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**Type of action:** Deployment of systemic solutions with the support of local clusters and the development of regional community-based innovation schemes



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# Data Management Plan & Open Research Data Pilot

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## Partners



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2.0	20.07.22	K-FLEX	Second version
3.0	01.11.22	K-FLEX	Last Version
4.0	07.11.22	EURADA	Quality check version

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## Executive summary

Working in line with the principles of open access to research data and publications generated through H2020 programmes, the FRONTSH1P project participates in the Open Research Data Pilot (ORDP) carried out by the European Commission.

The requirements that should be adhered to ensure open access are the following:

- Develop (and keep up-to-date) a Data Management Plan (DMP);
- Deposit the data in a research data repository;
- Ensure third parties can freely access, mine, exploit, reproduce and disseminate this data;
- Provide related information and identify (or provide) the tools needed to use the raw data to validate research results.

This deliverable aims to describe the processes followed in the FRONTSH1P project regarding the development of a Data Management Plan that is designed for the activities of mapping, analysis, consultation and involvement of stakeholders.

The processes followed in the FRONTSH1P project to collect, manage, and deposit the generated data during the first six months of the project's lifetime are also described in this deliverable. The holistic DMP set in the Description of Action based on partners' inputs collected in WP1 (Task 1.4) will ensure openness, accessibility to beneficiaries of all data generated during the project and reusability after its completion.

Under the requirements and guidelines of Horizon 2020 funded projects, projects must focus from an early stage on how research data will be stored and validate the scientific outputs. As several types of datasets will be produced, data sharing and communication between the partners will be established via DMP and the platform designed specifically for this purpose. According to the data mapping scheme, data and metadata generated from various sources will be combined into meaningful and valuable information. Maximum capabilities of data sharing and metadata usage will be achieved, considering data security, privacy, and General Data Protection Regulation compliance. Finally, data produced throughout FRONTSH1P will be shared among open European research databases.

## Introduction

FRONTSH1P is focusing on demonstrating four circular systemic solutions, where large amounts of data are expected to be generated during the implementation and testing of the enabling technologies. Besides, the FRONTSH1P project is participating in the extended Open Research Data Pilot (ORD Pilot) run by the European Commission (EC). This pilot aims to improve and maximise the access and reuse of research data generated by H2020 projects. The ORD Pilot considers the need to balance openness and protection of scientific information, commercialisation and Intellectual Property Rights (IPR), privacy concerns, security as well as data management and preservations. The Data Management Plan (DMP) is a key element of this ambition that describes the data management policy that will be used by the consortium partners regarding the data collected, processed and/or generated within the project<sup>1</sup>.

FRONTSH1P's Data Management Plan (DMP) is a formal document. It contains all the necessary activities that will be pursued for efficient organisation and data arrangement from different disciplines to provide accessibility to all data generated from partners and process modelling in FRONTSH1P's activities and thus hold valuable information by reducing costs and time. For FRONTSH1P's datasets to meet the requirements to be Findable, openly Accessible, Interoperable and Reusable (FAIR), the DMP further adopts the essential task of data and metadata handling. Metadata summarises crucial information for identifying mechanisms, data cataloguing, approach to keywords, clear versioning, identifying sources, data curation, open availability, vocabularies, discovering relationships between data, and further regulating the information produced during the FRONTSH1P project (Figure 1).



*Figure 1. DMP strategy*

Moreover, a sustainable DMP requires contemplating challenges in data security and data privacy for data to maintain high technical and scientific quality. Aspects such as storage, transfer, and recovery of sensitive data will be exploited within DMP. In terms of data privacy, DMP ensures data protection from breaches or cyber-attacks accounting partners' accessibility level for each beneficiary. All the above-described activities are harmonised with the General Data Protection Regulation (GDPR) guideline. Since not all data or potential uses are as precise as FRONTSH1P progresses, the DMP is intended to be a living document that can be updated again to be fine-tuned to the services identified by the consortium.

<sup>1</sup> European Commission, "H2020 templates: Data management plan v1.0 – 13.10.2016," [Online]. Available: [http://ec.europa.eu/research/participants/docs/h2020-funding-guide/cross-cutting-issues/open-access-data-management/data-management\\_en.htm](http://ec.europa.eu/research/participants/docs/h2020-funding-guide/cross-cutting-issues/open-access-data-management/data-management_en.htm) page 7



The data handled in the project will be documented in a dataset template (see Annexe I), which has been created to compile the most relevant information on the dataset lifecycle. The dataset template includes the following sections:

1. Data summary
2. FAIR data
  - 2.a. Findable data
  - 2.b. Accessible data
  - 2.c. Interoperable data
  - 2.d. Reusable data
3. Data management and allocation of resources
4. Ethical and legal aspects
5. Data security
6. Other aspects

Annexe II provides a dataset index of the datasets already identified, which are compiled in Annexe III. These annexes will be updated with new datasets throughout the duration of the project.

To regularly update the DMP, the FRONTSH1P consortium has agreed on the methodology to communicate any changes in data management as follows: the partner who has news in its data information communicates as soon as possible to the person in charge of the DMP (see section 3). If the new information represents a new dataset, the data owner will fill in the corresponding dataset template. The person in charge of the DMP will modify the DMP accordingly and complete the timetable of updates (on page 2 of this document). If the change is a new dataset, this will be included in annex III and the dataset index will be updated.

# 1. Data summary

## Purpose of the data collection/generation and relation with the project's objective

The FRONTSH1P project aims to ensure the green and just transition in the Polish Łódzkie region towards decarbonisation and territorial regeneration. The data collection has the purpose of assessing the circularity approach applied in the four systemic circular solutions through life cycle assessment and the implementation of a decision support digital tool. In addition, data will be collected in the activities in which the main goal is the engagement of citizens through the organisation of workshops, sharing of questionnaires, scholarly activities, etc. The data generated during the CSSs activities will be placed in the FRONTSH1P data repository created as a Google Drive folder.

## Types and formats of data generated/collected by the project

The data collected can be divided into two categories: “Non-personal data” and “personal data”.

The first category, “non-personal data”, comprehends scientific results including statistics, experimental and demo plant results and measurements, fieldwork observations, survey results, interview recordings, images, or other types.

The main data types and formats identified are:

- Text: plain text (TXT), HTML, XML, PDF/A.
- Databases: XML, CSV.
- Image: JPEG, JPG-2000, PNG, TIFF.
- Audio: AIFF, WAVE.
- Containers: TAR, GZIP, ZIP.
- Other: Video, SHP, Native formats of software used for simulations, ESRI Geodatabase, spectroscopic data (.spc and TEM: .dm3 and .dm4).

The second category, “personal data” comprehends the results from the social engagement activities, more specifically stakeholders and citizen contact details from the participation of workshops, seminars, educational activities, the results of questionnaires, etc.

## Reuse of existing data

DMP, via its implementation and structure, aims to maintain and offer long-term data availability while allowing data reuse between partners and stakeholders in the ecosystem.

## Origin of the data

To be specified with partners' inputs.

FRONTSH1P's data origin:

- Analysis of available dataset;
- Analysis of strategic documents;
- Questionnaires and surveys;
- Experimental;
- Simulation;
- Derived/compiled;
- Reference/canonical;
- Re-use data from local/national databases;
- Available open-source data, e.g., COPERNICUS.

## Expected size of data

The data size expected from the various input of the FRONTSH1P's partners have a range from few kB to few TB.

None of the dataset collected within FRONTSH1P has a fixed expected size, but the data will have a size that is growing (new data may be added but the old data is never changed or deleted) or revisable (new data may be added, and old data may be changed or deleted).

More details can be found in the partners' DMP inputs in annex III.

## Data utility

Based on the FRONTSH1P partner's DMP inputs on non-personal dataset, the major data utility along with long-term value are (in the consortium order):

- **RIC:** The data collected will be used to RIC to develop the regional circular booster toolkit in WP2 that will be useful to 1) project partners, mostly for CSSs (WP3, 4, 5, 6) and software tool development (STAM, WP7); 2) stakeholders; 3) policy makers; 4) NGOs and general public.
- **OPUS:** The dataset of WP3 will be useful to WP3 partners, such as UniLodz, Parzęczew and technical partners preparing technical part of implementation plan to CSS1.  
The dataset of WP4 will be useful to WP4 partners, such as UniLodz, Bzura Parzęczew, Veltha and technical partners preparing technical part of implementation plan to CSS2.
- **TUL:** The data might be useful for partners and stakeholders in the FRONTSH1P project and other companies, citizens, academy and government especially in the Łódzkie region.
- **UNILODZ:** The dataset of WP2 will be useful to all partners.

The dataset will be useful to WP3 partners, such as OPUS, Parzęczew and technical partners preparing technical part of implementation plan to CSS1.

The dataset of WP5 will be useful to WP5 partners, such as OPUS, ZMBzura and technical partners preparing technical part of implementation plan to CSS3.

The dataset of WP9 will be useful to all partners in the FRONTSH1P project and other company, citizens, academy and government especially in the Łódzkie region.

- **ZM BZURA:** The dataset will be useful for all WP4 partners.

The data of WP9 will be useful for the proper organisation of the events planned during the implementation of WP9, the dissemination of the circular economy idea.

- **KPMG Poland:** The dataset will mostly be used by KPMG to design and adjust the VER framework to the CSS's characteristics. Dataset may be useful to partners providing the data themselves – it will help to organise their knowledge about GHG emissions.

- **LP:** The dataset will be useful for WP6 partners, such as OPUS for evaluating and comparing the results of their market analysis with the information on technical possibilities provided by LEDA; KFLEX, PROPLAST and PROMIX to validate the used technology. Data on 3D-printer performance could be useful for OPUS for developing a training program for employees. Data could also be useful for K-FLEX to be able to transfer their waste streams into filament.

The dataset can also bring value to other companies, NGOs within replication in fellow regions.

- **UNIBZ:** The dataset will be useful to WP3 technical partners, such as NTUA, which will be taking advantage of the provided data in order to optimise the design of the burning and PCC unit available at NTUA facilities. Due to the fundamental nature of the experimental analysis, the dataset will most certainly gain solid interest in the scientific community working in the field of alternative source combustion as well as in the renewable energy industry.

- **STRESS:** The data will be useful for local analysis aimed at applying the tools and methodologies aimed at replicating at regional level the CSSs developed in the project.

- **PROPLAST:** Data will be then used by the partners (K-FLEX, Sirmax and LEDA) to carry out their activities from pilot to industrial scale to produce new foamed panels for insulation. Data will also be used by the technology provider (PROMIX) to improve their equipment and wider their knowledge on the use of the technology for new polymers.

- **GAL Irpinia:** The data will be useful for local analysis aimed at applying the tools and methodologies aimed at replicating at regional level the CSSs developed in the project.

- **NVMT:** The data collected in WP2 will be used by WP2 technical partners, who will operate in the development of the regional circularity booster toolkits and the regional circular economy monitoring system & partnership models.

The data of WP4 will be used by WP4 technical partners, who will operate in the development of the CSS2 objectives.

The data of WP8 will be used by WP8 technical partners, who will participate in the replication activities.
- **STAM:** The dataset will be useful to WP5 technical partners, such as INL, LNEG and NTUA, which will be taking advantage of the provided data in order to, respectively, implement the sensor system and perform Eco-design and LCA studies.
- **Carmasciando:** The data will be useful for local analysis aimed at applying the tools and methodologies aimed at replicating at regional level the CSSs developed in the project.
- **NTUA:** T3.2: The dataset will be useful to WP3 technical partners, such as K-FLEX and CERTH, who will analyse and utilize the produced char, and to partners involved in the replication stage of CSS1. Moreover, the dataset can be useful for industries that would like to implement the CSS1 solution in their premises.

T3.3: The dataset will be useful to WP3 technical partners, such as CERTH, who will perform dynamic process analysis of the overall CSS1 value chain and to partners involved in the replication stage of CSS1.

The dataset of eco-design/LCA may be useful to the consortium for information, follow-up, improvements of the CSS based on the results and recommendations as well as for the development of business models.

The results of the LCA analysis for all the CSS will be useful for different stakeholders, for example researchers, academics, students, citizens, related stakeholders.
- **CERTH:** The dataset of WP3 will be useful to WP3 technical partners, such as BKT, UNIBZ and the CSS2 partners that are involved in the char exploitation as a compost additive.

The dataset of WP4 will be useful to NTUA in order to perform the LCA/LCC analyses in the same Task 4.6.
- **MLEV:** The dataset of WP2 will be useful to WP2 technical partners, RIC and VELTHA who are the leaders of the specific tasks T2.1 & T2.3 for monitoring the framework for the circular economy and improving CSS harmonisation based on nine indicators: 1)Circular design; 2)New production process accepting “secondary raw materials”; 3)Reuse/refurbish/repair;4) Waste reduction; 5) Industrial symbiosis; 6) Waste recycling; 7)Net energy balance; 8) Reduction of emissions; 9) Net balance of jobs. Such indicators will be also used for the part of the assessment tool related to circular economy.

The dataset of WP8 will be useful to WP8 technical partners, INL and CRGR who are responsible for the tasks T8.1 and T8.3. The data will provide to them the necessary information about the annual outgoing flows of waste for (a) wood packaging and wood remnants (b) food and fodder remains (c) sewage (d) plastic and rubber garbage. As well as the evaluation of the existing system of waste gathering and waste management and the strengthening of consumers and buyers and enhancing citizens' active involvement in the cycle of waste exploitation.

The dataset of WP9 will be useful to all partners in the FRONTSH1P project and other company, citizens, academy, and government.

- **LNEG:** The target groups include the members of the project and the consortium, the EC, external researchers, research communities and the public (local stakeholders, economy and industrial entrepreneurs, services developers, regulatory and governmental bodies).
- **INL:** The target groups include the members of the project and the consortium, the EC, external researchers, research communities and the public, policy makers, industry, administrations, and citizens.
- **CCDR-Norte:** Data will be useful for the policy makers, industry, administrations, and citizens.
- **CARTIF:** Useful to partners participating in WP4 and coordinator, stakeholders.
- **CIRC.Friesland:** This data is useful for partners of the FRONTSH1P project, stakeholders, organisations and government institutions to obtain insights in what is happening within Friesland, and it can serve as an example for other regions to develop a similar approach.
- **W4ME:** The dataset will be useful to WP6 technical partners, such as NTUA and K-FLEX, who will envision to integrate the developed technology in their operational processes. Moreover, data on char and its possible applications in agriculture or plastic industry could be useful to other stakeholders working in these sectors.
- **VELTHA:** The dataset will be useful to the regional authorities and for further researcher.
- **PROMIX:** The gained data will be useful for K-FLEX, Promix, Proplast and other partners with direct involvement in the tasks stated above.
- **BKT:** The data are useful for our project partners to evaluate the tests they are carrying out at the gasification plant.

## 2. FAIR DATA

### 2.a. Making data findable

Making data easily findable is beneficial for future researchers and the public as it is more likely that the projects become known and their outputs utilised if they can be easily accessed. The project has an obligation under Article 29.1 of the Grant Agreement, which states:

“Unless it goes against their legitimate interests, each beneficiary must – as soon as possible – ‘disseminate’ its results by disclosing them to the public by appropriate means (other than those resulting from protecting or exploiting the results), including in scientific publications (in any medium).”

#### Standard identification mechanisms

Digital Object Identifiers (DOI) would be implemented according to the needs of the FROTNSH1P's progress. The data will be hosted in a stable and trusted repository to ensure that the research data can be found by others. FRONTSH1P will identify a suitable repository for open data sets, for example, the Zenodo open European research database.

#### Naming convention

To provide a unique and persistent identification in FRONTSH1P datasets, the primary approximation for the naming conventions in the ecosystem that will help the users in navigating and searching larger structures will be formed to include information regarding the following fields:

1. Partner ID: partner's name acronym.
2. Activity: data form, which specifies the way that data is created, the final purpose or the group of activities/WP where it is collected.
3. Date: the date of the creation of data in the format DDMMYY.
4. Version: in the case the data are revisable, the current version should be identified with “v\*\*”; while the original dataset will hold “v00” version number by default.

Following the above rule, an example of the identification of a dataset will have the following form: FRONTSH1P\_PARTNER\_Activity\_DDMMYY\_v\*\*

### Search keywords to optimise data re-use

In line with the naming convention, the identification of keywords to be coupled to each dataset would be useful to simplify the research of the data in the designed platform. Some keywords that must be used are:

- The term “European Union (EU)” and “Horizon 2020”;
- The grant number.

A directory with all the available keywords per category will be built and updated during FRONTSH1P’s implementation, optimising data reuse procedures.

## 2.b. Making data openly accessible

### Which data will be openly available as the default?

The section 2.b. of the “Dataset template” (Annexe I) provides information related to the accessibility of data. For each dataset, the partner that owns the data will indicate whether the dataset will be made openly available. If certain datasets cannot be shared (or need to be shared under restrictions), the partner will explain why, clearly separating legal and contractual reasons from voluntary restrictions. The openly accessible data (including the associated metadata and documentation) will be deposited in an open-access repository. The preferred repository is Zenodo (<https://zenodo.org/>), an OpenAIRE compliant repository, without precluding the further use of other repositories (e.g., institutional, subject-specific, etc.). All open data deposited in Zenodo will be assigned a persistent and unique DOI. The open data will be accessible without restrictions. This section will also indicate what methods or software tools are needed to access the data.

### Potential restrictions for datasets sharing

It should be considered the large size of the FRONTSH1P consortium, whose level of protection of each partner can differ among the data used or produced in the building of a specific case study. Consequently, case studies that are produced during the FRONTSH1P project will be published upon the consortium’s agreement whenever sensitive information is not included.

If some of the partners claim the confidentiality of their data due to IPR issues, the consortium agreement ensures the protection of the intellectual property of all partners. The IPR arising from the results of the project will be the property of the partner that has developed it. Procedures and tools that will be produced will remain on their respective owners for exploitation.



### How will the data be made accessible?

Data for the single-entry point, metadata, codes and workflows will be placed in cloud servers (project repository in Google Drive) and in open access repositories, which support multiple and heterogeneous data formats.

Along the consortium, the data will be shared between the partners thanks to a specific Google Drive folder.

## 2.c. Making data interoperable

### Interoperability of data

The preferred file formats will be defined along the activities of WP2, in particular in task 2.2 in the definition of the regional circularity booster toolkit, to ensure the harmonisation and reuse of the data alongside the FRONTSH1P project. The format chosen will be also to ensure accessibility in the future as they are non-proprietary, open and standard formats. In addition, the data will be always accompanied by a legend clearly explaining the meaning of the used nomenclature and the acronyms.

Since data are generally intended for a scientific audience, technical terms will be used. Such terms will be retrieved from the existing peer-reviewed literature, where conceptual definitions can be traced back.

### Data and metadata vocabularies

The section 2.c. of the “Dataset template” (annex I) will indicate what data and metadata vocabularies, standards or methodologies will be followed to make the data interoperable by other researchers, institutions, etc.

## 2.d. Increase data re-use

### Data licensing

The last section related to FAIR data will indicate the conditions for data re-use, particularly after the end of the project. The partners will define the possible licensing terms and restrictions for each dataset, particularly for third-party use.

### Timeframe for data access

During the project, the data shall be made accessible to the consortium partners under the terms of the Grant Agreement and Consortium Agreement. This section will also indicate the timeframe of data availability (when would be made available for re-use and how long).

### Data quality assurance

All the processes concerning data integrity will be documented and available to all users of the ecosystem.

## 3. Allocation of resources and responsibilities

K-FLEX is the partner responsible for data management within the project. K-FLEX will report the updates in the DMP to the WP leaders, to include them in the periodic reports of the project. The responsibility for data management in the project is given to Kamil Maszczyk and Mateusz Imiela from K-FLEX (email respectively: [kmaszczyk@kflex.com](mailto:kmaszczyk@kflex.com) and [mimiela@kflex.com](mailto:mimiela@kflex.com)). Nevertheless, each partner of the FRONTSH1P project will be responsible for the safe storage of their own datasets. Each partner will be responsible for the identification of new datasets that will be handled within their tasks. Each partner will be responsible for filling in a dataset for each WP they participate. The WP leaders will be responsible for collecting the inputs from the partners of their work package and uploading them to a specific Google Drive folder, notifying K-FLEX after the completion of this task. K-FLEX will be then responsible for updating this new dataset information into the DMP and for uploading the dataset to the FRONTSH1P platform. If the dataset will be made openly accessible, the dataset owner will be responsible for uploading it to Zenodo (<https://zenodo.org/>). The consortium has agreed with the use of this free-of-charge repository for making the data accessible (without precluding the further use of other repositories, e.g., institutional).

For the publications, the consortium will publish them in scientific journals that allow open access. The associated costs will be claimed as part of the H2020 grant.

## 4. Data processing and protection of personal data

Several of the partners will be processing personal data in very similar manners for identical purposes. Given the commonalities between partners, it is most useful to first provide relevancy explanations by the types of processing operations, then provide subsequent justifications for less common activities.

ALL partners will be processing:

- **FRONTSH1P partner contact details** – partners have shared with each other contact information, name, email, and role in the project as necessary to administer and conduct the research project as foreseen in the grant agreement. The legal basis for this is the performance of a contract.

Several partners will be processing:

- **Stakeholder contact lists** – contact information for stakeholders who have expressed an interest in the FRONTSH1P project and asked for more information and to be kept up to date, as well as contact information for individuals with existing relationships with the partners, where providing these people with information about the project would be compatible processing. Data may also be collected from interested parties, contacts, events where individual's sign-up to receive FRONTSH1P communications, the FRONTSH1P website and contacts from partners that might be interested in receiving such communications. Partners will process email address to send information, names to manage consent and distinguish stakeholders, and information about organisational affiliation, job title or role to provide suitable information to different categories of stakeholders. This processing is necessary for identification of user requirements, demonstrations and evaluation, open science, clustering, communication and dissemination activities.
- Personal data need to administer and manager **workshops, webinars and other events**. Partners will process name, email address, phone numbers to invite participants to these events, administer them, and record attendance; and country of organisation, organisation and job role to identify appropriate participants and appropriately structure the event; partners may process information such as car license plates where necessary for security at physical sites; as well as any special access requirements for physical events to allow the subject's safe and comfortable participation. Partners will retain name and affiliation for audit purposes but will delete security or accessibility information after the event. Partners may process financial information to reimburse participants provide accountability where expenses for participation are being covered by FRONTSH1P. partners may record events or take photos of participants for communication and dissemination purposes (with

participant consent). The legal basis for this data processing is consent of the data subject (consent forms are included in D10.1).

The following table provides each partner's data processing activities and their relevance and limitation to the purpose of the research project.

Beneficiary	Data processing activity	Relevance and limitation to the purposes of the research project
<b>1. K-FLEX</b>		
	Partner contact details	As above
<b>2. RIC</b>		
	Partner contact details	As above
<b>3. OPUS</b>		
	Partner contact details	As above
	Participants to training activities	<p>Participants information (surnames and forenames, address of residence or stay, e-mail telephone number) is processed in order to:</p> <ul style="list-style-type: none"> <li>• Record and publish the image;</li> <li>• Send marketing information;</li> <li>• Participate in the project;</li> <li>• In order to perform legal obligations imposed on the administrator, including settlement of the project;</li> <li>• In order to establish and pursue claims or defend against claims by;</li> <li>• Contacting a legal guardian.</li> </ul>
<b>4. TUL</b>		
	Partner contact details	As above
<b>5. UNILODZ</b>		
	Partner contact details	As above
	Stakeholders contact details	<p>Human data will be the main source of inference and implementation of the following project goals:</p> <ul style="list-style-type: none"> <li>• Define the proper model for effective governance of the regional/ territorial circular cluster;</li> <li>• Identification of incentives and barriers of existing in current socio-economic policy instruments;</li> <li>• Identification of market failures in scope of circular economy;</li> </ul>

		<ul style="list-style-type: none"> <li>• Identification system of public and private investments and public procurement pull for new solutions;</li> <li>• Definition of policy recommendations.</li> </ul>
<b>6. LR</b>		
	Partner contact details	As above
<b>7. BZURA</b>		
	Partner contact details	As above
	Events and workshop administration	As above
	Stakeholder contact details for the newsletter	BZURA will collect the data in order to increase public involvement in the dissemination of the circular economy idea in the Łódźke Province and to replicate its solutions in other locations.
<b>8. PARCZECZEW</b>		
	Partner contact details	As above
<b>9. KMPG Poland</b>		
	Partner contact details	As above
<b>10. SIRMAX</b>		
	Partner contact details	As above
<b>11. LP</b>		
	Partner contact details	As above
<b>12. UNIBZ</b>		
	Partner contact details	As above
<b>13. STRESS</b>		
	Partner contact details	As above
	Stakeholders contact details	The purpose of the data (personal contacts, email and phone correspondence) use is related to the creation of a network of stakeholders and for the creation of a local network of contact points for other (non-personal) data collection.
<b>14. PROPLAST</b>		
	Partner contact details	As above
<b>15. GAL Irpinia</b>		
	Partner contact details	As above
	Stakeholders contact details	The purpose of the data (personal contacts, email and phone correspondence) use is related to the creation of a network of stakeholders and for the creation of a local network of contact points for other (non-personal) data collection.
<b>16. NVMT</b>		
	Partner contact details	As above
	Events and workshop administration	As above

<b>17. STAM</b>		
	Partner contact details	As above
<b>18. Carmasciando</b>		
	Partner contact details	As above
	Stakeholders contact details	The purpose of the data (personal contacts, email and phone correspondence) use is related to the creation of a network of stakeholders and for the creation of a local network of contact points for other (non-personal) data collection.
<b>19. NTUA</b>		
	Partner contact details	As above
	Events and workshop administration	As above
<b>20. CERTH</b>		
	Partner contact details	As above
<b>21. PSTE</b>		
	Partner contact details	As above
<b>22. MLEV</b>		
	Partner contact details	As above
<b>23. LNEG</b>		
	Partner contact details	As above
<b>24. INL</b>		
	Partner contact details	As above
	Events and workshop administration	As above
	Social media and website data	Collection of data necessary (email address, name, company) to have a regular monitoring of communication activities vital to ensure a high-quality communication strategy execution.
<b>25. CCDR-Norte</b>		
	Partner contact details	As above
	Events and workshop administration	As above
<b>26. CARTIF</b>		
	Partner contact details	As above
<b>27. CSIC</b>		
	Partner contact details	As above
<b>28. CIRC.Friesland</b>		
	Partner contact details	As above
	Interviews with entrepreneurs	Processing of companies' information (name of organisation, address, legal form, NACE Code, website) to obtain insights in the current activities (ecosystem) concerned with (circular) plastics within Friesland.

29. FRL		
	Partner contact details	As above
	Interviews with stakeholders	Processing personal information (name, email address) with the aim is generate interest for activity in scope of circular economy that contribute to overcoming market failures in the areas covered by the systemic solutions implemented in the project.
30. W4ME		
	Partner contact details	As above
31. EURADA		
	Partner contact details	As above
	Stakeholder contact details for the newsletter	BZURA will collect the data in order to increase public involvement in the dissemination of the circular economy idea in the Łódzkie Province and to replicate its solutions in other locations.
	Events and workshop administration	As above
	Social media and website data	Collection of data necessary (email address, name, company) to have a regular monitoring of communication activities vital to ensure a high-quality communication strategy execution.
32. VELTHA		
	Partner contact details	As above
33. PROMIX		
	Partner contact details	As above
34. BKT		
	Partner contact details	As above

### Transparency

Transparency requirements under the GDPR are provided under article 13, where data is collected from the data subject, and article 14 where data is not collected from the data-subject.

Partners provide the information required under article 13, through the information sheet and informed consent form signed by data subjects. Templates for information sheets and informed consent forms have been provided in D10.1.

### Accuracy

The accuracy principle requires that personal data are kept up-to-date and that any inaccuracies are rectified, or, bearing in mind the purposes, the data are destroyed.

Where FRONTSH1P partners are made aware that any personal data they are processing is inaccurate, then they will rectify such data. If it is not possible, then they will seek to erase the data. However, noting that such data could be essential to fulfilling research purposes, then an assessment might need to be made on how the accuracy principle can be fulfilled whilst meeting the research purposes.

### Storage limitation

The storage limitation principle requires that personal data is not kept, or kept in an identifiable form, for longer than is necessary to achieve the purposes. Partners store personal data only for so long as it is necessary to keep it. Where identifying information is no longer needed, it will be destroyed.

The storage limitation principle should be applied in line with the obligation of the partners to keep records and other supporting documentation to prove the implementation of the action for a period of 5 years as set out in article 18 of the GA. As such, personal data may be retained for this period where it is necessary to do so to provide records and documentation to the EC.

Further, the GDPR explicitly notes that scientific research purposes might involve holding personal data for longer than is necessary and that technical and organisational measures should be taken to protect personal data in such circumstances.

## 5. Ethical and legal aspects

Article 34 of the FRONTSH1P Grant Agreement requires all partners to carry out their work in compliance with ethical principles and the highest standards of research integrity. This includes abiding by 'The European Code of Conduct on Research Integrity' which requires researchers to follow the principles of reliability, honesty, respect, and accountability in addition to rules on good practice and research integrity.

Any research carried out by FRONTSH1P partners that will involve the collection of data from human participants will include the provision of information sheets and informed consent forms that abide by such standards of research ethics in addition to data protection requirements.

Concerning data ethics, generally, FRONTSH1P partners should try to avoid re-purposing (1) datasets where the data-subjects were not aware of the data collection, and so would be unable to consent or exercise their rights as data-subjects; (2) processing data in ways that data-subjects would not expect; (3) processing data in ways that could have negative impacts on the dignity or autonomy of the data-subjects, and; (4) processing data in a way that would have a negative societal impact. These concerns are particularly important where data are sensitive in nature.



Anonymisation of such data does not mean that processing such data becomes ethical, but it does reduce risks of privacy harm and some ethical challenges. However, the fact that such processing in the FRONTSH1P project is for scientific research, which provides public benefit by its very nature, and that this research is intended to contribute to environmental and food safety and security are significant mitigating factors. If it is necessary to process such data for a research purpose in the FRONTSH1P project, then it must be clear that the processing of this data is not necessary, would not have disproportionate impacts on data-subjects, is legitimate, and is transparent. What is appropriate must be considered on a case-by-case basis depending on the nature of the data and the specific purposes and methods of processing.

## 6. Data security

Zenodo repository stores user passwords using strong cryptographic password hashing algorithms (currently PBKDF2+SHA512). Zenodo has a 12-hourly backup cycle with one backup sent to tape storage once a week, while a daily backup cycle will be set for cloud servers of RDC. According to the backup plan of RDC Infrastructure, 21 full infrastructure backups are maintained for the last 21 days, on a daily routine. Each consortium partner will also be responsible for the data security and the secure storage of their own datasets in their institutional repositories.

The digital datasets that will be used/generated within the project will be safely stored and managed by expert IT system administrators of each organisation. As general guidelines, the data will be stored in at least two separate locations to avoid data loss; the partners will limit the use of USB flash drives, and the files will be labelled in a systematic way in order to ensure consistency of the final dataset.

## 7. Risk mitigation strategy

As a large-scale demonstration project, FRONTSH1P involves a lot of activities with technologies that are already in the market or near-to-market (TRL 5 or more). Early detection and management of the risks and mitigation strategy is essential and is based on risks related to citizen engagement and techno-economic feasibility of the circular systemic solutions and their associated contingency plan for the successful development of FRONTSH1P. The procedure is based in an a-priori detection and categorization of the most important risks, a prioritization by their estimated probability and related impact and accompanying contingency measures. Five categories of risks have been identified:

- **Technical risks (T):** related with application and performance of the circular systemic solutions;
- **Financial risks (F):** related with investment plans from both public and private promoters;
- **Administrative risks (A):** related with administrative aspects of large FRONTSH1P consortium;
- **IPR risks (IR):** related with management of intellectual property rights of the technologies;
- **Coordination and Management risks (M):** related with project governance and continuous monitoring of the technical and financial evolution of the project;
- **Risk categorization according to probability (P):** high “+”, medium “=”, low “-”;
- **Risk categorization according to impact (I):** high “+”, medium “=”, low “-”.

The current version of the risk matrix hasn't changed from the Grant Agreement version as no new risks have been detected from the consortium.

Risk/WP	Contingency Plan with Preventive Measures (PM) & Contingency Measures (CM)	
	T1	Delays in demonstration activities P(=) ↔ I(+)
Technical risks (T) related to WP3, WP4, WP5, WP6	Preventive Measures (PM)	<b>Problems arising during the planning stage in the demonstration cluster:</b> the local and regional authorities involved in FRONTSH1P have drafted strategic plans including not only financial support already committed but also other alternatives to mitigate T1 risk in Łódzkie region. <b>Funding difficulties from private partners:</b> solid financial plans and business models, and count on the support of the local and regional authorities involved. <b>Support from citizens:</b> being active in the participatory process, e.g., participation apps, spaces to support co-design of solutions, etc. — Strategic cooperation with citizen representatives. Citizen engagement mechanisms will be reinforced from the beginning in order to minimise the probability of resistance to the actions envisaged in FRONTSH1P.
	Contingency Measures (CM)	<b>Problems arising during the planning stage in the demonstrative cluster:</b> immediate response after detection, partners affected will be called to a meeting to analyse the problem, define alternatives and decide the changes needed to solve the difficulties, together with the next steps to fulfil any necessary administrative and legal issue. <b>Funding difficulties from private partners:</b> K-FLEX will provide any possible support to any partner facing difficulties meeting project objectives, propose amendments e.g., roles and budget transfer between partners, or even replacement under EC rules & procedures. <b>Support from citizens:</b> having doubts about the understanding and support by citizens, communication and explanations measures will be reinforced by the partners involved, strongly supported by the regional and local authorities and local non/profit organisations.
	T2	Evaluation of performance after the interventions does not correspond to expectations P(-) ↔ I(+)

PM	The consortium has wide experience in innovation projects and counts with specific expertise in the use of design and planning tools. Common procedures for the impact evaluation will be delivered as well, based on de-facto standards. KPIs will be selected from EU initiatives and fine-tuned in collaboration with other projects under the coordination of the CCRI initiative, to name a few.
CM	In a situation of poor fulfilment of expectations, K-FLEX will lead a deep review of all the calculations made to define the baseline or the KPI performance, in order to discard any mistake in these steps. If the calculation was right, an assessment of the circular systemic solutions implemented will be done to identify the inefficient processes.
<b>T3</b>	<b>Replicability not as ambitious as expected P(-) ↔ I(+)</b>
PM	The strong replication strategy of <b>FRONTSH1P</b> considers the involvement of four regions. These clusters have not yet acquired the full technical competence to become a circular cluster but are strongly committed to creating a specific internal department and to delivering replication plans and an execution project, formally approved in a regional/local council decision. <b>FRONTSH1P partners</b> will support these developments. The capacity building strategy with a coaching-mentoring strategy will favour these developments.
CM	When replication clusters encounter difficulties, a supporting team will be created, formed by experts from Łódzkie Region, K-FLEX and Novamont. This contingency team will assess the situation and provide direct mentoring and support for the city to overcome any difficulty, based on other successful experiences, as the Flagship project First2run project coordinated by Novamont and funded within the BBI JTI of similar ambition.
<b>T4</b>	<b>Validation incomplete during FRONTSH1P project timeframe P(-) ↔ I(+)</b>
PM	<b>FRONTSH1P</b> partners are committed not only to provide extensive monitoring of the activities, but to continue this monitoring beyond the project timeframe. The integration of all data into a Digital Platform and tools is a solid asset to mitigate this risk.
CM	Any indication of potential delay of the starting date of monitoring in Łódzkie Region will be assessed by the Un. Łódz and WP2 Polish partners and reported to K-FLEX. Both partners together with the affected regional cluster will design an action plan to avoid a more than six months delay, preventing to endanger full monitoring of the activities.
<b>T5</b>	<b>Difficulties to implement the actions as designed P(=) ↔ I(-)</b>
PM	The design of the interventions in Łódzkie region for the deployment of the four CCS are available from proposal stage, including a sound investment plan. Moreover, during the project execution, WP3 to WP6 are aimed at covering all stages of CCS demonstration from design to validation and through the execution and monitoring. Replicating clusters will learn and collaborate from early beginning for their own implementation plans (WP8).
CM	For actions progressing not as initially planned and designed, the partners participating in it will assess the problem and define alternatives to accomplish project objectives. Changes, when relevant, will be formalised under EC rules.
<b>T6</b>	<b>Difficulties in the management of the flows within CSSs P(-) ↔ I(=)</b>
PM	The management of material, water, energy and data flows is crucial to deliver a circular cluster through systemic solutions, as addressed in WP2.

CM	An early detection of any difficulty will be promoted, which will be solved by RIC, Un. Łódź and K-FLEX working together and taking the opportunity to learn lessons from the different cases matter of FRONTSH1P interventions.
T7	<b>Difficulties in data gathering/integration with the proposed Platform P(-) ↔ I(+)</b>
PM	In FRONTSH1P a common open data framework will be developed in a cross-cutting activity in WP2. This task will define all requirements to guarantee that the necessary data from all the CSSs are correctly gathered following a common procedure, based on the open specifications concept. The specific developments will be done by RIC and STAM partners in the WP2 and validate in collaboration with other WPs (3 to 8). This structure will consider GDPR as the reference from the very beginning.
CM	Early detection of any difficulty for data gathering will lead to a redesign process performed by RIC and STAM, together with other relevant actors in each case to ensure all the requirements will be successfully fulfilled.
T8	<b>Specific risks of enabling technologies proposed within the four CSSs P(=) ↔ I(+)</b>
PM	<p><b>CSS1: risk to not achieve quality or sub-optimal wood waste quality, gasification efficiency not at the expected level, CO<sub>2</sub> capture not as efficient as expected.</b> As preventive measure, different tests will be carried out at pilot scale in order to appropriately collect all the necessary info for a proper design of the demo scale unit.</p> <p><b>CSS2: Risk of waste sugars and oils from food industry waste containing potential by-products negatively which could negatively affect the production of building blocks (monomers) and related bioplastics; yield of selected genotypes not at the targeted level due to adverse weather effects.</b> As preventive measure appropriate selection of the feedstock on the territory with particular reference to sugars quality and composition (rich in glucose) and waste oils (rich in oleic acid). Select appropriate genotypes well adapted to lands characteristics.</p> <p><b>CSS3: Risk of wastewaters containing consortia of bacteria that will disable the filtration power of microalgae.</b> As preventive measure appropriate tests will be developed on wastewater collected on the region and appropriate microalgae strain will be selected in order to operate the water depuration.</p> <p><b>CSS4: risk of excess of chlorination on the products after pyrolysis &amp; density of the foam not at the target (Rubber and PE).</b> As preventive measure partner will try to minimize the number of chlorinated compounds, substituting them with bio lubricants. Checking the size of the supercritical CO<sub>2</sub> pumps, understanding the real output needed, for perfect mixing with the polymer extruded.</p>

	CM	<p>When an innovative solution will not be able to scale-up such as the last development stages and reach the market, alternative solutions will be assessed in order to substitute the first one efficiently and achieve the overall objective.</p> <p><b>CSS1:</b> as contingency measure the optimisation with wood quality by selecting more carefully the sources of waste will be performed.</p> <p><b>CSS2:</b> as contingency measure, working on downstream process for sugars and oils further purification (adding a pre-treatment step for concentration and elimination of impurities) and blending with other sources of sugars and oils coming from other sectors will be done. Opportunity of blending vegetable oils from selected genotypes grown in marginal lands with other oils sources to achieve enough quantity for the targeted bio-oils productivity.</p> <p><b>CSS3:</b> as contingency measure, working on deeper water pre-treatment with anaerobic and aerobic system will be implemented to destroy possible antagonist microorganisms that can lower the microalgae purification potential.</p> <p><b>CSS4:</b> as contingency measure, partners will increase the size of the dichlorination unit, incrementing the output of the flow. Chemically working on solubility of supercritical CO<sub>2</sub> experience from surfactants science (rubber) to increase cell stability structure and for PE working on the nucleating agents for better cell stability.</p>
	F1	<b>Economic analysis show higher cost impact than expected P(=) ↔ I(=)</b>
Financial risks related to WP (3-8)	PM	All public and private partners involved in <b>FRONTSH1P</b> are committed to support the actions as reflected in the investment plans presented in the proposal. Several funding instruments are identified as well. These instruments could mitigate the impact of improbable higher costs than initially planned, together with CO <sub>2</sub> credits.
	CM	Funding instruments will be assessed to mitigate the extra cost impact based on the large experience of KPMG and EURADA at local and EU scale.
	F2	<b>Energy and material/water balance: savings overestim. (and operating costs underestim.) P(=) ↔ I(=)</b>
	PM	Rigorous simulations and analysis have been carried out for all the CSSs involved in the Łódzkie cluster. Although a more detailed analysis will be carried out during the project and a rigorous procedure to evaluate the performance of the replication clusters, this initial analysis and estimates assess that the probability of this risk is low.
	CM	A deep review of all the calculations will be made to define the energy and CO <sub>2</sub> savings and operating costs, in order to discard any mistake. If the calculation was right an assessment of the solutions implemented will be done to identify the inefficient processes.
	F3	<b>Planned investments not materialised (or not envisaged) P(-) ↔ I(+)</b>
	PM	The investment plans submitted demonstrate the strong commitment of both public bodies and private companies to implement the planned activities in the project. Moreover, the circular cluster to be developed in Łódz is part of the city urban plans.
	CM	Partners related with the action affected will be called to a meeting to analyse the problem, define alternatives, and decide the changes needed to solve the difficulties, together with the next steps to fulfil any necessary administrative and legal issue.
Ad	A1	<b>Financial or activity problems in one partner of the consortium P(=) ↔ I(=)</b>

	PM	Most of the partners have participated in other EU initiatives, fulfilling the financial and solvency requirements of the EC to become a full partner.	
	CM	In the unlikely event that a partner leaves the consortium due to financial reasons, the consortium can assume part of the tasks from the departed partner. If necessary, a new partner can be easily identified from the large networks around the regional clusters and partners already on-board of <b>FRONTSH1P</b> .	
	<b>A2</b>	<b>A replication cluster withdraws the project P(-) ↔ I(+)</b>	
	PM	The four <b>FRONTSH1P</b> replication clusters are frontrunners in circular transformation engaging local and regional authorities with clear links at national scale. The strong commitment of the clusters is reflected in their financial plans. The clusters that are supported by local partners, envisage to participate very actively from the beginning in the project and to gain insights from the implementations in the Łódzkie cluster.	
	CM	A twofold open dialogue will be started with the EC and the consortium, in order to find the best solution preserving the rights of remaining partners. Priority option will be fulfilling eligibility conditions.	
	<b>A3</b>	<b>Partner leaving the consortium P(=) ↔ I(-)</b>	
	PM	<b>FRONTSH1P</b> is executed by a big consortium of 34 partners, gathering sufficient skills and diversity to assure that one of the partners can replace the partner leaving the consortium if required. In all crucial parts of the project (including design, planning, modelling and all demonstrations), <b>FRONTSH1P</b> involves more than 1 partner minimising A3 impact.	
	CM	Partners related with the action affected will be called to a meeting to analyse the problem, define any alternatives and decide the changes needed to solve the difficulties, together with the next steps to fulfil any necessary administrative and legal issue.	
	<b>IPR risks related to all WPs and Managed in WP9</b>	<b>IR1</b>	<b>IPR management disagreements / breach of IPR conditions P(+) ↔ I(-)</b>
		PM	The strategy to deal with IPR issues will be established in the CA to complement GA rules on issues such as joint ownership. Specific task (WP9) is aimed at defining the exploitable results and market roadmaps. Even at proposal stage, a tentative list of these results is available. To protect ownership, even a Non-Disclosure Agreement has been signed among all partners to assure confidentiality and protection of partner's results. The Exploitation & Dissemination Leader (EUR) will oversee monitoring and solving IPR aspects throughout the whole project with focus on innovative technologies.
CM		The Steering Committee and the Project Coordinator will be in charge of defining and solving disputes around these IPR aspects in case these can arise. The CA covers alternative procedure for cases not solved amicably.	
<b>IR2</b>		<b>Not clear IP responsibility in a multiple partners consortium P(-) ↔ I(-)</b>	
	PM	<b>FRONTSH1P</b> defines a clear management structure assuring that all decisions are made following a consensus approach. As aforementioned, K-FLEX will work very close to the partners (mainly Industrial partners) to manage IP thought the whole project execution. Intellectual Property is one of the main aspects to be considered by the management structure. Joint ownership rules in the GA and the CA will be followed.	

	CM	The Steering Committee and the Project Coordinator will clarify any misunderstanding in IPR matters. The CA defines clearly the procedures applied if no agreement is reached among the partners involved including Alternative Dispute Resolutions (ADR) methods.
Coordination/Management risks related to WP1	<b>M1</b>	<b>Difficult coordination of large consortium-Collaboration problems P(-) ↔ I(-)</b>
	PM	The management structure, outlined in Section 3 and included in CA, is adequate to identify potential problems and timely response. CA to be signed before project start covering conflict resolution procedures. Special attention in mutual respect, ethical and gender issues as well as in team building and cohesion to be given. Continuous contact and communication strategy with all partners by the Coordinator (regular meetings/calls).
	CM	If difficulties in coordination and management arise, K-FLEX will strengthen the bilateral communication channels with all partners and the multilateral links in the FRONTSH1P community. The CA covers alternative procedure for cases not solved amicably.
	<b>M2</b>	<b>Not adequate level of quality in works and deliverables or delays in milestones achievement P(=) / I(+)</b>
	PM	Constant monitoring at different levels as mitigation of M2: Coordinator, WP leader and Task leader. Follow-up strategies are established such as periodic project meetings, regular audio-conference, interim reports to monitor on a continuous basis and a peer-review process applied to all deliverables before submission among partners. These strategies consider both the technical and financial sides of the project.
	CM	In case of insufficient quality of any inputs and/or deliverables, WP leaders shall request a new improved version. In case of delays, WP leader will assess the reasons and negotiate a new deadline or re-assign roles and tasks under discussion with the Coordinator. General Assembly can identify a beneficiary in breach of its obligation and eventually declare them as a 'defaulting party' if the situation is not remedied.
	<b>M3</b>	<b>GDPR and Data Management problems P(-) ↔ I(+)</b>
	PM	FRONTSH1P fosters open data as a part of its core concepts. All partners are committed to ensure the compliance with the new GDPR in all the developments. A data management plan (DMP) will be delivered according to the Horizon 2020 guidelines at the beginning of the project (M1), also to consider cybersecurity aspects by STAM.
CM	In case of non-compliance by a partner, the reasons for that will be assessed and the partner will be supported if needed. DMP could be improved if clarifications are needed.	

## 8. Other issues

Currently, the FRONTSH1P project does not use other national, funder, sectorial or departmental procedures for data management and no other direct issues have been found in this initial phase of the data management plan.

# Annexe I – Dataset template

## Non-personal data template

### 1. Data summary

**Name of Beneficiary:**

<b>Dataset identifier</b>
<b>WP and Task</b>
<a href="#">Click here to enter text</a>
<b>Dataset description</b>
Describe the dataset in a few lines.
<b>Purpose of the data</b>
Explain the purpose of the data collection/generation and its relation to the objectives of the project.
<b>Source of the data</b>
Text, e.g., field or laboratory notes, survey responses Numeric, e.g., tables, counts, measurements Audiovisual, e.g., images, sound recordings, video Models, computer code Other (please specify): <a href="#">click here to enter text</a>
<b>Type of data regarding the form</b>
Text: plain text (TXT), HTML, XML, PDF/A Databases: XML, CSV Image: JPEG, JPG-2000, PNG, TIFF Audio: AIFF, WAVE Containers: TAR, GZIP, ZIP Other (please specify): <a href="#">click here to enter text</a>
<b>Origin of the data</b>



Newly collected/generated
Re-used (please explain): <a href="#">click here to enter text</a>
<b>Expected size of data</b>
Give an estimation: e.g. a few kB/MB/GB, etc.
Fixed: never change after being collected or generated
Growing: new data may be added but the old data is never changed or deleted
Revisable: new data may be added, and old data may be changed or deleted
<b>Utility of the data</b>
Indicate to whom the data might be useful e.g. partners, stakeholders, citizens, etc.
<b>Software involved in the data processing</b>

## 2. FAIR Data

### 2.a. FAIR Data: Making data findable

<b>Standard identification mechanism and metadata</b>
Are the data produced and/or used in the project discoverable with metadata, identifiable and locatable by means of a standard identification mechanism (e.g. persistent and unique identifiers such as Digital Object Identifiers).
<b>Naming convention</b>
Indicate any naming convention that you follow.
<b>Keywords</b>
Provide keywords to optimise possibilities for re-use.

### 2.b. FAIR Data: Making data openly accessible

<b>Dataset accessibility</b>
------------------------------

If confidential, explain why, clearly separating legal and contractual reasons from voluntary restrictions.

Confidential data

Public data

Reason for confidentiality: [click here to enter text](#)

#### Software tools

Indicate what methods or software tools are needed to access the data.

#### Repository to be used to deposit the dataset

Where will the data and metadata be deposited? Preference should be given to certified repositories which support open access where possible.

### 2.c. FAIR Data: Making data interoperable

#### Are the data interoperable?

Brief description of the tools/vocabularies used to make the data usable by other researchers, institutions, etc.

### 2.d. FAIR Data: Increasing data re-use

#### Restrictions

If applicable, define the data licensing approach to permit the widest re-use possible. Indicate the chosen license tools.

#### Indicate for how long it is intended that the data remains re-usable

[Click here to enter text.](#)

#### Explain how data quality is assured

[Click here to enter text.](#)

### 3. Allocation of resources

**If applicable, indicate any allocation of resources to data management**

Click here to enter text.

### 4. Ethical aspects

**Please indicate if you have identified any ethical or legal aspect that could impact the data sharing**

Click here to enter text.

### 5. Data security

**Indicate the provisions in place to ensure data security**

Click here to enter text.

# Personal data template

## 1- Data processing

Name of Beneficiary:

<b>Dataset identifier</b>
<b>WP and Task</b>
<i>Click here to enter text</i>
<b>Dataset description</b>
<i>Describe the dataset in a few lines.</i>
<b>Purpose of the data</b>
<i>Explain the purpose of the data collection/generation and its relation to the objectives of the project.</i>
<b>Processing activity</b>
<i>Enter the name of the processing activity, e.g. marketing activities, extracting data from social networks etc.</i>
<b>Type of data</b>
<i>E.g., name, email address, phone, IP address etc.</i>
<b>Special categories of data</b>
<i>Do you process any of the following categories of data: racial or ethnic origin, political opinions, religious or philosophical beliefs, or trade union membership, genetic data, biometric data, health, sexual orientation? If yes, specify which one.</i>
<b>Expected size of data</b>
<i>Do you process criminal offence data?</i>

<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>Data classification</b>
<input type="checkbox"/> Public <input type="checkbox"/> Confidential <input type="checkbox"/> Other: <i>Click here to enter text</i>
<b>Software involved in the data processing</b>
<i>Enter the key IT systems(s) used to process or store the data.</i>
<b>Retention period</b>
<i>How long will you keep the data for?</i>

**2. Data collection**

<b>Source</b>
<i>Where do the data come from?</i>
<b>Means of collection</b>
<i>How were the data collected, obtained, or generated?</i>

**3. Data usage**

<b>Legal basis</b>
<i>What is the legal basis for processing according to Article 6 the GDPR?</i>
<b>Purpose of processing</b>
<i>Briefly describe the reason(s) why the data is used / processed.</i>

**4. A29WP DPIA Criteria**

<b>Evaluation or scoring: do you carry out any form of profiling?</b>
---



- Yes  
 No

**Automated decision making: do the data processing involve automated decision making without human intervention?**

- Yes  
 No

**Systematic monitoring: are the data used to observe, monitor, or control data subject?**

- Yes  
 No

**Sensitive data: do you process special categories of data and/or criminal offence data?**

- Yes  
 No

**Matching or combining datasets: do you match/combine different data from different controllers and/or taken for different purpose?**

- Yes  
 No

**Vulnerable groups: data from children, workers, employees, ill persons, or asylum seekers?**

- Yes  
 No

**Use of innovative technologies: e.g., facial recognition, high-risk AI, etc.**

- Yes  
 No

**Prevention: as a result, could the data subjects be prevented from exercising a right or using a service or a contract?**

- Yes  
 No

## 5. Data sharing

### Internal data sharing

*Will the data be shared with other beneficiaries? Specify.*

### External data sharing

*Will the data be shared with third parties outside the GA? Specify.*

### Purpose of the data sharing

*Why (purpose) are the data being shared?*

### Legal basis for the data sharing

*Specify the legal basis for the data sharing according to Article 6 GDPR.*

**DSA/DPA/JCA**

*If the data is shared (with other beneficiaries or third parties) indicate the type of Agreement in place (if needed): Data Sharing (DSA), Data Processing, (DPA) or Joint Controller Agreement (JCA).*

**6. Location – Data transfer**

**Location**

*Where are the data being processed?*

**Country(ies) where data is transferred?**

*Are the data being transferred outside the EEA? If yes, to which country(ies)?*

**Transfer mechanism**

*Indicate the data transfer mechanism in place.*

**Are any Special Categories of data transferred?**

*Indicate whether the transfer involves the transfer of special categories of data and/or criminal convictions and offences.*

**7. Data security**

**Security measures**

*Briefly describe the security measures applied to safeguard the data.*

**Anonymisation or pseudonymisation techniques**

*Specify whether any anonymisation or pseudonymisation techniques have been put in place.*

## 8. General principles

### Information to Data Subjects

*Article 13 and 14 of the GDPR: Has the information been provided to data subjects? If no, please specify if any exemption applies.*

### Principles of processing

*Specify whether you comply with all the principles of the data processing or you have any concerns you may not meet any or some of them.*



## Annexe II – Dataset index

### WP2

DATASET ID	OWNER(S)
FRONTSH1P_RIC_RegionalCircularBoosterToolkit_DDMMYY_v00	RIC
FRONTSH1P_UNILODZ_Data_DDMMYY_v00	UNILODZ
FRONTSH1P_UNILODZ_PersonalDataWP2_DDMMYY_v00	UNILODZ
FRONTSH1P_BZURA_PersonalDataWP2_DDMMYY_v00	BZURA
FRONTSH1P_KMPG_Emissions_DDMMYY_v00	KMPG Poland
FRONTSH1P_NVMT_WP2Data_DDMMYY_v00	NVMT
FRONTSH1P_MLEV_WP2Data_DDMMYY_v00	MLEV
FRONTSH1P_LNEG_GeodatabaseLodzkie_DDMMYY_v00	LNEG
FRONTSH1P_CIRC.FRL_WP2_DDMMYY_v00	CIRC.Friesland
FRONTSH1P_CIRC.FRL_PersonalDataWP2_DDMMYY_v00	CIRC.Friesland
FRONTSH1P_VELTHA_Monitoring_DDMMYY_v00	VELTHA

### WP3

DATASET ID	OWNER(S)
FRONTSH1P_UPOS_DataWP3_DDMMYY_v00	UPOS
FRONTSH1P_UPOS_PersonalDataWP3_DDMMYY_v00	UPOS
FRONTSH1P_UNILODZ_DataWP3_DDMMYY_v00	UNILODZ
FRONTSH1P_UNILODZ_PersonalDataWP3_DDMMYY_v00	UNILODZ
FRONTSH1P_UNIBZ_Combustion_DDMMYY_v00	UNIBZ
FRONTSH1P_NTUA_Gasifier_DDMMYY_v00	NTUA
FRONTSH1P_NTUA_LCAWP3_DDMMYY_v00	NTUA
FRONTSH1P_CERTH_CharCharact_DDMMYY_v00	CERTH
FRONTSH1P_LNEG_EcodesignWP3_DDMMYY_v00	LNEG
FRONTSH1P_BKT_Gasification_DDMMYY_v00	BKT

### WP4

DATASET ID	OWNER(S)
FRONTSH1P_UPOS_DataWP4_DDMMYY_v00	UPOS
FRONTSH1P_UPOS_PersonalDataWP4_DDMMYY_v00	UPOS
FRONTSH1P_UNILODZ_DataWP4_DDMMYY_v00	UNILODZ
FRONTSH1P_UNILODZ_PersonalDataWP4_DDMMYY_v00	UNILODZ
FRONTSH1P_BZURA_WasteWP4_DDMMYY_v00	BZURA
FRONTSH1P_BZURA_PersonalDataWP4_DDMMYY_v00	BZURA
FRONTSH1P_NVMT_DataWP4_DDMMYY_v00	NVMT

FRONTSH1P_NTUA_LCAWP4_DDMMYY_v00	NTUA
FRONTSH1P_CERTH_DesignCSS2ValueChain_DDMMYY_v00	CERTH
FRONTSH1P_LNEG_ProcessConditionsCSS2_DDMMYY_v00	LNEG
FRONTSH1P_LNEG_EcodesignWP4_DDMMYY_v00	LNEG
FRONTSH1P_CARTIF_Fermentation_DDMMYY_v00	CARTIF

## WP5

DATASET ID	OWNER(S)
FRONTSH1P_UNILODZ_DataWP5_DDMMYY_v00	UNILODZ
FRONTSH1P_UNILODZ_PersonalDataWP5_DDMMYY_v00	UNILODZ
FRONTSH1P_STAM_MicroalgaeTreatment_DDMMYY_v00	STAM
FRONTSH1P_LNEG_EcodesignWP5_DDMMYY_v00	LNEG
FRONTSH1P_INL_SERSCO2sensor_DDMMYY_v00	INL

## WP6

DATASET ID	OWNER(S)
FRONTSH1P_TUL_Extrusion_DDMMYY_v00	TUL
FRONTSH1P_LP_3DPrinting_DDMMYY_v00	LP
FRONTSH1P_LP_NIPUFoaming_DDMMYY_v00	LP
FRONTSH1P_PROPLAST_FoamingTests_DDMMYY_v00	PROPLAST
FRONTSH1P_LNEG_EcodesignWP6_DDMMYY_v00	LNEG
FRONTSH1P_W4ME_Dechlorination_DDMMYY_v00	W4ME
FRONTSH1P_PROMIX_FoamingTrials_DDMMYY_v00	PROMIX

## WP8

DATASET ID	OWNER(S)
FRONTSH1P_STRESS_GALIrpinia_Carmasciando_DataWP8_DDMMYY_v00	STRESS; GAL Irpinia; Carmasciando
FRONTSH1P_STRESS_GALIrpinia_Carmasciando_PersonalDataWP8_DDMMYY_v00	STRESS; GAL Irpinia; Carmasciando
FRONTSH1P_NVMT_DataWP8_DDMMYY_v00	NVMT
FRONTSH1P_MLEV_Replication_DDMMYY_v00	MLEV
FRONTSH1P_INL_RegionalCEAP_DDMMYY_v00	INL
FRONTSH1P_INL_PersonalDataWP8_DDMMYY_v00	INL
FRONTSH1P_CCDR-N_RegionalCEAP_DDMMYY_v00	CCDR-Norte
FRONTSH1P_CCDR-N_PersonalDataWP8_DDMMYY_v00	CCDR-Norte

FRONTSH1P_CIRC.FRL_WP8_DDMMYY_v00	CIRC.Friesland
FRONTSH1P_FRL_PersonalDataWP8_DDMMYY_v00	FRL

## WP9

<b>DATASET ID</b>	<b>OWNER(S)</b>
FRONTSH1P_OPUS_Communication_DDMMYY_v00	OPUS
FRONTSH1P_OPUS_PersonalDataWP9_DDMMYY_v00	OPUS
FRONTSH1P_UNILODZ_DataWP9_DDMMYY_v00	UNILODZ
FRONTSH1P_UNILODZ_PersonalDataWP9_DDMMYY_v00	UNILODZ
FRONTSH1P_BZURA_DataWP9_DDMMYY_v00	BZURA
FRONTSH1P_BZURA_PersonalDataWP9_DDMMYY_v00	BZURA
FRONTSH1P_NVMT_PersonalDataWP9_DDMMYY_v00	NVMT
FRONTSH1P_NTUA_LCARResults_DDMMYY_v00	NTUA
FRONTSH1P_NTUA_PersonalDataWP9_DDMMYY_v00	NTUA
FRONTSH1P_MLEV_AnalysisWaste_DDMMYY_v00	MLEV
FRONTSH1P_INL_PersonalDataWP9_DDMMYY_v00	INL
FRONTSH1P_CCDDR-N_PersonalDataWP9_DDMMYY_v00	CCDDR-Norte
FRONTSH1P_CIRC.FRL_PersonalDataWP9_DDMMYY_v00	CIRC.Friesland
FRONTSH1P_FRL_PersonalDataWP9_DDMMYY_v00	FRL

## Annexe III – Description of datasets

### Non-personal inputs

WP2

**Name of Beneficiary: RIC**

#### 1. Data summary: Non-personal data

<b>Dataset identifier</b>
FRONTSHP1P_RIC_RegionalCircularBoosterToolkit_DDMMYY_v00
<b>WP and Task</b>
WP2, Task 2.2
<b>Dataset description</b>
Data concerning circular economy in Lodz region available from public databases will be used: <ul style="list-style-type: none"> <li>– analysis of legal documents relating to waste management on the level of European Union, national and regional;</li> <li>– analysis of the European, national and regional strategic documents in the field of circular economy;</li> <li>– analysis of existing databases on all levels, including the community level, containing information on waste management in scope of the entire Frontsh1p project and in all dimensions specified by CSSs.</li> </ul>
<b>Purpose of the data</b>
On the basis of the collected data, the following deliverables will be prepared: D2.2 Regional Circularity Booster Toolkit D2.6 Circular Governance Model, operational framework, Lodzkie region CEAP enhancement and implementation updates.  The Regional Circularity Booster Toolkit will be tested in Lodzkie Region and then – transferred to other project regions in Italy, Portugal, Greece and Netherland.
<b>Source of the data</b>
<input checked="" type="checkbox"/> Text, e.g., field or laboratory notes, survey responses <input checked="" type="checkbox"/> Numeric, e.g., tables, counts, measurements <input type="checkbox"/> Audiovisual, e.g., images, sound recordings, video <input type="checkbox"/> Models, computer code <input type="checkbox"/> X Other (please specify): legal documents, EU, national, regional documents of Marshal Office, BZURA database, public statistical data, Regional Waste Database (BDO), Local Data Bank of the Central Statistical Office – (BDL GUS)
<b>Type of data regarding the form</b>

- Text: plain text (TXT), HTML, XML, PDF/A
- Databases: XML, CSV
- Image: JPEG, JPG-2000, PNG, TIFF
- Audio: AIFF, WAVE
- Containers: TAR, GZIP, ZIP
- Other (please specify): [click here to enter text](#)

#### Origin of the data

- Newly collected/generated
- Re-used (please explain): Data already available from public databases will be used, if needed, especially from the Central&Local Statistical Offices of Poland, Italy, Portugal, Greece, Netherland. If needed data will be processed in different dimensions.

#### Expected size of data

> 5 GB

- Fixed: never change after being collected or generated
- Growing: new data may be added but the old data is never changed or deleted
- Revisable: new data may be added, and old data may be changed or deleted

#### Utility of the data

The data used in the Task 2.2 will be useful for:

1. Project partners, mostly for CSSs (WP3, 4, 5, 6) and software tool development (STAM, WP7)
2. Stakeholders, e.g., companies, who may be interested in using tools to develop their business and technology according to the rules of circular economy
3. Policy makers (selected counties, municipalities, regions and government bodies in Poland and partner countries), who are interested in receiving evidence-based information on circular economy tools.
4. NGOs and general public, who are interested in learning more about benefits of following rules of circular economy

#### Software involved in the data processing

Microsoft 365 with Microsoft SharePoint  
Microsoft Teams

## 2. FAIR Data

### 2.a. FAIR Data: Making data findable

#### Standard identification mechanism and metadata

If the data are published in form of articles, metadata will be provided, including:

- Basic bibliographic metadata such as title, publication date, contributor name and affiliation, ORCID ID, DOI.

Rich metadata in form of internal/ external reports will provided with:

- Abstract,

– Keywords

Thanks to registering the metadata with Zenodo, it will be possible to harvest and index the metadata. Zenodo ensures that the data is assigned an identifier. It will resolve the consistency of identifiers to all digital objects generated by the Task 2.2

**Naming convention**

Data collected during the WP2, Task 2.2 and T2.4 realization are named according to the following convention:

*T.2.2\_YYMMDD\_descriptive\_name(VersionNumber)*

*T2.4\_YYMMDD\_descriptive\_name(VersionNumber)*

**Keywords**

*Provide keywords to optimise possibilities for re-use.*

Waste data base, Local community database, regional business data inquiries

**2.b. FAIR Data: Making data openly accessible**

**Dataset accessibility**

For all open access data, no person identity verification will be performed. For all restricted data (especially the data protected by trade secrecy of relevant partner(s) of the consortium or personal data of research participants), the identity of all persons accessing the data will be ascertained following the standard access control of Microsoft SharePoint (Microsoft Teams).

Confidential data X

Public data

Reason for confidentiality: All data delivered by CSSs will be considered confidential (although available to all the consortium) before the project consortium decides to make them public.

**Software tools**

The data be accessible through Hypertext Transfer Protocol Secure (HTTPS). The metadata will be openly available under a public domain dedication CC0. The metadata will contain information (DOI) to enable the user to access the data.

**Repository to be used to deposit the dataset**

The publicly available deliverables (whenever possible, with underlying raw data that would be fully anonymized of privately identifiable data in accordance to GDPR regulations) will be deposited in Zenodo, ensuring long-term preservation of the results. Zenodo ensures that the data is assigned an identifier. It will resolve the identifier to all digital objects generated by the Task 2.2.

**2.c. FAIR Data: Making data interoperable**

**Are the data interoperable?**

Whenever possible data will include qualified reference following glossary creating within the project. If needed, the etymology and definition of the specific data will be included.

## 2.d. FAIR Data: Increasing data re-use

### Restrictions

Whenever possible, all data will be made freely available in the public domain to permit the widest re-use possible. The data be licensed using the standard reuse license: an Attribution-ShareAlike 4.0 International. It allows adaptations of Task 2.2 research outputs, as long as others share alike. It also allows commercial uses of our work.

### Indicate for how long it is intended that the data remains re-usable

Long term preservation will be ensured by sharing the data and all possible outputs through Zenodo. Task 2.2-originating research content may be uploaded to Zenodo free of charge. Zenodo is funded by the European Commission, CERN, Alfred P. Sloan Foundation, Arcadia Fund and donations via CERN & Society Foundation.

### Explain how data quality is assured

The overall approach to data quality management in the projects is based on two aspects: the timely completion of the deliverables on the one hand, and the design of high-quality documents on the other hand.

The timely delivery of all documents will be part of regular status updates. During each weekly meetings, the Principle Investigator will provide a review of timelines and deliverables with a special focus on deliverables that are due soon.

In terms of the overall quality of the deliverables, the quality management process in Task 2.2 will focus on the following requirements:

- Clarity of thought and presentation: Is the document well written and easy-to-read? Is there a suitable balance of text and illustrations? Does the document have a proper layout? Are illustrations and tables properly referenced? Are references provided and are they complete? Is there a clear guidance for the user (especially guidelines, tools)? etc.
- Internal validity: Is the text and the data in the document plausible? Do text and data match? Are there contradictions within the document? etc.
- Contribution and conformity: Does the deliverable contribute to the aim of the task? Is the deliverable suited to the actual target group? Are there any deviations of the deliverable and its outline in the project both in terms of content and form? etc.

To make sure that all deliverables fulfil these requirements, the quality management approach in the project is based on a two-level approach.

- First level: The first level is an internal review process.
- Second level: quality reviewers for each deliverable pointed by the Leader.

On each review level, a sufficient time buffer for the review will be planned. The reviewer will provide comments in written. The task members or the contributors will then incorporate the comments in their document, or they will reject the comments with a justification for the rejection. The PI will keep track of the review level by an Excel-sheet for each deliverable.

### 3. Allocation of resources

**If applicable, indicate any allocation of resources to data management**

The team assigned to the project.

### 4. Ethical aspects

**Please indicate if you have identified any ethical or legal aspect that could impact the data sharing**

RIC will follow the “Guidelines for Conducting Ethical Socio-Economic Research”, developed in 2004 within the RESPECT project, funded by the European Commission’s Information Society Technologies (IST) Programme:

- The research aims of any study should both benefit society and minimise social harm.
- Researchers should endeavour to balance professional integrity with respect for national and international law.
- Researchers should endeavour to ensure that research is commissioned and conducted with respect for, and awareness of, gender differences.
- Researchers should endeavour to ensure that research is commissioned and conducted with respect for all groups in society, regardless of race, ethnicity, religion and culture.
- Researchers should endeavour to ensure that research is commissioned and conducted with respect for under-represented social groups and that attempts are made to avoid their marginalisation or exclusion.
- Researchers should endeavour to ensure that the concerns of relevant stakeholders and user groups are addressed.
- Researchers should endeavour to ensure that an appropriate research method is selected on the basis of informed professional expertise.
- Researchers should endeavour to ensure that the research team has the necessary professional expertise and support.
- Researchers should endeavour to ensure that the research process does not involve any unwarranted material gain or loss for any participants.
- Researchers should endeavour to ensure factual accuracy and avoid falsification, fabrication, suppression, or misinterpretation of data.
- Researchers should endeavour to reflect on the consequences of research engagement for all participants and attempt to alleviate potential disadvantages to participation for any individual or category of person.
- Researchers should endeavour to ensure that reporting and dissemination are carried out in a responsible manner.
- Researchers should endeavour to ensure that methodology and findings are open for discussion and peer review.
- Researchers should endeavour to ensure that any debts to previous research as a source of knowledge, data, concepts, and methodology should be fully acknowledged in all outputs.
- Researchers should endeavour to ensure that participation in research should be voluntary.
- Researchers should endeavour to ensure that decisions about participation in research are made from an informed position.



- Researchers should endeavour to ensure that all data are treated with appropriate confidentiality and anonymity.
- Researchers should endeavour to ensure that research participants are protected from undue intrusion, distress, indignity, physical discomfort, personal embarrassment, or psychological or other harm.

Simultaneously there are no ethical or legal aspect identified which impact the process of data sharing.

## 5. Data security

### Indicate the provisions in place to ensure data security

Within the project's lifetime, in order to enhance the effective collaboration among partners, data will be exchanged and stored in a project-specific access-restricted SharePoint platform hosted at RIC Pro-Akademia. It is also available through Microsoft Teams. Access will be granted only to Project Partners' employees officially assigned to work in the project. No access to third parties will be granted.

### Name of Beneficiary: University of Lodz (UniLodz)

#### 1. Data summary: Non-personal data

##### Dataset identifier

FRONTSH1P\_UNILODZ\_Data\_DDMMYY\_v00

##### WP and Task

WP2 and T2.1, T2.4

##### Dataset description

The dataset contains the results of stakeholder surveys for effective implementation among CSSs.

Data in the project will come from various sources:

- analysis of data available on the websites of National Statistics, Eurostat, and selected Offices;
- expert discussions;
- questionnaire and FGI;
- surveys;
- public datasets such as: BDL, REGON, etc.;

##### Purpose of the data

- define the proper model for effective governance of the regional/ territorial circular cluster;
- identification of incentives and barriers of existing in current socio-economic policy instruments;
- identification of market failures in scope of circular economy;
- identification system of public and private investments and public procurement pull for new solutions;
- definition of policy recommendations.

##### Source of the data

<input checked="" type="checkbox"/> Text, e.g., field or laboratory notes, survey responses <input checked="" type="checkbox"/> Numeric, e.g., tables, counts, measurements <input checked="" type="checkbox"/> Audiovisual, e.g., images, sound recordings, video <input type="checkbox"/> Models, computer code <input checked="" type="checkbox"/> Other (please specify): <i>shp</i>
<b>Type of data regarding the form</b>
<input checked="" type="checkbox"/> Text: plain text (TXT), HTML, XML, PDF/A <input checked="" type="checkbox"/> Databases: XML, CSV <input checked="" type="checkbox"/> Image: JPEG, JPG-2000, PNG, TIFF <input checked="" type="checkbox"/> Audio: AIFF, WAVE <input type="checkbox"/> Containers: TAR, GZIP, ZIP <input checked="" type="checkbox"/> Other (please specify): <i>shp</i>
<b>Origin of the data</b>
<input checked="" type="checkbox"/> Newly collected/generated <input type="checkbox"/> Re-used (please explain):
<b>Expected size of data</b>
<input type="checkbox"/> Fixed: never change after being collected or generated <input type="checkbox"/> Growing: new data may be added but the old data is never changed or deleted <input checked="" type="checkbox"/> Revisable: new data may be added, and old data may be changed or deleted
<b>Utility of the data</b>
The dataset will be useful to all partners.
<b>Software involved in the data processing</b>
Microsoft Forms, Excel, OneDrive. ArcGIS, QGis, SPSS, Statistica

## 2. FAIR Data

### 2.a.FAIR Data: Making data findable

<b>Standard identification mechanism and metadata</b>
The most relevant data will be published in international journals (as a article) to which a DOI is generally associated. According to the article content, it will be also possible to associate metadata to it in a dedicated repository usually suggested by the journal and made available to readers.
<b>Naming convention</b>
Files including data collected during the project will be named according to the following pattern: <i>FRONTSHIP_descriptive_name(date)</i> For example, the file collected during FGI will be saved as: <i>FRONTSHIP_FGIcompany_12.05.2022</i>
<b>Keywords</b>
Regional stakeholders, Company, Society, Academy, Government, Requirements, Success criteria, circular benchmarking.

## 2.b. FAIR Data: Making data openly accessible

### Dataset accessibility

Confidential data  
Public data - X

### Software tools

Generally, the data will be accessible through software such as PDF readers and Microsoft Excel, Microsoft Word.

### Repository to be used to deposit the dataset

All data and metadata will be deposited in the internal repository of UniLodz servers on Microsoft OneDrive Cloud.

Data shared with the consortium, will be uploaded in the common Google Drive folder created by the coordinators.

Data that are intended to be published on international scientific journals will need to wait for the publication acceptance before being deposited in public repositories.

## 2.c. FAIR Data: Making data interoperable

### Are the data interoperable?

The data will be always accompanied by a legend clearly explaining the meaning of the used nomenclature and the acronyms .

Since data are generally intended for a scientific audience, technical terms will be used. Such terms will be retrieved from the existing peer-reviewed literature, where conceptual definitions can be traced back.

## 2.d. FAIR Data: Increasing data re-use

### Restrictions

Once published, data will have to submit to the standard licenses as the Creative Commons International License.

Moreover, data restrictions will comply with the Grant Agreement.

### Indicate for how long it is intended that the data remains re-usable

Once published in article form or in dedicated repositories, data could be re-used as long as they will be considered useful and up-to-date.

### Explain how data quality is assured

Data will be carefully collected applying (if possible) a statistical approach. A cross check carried out by at least another staff member than responsible for collection will be foreseen whenever possible.

A comparison with data reported in the literature will be always carried out to ensure that the data collected are reasonable.

Moreover, data will be reviewed by different experts in the field.

### 3. Allocation of resources

**If applicable, indicate any allocation of resources to data management**

No resources have been allocated to data management.

### 4. Ethical aspects

**Please indicate if you have identified any ethical or legal aspect that could impact the data sharing**

No ethical or legal aspects that could impact the data sharing have been identified.

### 5. Data security

**Indicate the provisions in place to ensure data security**

Before making the data usable for the consortium or for the public, UniLodz data will be stored in UniLodz computers and Microsoft OneDrive cloud. Such platforms can only be accessed through encrypted accounts, that ensure the avoidance of unwanted external access.

**Name of Beneficiary: KPMG**

#### 1. Data summary: Non-personal data

**Dataset identifier**

FRONTSH1P\_KMPG\_Emissions\_DDMMYY\_v00

**WP and Task**

WP2, T2.5

**Dataset description**

Data on emission reduction methodologies such as emission sources, GHGs being emitted, quantification method, description of technology resulting in emissions reduction, material flow, foreseen reduction quantities.

**Purpose of the data**

Providing methodology input for Voluntary Emission Reduction framework. Assessing the potential of individual projects to participate in the VER System.

**Source of the data**

- Text, e.g., field or laboratory notes, survey responses
- Numeric, e.g., tables, counts, measurements
- Audiovisual, e.g., images, sound recordings, video
- Models, computer code
- Other (please specify): *click here to enter text*

**Type of data regarding the form**

<input checked="" type="checkbox"/> Text: plain text (TXT), HTML, XML, PDF/A <input type="checkbox"/> Databases: XML, CSV <input checked="" type="checkbox"/> Image: JPEG, JPG-2000, PNG, TIFF <input type="checkbox"/> Audio: AIFF, WAVE <input checked="" type="checkbox"/> Containers: TAR, GZIP, ZIP <input type="checkbox"/> Other (please specify): <i>click here to enter text</i>
<b>Origin of the data</b>
<input checked="" type="checkbox"/> Newly collected/generated <input checked="" type="checkbox"/> Re-used (please explain): some data may readily be available (e.g. data collected by the partners in the process of LCA analysis)
<b>Expected size of data</b>
<input type="checkbox"/> Fixed: never change after being collected or generated <input type="checkbox"/> Growing: new data may be added but the old data is never changed or deleted <input checked="" type="checkbox"/> Revisable: new data may be added, and old data may be changed or deleted
<b>Utility of the data</b>
The dataset will mostly be used by KPMG to design and adjust the VER framework to the CSS's characteristics. Dataset may be useful to partners providing the data themselves – it will help to organize their knowledge about GHG emissions.
<b>Software involved in the data processing</b>
MS Office (MS Excel, MS Word)

## 2. FAIR Data

### 2.a.FAIR Data: Making data findable

<b>Standard identification mechanism and metadata</b>
The data will be organised in the folder tree corresponding to data structure.
<b>Naming convention</b>
Files related to the project will be named according to the following convention: YYYYMMDD_descriptive_name.(versionNumber)
For example: 20220909_emission_target.1.1
<b>Keywords</b>
Voluntary Emission Reduction System, emissions reduction, emission, GHG, decarbonisation

### 2.b. FAIR Data: Making data openly accessible

<b>Dataset accessibility</b>
Confidential data - X Public data Reason for confidentiality: data will be collected for purpose of VER System preparation only
<b>Software tools</b>
MS Office (MS Excel, MS Word)
<b>Repository to be used to deposit the dataset</b>

Internal KPMG repository on the One Drive Cloud with restricted access

### 2.c. FAIR Data: Making data interoperable

#### Are the data interoperable?

The dataset will be processed and in effect used as an input to the Voluntary Emission Reduction Programme framework (the GHG quantification methodology input). The vocabulary used will be compliant with the GHG Protocol standard, a thus universal.

### 2.d. FAIR Data: Increasing data re-use

#### Restrictions

n/a

#### Indicate for how long it is intended that the data remains re-usable

The data will remain re-usable until it gets outdated (which is unforeseeable, but not expected to happen soon).

#### Explain how data quality is assured

The data will be evaluated and updated with the newest version. It will also be cross-checked with publicly available data (such as UFNCCC methodologies).

## 3. Allocation of resources

#### If applicable, indicate any allocation of resources to data management

The team assigned to the project

## 4. Ethical aspects

#### Please indicate if you have identified any ethical or legal aspect that could impact the data sharing

n/a

## 5. Data security

#### Indicate the provisions in place to ensure data security

KPMG follows its usual, stringent data management policies, which are verified and updated by the National Information Technology Security Officer. All KPMG employees are required to complete regular data security trainings.

**Name of Beneficiary: Novamont S.p.A.**

## 1. Data summary: Non-personal data

<b>Dataset identifier</b>
FRONTSHP1P_NVMT_WP2Data_DDMMYY_v00
<b>WP and Task</b>
WP2 Task 2.2 and 2.3
<b>Dataset description</b>
Data related to: <ul style="list-style-type: none"> <li>The description of Novamont Feedstocks (e.g. raw material properties and quality, crops specification, food waste properties) and final applications (e.g. polymer quality and properties, final demonstrator specifications...).</li> <li>regional economy monitor system</li> </ul>
<b>Purpose of the data</b>
To share information with the partners for the regional Systemic economic approach and the development of methodology and toolkits support
<b>Source of the data</b>
<input checked="" type="checkbox"/> Text, e.g., field or laboratory notes, survey responses <input checked="" type="checkbox"/> Numeric, e.g., tables, counts, measurements <input type="checkbox"/> Audiovisual, e.g., images, sound recordings, video <input type="checkbox"/> Models, computer code <input type="checkbox"/> Other (please specify): <i>click here to enter text</i>
<b>Type of data regarding the form</b>
<input checked="" type="checkbox"/> Text: plain text (TXT), HTML, XML, PDF/A <input checked="" type="checkbox"/> Databases: XML, CSV <input checked="" type="checkbox"/> Image: JPEG, JPG-2000, PNG, TIFF <input type="checkbox"/> Audio: AIFF, WAVE <input checked="" type="checkbox"/> Containers: TAR, GZIP, ZIP <input type="checkbox"/> Other (please specify): <i>click here to enter text</i>
<b>Origin of the data</b>
<input checked="" type="checkbox"/> Newly collected/generated <input checked="" type="checkbox"/> Re-used (please explain): Public data
<b>Expected size of data</b>
<i>Give an estimation: e.g. a few kB/MB/GB, etc.</i> <input type="checkbox"/> Fixed: never change after being collected or generated <input type="checkbox"/> Growing: new data may be added but the old data is never changed or deleted <input checked="" type="checkbox"/> Revisable: new data may be added, and old data may be changed or deleted
<b>Utility of the data</b>
The data will be used by WP2 technical partners, who will operate in the development of the Regional Circularity Booster toolkits and the Regional circular economy monitoring system & partnership models.
<b>Software involved in the data processing</b>
Excel, Word, Power Point

## 2. FAIR Data

### 2.a.FAIR Data: Making data findable

<b>Standard identification mechanism and metadata</b>
Not defined
<b>Naming convention</b>
Files including data collected during the project will be named according to the following convention: WP2_FRONTSH1P_YYMMDD_descriptive_name(VersionNumber)
<b>Keywords</b>
Not defined

### 2.b. FAIR Data: Making data openly accessible

<b>Dataset accessibility</b>
Confidential data: data shared are restricted to consortium Public data Reason for confidentiality: all data will be considered as confidential unless specified otherwise.
<b>Software tools</b>
<i>Excel, Word, Power Point</i>
<b>Repository to be used to deposit the dataset</b>
<i>The shared data will be copied in the Novamont repository servers and may be collected in the project shared folders (i.e. Google Cloud)</i>

### 2.c.FAIR Data: Making data interoperable

<b>Are the data interoperable?</b>
<i>DATA will be made available with common type software files and shared via e-mail (e.g. Word, Excel, power point, ...).</i>

### 2.d. FAIR Data: Increasing data re-use

<b>Restrictions</b>
Not defined
<i>Indicate for how long it is intended that the data remains re-usable</i>
<i>Data are usable until the end of the Frotnsh1p project, unless otherwise specified.</i>
<b>Explain how data quality is assured</b>
<i>If a scientific article is produced, it will be subjected to peer review before publishing If internal, data quality is subject to internal procedure (e.g. ISO 9001 certification)</i>



### 3. Allocation of resources

**If applicable, indicate any allocation of resources to data management**

Company resources are involved in data management for internal company repository servers but not allocated to the project.

### 4. Ethical aspects

**Please indicate if you have identified any ethical or legal aspect that could impact the data sharing**

Not applicable

### 5. Data security

**Indicate the provisions in place to ensure data security**

Internal server have standard security processes: restricted access, backup periodically, all security parameters accomplished

## Name of Beneficiary: Municipality of Levadia

### 1. Data summary: Non-personal data

**Dataset identifier**

FRONTSH1P\_MLEV\_WP2Data\_DDMMYY\_v00

**WP and Task**

WP2 T2.1 & T2.3

**Dataset description**

The dataset will draft a Public Circular Procurement scheme able to be used for the outcomes of the CSSs through the identification of incentives and barriers of existing socio-economic policy instruments on the regional level of the Municipality. Especially will focus on the waste recycling

**Purpose of the data**

The main goal of the collection of data will be to develop the methodology and toolkits to support the regional transition to a circular economy, taking into account various types of local sources of waste as raw materials for reprocessing, reusing, recycling and upcycling.

**Source of the data**

- xText, e.g., field or laboratory notes, survey responses
- xNumeric, e.g., tables, counts, measurements
- Audiovisual, e.g., images, sound recordings, video
- Models, computer code
- Other (please specify): *click here to enter text*

**Type of data regarding the form**

xText: plain text (TXT), HTML, XML, PDF/A

XDatabases: XML, CSV

Image: JPEG, JPG-2000, PNG, TIFF

Audio: AIFF, WAVE

Containers: TAR, GZIP, ZIP

Other (please specify): [click here to enter text](#)

#### Origin of the data

xNewly collected/generated

xRe-used (please explain): Data that we have already available

#### Expected size of data

Fixed: never change after being collected or generated

Growing: new data may be added but the old data is never changed or deleted

xRevisable: new data may be added, and old data may be changed or deleted

#### Utility of the data

The dataset will be useful to WP2 technical partners, RIC and VELTHA who are the leaders of the specific tasks T2.1 & T2.3 for monitoring the framework for the circular economy and improving CSS harmonization based on nine indicators: 1)Circular design; 2)New production process accepting “secondary raw materials”; 3)Re-use/Refurbish/ repair;4) Waste reduction; 5) Industrial symbiosis; 6) Waste recycling; 7)Net energy balance; 8) Reduction of emissions; 9) Net balance of jobs Such indicators will be also used for the part of the assessment tool related to circular economy.

Microsoft Excel

## 2. FAIR Data

### 2.a.FAIR Data: Making data findable

#### Standard identification mechanism and metadata

The most relevant data produced will be published in article form in international journals to which a DOI is generally associated. According to the article content, it will be also possible to associate metadata to it in a dedicated repository usually suggested by the journal and made available to readers.

#### Naming convention

Files including data collected during the project will be named according to the following convention:

*FRONTSHIP\_YYMMDD\_descriptive\_name(Version Number)*

#### Keywords

*Provide keywords to optimise possibilities for re-use.*

Wood packaging and wood remnants, food and fodder remains, plastic and rubber garbage

### 2.b. FAIR Data: Making data openly accessible

#### Dataset accessibility

Public data

#### Software tools

Generally the data will be accessible through software such as PDF readers and Microsoft Excel.

#### Repository to be used to deposit the dataset

All data and metadata will be deposited in the internal repository of MLEV servers.  
 Data to be shared with the consortium will be uploaded in the common Google Drive folder created by the coordinators.  
 Data that are intended to be published on international scientific journals will need to wait for the publication acceptance before being deposited in public repositories.

### 2.c. FAIR Data: Making data interoperable

#### Are the data interoperable?

The data will be always accompanied by a legend clearly explaining the meaning of the acronyms used. Moreover, graphics will be designed taking into account colour blind reader. This will increase the readability of the data collected making them more accessible.  
 Since data are generally intended for a scientific audience, technical terms will be used. Such terms will be retrieved from the existing peer-reviewed literature, where conceptual definitions can be traced back.

### 2.d. FAIR Data: Increasing data re-use

#### Restrictions

Once published, data will have to submit to the standard licenses as the Creative Commons International License.  
 Moreover, data restrictions will comply with the Grant Agreement.

#### Indicate for how long it is intended that the data remains re-usable

Once published in article form or in dedicated repositories, data could be re-used as long as they will be considered useful and up-to-date.

#### Explain how data quality is assured

Data will be carefully collected applying (if possible) a statistical approach. A cross check carried out by at least another staff member than responsible for collection will be foreseen whenever possible.  
 A comparison with data reported in the literature will be always carried out to ensure that the data collected are reasonable.  
 Moreover, data will be reviewed by different experts in the field.

## 3. Allocation of resources

#### If applicable, indicate any allocation of resources to data management

No resources have been allocated to data management.

## 4. Ethical aspects

#### Please indicate if you have identified any ethical or legal aspect that could impact the data sharing

No ethical or legal aspects that could impact the data sharing have been identified.

## 5. Data security

### Indicate the provisions in place to ensure data security

Before making the data usable for the consortium or for the public, MLEV data will be stored in MLEV computers, Microsoft One Drive cloud. Such platforms can only be accessed through encrypted accounts, that ensure the avoidance of unwanted external access.

## Name of Beneficiary: LNEG

### 1. Data summary: Non-personal data

#### Dataset identifier

FRONTSH1P\_LNEG\_GeodatabaseLodzkie\_DDMMYY\_v00

#### WP and Task

WP2, Task 2.2.5: Regional Circularity Booster Mapping

#### Dataset description

*Describe the dataset in a few lines.*

- Geodatabase that includes information on stakeholder identifiers, supranational waste/economic identifiers, specific value-circularity levels, geolocated-technological data, land-cover and social indicators.
- Presentation of the obtained results during the conference and project meetings.

#### Purpose of the data

*Explain the purpose of the data collection/generation and its relation to the objectives of the project.*

Booster the regional transition to a circular economy in the FrontSh1p project: generation of a geodatabase for stakeholder characterisation and mapping to be included in the Regional Circularity Booster Toolkit of WP2 for the Lodzkie region.

#### Source of the data

- Text, e.g., field or laboratory notes, survey responses
- Numeric, e.g., tables, counts, measurements
- Audiovisual, e.g., images, sound recordings, video
- Models, computer code
- Other (please specify): available open-source data, e.g. COPERNICUS

#### Type of data regarding the form

- Text: plain text (TXT), HTML, XML, PDF/A
- Databases: XML, CSV
- Image: JPEG, JPG-2000, PNG, TIFF
- Audio: AIFF, WAVE
- Containers: TAR, GZIP, ZIP
- Other (please specify): [click here to enter text](#)

#### Origin of the data

- Newly collected/generated
- Re-used (please explain): *Official Reports, Statistic data*

#### Expected size of data

*Give an estimation: e.g. a few kB/MB/GB, etc.*

< 1GB

<input type="checkbox"/> Fixed: never change after being collected or generated <input checked="" type="checkbox"/> Growing: new data may be added but the old data is never changed or deleted <input checked="" type="checkbox"/> Revisable: new data may be added, and old data may be changed or deleted
<b>Utility of the data</b>
Project partners, local stakeholders, economy and industrial entrepreneurs, services developers, regulatory and governmental bodies
<b>Software involved in the data processing</b>
ArcGIS (ESRI) and standard Microsoft desktop formats (Word, Excel, Powerpoint)

## 2. FAIR Data

### 2.a. FAIR Data: Making data findable

<b>Standard identification mechanism and metadata</b>
<i>Are the data produced and/or used in the project discoverable with metadata, identifiable and locatable by means of a standard identification mechanism (e.g. persistent and unique identifiers such as Digital Object Identifiers).</i>
Publications and some open access data: repositories generate DOI.
<b>Naming convention</b>
<i>Indicate any naming convention that you follow.</i>
<b>Keywords</b>
<i>Provide keywords to optimise possibilities for re-use.</i>
Specific information respecting keywords shall be based on the keyword thesauri to be defined in the geodatabase glossary.

### 2.b. FAIR Data: Making data openly accessible

<b>Dataset accessibility</b>
<i>If confidential, explain why, clearly separating legal and contractual reasons from voluntary restrictions.</i>
Public data: YES Data will be available in an open-data platform (it can be used freely). Data will be shared with the WP partners to support the project work. All deliverables and milestones will be shared within the consortium and the EC.
Confidential data: YES Reason for confidentiality: The data relating to internal processes involved in execution of the project activities as well as the collected data may be a subject for intellectual property (IP) issues, hence may have restricted access in the repository.
<b>Software tools</b>
<i>Indicate what methods or software tools are needed to access the data.</i>
<b>Repository to be used to deposit the dataset</b>

*Where will the data and metadata be deposited? Preference should be given to certified repositories which support open access where possible.*

### 2.c. FAIR Data: Making data interoperable

#### Are the data interoperable?

*Brief description of the tools/vocabularies used to make the data usable by other researchers, institutions, etc.*

A common vocabulary, typical to the research field will be used for semantic data harmonisation.

### 2.d. FAIR Data: Increasing data re-use

#### Restrictions

*If applicable, define the data licensing approach to permit the widest re-use possible. Indicate the chosen license tools.*

Publications: Data will be licensed using standard licenses (i.e., Creative Commons licenses) in line with the obligations set out in the Grant Agreement.

Data will be available straight after publication. However, the raw data for a publication must be uploaded to an open access repository before the manuscript is accepted. Therefore, the data will be in the open access repository, but not accessible until the paper is accepted and a DOI is created (kind of embargo period).

#### Indicate for how long it is intended that the data remains re-usable

*Click here to enter text.*

#### Explain how data quality is assured

*Click here to enter text.*

### 3. Allocation of resources

#### If applicable, indicate any allocation of resources to data management

All LNEG costs for making data FAIR are integrated within the project. There are no dedicated resources for long term preservation.

### 4. Ethical aspects

#### Please indicate if you have identified any ethical or legal aspect that could impact the data sharing

No specific issues detected.

## 5. Data security

### Indicate the provisions in place to ensure data security

LNEG: data will be stored in at least two locations (i.e. LNEG repository, EC portal and FRONTSH1P webpage/repository) to provide for data backup, recovery and secure storage for a limited time. Transfer of sensitive data will use secure protocols (i.e., username and password,...). The LNEG repository is stored at LNEG servers with security protocols established by the Centro Nacional de Cibersegurança (National Cybersecurity Center).

### Name of Beneficiary: CIRC.Friesland

#### 1. Data processing: Personal data

Dataset identifier
FRONTSH1P_CIRC.FRL_WP2_DDMMYY_v00 FRONTSH1P_CIRC.FRL_WP8_DDMMYY_v00
WP and Task
WP2 – Regional Systemic Circular Economic Approach WP8 – Replication Strategies
Dataset description
<i>Describe the dataset in a few lines.</i> The dataset comprises of data retrieved from the innovatiespotter.nl database, which uses artificial intelligence to combine open-access data about organisations. This dataset is focused on mapping the (circular) plastics ecosystem within the province of Friesland, the Netherlands. Later in the process, the data will be complemented with information acquired by talks and interviews with entrepreneurs.
Purpose of the data
<i>Explain the purpose of the data collection/generation and its relation to the objectives of the project.</i> The data is used to obtain insights in the current activities (ecosystem) concerned with (circular) plastics within Friesland. This relates to WP2: Regional Systemic Circular Economic Approach. Obtaining insights in what is happening within the region helps by designing a systemic approach towards a circular economy.
Source of the data
<input type="checkbox"/> Text, e.g., field or laboratory notes, survey responses <input checked="" type="checkbox"/> Numeric, e.g., tables, counts, measurements <input type="checkbox"/> Audiovisual, e.g., images, sound recordings, video <input type="checkbox"/> Models, computer code <input type="checkbox"/> Other (please specify): <a href="#">click here to enter text</a>
Type of data regarding the form

<input checked="" type="checkbox"/> Text: plain text (TXT), HTML, XML, PDF/A <input checked="" type="checkbox"/> Databases: XML, CSV <input type="checkbox"/> Image: JPEG, JPG-2000, PNG, TIFF <input type="checkbox"/> Audio: AIFF, WAVE <input type="checkbox"/> Containers: TAR, GZIP, ZIP <input type="checkbox"/> Other (please specify): <i>click here to enter text</i>
<b>Origin of the data</b>
<input checked="" type="checkbox"/> Newly collected/generated <input checked="" type="checkbox"/> Re-used (please explain): the data is already available online, but is only mapped/grouped together within the innovatiespotter.nl database.
<b>Expected size of data</b>
<i>Give an estimation: e.g. a few kB/MB/GB, etc. A few MB.</i> <input type="checkbox"/> Fixed: never change after being collected or generated <input type="checkbox"/> Growing: new data may be added but the old data is never changed or deleted <input checked="" type="checkbox"/> Revisable: new data may be added, and old data may be changed or deleted
<b>Utility of the data</b>
<i>Indicate to whom the data might be useful e.g. partners, stakeholders, citizens, etc.</i> This data is useful for partners of the FRONTSH1P project, stakeholders, organisations and government institutions to obtain insights in what is happening within Friesland, and it can serve as an example for other regions to develop a similar approach.
<b>Software involved in the data processing</b>
<a href="http://www.innovatiespotter.nl">www.innovatiespotter.nl</a> Microsoft Excel Microsoft Word

## 2. FAIR Data

### 2.a. FAIR Data: Making data findable

<b>Standard identification mechanism and metadata</b>
<i>Are the data produced and/or used in the project discoverable with metadata, identifiable and locatable by means of a standard identification mechanism (e.g. persistent and unique identifiers such as Digital Object Identifiers).</i> Most of the data can be found in the Innovatiespotter.nl database, or by using the other datasources noted in the report of the research. The results from talks and interviews with entrepreneurs will be reported in the accompanying research report.
<b>Naming convention</b>
<i>Indicate any naming convention that you follow.</i> Files including data collected during the project will be named according to the following convention: FRONTSH1P_YYMMDD_descriptive_name (VersionNumber)For example: FRONTSH1P_220612_InnovatiespotterV1



### Keywords

*Provide keywords to optimise possibilities for re-use.*  
Plastics, circular plastics, recycling, ecosystem.

## 2.b. FAIR Data: Making data openly accessible

### Dataset accessibility

*If confidential, explain why, clearly separating legal and contractual reasons from voluntary restrictions.*

*The data is not confidential.*

### Software tools

*Indicate what methods or software tools are needed to access the data.*

The data is downloaded via innovatiespotter.com through Excel sheets. In order to access the data, the only software tool that is needed is Excel.

### Repository to be used to deposit the dataset

*Where will the data and metadata be deposited? Preference should be given to certified repositories which support open access where possible.*

All data and metadata will be deposited in the internal repository of Circulair Friesland's servers. Data to be shared with the consortium will be uploaded in the common Google Drive folder created by the coordinators. After a careful evaluation, data that are deemed public could also be deposited on websites of e.g. the FRONTSHIP Project or Circulair Friesland.

## 2.c. FAIR Data: Making data interoperable

### Are the data interoperable?

*Brief description of the tools/vocabularies used to make the data usable by other researchers, institutions, etc.*

The data will be always accompanied by a legend clearly explaining the meaning of the nomenclature and the acronyms used. Moreover, graphics will be designed taking into account colour blind reader. This will increase the readability of the data collected making them more accessible. Apart from that, an accompanying guide will be published making all the data and concepts understandable.

## 2.d. FAIR Data: Increasing data re-use

### Restrictions

*If applicable, define the data licensing approach to permit the widest re-use possible. Indicate the chosen license tools.*

There are no data license applicable. However, data restrictions will comply with the Grant Agreement.

### Indicate for how long it is intended that the data remains re-usable

*Click here to enter text.*

Once published, data could be re-used as long as they will be considered useful and up-to-

date.

**Explain how data quality is assured**

*Click here to enter text.*

Data will be carefully collected through desk-research. After that, data-validation occurs by conversations and interviews with entrepreneurs and other knowledgeable people.

### 3. Allocation of resources

**If applicable, indicate any allocation of resources to data management**

Not applicable.

### 4. Ethical aspects

**Please indicate if you have identified any ethical or legal aspect that could impact the data sharing**

*Click here to enter text.*

No.

### 5. Data security

**Indicate the provisions in place to ensure data security**

*Click here to enter text.*

Before making the data usable for the consortium or for the public, Circulair Friesland data will be stored in Circulair Friesland laptops and Teams folders. Such platforms can only be accessed through encrypted accounts, that ensure the avoidance of unwanted external access.

## Name of Beneficiary: Veltha

### 1. Data summary: Non-personal data

**Dataset identifier**

FRONTSH1P\_VELTHA\_Monitoring\_DDMMYY\_v00

**WP and Task**

WP2 and T2.3

**Dataset description**

Data useful for the monitoring of the circularity of Lodzkie coming from a wide range of public and private sources. Such as organizations and authorities

Data in the project will come from various sources:

- analysis of data available on the websites of National Statistics, Eurostat, and selected Offices;
- expert discussions;

- questionnaire, and FGI;
- surveys ;
- public data sets such as: BDL, REGON, etc.;

#### Purpose of the data

Understanding how far the circular economy in Lodzkie is and how fast is it making progress.

#### Source of the data

- Text, e.g., field or laboratory notes, survey responses
- Numeric, e.g., tables, counts, measurements
- Audiovisual, e.g., images, sound recordings, video
- Models, computer code
- Other (please specify):

#### Type of data regarding the form

- Text: plain text (TXT), HTML, XML, PDF/A
- Databases: XML, CSV
- Image: JPEG, JPG-2000, PNG, TIFF
- Audio: AIFF, WAVE
- Containers: TAR, GZIP, ZIP
- Other (please specify):

#### Origin of the data

- Newly collected/generated
- Re-used (please explain):

#### Expected size of data

- Fixed: never change after being collected or generated
- Growing: new data may be added but the old data is never changed or deleted
- Revisable: new data may be added, and old data may be changed or deleted

#### Utility of the data

The dataset will be useful to the Regional authorities and for further researcher.

#### Software involved in the data processing

Microsoft Excel  
Tableau  
*May vary depending on the specific data shape.*

## 2. FAIR Data

### 2.a.FAIR Data: Making data findable

#### Standard identification mechanism and metadata

The most relevant data produced will be published in article form in international journals to which a DOI is generally associated. According to the article content, it will be also possible to associate metadata to it in a dedicated repository usually suggested by the journal and made available to readers.

#### Naming convention

Files including data collected during the project will be named according to the following pattern:  
*FRONTSH1P\_descriptive\_name(date)*

**Keywords**

Regional stakeholders, Company, Society, Academy, Government, Requirements, Success criteria.

**2.b. FAIR Data: Making data openly accessible**

**Dataset accessibility**

Confidential data

Public data - X

**Software tools**

Generally the data will be accessible through software such as PDF readers and Microsoft Excel, Microsoft Word.

**Repository to be used to deposit the dataset**

All data and metadata will be deposited in the internal repository of Veltha’s servers on Google Drive.

Data shared with the consortium will be uploaded in the common Google Drive folder created by the coordinators.

Data that are intended to be published on international scientific journals will need to wait for the publication acceptance before being deposited in public repositories.

**2.c. FAIR Data: Making data interoperable**

**Are the data interoperable?**

The data will be always accompanied by a legend clearly explaining the meaning of the used nomenclature and the acronyms.

Since data are generally intended for a scientific audience, technical terms will be used. Such terms will be retrieved from the existing peer-reviewed literature, where conceptual definitions can be traced back.

**2.d. FAIR Data: Increasing data re-use**

**Restrictions**

Once published, data will have to submit to the standard licenses as the Creative Commons International License.

Moreover, data restrictions will comply with the Grant Agreement.

**Indicate for how long it is intended that the data remains re-usable**

Once published in article form or in dedicated repositories, data could be re-used as long as they will be considered useful and up-to-date.

**Explain how data quality is assured**

Data will be carefully collected applying (if possible) a statistical approach. A cross check carried out by at least another staff member than responsible for collection will be foreseen whenever possible.

A comparison with data reported in the literature will be always carried out to ensure that the data collected are reasonable.

Moreover, data will be reviewed by different experts in the field.

### 3. Allocation of resources

**If applicable, indicate any allocation of resources to data management**

No resources have been allocated to data management.

### 4. Ethical aspects

**Please indicate if you have identified any ethical or legal aspect that could impact the data sharing**

No ethical or legal aspects that could impact the data sharing have been identified.

### 5. Data security

**Indicate the provisions in place to ensure data security**

Before making the data usable for the consortium or for the public, Veltha data will be stored in Veltha's computers, Google Drive. Such platforms can only be accessed through encrypted accounts, that ensure the avoidance of unwanted external access.

## WP3

Name of Beneficiary: Centre for Promotion and Development Civil Society OPUS

### 1. Data summary: Non-personal data

<b>Dataset identifier</b>
FRONTSH1P_UPOS_DataWP3_DDMMYY_v00
<b>WP and Task</b>
WP3 and T3.1 T 3.4
<b>Dataset description</b>
Non-personal data on information about the circular economy, knowledge of circular economy-related concepts will be used, including: analysis of data available on the websites of National Statistics, Eurostat, and selected Offices, others institutions; expert discussions; expert analyses, questionnaire; surveys; public data sets.
<b>Purpose of the data</b>
The purpose data collection is preparing the framework non-technical state of the art: <ul style="list-style-type: none"> <li>– Identification, involvement, needs and expectations from regional stakeholders involved in CSS1</li> <li>– Requirements and success criteria to satisfy the implementation of non-technological solutions required in CSS1</li> <li>– Citizens engagement plan in CSS 1</li> </ul>
<b>Source of the data</b>
<input checked="" type="checkbox"/> Text, e.g., field or laboratory notes, survey responses <input checked="" type="checkbox"/> Numeric, e.g., tables, counts, measurements <input checked="" type="checkbox"/> Audiovisual, e.g., images, sound recordings, video <input type="checkbox"/> Models, computer code <input type="checkbox"/> Other (please specify): <i>click here to enter text</i>
<b>Type of data regarding the form</b>
<input checked="" type="checkbox"/> Text: plain text (TXT), HTML, XML, PDF/A <input checked="" type="checkbox"/> Databases: XML, CSV <input checked="" type="checkbox"/> Image: JPEG, JPG-2000, PNG, TIFF <input type="checkbox"/> Audio: AIFF, WAVE <input checked="" type="checkbox"/> Containers: TAR, GZIP, ZIP <input type="checkbox"/> Other (please specify):
<b>Origin of the data</b>
<input checked="" type="checkbox"/> Newly collected/generated <input type="checkbox"/> Re-used (please explain):
<b>Expected size of data</b>
<input type="checkbox"/> Fixed: never change after being collected or generated <input type="checkbox"/> Growing: new data may be added but the old data is never changed or deleted <input checked="" type="checkbox"/> Revisable: new data may be added, and old data may be changed or deleted
<b>Utility of the data</b>
The dataset will be useful to WP3 partners, such as UniLodz Parzęczew and technical partners preparing technical part of implementation plan to CSS1.
<b>Software involved in the data processing</b>
OPUS_GoogleWorkspace_drives , Microsoft Office

## 2. FAIR Data

### 2.a.FAIR Data: Making data findable

#### Standard identification mechanism and metadata

The most relevant data produced will be published on OPUS and partners web sides and article form in local, international journals . According to the article content, it will be also possible to associate metadata to it in a dedicated repository usually suggested by the journal and made available to readers.

#### Naming convention

Files including data collected during the project will be named according to the following pattern:  
*FRONTSHIP\_descriptive\_name(date)*  
 For example, the file collected during FGI will be saved as:  
*FRONTSHIP\_CEPJan\_CSS1\_12.05.2022*

#### Keywords

Circular economy, citizens engagement, CSS, local activity, regional stakeholders, Company, Society, Academy, Government, Requirements, Success criteria.

### 2.b. FAIR Data: Making data openly accessible

#### Dataset accessibility

Confidential data  
 Public data - X

#### Software tools

Generally the data will be accessible through software such as PDF readers and Microsoft Excel, Microsoft Word and Google Docs, Google sheets.

#### Repository to be used to deposit the dataset

All data and metadata will be deposited in OPUS servers.  
 Data to be shared with the consortium will be uploaded in the common OPUS GoogleWorkspace Drive folder created by the coordinators.

### 2.c.FAIR Data: Making data interoperable

#### Are the data interoperable?

According to the glossary, the data will always be accompanied by a legend clearly explaining the scope of the data to which it relates.

### 2.d. FAIR Data: Increasing data re-use

#### Restrictions

Once published, data will have to submit to the standard licenses as the Creative Commons International License.  
 Moreover, data restrictions will comply with the Grant Agreement.

**Indicate for how long it is intended that the data remains re-usable**

Once published data could be re-used as long as they will be considered useful and up-to-date.

**Explain how data quality is assured**

Data will be carefully collected applying (if possible) a statistical approach.  
 A comparison with data reported in the literature will be always carried out to ensure that the data collected are reasonable.  
 Moreover, data will be reviewed by different experts in the field

**3. Allocation of resources**

**If applicable, indicate any allocation of resources to data management**

No resources have been allocated to data management.

**4. Ethical aspects**

**Please indicate if you have identified any ethical or legal aspect that could impact the data sharing**

No ethical or legal aspects that could impact the data sharing have been identified.

**5. Data security**

**Indicate the provisions in place to ensure data security**

Before making the data available for use by partners or to the public, the data will be stored on OPUS computers and servers. Access to them is possible only through encrypted accounts that ensure the avoidance of unwanted access from outside.

**Name of Beneficiary: University of Lodz (UniLodz)**

**1. Data summary: Non-personal data**

**Dataset identifier**

FRONTSH1P\_UNILODZ\_DataWP3\_DDMMYY\_v00

**WP and Task**

WP3 and T3.1

**Dataset description**

The dataset contains the results of stakeholder surveys for effective implementation among CSS1. Data in the project will come from various sources:

- analysis of data available on the websites of National Statistics, Eurostat, and selected Offices;
- expert discussions;
- questionnaire, and FGI;
- surveys ;
- public data sets such as: BDL, REGON, etc.;

**Purpose of the data**



The purpose data collection is preparing the framework non-technical state of the art:

- Identification, involvement, needs and expectations from regional stakeholders involved in CSS1
- Requirements and success criteria to satisfy the implementation of non-technological solutions required in CSS1

**Source of the data**

- Text, e.g., field or laboratory notes, survey responses
- Numeric, e.g., tables, counts, measurements
- Audiovisual, e.g., images, sound recordings, video
- Models, computer code
- Other (please specify): *click here to enter text*

**Type of data regarding the form**

- Text: plain text (TXT), HTML, XML, PDF/A
- Databases: XML, CSV
- Image: JPEG, JPG-2000, PNG, TIFF
- Audio: AIFF, WAVE
- Containers: TAR, GZIP, ZIP
- Other (please specify): *shp*

**Origin of the data**

- Newly collected/generated
- Re-used (please explain):

**Expected size of data**

- Fixed: never change after being collected or generated
- Growing: new data may be added but the old data is never changed or deleted
- Revisable: new data may be added, and old data may be changed or deleted

**Utility of the data**

The dataset will be useful to WP3 partners, such as OPUS, Parzęczew and technical partners preparing technical part of implementation plan to CSS1.

**Software involved in the data processing**

Microsoft Excel  
ArcGIS, QGis

## 2. FAIR Data

### 2.a.FAIR Data: Making data findable

**Standard identification mechanism and metadata**

The most relevant data will be published in international journals (as a article) to which a DOI is generally associated. According to the article content, it will be also possible to associate metadata to it in a dedicated repository usually suggested by the journal and made available to readers.

**Naming convention**

Files including data collected during the project will be named according to the following pattern:  
*FRONTSH1P\_descriptive\_name(date)*  
For example, the file collected during FGI will be saved as: *FRONTSH1P\_FGIcompany\_12.05.2022*

**Keywords**

Regional stakeholders, Company, Society, Academy, Government, Requirements, Success criteria.

## 2.b. FAIR Data: Making data openly accessible

### Dataset accessibility

Confidential data

Public data - X

### Software tools

Generally the data will be accessible through software such as PDF readers and Microsoft Excel, Microsoft Word.

### Repository to be used to deposit the dataset

All data and metadata will be deposited in the internal repository of UniLodz servers on One Drive Cloud.

Data shared with the consortium will be uploaded in the common Google Drive folder created by the coordinators.

Data that are intended to be published on international scientific journals will need to wait for the publication acceptance before being deposited in public repositories.

## 2.c. FAIR Data: Making data interoperable

### Are the data interoperable?

The data will be always accompanied by a legend clearly explaining the meaning of the used nomenclature and the acronyms.

Since data are generally intended for a scientific audience, technical terms will be used. Such terms will be retrieved from the existing peer-reviewed literature, where conceptual definitions can be traced back.

## 2.d. FAIR Data: Increasing data re-use

### Restrictions

Once published, data will have to submit to the standard licenses as the Creative Commons International License.

Moreover, data restrictions will comply with the Grant Agreement.

### Indicate for how long it is intended that the data remains re-usable

Once published in article form or in dedicated repositories, data could be re-used as long as they will be considered useful and up-to-date.

### Explain how data quality is assured

Data will be carefully collected applying (if possible) a statistical approach. A cross check carried out by at least another staff member than responsible for collection will be foreseen whenever possible.

A comparison with data reported in the literature will be always carried out to ensure that the data collected are reasonable.

Moreover, data will be reviewed by different experts in the field.

### 3. Allocation of resources

**If applicable, indicate any allocation of resources to data management**

No resources have been allocated to data management.

### 4. Ethical aspects

**Please indicate if you have identified any ethical or legal aspect that could impact the data sharing**

No ethical or legal aspects that could impact the data sharing have been identified.

### 5. Data security

**Indicate the provisions in place to ensure data security**

Before making the data usable for the consortium or for the public, UniLodz data will be stored in UniLodz computers, Microsoft OneDrive cloud. Such platforms can only be accessed through encrypted accounts, that ensure the avoidance of unwanted external access.

## Name of Beneficiary: University of Bolzano (UNIBZ)

### 1. Data summary: Non-personal data

**Dataset identifier**

FRONTSH1P\_UNIBZ\_Combustion\_DDMMYY\_v00

**WP and Task**

WP3 and T3.3

**Dataset description**

*Describe the dataset in a few lines.*

The dataset refers to CSS1 and includes the results of the experimental campaign conducted on the combustion test-rig operating at the UNIBZ's facilities.

It comprises data related to the experimental investigations carried out on the combustion of the syngas provided by the Burkhardt's gasifier. In particular, fundamental investigations in terms of flame temperature, pressures, and combustion characteristics will be provided.

**Purpose of the data**

*Explain the purpose of the data collection/generation and its relation to the objectives of the project.*

The data will be essential for providing a basic understanding of syngas combustion phenomena, which will be then used by the partners to carry out their activities in terms of Post Combustion Capture (PCC) technology.

**Source of the data**

- Text, e.g., field or laboratory notes, survey responses
- Numeric, e.g., tables, counts, measurements
- Audiovisual, e.g., images, sound recordings, video
- Models, computer code
- Other (please specify): [click here to enter text](#)

### Type of data regarding the form

- Text: plain text (TXT), HTML, XML, PDF/A
- Databases: XML, CSV
- Image: JPEG, JPG-2000, PNG, TIFF
- Audio: AIFF, WAVE
- Containers: TAR, GZIP, ZIP
- Other (please specify): *click here to enter text*

### Origin of the data

- Newly collected/generated
- Re-used (please explain): *click here to enter text*

### Expected size of data

*Give an estimation: e.g. a few kB/MB/GB, etc.*

- Fixed: never change after being collected or generated
- Growing: new data may be added but the old data is never changed or deleted
- Revisable: new data may be added, and old data may be changed or deleted

### Utility of the data

*Indicate to whom the data might be useful e.g. partners, stakeholders, citizens, etc.*

The dataset will be useful to WP3 technical partners, such as NTUA, which will be taking advantage of the provided data in order to optimize the design of the burning and PCC unit available at NTUA facilities. Due to the fundamental nature of the experimental analysis, the dataset will most certainly gain solid interest in the scientific community working in the field of alternative source combustion as well as in the renewable energy industry.

### Software involved in the data processing

Microsoft Excel  
Python  
Matlab

## 2. FAIR Data

### 2.a.FAIR Data: Making data findable

#### Standard identification mechanism and metadata

*Are the data produced and/or used in the project discoverable with metadata, identifiable and locatable by means of a standard identification mechanism (e.g. persistent and unique identifiers such as Digital Object Identifiers).*

The most relevant data produced will be published in article form in international journals to which a DOI is generally associated. According to the article content, it will be also possible to associate metadata to it in a dedicated repository usually suggested by the journal and made available to readers.

#### Naming convention

*Indicate any naming convention that you follow.*

Files including data collected during the project will be named according to the following convention:

*FRONTSHIP\_YYMMDD\_descriptive\_name(VersionNumber)*

For example, the file related to the data of the combustion test on 6<sup>th</sup> November 2022, will be saved as:

FRONTSH1P\_221106\_comb

#### Keywords

*Provide keywords to optimise possibilities for re-use.*

Combustion, combustion chamber, syngas, model, simulation, design of experiment, gasification, gasifier

## 2.b. FAIR Data: Making data openly accessible

#### Dataset accessibility

*If confidential, explain why, clearly separating legal and contractual reasons from voluntary restrictions.*

Confidential data

Public data

Reason for confidentiality: [click here to enter text](#)

#### Software tools

*Indicate what methods or software tools are needed to access the data.*

Generally the data will be accessible through software such as PDF readers and Microsoft Excel.

Codes and scripts will be accessible either through Python compilers or through Matlab

#### Repository to be used to deposit the dataset

*Where will the data and metadata be deposited? Preference should be given to certified repositories which support open access where possible.*

All data and metadata will be deposited in the internal repository of UNIBZ's servers.

Data to be shared with the consortium will be uploaded in the common Google Drive folder created by the coordinators.

After a careful evaluation, data that are deemed public could also be deposited in ZENODO or other repositories.

Data that are intended to be published on international scientific journals will need to wait for the publication acceptance before being deposited in public repositories.

## 2.c. FAIR Data: Making data interoperable

#### Are the data interoperable?

*Brief description of the tools/vocabularies used to make the data usable by other researchers, institutions, etc.*

The data will be always accompanied by a legend clearly explaining the meaning of the nomenclature and the acronyms used. Moreover, graphics will be designed taking into account colour blind reader. This will increase the readability of the data collected making them more accessible.

Since data are generally intended for a scientific audience, technical terms will be used. Such terms will be retrieved from the existing peer-reviewed literature, where conceptual definitions can be traced back.

## 2.d. FAIR Data: Increasing data re-use

#### Restrictions

*If applicable, define the data licensing approach to permit the widest re-use possible. Indicate the chosen license tools.*

*Once published, data will have to submit to the standard licenses as the Creative Commons International License.*

*Moreover, data restrictions will comply with the Grant Agreement.*

**Indicate for how long it is intended that the data remains re-usable**

*Click here to enter text.*

*Once published in article form or in dedicated repositories, data could be re-used as long as they will be considered useful and up-to-date.*

**Explain how data quality is assured**

*Click here to enter text.*

*Data will be carefully collected applying (if possible) a statistical approach. A cross check carried out by at least another staff member than responsible for collection will be foreseen whenever possible.*

*A comparison with data reported in the literature will be always carried out to ensure that the data collected are reasonable.*

*Moreover, data will be reviewed by different experts in the field.*

**3. Allocation of resources**

**If applicable, indicate any allocation of resources to data management**

*Click here to enter text.*

No resources have been allocated to data management.

**4. Ethical aspects**

**Please indicate if you have identified any ethical or legal aspect that could impact the data sharing**

*Click here to enter text.*

No ethical or legal aspects that could impact the data sharing have been identified

**5. Data security**

**Indicate the provisions in place to ensure data security**

*Click here to enter text.*

Before making the data usable for the consortium or for the public, UNIBZ data will be stored in UNIBZ laptops and Teams folders. Such platforms can only be accessed through encrypted accounts, that ensure the avoidance of unwanted external access.

**Name of Beneficiary: NTUA**

## 1. Data summary: Non-personal data

Dataset identifier
FRONTSHP1P_NTUA_Gasifier_DDMMYY_v00 (T3.2 and T3.3) FRONTSHP1P_NTUA_LCAWP3_DDMMYY_v00 (T3.4)
WP and Task
WP3, Task 3.2, 3.3, 3.4
Dataset description
<p><i>Describe the dataset in a few lines.</i></p> <p>T3.2: The dataset refers to CSS1 and includes the results of the experimental campaign conducted on the biomass gasifier provided by Burkhardt (BKT), while it will be located and operated at the NTUA's facilities. It includes test results from pellet gasification (pellet properties, BKT gasifier information, combustion conditions, char yield, syngas properties/quantity, tar) and related calculations</p> <p>T3.3: The dataset refers to CSS1 and comprises of data related to the functioning and operation of the integrated system (gasifier, boiler, PPC unit), test results and process modelling results included. The dataset also includes design inputs for burner, flammability of syngas – syngas flame analysis results, emissions, temperature and optical measurements at varying air-to-fuel ratios, syngas impurities and treatment</p> <p>T3.4: The dataset refers to CSS1 and is dedicated to the LCA, LCC and S-LCA study of the CSS1 including the following categories of information:</p> <ul style="list-style-type: none"> <li>• Type of waste</li> <li>• Amount (unit / year)</li> <li>• Data Classification</li> <li>• Process (i.e. wood packaging)</li> <li>• Description of Process (max 200 words)</li> <li>• Input / Output of the processes (tn/year) if any</li> <li>• Reference / Source of data</li> </ul>
Purpose of the data
<p><i>Explain the purpose of the data collection/generation and its relation to the objectives of the project.</i></p> <p>T3.2: The results obtained will be used for the development of a process model that will allow for identifying the optimal process conditions in terms of char yield and cold-gas-efficiency.</p> <p>T3.3: Experimental and modelling results and design inputs will be utilized: 1. for the development of an integrated system (gasifier, burner, PCC unit) 2: to develop a design tool for the overall bio-syngas utilization in industrial boiler with PCC and to define the operation mapping, optimised parameters and configurations for demo and industrial technology deployment as well as optimum management of the overall process. Along with model development and validation by experimental results, a compact PCC unit will be set up at NTUA.</p> <p>T3.4: LCA, LCC and S-LCA study of the CSS1 following ISO 14040/44, 21930 and other applicable standards, for investigating the environmental impact of wood packaging through LCA, LCC and S-LCA. The study will focus on the specific footprint of the bio-based products of CSS1 in terms of GHG emissions and a series of other indicators regarding human health, climate impact and ecosystem quality. The study will be accompanied by a scale up costing assessment for variable facility capacity considering process optimisation through sensitivity analysis.</p>

### Source of the data

- Text, e.g., field or laboratory notes, survey responses
- Numeric, e.g., tables, counts, measurements
- Audiovisual, e.g., images, sound recordings, video
- Models, computer code
- Other (please specify): *click here to enter text*

### Type of data regarding the form

- Text: plain text (TXT), HTML, XML, PDF/A
- Databases: XML, CSV
- Image: JPEG, JPG-2000, PNG, TIFF
- Audio: AIFF, WAVE
- Containers: TAR, GZIP, ZIP
- Other (please specify): *click here to enter text*

### Origin of the data

- Newly collected/generated
- Re-used (please explain): *click here to enter text*

### Expected size of data

*Give an estimation: e.g. a few kB/MB/GB, etc.*

> 10 GB

- Fixed: never change after being collected or generated
- Growing: new data may be added but the old data is never changed or deleted
- Revisable: new data may be added, and old data may be changed or deleted

### Utility of the data

*Indicate to whom the data might be useful e.g. partners, stakeholders, citizens, etc.*

T3.2: The dataset will be useful to WP3 technical partners, such as K-FLEX and CERTH, who will analyse and utilize the produced char, and to partners involved in the replication stage of CSS1. Moreover, the dataset can be useful for industries that would like to implement the CSS1 solution in their premises.

T3.3: The dataset will be useful to WP3 technical partners, such as CERTH, who will perform dynamic process analysis of the overall CSS1 value chain and to partners involved in the replication stage of CSS1.

T3.4: The dataset may be useful to the consortium for information, follow-up, improvements of the CSS based on the results and recommendations as well as for the development of business models.

### Software involved in the data processing

ASPEN Plus, GaBi 8.5 Sphera™, Microsoft Office (Excel, Teams, OneDrive, Outlook)

## 2. FAIR Data

### 2.a.FAIR Data: Making data findable

#### Standard identification mechanism and metadata



*Are the data produced and/or used in the project discoverable with metadata, identifiable and locatable by means of a standard identification mechanism (e.g. persistent and unique identifiers such as Digital Object Identifiers).*

All data is collected and processed in accordance with Data Protection Legislation.

The most relevant data produced will be published in article form in international journals to which a DOI is generally associated. According to the article content, it will be also possible to associate metadata to it in a dedicated repository usually suggested by the journal and made available to readers.

#### **Naming convention**

*Indicate any naming convention that you follow.*

Files including data collected during the project will be named according to the following convention:

FRONTSH1P\_YYMMDD\_description(VersionNumber)

#### **Keywords**

*Provide keywords to optimise possibilities for re-use.*

Process, modelling, gasification, char, syngas, PCC, bio-syngas utilization, simulation, LCI, process

## **2.b. FAIR Data: Making data openly accessible**

#### **Dataset accessibility**

*If confidential, explain why, clearly separating legal and contractual reasons from voluntary restrictions.*

Confidential data: Raw data from experiments. Deliverable D3.4, data related to processes, measurements and intellectual property of consortium and involved stakeholders

Public data: Results derived by LCA, LCC,s-LCA analysis and reported in D3.4 (public)

Reason for confidentiality: For businesses and industries to protect operational integrity and unauthorized access to sensitive data that can expose intellectual property, trade secrets and confidential communications.[click here to enter text](#)

#### **Software tools**

*Indicate what methods or software tools are needed to access the data.*

Aspen Plus, GaBi 8.5 Sphera™, Microsoft Office (Excel, Teams, OneDrive, Outlook), pdf readers

#### **Repository to be used to deposit the dataset**

*Where will the data and metadata be deposited? Preference should be given to certified repositories which support open access where possible.*

All data and metadata will be deposited in the internal repository of NTUA's servers.

Data to be shared with the consortium will be uploaded in the common Google Drive folder created by the coordinators.

Data that are intended to be published on international scientific journals will need to wait for the publication acceptance before being deposited in public repositories.

## **2.c. FAIR Data: Making data interoperable**

#### **Are the data interoperable?**

*Brief description of the tools/vocabularies used to make the data usable by other researchers, institutions, etc.*

Documents with titles and definitions of parameters and processes involved in the integrated system (gasifier, burner, PCC unit) accessible by the consortium.

Legend with nomenclature and acronyms.

Technical terms retrieved from the existing literature, where conceptual definitions can be traced back.

Document with titles and definitions of parameters and processes involved in LCA, LCC, s-LCA analysis accessible by the consortium, Public deliverable D3.4.

## 2.d. FAIR Data: Increasing data re-use

### Restrictions

*If applicable, define the data licensing approach to permit the widest re-use possible. Indicate the chosen license tools.*

Data restrictions will comply with the Grant Agreement.

### Indicate for how long it is intended that the data remains re-usable

*Click here to enter text.*

Once published, data could be re-used as long as they will be considered useful and up-to-date.

### Explain how data quality is assured

*Click here to enter text.*

ISO 14040/44, 21930 and other applicable standards for life cycle

Data will be carefully collected applying (if possible) a statistical approach.

Cross check on the data collected.

Comparison with data reported in the literature to ensure that the data collected are reasonable.

## 3. Allocation of resources

### If applicable, indicate any allocation of resources to data management

*Click here to enter text.*

No resources have been allocated to data management.

## 4. Ethical aspects

### Please indicate if you have identified any ethical or legal aspect that could impact the data sharing

*Click here to enter text.*

No ethical or legal aspects that could impact the data sharing have been identified.

## 5. Data security

### Indicate the provisions in place to ensure data security

*Click here to enter text.*

Protocols and provisions prescribed by software involved in the data processing (Aspen Plus, GaBi 8.5 Sphera™, Microsoft Office (Excel, Teams, OneDrive, Outlook)

**Name of Beneficiary: CERTH**

**1. Data summary: Non-personal data**

<b>Dataset identifier</b>
FRONTSH1P_CERTH_CharCharact_DDMMYY_v00
<b>WP and Task</b>
WP3 and Task 3.2
<b>Dataset description</b>
<i>Describe the dataset in a few lines.</i> The dataset refers to CSS1 and includes the detailed analysis and characterization of the produced char from the gasification process at UNIBZ.
<b>Purpose of the data</b>
<i>Explain the purpose of the data collection/generation and its relation to the objectives of the project.</i> The data will evaluate the ability of using the produced char in CSS2 as compost.
<b>Source of the data</b>
<input type="checkbox"/> Text, e.g., field or laboratory notes, survey responses <input checked="" type="checkbox"/> Numeric, e.g., tables, counts, measurements <input type="checkbox"/> Audiovisual, e.g., images, sound recordings, video <input type="checkbox"/> Models, computer code <input type="checkbox"/> Other (please specify): <i>click here to enter text</i>
<b>Type of data regarding the form</b>
<input checked="" type="checkbox"/> Text: plain text (TXT), HTML, XML, PDF/A <input checked="" type="checkbox"/> Databases: XML, CSV <input checked="" type="checkbox"/> Image: JPEG, JPG-2000, PNG, TIFF <input type="checkbox"/> Audio: AIFF, WAVE <input type="checkbox"/> Containers: TAR, GZIP, ZIP <input type="checkbox"/> Other (please specify): <i>click here to enter text</i>
<b>Origin of the data</b>
<input checked="" type="checkbox"/> Newly collected/generated <input type="checkbox"/> Re-used (please explain): <i>click here to enter text</i>
<b>Expected size of data</b>
<i>Give an estimation: e.g. a few kB/MB/GB, etc.</i> <input type="checkbox"/> Fixed: never change after being collected or generated <input checked="" type="checkbox"/> Growing: new data may be added but the old data is never changed or deleted <input type="checkbox"/> Revisable: new data may be added, and old data may be changed or deleted
<b>Utility of the data</b>
<i>Indicate to whom the data might be useful e.g. partners, stakeholders, citizens, etc.</i> The dataset will be useful to WP3 technical partners, such as BKT, UNIBZ and the CSS2 partners that are involved in the char exploitation as a compost additive.
<b>Software involved in the data processing</b>
Microsoft Excel Microsoft Word

## 2. FAIR Data

### 2.a.FAIR Data: Making data findable

#### Standard identification mechanism and metadata

*Are the data produced and/or used in the project discoverable with metadata, identifiable and locatable by means of a standard identification mechanism (e.g. persistent and unique identifiers such as Digital Object Identifiers).*

The most relevant data produced will be published in article form in international journals to which a DOI is generally associated. According to the article content, it will be also possible to associate metadata to it in a dedicated repository usually suggested by the journal and made available to readers.

#### Naming convention

*Indicate any naming convention that you follow.*

Files including data processing during the project will be named according to the following convention:

*FRONTSH1P\_CCS1\_descriptive\_name\_VersionNumber*

#### Keywords

*Provide keywords to optimise possibilities for re-use.*

Gasification, char, characterization, ultimate analysis, proximate analysis, compost

### 2.b. FAIR Data: Making data openly accessible

#### Dataset accessibility

*If confidential, explain why, clearly separating legal and contractual reasons from voluntary restrictions.*

Confidential data - X

Public data

Reason for confidentiality: All data will be considered available at consortium level until their publication in international journals.

#### Software tools

*Indicate what methods or software tools are needed to access the data.*

The data will be accessible through software such as PDF readers and Microsoft Excel

#### Repository to be used to deposit the dataset

*Where will the data and metadata be deposited? Preference should be given to certified repositories which support open access where possible.*

All data and metadata will be deposited in the internal repository of CERTH's servers. Data to be shared with the consortium will be uploaded in the common Google Drive folder created by the coordinators. Any publication will be deposited in ZENODO or other repositories as soon as it is accepted by the journal.

## 2.c. FAIR Data: Making data interoperable

### Are the data interoperable?

*Brief description of the tools/vocabularies used to make the data usable by other researchers, institutions, etc.*

The data will be always accompanied by a legend clearly explaining the meaning of the nomenclature and the acronyms used.

## 2.d. FAIR Data: Increasing data re-use

### Restrictions

*If applicable, define the data licensing approach to permit the widest re-use possible. Indicate the chosen license tools.*

Once published, data will have to submit to the standard licenses as the Creative Commons International License.

Moreover, data restrictions will comply with the Grant Agreement.

### Indicate for how long it is intended that the data remains re-usable

*Click here to enter text.*

Once published in article form or in dedicated repositories, data could be re-used as long as they will be considered useful and up-to-date.

### Explain how data quality is assured

*Click here to enter text.*

A cross check carried out by at least another staff member than responsible for performing the dynamic process simulation and control. A comparison with data reported in the literature will be carried out to ensure that the data is reasonable. Moreover, data will be reviewed by different experts in the field.

## 3. Allocation of resources

### If applicable, indicate any allocation of resources to data management

*Click here to enter text.*

No resources have been allocated to data management.

## 4. Ethical aspects

### Please indicate if you have identified any ethical or legal aspect that could impact the data sharing

*Click here to enter text.*

No ethical or legal aspects that could impact the data sharing have been identified.

## 5. Data security

### Indicate the provisions in place to ensure data security

[Click here to enter text.](#)

Before making the data usable for the consortium or for the public, CERTH data will be stored in laptops and external hard disks.

## Name of Beneficiary: LNEG

### 1. Data summary: Non-personal data

<b>Dataset identifier</b>
FRONTSH1P_LNEG_EcodesignWP3_DDMMYY_v00 FRONTSH1P_LNEG_EcodesignWP4_DDMMYY_v00 FRONTSH1P_LNEG_EcodesignWP5_DDMMYY_v00 FRONTSH1P_LNEG_EcodesignWP6_DDMMYY_v00
<b>WP and Task</b>
Task 3.4, 4.6, 5.4, 6.5 - Ecodesign of the CSS
<b>Dataset description</b>
Data related to the value chain, inputs and outputs, and impacts will be collected. Examples and case studies publicly available will be collected, analysed, treated and references will be established.
<b>Purpose of the data</b>
Data for Deliverable DXXX Ecodesign Case studies, developed within the WP
<b>Source of the data</b>
<input checked="" type="checkbox"/> Text, e.g., field or laboratory notes, survey responses <input checked="" type="checkbox"/> Numeric, e.g., tables, counts, measurements <input checked="" type="checkbox"/> Audiovisual, e.g., images, sound recordings, video <input type="checkbox"/> Models, computer code <input type="checkbox"/> Other (please specify): <a href="#">click here to enter text</a>
<b>Type of data regarding the form</b>
<input checked="" type="checkbox"/> Text: plain text (TXT), HTML, XML, PDF/A <input type="checkbox"/> Databases: XML, CSV <input checked="" type="checkbox"/> Image: JPEG, JPG-2000, PNG, TIFF <input type="checkbox"/> Audio: AIFF, WAVE <input type="checkbox"/> Containers: TAR, GZIP, ZIP <input type="checkbox"/> Other (please specify): <a href="#">click here to enter text</a>
<b>Origin of the data</b>
<input checked="" type="checkbox"/> Newly collected/generated <input type="checkbox"/> Re-used (please explain): <a href="#">click here to enter text</a>
<b>Expected size of data</b>
Up to a few MB size
<input type="checkbox"/> Fixed: never change after being collected or generated <input checked="" type="checkbox"/> Growing: new data may be added but the old data is never changed or deleted <input checked="" type="checkbox"/> Revisable: new data may be added, and old data may be changed or deleted
<b>Utility of the data</b>
The target groups include the members of the project and the consortium, the EC, external researchers, research communities and the public.

**Software involved in the data processing**

Data in this context will be in standard Microsoft desktop formats (Word, Excel, Powerpoint); and Adobe Acrobat, Photoshop and Illustrator.

**2. FAIR Data**

**2.a.FAIR Data: Making data findable**

**Standard identification mechanism and metadata**

*Are the data produced and/or used in the project discoverable with metadata, identifiable and locatable by means of a standard identification mechanism (e.g. persistent and unique identifiers such as Digital Object Identifiers).*

For project outputs such as publications and SOPs and some open access data repositories generate DOI.

Some data will be produced using protocols identifiable and locatable by means of a standard identification mechanism.

**Naming convention**

*Indicate any naming convention that you follow.*

There is not a standard naming convention

**Keywords**

*Provide keywords to optimise possibilities for re-use.*

Case studies

**2.b. FAIR Data: Making data openly accessible**

**Dataset accessibility**

*If confidential, explain why, clearly separating legal and contractual reasons from voluntary restrictions.*

Public data: YES

Data will be available in an open-data platform (it can be used freely). Data will be shared with the WP partners to support the project work. All deliverables and milestones will be shared within the consortium and the EC.

**Software tools**

*Indicate what methods or software tools are needed to access the data.*

Web browser for web content, open-source tools for SOPs, reports files and experimental data - Microsoft Office or equivalent open-source software.

**Repository to be used to deposit the dataset**

*Where will the data and metadata be deposited? Preference should be given to certified repositories which support open access where possible.*

Via the project website and the selected trusted open access institutional repositories (LNEG repository).

### 2.c. FAIR Data: Making data interoperable

#### Are the data interoperable?

A common vocabulary, typical to the research field will be used for semantic data harmonisation. The interoperability will be possible on request and after the embargo period (once the produced deliverable will be no longer considered confidential).

### 2.d. FAIR Data: Increasing data re-use

#### Restrictions

Data will be licensed using standard licenses (i.e., Creative Commons licenses) in line with the obligations set out in the Grant Agreement.

Data will be available straight after publication. However, the raw data for a publication must be uploaded to an open access repository before the manuscript is accepted. Therefore, the data will be in the open access repository, but not accessible until the paper is accepted and a DOI is created (kind of embargo period).

#### Indicate for how long it is intended that the data remains re-usable

It is expected that data may be available for re-use right after the end of the FRONTSH1P projects.

#### Explain how data quality is assured

Internal revision before submission to validate data and to ensure the quality (completeness, accuracy, relevance, appearance and structure) of deliverables and milestones.

### 3. Allocation of resources

#### If applicable, indicate any allocation of resources to data management

All costs for making data FAIR are integrated within the project. There are no dedicated resources for long term preservation.

### 4. Ethical aspects

#### Please indicate if you have identified any ethical or legal aspect that could impact the data sharing

No specific issues detected

### 5. Data security

#### Indicate the provisions in place to ensure data security

In all case, data will be stored in at least two locations (i.e., LNEG repository, EC portal and FRONTSH1P webpage/repository) to provide for data backup, recovery and secure storage for a limited time. Transfer of sensitive data will use secure protocols (i.e., username and password,...). The LNEG repository is stored at LNEG servers with security protocols established by the Centro Nacional de Cibersegurança (National Cybersecurity Center).



**Name of Beneficiary: Burkhardt GmbH (BKT)**

**1. Data summary: Non-personal data**

<b>Dataset identifier</b>
FRONTSH1P_BKT_Gasification_DDMMYY_v00
<b>WP and Task</b>
WP3 T3.2 and T3.3
<b>Dataset description</b>
The gasification plant storages operating values in a database on the plant computer. We have access to the database via an Internet connection of the plant. The data are measured values, setpoints, counters and specific indicators. We can read the data from the database via an Excel macro file.
<b>Purpose of the data</b>
Explain the purpose of the data collection/generation and its relation to the objectives of the project. We read the data and make it available to FREE UNIVERSITY OF BOZEN-BOLZANO (UNIBZ) and to NATIONAL TECHNICAL UNIVERSITY OF ATHENS (NTUA). This enables the project partners to generate evaluations of the tests carried out.
<b>Source of the data</b>
<input type="checkbox"/> Text, e.g., field or laboratory notes, survey responses <input checked="" type="checkbox"/> Numeric, e.g., tables, counts, measurements <input type="checkbox"/> Audiovisual, e.g., images, sound recordings, video <input type="checkbox"/> Models, computer code <input type="checkbox"/> Other (please specify): <a href="#">click here to enter text</a>
<b>Type of data regarding the form</b>
<input type="checkbox"/> Text: plain text (TXT), HTML, XML, PDF/A <input checked="" type="checkbox"/> Databases: XML, CSV <input type="checkbox"/> Image: JPEG, JPG-2000, PNG, TIFF <input type="checkbox"/> Audio: AIFF, WAVE <input type="checkbox"/> Containers: TAR, GZIP, ZIP <input type="checkbox"/> Other (please specify): <a href="#">click here to enter text</a>
<b>Origin of the data</b>
<input checked="" type="checkbox"/> Newly collected/generated <input type="checkbox"/> Re-used (please explain): <a href="#">click here to enter text</a>
<b>Expected size of data</b>
Give an estimation: e.g. a few kB/MB/GB, etc. <input type="checkbox"/> Fixed: never change after being collected or generated <input type="checkbox"/> Growing: new data may be added but the old data is never changed or deleted <input checked="" type="checkbox"/> Revisable: new data may be added, and old data may be changed or deleted
<b>Utility of the data</b>

Indicate to whom the data might be useful e.g. partners, stakeholders, citizens, etc. The data are useful for our project partners to evaluate the tests they are carrying out at the gasification plant.
<b>Software involved in the data processing</b>
Microsoft Excel

## 2. FAIR Data

### 2.a.FAIR Data: Making data findable

<b>Standard identification mechanism and metadata</b>
Are the data produced and/or used in the project discoverable with metadata, identifiable and locatable by means of a standard identification mechanism (e.g. persistent and unique identifiers such as Digital Object Identifiers). No.
<b>Naming convention</b>
Indicate any naming convention that you follow. /
<b>Keywords</b>
Provide keywords to optimise possibilities for re-use. /

### 2.b. FAIR Data: Making data openly accessible

<b>Dataset accessibility</b>
If confidential, explain why, clearly separating legal and contractual reasons from voluntary restrictions. Confidential data Public data Reason for confidentiality: <a href="#">click here to enter text</a>
<b>Software tools</b>
Indicate what methods or software tools are needed to access the data. /
<b>Repository to be used to deposit the dataset</b>
Where will the data and metadata be deposited? Preference should be given to certified repositories which support open access where possible. The files that are transmitted to the two project partners are stored in a digital storage location of our company.

## 2.c. FAIR Data: Making data interoperable

### Are the data interoperable?

Brief description of the tools/vocabularies used to make the data usable by other researchers, institutions, etc.

/

## 2.d. FAIR Data: Increasing data re-use

### Restrictions

If applicable, define the data licensing approach to permit the widest re-use possible. Indicate the chosen license tools.

/

### Indicate for how long it is intended that the data remains re-usable

Click here to enter text.

/

### Explain how data quality is assured

Click here to enter text.

/

## 3. Allocation of resources

### If applicable, indicate any allocation of resources to data management

Click here to enter text.

/

## 4. Ethical aspects

### Please indicate if you have identified any ethical or legal aspect that could impact the data sharing

Click here to enter text.

/

## 5. Data security

### Indicate the provisions in place to ensure data security

Click here to enter text.

The files that are transmitted to the two project partners are stored in a digital storage location of our company. This digital storage location can only be accessed through encrypted accounts, which ensure the avoidance of unwanted external access.



## WP4

Name of Beneficiary: Centre for Promotion and Development Civil Society OPUS

### 1. Data summary: Non-personal data

<b>Dataset identifier</b>
FRONTSH1P_UPOS_DataWP4_DDMMYY_v00
<b>WP and Task</b>
WP4 and T4.2 T.4.6
<b>Dataset description</b>
Non-personal data on information about the circular economy, knowledge of circular economy, models citizens engagement activity, social enterprises, -related concepts will be used, including: analysis of data available on the websites of National Statistics, Eurostat, and selected Offices, others institutions; expert discussions; expert analyses, questionnaire; surveys; public data sets.
<b>Purpose of the data</b>
The purpose data collection is preparing the framework non-technical state of the art: <ul style="list-style-type: none"> <li>- Citizens engagement plan in CSS 2 (<i>action transferred from WP 4 to WP 7</i>)</li> <li>- Education program (<i>action transferred from WP 4 to WP 7</i>)</li> <li>- development of a circularity assessment application/tools (<i>action transferred from WP 4 to WP 7</i>)</li> <li>- Model of social enterprises (<i>action transferred from WP 4 to WP 7</i>)</li> </ul>
<b>Source of the data</b>
<input checked="" type="checkbox"/> Text, e.g., field or laboratory notes, survey responses <input checked="" type="checkbox"/> Numeric, e.g., tables, counts, measurements <input checked="" type="checkbox"/> Audiovisual, e.g., images, sound recordings, video <input checked="" type="checkbox"/> Models, computer code <input type="checkbox"/> Other (please specify): <i>click here to enter text</i>
<b>Type of data regarding the form</b>
<input checked="" type="checkbox"/> Text: plain text (TXT), HTML, XML, PDF/A <input checked="" type="checkbox"/> Databases: XML, CSV <input checked="" type="checkbox"/> Image: JPEG, JPG-2000, PNG, TIFF <input type="checkbox"/> Audio: AIFF, WAVE <input checked="" type="checkbox"/> Containers: TAR, GZIP, ZIP <input type="checkbox"/> Other (please specify):
<b>Origin of the data</b>
<input checked="" type="checkbox"/> Newly collected/generated <input type="checkbox"/> Re-used (please explain):
<b>Expected size of data</b>
<input type="checkbox"/> Fixed: never change after being collected or generated <input type="checkbox"/> Growing: new data may be added but the old data is never changed or deleted <input checked="" type="checkbox"/> Revisable: new data may be added, and old data may be changed or deleted
<b>Utility of the data</b>
The dataset will be useful to WP4 partners, such as UniLodz , Bzura Parzęczew, Veltha and technical partners preparing technical part of implementation plan to CSS2.
<b>Software involved in the data processing</b>
OPUS_GoogleWorkspace_drives , Microsoft Office

## 2. FAIR Data

### 2.a.FAIR Data: Making data findable

#### Standard identification mechanism and metadata

The most relevant data produced will be published on OPUS and partners web sides and article form in local, international journals . According to the article content, it will be also possible to associate metadata to it in a dedicated repository usually suggested by the journal and made available to readers.

#### Naming convention

Files including data collected during the project will be named according to the following pattern:  
*FRONTSHIP\_descriptive\_name(date)*

For example, the file collected during FGI will be saved as:  
*FRONTSHIP\_CEPJan\_CSS2\_12.05.2022*

#### Keywords

Circular economy, citizens engagement, social enterprises, CSS, local activity, education,

### 2.b. FAIR Data: Making data openly accessible

#### Dataset accessibility

Confidential data

Public data - X

#### Software tools

Generally the data will be accessible through software such as PDF readers and Microsoft Excel, Microsoft Word and Google Docs, Google sheets.

#### Repository to be used to deposit the dataset

All data and metadata will be deposited in OPUS servers.

Data to be shared with the consortium will be uploaded in the common OPUS GoogleWorkspace Drive folder created by the coordinators

### 2.c.FAIR Data: Making data interoperable

#### Are the data interoperable?

According to the glossary, the data will always be accompanied by a legend clearly explaining the scope of the data to which it relates.

### 2.d. FAIR Data: Increasing data re-use

#### Restrictions

Once published, data will have to submit to the standard licenses as the Creative Commons International License.

Moreover, data restrictions will comply with the Grant Agreement.

#### Indicate for how long it is intended that the data remains re-usable

Once published data could be re-used as long as they will be considered useful and up-to-date.

**Explain how data quality is assured**

Data will be carefully collected applying (if possible) a statistical approach.  
 A comparison with data reported in the literature will be always carried out to ensure that the data collected are reasonable.  
 Moreover, data will be reviewed by different experts in the field

**3. Allocation of resources**

**If applicable, indicate any allocation of resources to data management**

No resources have been allocated to data management.

**4. Ethical aspects**

**Please indicate if you have identified any ethical or legal aspect that could impact the data sharing**

No ethical or legal aspects that could impact the data sharing have been identified.

**5. Data security**

**Indicate the provisions in place to ensure data security**

Before making the data available for use by partners or to the public, the data will be stored on OPUS computers and servers. Access to them is possible only through encrypted accounts that ensure the avoidance of unwanted access from outside.

**Name of Beneficiary: University of Lodz (UniLodz)**

**1. Data summary: Non-personal data**

**Dataset identifier**

FRONTSHP1P\_UNILODZ\_DataWP4\_DDMMYY\_v00

**WP and Task**

WP4 and T4.2

**Dataset description**

The dataset contains the results of stakeholder surveys for effective implementation among CSS2. Data in the project will come from various sources:

- analysis of data available on the websites of National Statistics, Eurostat, and selected Offices;
- expert discussions;
- questionnaire, and FGI;
- surveys ;
- public data sets such as: BDL, REGON, etc.;

**Purpose of the data**



The purpose data collection is preparing the framework non-technical state of the art:

- Identification, involvement, needs and expectations from regional stakeholders involved in CSS2
- Requirements and success criteria to satisfy the implementation of non-technological solutions required in CSS2

#### Source of the data

- Text, e.g., field or laboratory notes, survey responses
- Numeric, e.g., tables, counts, measurements
- Audiovisual, e.g., images, sound recordings, video
- Models, computer code
- Other (please specify): *click here to enter text*

#### Type of data regarding the form

- Text: plain text (TXT), HTML, XML, PDF/A
- Databases: XML, CSV
- Image: JPEG, JPG-2000, PNG, TIFF
- Audio: AIFF, WAVE
- Containers: TAR, GZIP, ZIP
- Other (please specify): *shp*

#### Origin of the data

- Newly collected/generated
- Re-used (please explain):

#### Expected size of data

- Fixed: never change after being collected or generated
- Growing: new data may be added but the old data is never changed or deleted
- Revisable: new data may be added, and old data may be changed or deleted

#### Utility of the data

The dataset will be useful to WP4 partners, such as OPUS, ZMBzura and technical partners preparing technical part of implementation plan to CSS2.

#### Software involved in the data processing

Microsoft Excel  
ArcGIS, QGIS

## 2. FAIR Data

### 2.a.FAIR Data: Making data findable

#### Standard identification mechanism and metadata

The most relevant data will be published in international journals (as a article) to which a DOI is generally associated. According to the article content, it will be also possible to associate metadata to it in a dedicated repository usually suggested by the journal and made available to readers.

#### Naming convention

Files including data collected during the project will be named according to the following pattern:  
*FRONTSHIP\_descriptive\_name(date)*



For example, the file collected during FGI will be saved as: *FRONTSH1P\_FGIcompany\_12.05.2022*

**Keywords**

Regional stakeholders, Company, Society, Academy, Government, Requirements, Success criteria.

**2.b. FAIR Data: Making data openly accessible**

**Dataset accessibility**

Confidential data  
Public data - X

**Software tools**

Generally the data will be accessible through software such as PDF readers and Microsoft Excel, Microsoft Word.

**Repository to be used to deposit the dataset**

All data and metadata will be deposited in the internal repository of UniLodz servers on One Drive Cloud.  
Data shared with the consortium will be uploaded in the common Google Drive folder created by the coordinators.  
Data that are intended to be published on international scientific journals will need to wait for the publication acceptance before being deposited in public repositories.

**2.c. FAIR Data: Making data interoperable**

**Are the data interoperable?**

The data will be always accompanied by a legend clearly explaining the meaning of the used nomenclature and the acronyms.  
Since data are generally intended for a scientific audience, technical terms will be used. Such terms will be retrieved from the existing peer-reviewed literature, where conceptual definitions can be traced back.

**2.d. FAIR Data: Increasing data re-use**

**Restrictions**

Once published, data will have to submit to the standard licenses as the Creative Commons International License.  
Moreover, data restrictions will comply with the Grant Agreement.

**Indicate for how long it is intended that the data remains re-usable**

Once published in article form or in dedicated repositories, data could be re-used as long as they will be considered useful and up-to-date.

**Explain how data quality is assured**

Data will be carefully collected applying (if possible) a statistical approach. A cross check carried out by at least another staff member than responsible for collection will be foreseen whenever possible.  
A comparison with data reported in the literature will be always carried out to ensure that the data collected are reasonable.

Moreover, data will be reviewed by different experts in the field.

### 3. Allocation of resources

**If applicable, indicate any allocation of resources to data management**

No resources have been allocated to data management.

### 4. Ethical aspects

**Please indicate if you have identified any ethical or legal aspect that could impact the data sharing**

No ethical or legal aspects that could impact the data sharing have been identified.

### 5. Data security

**Indicate the provisions in place to ensure data security**

Before making the data usable for the consortium or for the public, UniLodz data will be stored in UniLodz computers, Microsoft OneDrive cloud. Such platforms can only be accessed through encrypted accounts, that ensure the avoidance of unwanted external access.

**Name of Beneficiary: Związek Międzygminny "BZURA"**

#### 1. Data summary: Non-personal data

**Dataset identifier**

FRONTSH1P\_BZURA\_WasteWP4\_DDMMYY\_v00

**WP and Task**

WP4 4,1-4,6

**Dataset description**

*The data collection concerns data on waste in the Łódź region, data on the marginal lands, data on bio-waste and the method of their collection.*

**Purpose of the data**

*Data will be collected to develop systemic solutions based on community innovation schemes through citizens and to demonstrate a prototype facility for the treatment of bio-waste.*

**Source of the data**

- Text, e.g., field or laboratory notes, survey responses
- Numeric, e.g., tables, counts, measurements
- Audiovisual, e.g., images, sound recordings, video
- Models, computer code
- Other (please specify): *click here to enter text*

<b>Type of data regarding the form</b>
<input checked="" type="checkbox"/> Text: plain text (TXT), HTML, XML, PDF/A <input checked="" type="checkbox"/> Databases: XML, CSV <input checked="" type="checkbox"/> Image: JPEG, JPG-2000, PNG, TIFF <input type="checkbox"/> Audio: AIFF, WAVE <input type="checkbox"/> Containers: TAR, GZIP, ZIP <input type="checkbox"/> Other (please specify): <i>click here to enter text</i>
<b>Origin of the data</b>
<input checked="" type="checkbox"/> Newly collected/generated <input type="checkbox"/> Re-used (please explain): <i>click here to enter text</i>
<b>Expected size of data</b>
<input type="checkbox"/> Fixed: never change after being collected or generated <input type="checkbox"/> Growing: new data may be added but the old data is never changed or deleted <input checked="" type="checkbox"/> Revisable: new data may be added, and old data may be changed or deleted
<b>Utility of the data</b>
<i>The dataset will be useful for all WP4 partners</i>
<b>Software involved in the data processing</b>
Microsoft Office, OneDrive

## 2. FAIR Data

### 2.a.FAIR Data: Making data findable

<b>Standard identification mechanism and metadata</b>
The most relevant data produced will be published in article form in international journals to which a DOI is generally associated. According to the article content, it will be also possible to associate metadata to it in a dedicated repository usually suggested by the journal and made available to readers.
<b>Naming convention</b>
Files including data collected during the project will be named according to the following pattern: <i>FRONTSH1P_descriptive_name(date)</i> For example, data on the amount of waste will be saved as: <i>FRONTSH1P_amount of waste_01.02.2022</i>
<b>Keywords</b>
<i>Circular economy, bio waste, raw materials, prototype installation</i>

### 2.b. FAIR Data: Making data openly accessible

<b>Dataset accessibility</b>
Confidential data Public data- x
<b>software tools</b>
Generally the data will be accessible through software such as PDF readers and Microsoft Excel, Microsoft Word.
<b>Repository to be used to deposit the dataset</b>

All data and metadata will be deposited in ZM BZURA's servers.  
Data to be shared with the consortium will be uploaded in the common Google Drive folder created by the coordinators.

### 2.c. FAIR Data: Making data interoperable

#### Are the data interoperable?

The data will always be accompanied by a legend clearly explaining the scope of the data to which it relates.

### 2.d. FAIR Data: Increasing data re-use

#### Restrictions

Data restrictions will comply with the Grant Agreement.

#### Indicate for how long it is intended that the data remains re-usable

Data could be re-used as long as they will be considered useful and up-to-date.

#### Explain how data quality is assured

*Data will be carefully collected from reliable (state-owned) sources. In case of any doubts as to the credibility of the data, they will be verified by experts.*

### 3. Allocation of resources

#### If applicable, indicate any allocation of resources to data management

No resources have been allocated to data management.

### 4. Ethical aspects

#### Please indicate if you have identified any ethical or legal aspect that could impact the data sharing

No ethical or legal aspects that could impact the data sharing have been identified.

### 5. Data security

#### Indicate the provisions in place to ensure data security

*Before making the data available for use by partners or to the public, the data will be stored on BZURA computers and servers. Access to them is possible only through encrypted accounts that ensure the avoidance of unwanted access from outside.*

**Name of Beneficiary: Novamont S.p.A.**

#### 1. Data summary: Non-personal data

#### Dataset identifier

FRONTSHP1P_NVMT_DataWP4_DDMMYY_v00
<b>WP and Task</b>
WP4 Task 4.1, 4.2, 4.3, 4.4, 4.5 and 4.6
<b>Dataset description</b>
Data related to: <ul style="list-style-type: none"> <li>• needs and expectations of regional stakeholders;</li> <li>• type of waste/raw materials and feedstocks for waste plant management.</li> <li>• Feedstock macromolecular composition;</li> <li>• allocation of waste volume for the companies involved, collection.</li> <li>• delivery timing and patterns and cooperation schemes at regional level.</li> <li>• Main food industries wastes rich in sugars available in the region.</li> <li>• list of local converters for biodegradable and compostable film production.</li> <li>• list of main oils seed crops cultivated in Poland, average productions rate, cultivation practices, water needs, main phytosanitary issues related to those crops.</li> <li>• list of farmers association in the region.</li> <li>• marginal soil distribution and marginality issues.</li> <li>• Regional innovative agronomic practices;</li> <li>• Contractual and logistic models for agricultural products.</li> <li>• Life cycle input and output of the CSS2 biobased products</li> </ul>
<b>Purpose of the data</b>
<ul style="list-style-type: none"> <li>• Development of the CSS2 baseline;</li> <li>• identification of agricultural and industrial applications;</li> <li>• identification of feedstock and waste valorisation patterns;</li> </ul>
<b>Source of the data</b>
<input checked="" type="checkbox"/> Text, e.g., field or laboratory notes, survey responses <input checked="" type="checkbox"/> Numeric, e.g., tables, counts, measurements <input type="checkbox"/> Audiovisual, e.g., images, sound recordings, video <input type="checkbox"/> Models, computer code <input type="checkbox"/> Other (please specify): <i>click here to enter text</i>
<b>Type of data regarding the form</b>
<input checked="" type="checkbox"/> Text: plain text (TXT), HTML, XML, PDF/A <input checked="" type="checkbox"/> Databases: XML, CSV <input checked="" type="checkbox"/> Image: JPEG, JPG-2000, PNG, TIFF <input type="checkbox"/> Audio: AIFF, WAVE <input checked="" type="checkbox"/> Containers: TAR, GZIP, ZIP <input type="checkbox"/> Other (please specify): <i>click here to enter text</i>
<b>Origin of the data</b>
<input checked="" type="checkbox"/> Newly collected/generated <input checked="" type="checkbox"/> Re-used (please explain): Public data
<b>Expected size of data</b>
<i>Give an estimation: e.g. a few kB/MB/GB, etc.</i> <input type="checkbox"/> Fixed: never change after being collected or generated <input type="checkbox"/> Growing: new data may be added but the old data is never changed or deleted <input checked="" type="checkbox"/> Revisable: new data may be added, and old data may be changed or deleted
<b>Utility of the data</b>
The data will be used by WP4 technical partners, who will operate in the development of the CSS2 objectives.
<b>Software involved in the data processing</b>

Excel, word, Power Point

## 2. FAIR Data

### 2.a.FAIR Data: Making data findable

<b>Standard identification mechanism and metadata</b>
Not defined
<b>Naming convention</b>
Files including data collected during the project will be named according to the following convention: WP4_FRONTSH1P_YYMMDD_descriptive_name(VersionNumber)
<b>Keywords</b>
Not defined

### 2.b. FAIR Data: Making data openly accessible

<b>Dataset accessibility</b>
Confidential data: data shared are restricted to consortium Public data Reason for confidentiality: all data will be considered as confidential unless specified otherwise.
<b>Software tools</b>
Excel, Word, Power Point
<b>Repository to be used to deposit the dataset</b>
The shared data will be copied in the Novamont repository servers and may be collected in the project shared folders (i.e. Google Cloud)

### 2.c.FAIR Data: Making data interoperable

<b>Are the data interoperable?</b>
DATA will be made available with common type software files and shared via e-mail (e.g. Word, Excel, power point...).

### 2.d. FAIR Data: Increasing data re-use

<b>Restrictions</b>
Not defined
<b>Indicate for how long it is intended that the data remains re-usable</b>
Data are usable until the end of the Frotnsh1p project, unless otherwise specified.
<b>Explain how data quality is assured</b>
If a scientific article is produced, it will be subjected to peer review before publishing If internal, data quality is subject to internal procedure (e.g. ISO 9001 certification)

### 3. Allocation of resources

**If applicable, indicate any allocation of resources to data management**

Company resources are involved in data management for internal company repository servers but not allocated to the project.

### 4. Ethical aspects

**Please indicate if you have identified any ethical or legal aspect that could impact the data sharing**

Not applicable

### 5. Data security

**Indicate the provisions in place to ensure data security**

Internal server have standard security processes: restricted access, backup periodically, all security parameters accomplished

**Name of Beneficiary: NTUA – National Technical University of Athens**

#### 1. Data summary: Non-personal data

**Dataset identifier**

FRONTSH1P\_NTUA\_LCAWP4\_DDMMYY\_v00

**WP and Task**

WP4, Task 4.6

**Dataset description**

*Describe the dataset in a few lines.*

The dataset refers to CSS2 and is dedicated to the LCA, LCC and S-LCA study of the CSS2 including the following categories of information:

- Type of waste (i.e. biolubricants)
- Amount (unit / year)
- Data Classification
- Process (i.e. food and feed treatment)
- Description of Process (max 200 words)
- Input / Output of the processes (tn/year) if any
- Reference / Source of data

**Purpose of the data**

*Explain the purpose of the data collection/generation and its relation to the objectives of the project.*

LCA, LCC and S-LCA study of the CSS2 following ISO 14040/44, 21930 and other applicable standards, for investigating the environmental impact of the food and feed through LCA, LCC and S-LCA. The study will focus on the specific footprint of the bio-based products of CSS2 in terms of GHG emissions and a series of other indicators regarding human health, climate impact and ecosystem quality. The study will be accompanied by a scale up costing assessment for variable facility capacity considering process optimisation through sensitivity analysis.

**Source of the data**

<input checked="" type="checkbox"/> Text, e.g., field or laboratory notes, survey responses <input checked="" type="checkbox"/> Numeric, e.g., tables, counts, measurements <input checked="" type="checkbox"/> Audiovisual, e.g., images, sound recordings, video <input checked="" type="checkbox"/> Models, computer code <input type="checkbox"/> Other (please specify): <i>click here to enter text</i>
<b>Type of data regarding the form</b>
<input checked="" type="checkbox"/> Text: plain text (TXT), HTML, XML, PDF/A <input checked="" type="checkbox"/> Databases: XML, CSV <input checked="" type="checkbox"/> Image: JPEG, JPG-2000, PNG, TIFF <input type="checkbox"/> Audio: AIFF, WAVE <input checked="" type="checkbox"/> Containers: TAR, GZIP, ZIP <input type="checkbox"/> Other (please specify): <i>click here to enter text</i>
<b>Origin of the data</b>
<input checked="" type="checkbox"/> Newly collected/generated <input type="checkbox"/> Re-used (please explain): <i>click here to enter text</i>
<b>Expected size of data</b>
<i>Give an estimation: e.g. a few kB/MB/GB, etc.</i> > 10 GB <input type="checkbox"/> Fixed: never change after being collected or generated <input checked="" type="checkbox"/> Growing: new data may be added but the old data is never changed or deleted <input type="checkbox"/> Revisable: new data may be added, and old data may be changed or deleted
<b>Utility of the data</b>
<i>Indicate to whom the data might be useful e.g. partners, stakeholders, citizens, etc.</i> The dataset may be useful to the consortium for information, follow-up, improvements of the CSS based on the results and recommendations as well as for the development of business models.
<b>Software involved in the data processing</b>
GaBi 8.5 Sphera™, Microsoft Office (Excel, Teams, OneDrive, Outlook)

## 2. FAIR Data

### 2.a.FAIR Data: Making data findable

<b>Standard identification mechanism and metadata</b>
<i>Are the data produced and/or used in the project discoverable with metadata, identifiable and locatable by means of a standard identification mechanism (e.g. persistent and unique identifiers such as Digital Object Identifiers).</i> All data is collected and processed in accordance with Data Protection Legislation.  The most relevant data produced will be published in article form in international journals to which a DOI is generally associated. According to the article content, it will be also possible to associate metadata to it in a dedicated repository usually suggested by the journal and made available to readers.
<b>Naming convention</b>
<i>Indicate any naming convention that you follow.</i> Files including data collected during the project will be named according to the following convention:



FRONTSHP1P\_YYMMDD\_description (VersionNumber)

#### Keywords

*Provide keywords to optimise possibilities for re-use.*

LCI, Process, modelling

### 2.b. FAIR Data: Making data openly accessible

#### Dataset accessibility

*If confidential, explain why, clearly separating legal and contractual reasons from voluntary restrictions.*

Confidential data: Raw data from experiments, data related to processes, measurements and intellectual property of consortium and involved stakeholders

Public data: Results derived by LCA, LCC,s-LCA analysis and reported in D4.6 (public)

Reason for confidentiality: For businesses and industries to protect operational integrity and unauthorized access to sensitive data that can expose intellectual property, trade secrets and confidential communications.[click here to enter text](#)

#### Software tools

*Indicate what methods or software tools are needed to access the data.*

GaBi 8.5 Sphera™, Microsoft Office (Excel, Teams, OneDrive, Outlook), pdf readers

#### Repository to be used to deposit the dataset

*Where will the data and metadata be deposited? Preference should be given to certified repositories which support open access where possible.*

All data and metadata will be deposited in the internal repository of NTUA's servers.

Data to be shared with the consortium will be uploaded in the common Google Drive folder created by the coordinators.

Data that are intended to be published on international scientific journals will need to wait for the publication acceptance before being deposited in public repositories.

### 2.c.FAIR Data: Making data interoperable

#### Are the data interoperable?

*Brief description of the tools/vocabularies used to make the data usable by other researchers, institutions, etc.*

Legend with nomenclature and acronyms.

Technical terms retrieved from the existing literature, where conceptual definitions can be traced back.

Document with titles and definitions of parameters and processes involved in LCA, LCC, s-LCA analysis accessible by the consortium, Public deliverable D4.6.

### 2.d. FAIR Data: Increasing data re-use

#### Restrictions

*If applicable, define the data licensing approach to permit the widest re-use possible. Indicate the chosen license tools.*

Data restrictions will comply with the Grant Agreement.

**Indicate for how long it is intended that the data remains re-usable**

*Click here to enter text.*

Once published, data could be re-used as long as they will be considered useful and up-to-date.

**Explain how data quality is assured**

*Click here to enter text.*

ISO 14040/44, 21930 and other applicable standards for life cycle

Data will be carefully collected applying (if possible) a statistical approach.

Cross check on the data collected.

Comparison with data reported in the literature to ensure that the data collected are reasonable.

### 3. Allocation of resources

**If applicable, indicate any allocation of resources to data management**

*Click here to enter text.*

No resources have been allocated to data management.

### 4. Ethical aspects

**Please indicate if you have identified any ethical or legal aspect that could impact the data sharing**

*Click here to enter text.*

No ethical or legal aspects that could impact the data sharing have been identified.

### 5. Data security

**Indicate the provisions in place to ensure data security**

*Click here to enter text.*

Protocols and provisions prescribed by software involved in the data processing (GaBi 8.5 Sphera™, Microsoft Office (Excel, Teams, OneDrive, Outlook) )

**Name of Beneficiary: CERTH**

#### 1. Data summary: Non-personal data

**Dataset identifier**

FRONTSH1P\_CERTH\_DesignCSS2ValueChain\_DDMMYY\_v00

**WP and Task**

WP4 and Task 4.6

**Dataset description**

*Describe the dataset in a few lines.*

The dataset refers to CSS2 and includes the process simulation results of the overall SS2 value chain comprising data related to the identification of the design and operational aspects of the whole process.

#### **Purpose of the data**

*Explain the purpose of the data collection/generation and its relation to the objectives of the project.*

The data will include information of the basic design and operation parameters of the CSS2 that ensure the optimal performance at full scale. This data is necessary for the overall assessment of the CSS2 concept from economic and environmental point of view.

#### **Source of the data**

- Text, e.g., field or laboratory notes, survey responses
- Numeric, e.g., tables, counts, measurements
- Audiovisual, e.g., images, sound recordings, video
- Models, computer code
- Other (please specify): *click here to enter text*

#### **Type of data regarding the form**

- Text: plain text (TXT), HTML, XML, PDF/A
- Databases: XML, CSV
- Image: JPEG, JPG-2000, PNG, TIFF
- Audio: AIFF, WAVE
- Containers: TAR, GZIP, ZIP
- Other (please specify): *click here to enter text*

#### **Origin of the data**

- Newly collected/generated
- Re-used (please explain): *click here to enter text*

#### **Expected size of data**

*Give an estimation: e.g. a few kB/MB/GB, etc.*

- Fixed: never change after being collected or generated
- Growing: new data may be added but the old data is never changed or deleted
- Revisable: new data may be added, and old data may be changed or deleted

#### **Utility of the data**

*Indicate to whom the data might be useful e.g. partners, stakeholders, citizens, etc.*

The dataset will be useful to NTUA in order to perform the LCA/LCC analyses in the same Task 4.6.

#### **Software involved in the data processing**

Microsoft Excel  
 ASPEN Plus  
 Matlab  
 Fortran

## 2. FAIR Data

### 2.a.FAIR Data: Making data findable

#### **Standard identification mechanism and metadata**

*Are the data produced and/or used in the project discoverable with metadata, identifiable and locatable by means of a standard identification mechanism (e.g. persistent and unique identifiers such as Digital Object Identifiers).*

The most relevant data produced will be published in article form in international journals to which a DOI is generally associated. According to the article content, it will be also possible to associate metadata to it in a dedicated repository usually suggested by the journal and made available to readers.

#### **Naming convention**

*Indicate any naming convention that you follow.*

Files including data processing during the project will be named according to the following convention:

*FRONTSHIP\_CCS2\_descriptive\_name\_VersionNumber*

#### **Keywords**

*Provide keywords to optimise possibilities for re-use.*

Bioreactor, hydrolysis, fermentation, food waste, process model, bio-lubricants, bio-oil

### **2.b. FAIR Data: Making data openly accessible**

#### **Dataset accessibility**

*If confidential, explain why, clearly separating legal and contractual reasons from voluntary restrictions.*

Confidential data - X

Public data

Reason for confidentiality: All data will be considered available at consortium level until their publication in international journals. The data related to the developed models will be confidential due to internal policy for file sharing but can be available to the partners upon request and justification.

#### **Software tools**

*Indicate what methods or software tools are needed to access the data.*

The data will be accessible through software such as PDF readers and Microsoft Excel  
Process models will be accessible through Aspen Plus.

#### **Repository to be used to deposit the dataset**

*Where will the data and metadata be deposited? Preference should be given to certified repositories which support open access where possible.*

All data and metadata will be deposited in the internal repository of CERTH's servers. Data to be shared with the consortium will be uploaded in the common Google Drive folder created by the coordinators. Any publication will be deposited in ZENODO or other repositories as soon as it is accepted by the journal.

### **2.c. FAIR Data: Making data interoperable**

#### **Are the data interoperable?**

*Brief description of the tools/vocabularies used to make the data usable by other researchers, institutions, etc.*

The data will be always accompanied by a legend clearly explaining the meaning of the nomenclature and the acronyms used. The terminology that is going to be used will be retrieved from the existing relevant literature.

## 2.d. FAIR Data: Increasing data re-use

### Restrictions

*If applicable, define the data licensing approach to permit the widest re-use possible. Indicate the chosen license tools.*

Once published, data will have to submit to the standard licenses as the Creative Commons International License.

Moreover, data restrictions will comply with the Grant Agreement.

### Indicate for how long it is intended that the data remains re-usable

*Click here to enter text.*

Once published in article form or in dedicated repositories, data could be re-used as long as they will be considered useful and up-to-date.

### Explain how data quality is assured

*Click here to enter text.*

A cross check carried out by at least another staff member than responsible for performing the process simulation. A comparison with data reported in the literature will be carried out to ensure that the data is reasonable. Moreover, data will be reviewed by different experts in the field.

## 3. Allocation of resources

### If applicable, indicate any allocation of resources to data management

*Click here to enter text.*

No resources have been allocated to data management.

## 4. Ethical aspects

### Please indicate if you have identified any ethical or legal aspect that could impact the data sharing

*Click here to enter text.*

No ethical or legal aspects that could impact the data sharing have been identified.

## 5. Data security

### Indicate the provisions in place to ensure data security

*Click here to enter text.*

Before making the data usable for the consortium or for the public, CERTH data will be stored in laptops and external hard disks.

**Name of Beneficiary: LNEG**

**1. Data summary: Non-personal data**

<b>Dataset identifier</b>
FRONTSH1P_LNEG_ProcessConditionsCSS2_DDMMYY_v00
<b>WP and Task</b>
WP4, Task 4.3: From agricultural wastes into FFAs for new eco-designed circular biobased products; Task 4.4: From food industry waste into compostable bioplastics for enhancing urban biowaste separate collection and valorization into compost and biomethane; Task 4.6 Ecodesign of the CSS2.
<b>Dataset description</b>
Data (including protocols) describing the process conditions and efficiency (e.g., yield) will be collected. Data related to the value chain, inputs and outputs, and impacts will be collected. Examples and case studies publicly available will be collected, analysed, treated and references will be established
<b>Purpose of the data</b>
Data for deliverable produced by this WP related to Agricultural waste conversion into FFAs feasibility – TECH (D4.3) and related to demonstration of food industry waste conversion into compostable bags for OFMSW separate collection and its valorisation into compost/biomethane. Data for Deliverable D4.7 Ecodesign Case studies, developed within the WP
<b>Source of the data</b>
<input checked="" type="checkbox"/> Text, e.g., field or laboratory notes, survey responses <input checked="" type="checkbox"/> Numeric, e.g., tables, counts, measurements <input checked="" type="checkbox"/> Audiovisual, e.g., images, sound recordings, video <input type="checkbox"/> Models, computer code <input type="checkbox"/> Other (please specify): <a href="#">click here to enter text</a>
<b>Type of data regarding the form</b>
<input checked="" type="checkbox"/> Text: plain text (TXT), HTML, XML, PDF/A <input type="checkbox"/> Databases: XML, CSV <input checked="" type="checkbox"/> Image: JPEG, JPG-2000, PNG, TIFF <input type="checkbox"/> Audio: AIFF, WAVE <input type="checkbox"/> Containers: TAR, GZIP, ZIP <input type="checkbox"/> Other (please specify): <a href="#">click here to enter text</a>
<b>Origin of the data</b>
<input checked="" type="checkbox"/> Newly collected/generated <input type="checkbox"/> Re-used (please explain): <a href="#">click here to enter text</a>
<b>Expected size of data</b>
Up to a few MB size <input type="checkbox"/> Fixed: never change after being collected or generated <input checked="" type="checkbox"/> Growing: new data may be added but the old data is never changed or deleted <input checked="" type="checkbox"/> Revisable: new data may be added, and old data may be changed or deleted
<b>Utility of the data</b>
The target groups include the members of the project and the consortium, the EC, external researchers, research communities and the public.

### Software involved in the data processing

Data in this context will be in standard Microsoft desktop formats (Word, Excel, Powerpoint); and Adobe Acrobat, Photoshop and Illustrator.

## 2. FAIR Data

### 2.a.FAIR Data: Making data findable

#### Standard identification mechanism and metadata

*Are the data produced and/or used in the project discoverable with metadata, identifiable and locatable by means of a standard identification mechanism (e.g. persistent and unique identifiers such as Digital Object Identifiers).*

For project outputs such as publications and SOPs and some open access data repositories generate DOI.

Data generated in certain scientific equipment include metadata inside of the file/image (e.g. HPLC) such as equipment information, date of data acquisition, units of measurement, protocol information, etc.

Some data will be produced using protocols identifiable and locatable by means of a standard identification mechanism.

#### Naming convention

*Indicate any naming convention that you follow.*

There is not a standard naming convention

#### Keywords

*Provide keywords to optimise possibilities for re-use.*

Saccharification, Pre-treatment, Composition, Fermentation, Case studies

### 2.b. FAIR Data: Making data openly accessible

#### Dataset accessibility

Public data: YES

Data will be available in an open-data platform (it can be used freely). Data will be shared with the WP partners to support the project work. All deliverables and milestones will be shared within the consortium and the EC.

Confidential data: YES

Reason for confidentiality: The data relating to internal processes involved in execution of the project activities as well as the collected data may be a subject for intellectual property (IP) issues, hence may have restricted access in the repository.

#### Software tools

*Indicate what methods or software tools are needed to access the data.*

Web browser for web content, open-source tools for SOPs, reports files and experimental data - Microsoft Office or equivalent open-source software.

#### Repository to be used to deposit the dataset

Via the project website and the selected trusted open access institutional repositories (LNEG repository).

### 2.c. FAIR Data: Making data interoperable

#### Are the data interoperable?

*Brief description of the tools/vocabularies used to make the data usable by other researchers, institutions, etc.*

A common vocabulary, typical to the research field will be used for semantic data harmonisation. The interoperability will be possible on request and after the embargo period (once the produced deliverable will be no longer considered confidential).

### 2.d. FAIR Data: Increasing data re-use

#### Restrictions

Data will be licensed using standard licenses (i.e., Creative Commons licenses) in line with the obligations set out in the Grant Agreement.

Data will be available straight after publication. However, the raw data for a publication must be uploaded to an open access repository before the manuscript is accepted. Therefore, the data will be in the open access repository, but not accessible until the paper is accepted and a DOI is created (kind of embargo period).

#### Indicate for how long it is intended that the data remains re-usable

It is expected that data may be available for re-use right after the end of the FRONTSH1P projects.

#### Explain how data quality is assured

Internal revision before submission to validate data and to ensure the quality (completeness, accuracy, relevance, appearance and structure) of deliverables and milestones.

### 3. Allocation of resources

#### If applicable, indicate any allocation of resources to data management

All costs for making data FAIR are integrated within the project. There are no dedicated resources for long term preservation.

### 4. Ethical aspects

#### Please indicate if you have identified any ethical or legal aspect that could impact the data sharing

No specific issues detected

### 5. Data security

#### Indicate the provisions in place to ensure data security

In all case, data will be stored in at least two locations (i.e., LNEG repository, EC portal and FRONTSH1P webpage/repository) to provide for data backup, recovery and secure storage for a limited time. Transfer of sensitive data will use secure protocols (i.e., username and password,...). The LNEG repository is stored at LNEG servers with security protocols established by the Centro Nacional de Cibersegurança (National Cybersecurity Center).



**Name of Beneficiary: CARTIF**

**1. Data summary: Non-personal data**

<b>Dataset identifier</b>
FRONTSH1P_CARTIF_Fermentation_DDMMYY_v00
<b>WP and Task</b>
WP4, Task 4.1, 4.2 and 4.3
<b>Dataset description</b>
<i>Describe the dataset in a few lines.</i> Task 4.1 and 4.2 state of the art, implementation plan Laboratory data regarding Task 4.3
<b>Purpose of the data</b>
<i>Explain the purpose of the data collection/generation and its relation to the objectives of the project.</i> Data will be collected as an intermediate step for larger scale fermentation of biomass to produce fatty acids and included Deliverable 4
<b>Source of the data</b>
<input checked="" type="checkbox"/> Text, e.g., field or laboratory notes, survey responses <input checked="" type="checkbox"/> Numeric, e.g., tables, counts, measurements <input type="checkbox"/> Audiovisual, e.g., images, sound recordings, video <input type="checkbox"/> Models, computer code <input type="checkbox"/> Other (please specify): <i>click here to enter text</i>
<b>Type of data regarding the form</b>
<input checked="" type="checkbox"/> Text: plain text (TXT), HTML, XML, PDF/A <input checked="" type="checkbox"/> Databases: XML, CSV <input checked="" type="checkbox"/> Image: JPEG, JPG-2000, PNG, TIFF <input type="checkbox"/> Audio: AIFF, WAVE <input type="checkbox"/> Containers: TAR, GZIP, ZIP <input type="checkbox"/> Other (please specify): <i>click here to enter text</i>
<b>Origin of the data</b>
<input checked="" type="checkbox"/> Newly collected/generated <input checked="" type="checkbox"/> Re-used (please explain): <i>click here to enter text</i> Data already published will be used in the State of the Art
<b>Expected size of data</b>
<i>Give an estimation: e.g. a few kB/MB/GB, etc.</i> A few kB <input type="checkbox"/> Fixed: never change after being collected or generated <input type="checkbox"/> Growing: new data may be added but the old data is never changed or deleted <input checked="" type="checkbox"/> Revisable: new data may be added, and old data may be changed or deleted
<b>Utility of the data</b>
<i>Indicate to whom the data might be useful e.g. partners, stakeholders, citizens, etc.</i> Useful to partners participating in WP4 and coordinator, stakeholders
<b>Software involved in the data processing</b>
Excel, Word

## 2. FAIR Data

### 2.a.FAIR Data: Making data findable

#### Standard identification mechanism and metadata

*Are the data produced and/or used in the project discoverable with metadata, identifiable and locatable by means of a standard identification mechanism (e.g. persistent and unique identifiers such as Digital Object Identifiers).*

*In case of scientific paper publications, in an indexed journal, keywords and acknowledgements will refer to Frontsh1p, its GA and H2020 financial support,*

#### Naming convention

*Indicate any naming convention that you follow.*

Not applicable

#### Keywords

*Provide keywords to optimise possibilities for re-use.*

Fatty acids, biotechnology, non-fossil polymers, H2020, GA number

### 2.b. FAIR Data: Making data openly accessible

#### Dataset accessibility

*If confidential, explain why, clearly separating legal and contractual reasons from voluntary restrictions.*

#### Public data

#### Software tools

*Indicate what methods or software tools are needed to access the data.*

Excel, word

#### Repository to be used to deposit the dataset

*Where will the data and metadata be deposited? Preference should be given to certified repositories which support open access where possible.*

Zenodo.org

### 2.c.FAIR Data: Making data interoperable

#### Are the data interoperable?

*Brief description of the tools/vocabularies used to make the data usable by other researchers, institutions, etc.*

Yes, standard documents will be used: pdf, doc, xml

### 2.d. FAIR Data: Increasing data re-use

#### Restrictions

*If applicable, define the data licensing approach to permit the widest re-use possible. Indicate the chosen license tools.*

No restrictions for use in research applications

**Indicate for how long it is intended that the data remains re-usable**

*Click here to enter text.*

No limit

**Explain how data quality is assured**

*Click here to enter text.*

If a scientific article is produced, it will be subjected to peer review before publishing

### 3. Allocation of resources

**If applicable, indicate any allocation of resources to data management**

*Click here to enter text.*

All expenses for the publication will be allocated to Frontsh1p funding as referred in 29.3 in GA.

### 4. Ethical aspects

**Please indicate if you have identified any ethical or legal aspect that could impact the data sharing**

*Click here to enter text.*

Not applicable

### 5. Data security

**Indicate the provisions in place to ensure data security**

*Click here to enter text.*

Internal server have standard security processes: restricted access, backup periodically, all security parameters accomplished

## WP5

Name of Beneficiary: University of Lodz (UniLodz)

### 1. Data summary: Non-personal data

<b>Dataset identifier</b>
FRONTSH1P_UNILODZ_DataWP5_DDMMYY_v00
<b>WP and Task</b>
WP5 and T5.1, T5.2
<b>Dataset description</b>
<p>The dataset contains the results of stakeholder surveys for effective implementation among CSS3. Data in the project will come from various sources:</p> <ul style="list-style-type: none"> <li>- analysis of data available on the websites of National Statistics, Eurostat, and selected Offices;</li> <li>- expert discussions;</li> <li>- questionnaire, and FGI;</li> <li>- surveys ;</li> <li>- public data sets such as: BDL, REGON, etc.;</li> </ul>
<b>Purpose of the data</b>
<p>The purpose data collection is preparing the framework non-technical state of the art:</p> <ul style="list-style-type: none"> <li>- Identification, involvement, needs and expectations from regional stakeholders involved in CSS3</li> <li>- Requirements and success criteria to satisfy the implementation of non-technological solutions required in CSS3</li> <li>- Identification and availability of wastewaters.</li> </ul>
<b>Source of the data</b>
<input checked="" type="checkbox"/> Text, e.g., field or laboratory notes, survey responses <input checked="" type="checkbox"/> Numeric, e.g., tables, counts, measurements <input checked="" type="checkbox"/> Audiovisual, e.g., images, sound recordings, video <input type="checkbox"/> Models, computer code <input type="checkbox"/> Other (please specify):
<b>Type of data regarding the form</b>
<input checked="" type="checkbox"/> Text: plain text (TXT), HTML, XML, PDF/A <input checked="" type="checkbox"/> Databases: XML, CSV <input type="checkbox"/> Image: JPEG, JPG-2000, PNG, TIFF <input checked="" type="checkbox"/> Audio: AIFF, WAVE <input type="checkbox"/> Containers: TAR, GZIP, ZIP <input checked="" type="checkbox"/> Other (please specify): <i>shp</i>
<b>Origin of the data</b>
<input checked="" type="checkbox"/> Newly collected/generated <input type="checkbox"/> Re-used (please explain):
<b>Expected size of data</b>
<input type="checkbox"/> Fixed: never change after being collected or generated <input type="checkbox"/> Growing: new data may be added but the old data is never changed or deleted <input checked="" type="checkbox"/> Revisable: new data may be added, and old data may be changed or deleted
<b>Utility of the data</b>

The dataset will be useful to WP4 partners, such as OPUS, ZMBzura and technical partners preparing technical part of implementation plan to CSS3.

**Software involved in the data processing**

Microsoft Excel  
ArcGIS, QGis

**2. FAIR Data**

**2.a.FAIR Data: Making data findable**

**Standard identification mechanism and metadata**

The most relevant data produced will be published in article form in international journals to which a DOI is generally associated. According to the article content, it will be also possible to associate metadata to it in a dedicated repository usually suggested by the journal and made available to readers.

**Naming convention**

Files including data collected during the project will be named according to the following pattern: *FRONTSH1P\_descriptive\_name(date)*  
For example, the file collected during FGI will be saved as: *FRONTSH1P\_FGIcompany\_12.05.2022*

**Keywords**

Regional stakeholders, Company, Society, Academy, Government, Requirements, Success criteria.

**2.b. FAIR Data: Making data openly accessible**

**Dataset accessibility**

Confidential data  
Public data - X

**Software tools**

Generally the data will be accessible through software such as PDF readers and Microsoft Excel, Microsoft Word.

**Repository to be used to deposit the dataset**

All data and metadata will be deposited in the internal repository of UniLodz servers on One Drive Cloud.  
Data shared with the consortium will be uploaded in the common Google Drive folder created by the coordinators.  
Data that are intended to be published on international scientific journals will need to wait for the publication acceptance before being deposited in public repositories.

**2.c.FAIR Data: Making data interoperable**

**Are the data interoperable?**

The data will be always accompanied by a legend clearly explaining the meaning of the used nomenclature and the acronyms.

Since data are generally intended for a scientific audience, technical terms will be used. Such terms will be retrieved from the existing peer-reviewed literature, where conceptual definitions can be traced back.

## 2.d. FAIR Data: Increasing data re-use

### Restrictions

Once published, data will have to submit to the standard licenses as the Creative Commons International License.

Moreover, data restrictions will comply with the Grant Agreement.

### Indicate for how long it is intended that the data remains re-usable

Once published in article form or in dedicated repositories, data could be re-used as long as they will be considered useful and up-to-date.

### Explain how data quality is assured

Data will be carefully collected applying (if possible) a statistical approach. A cross check carried out by at least another staff member than responsible for collection will be foreseen whenever possible.

A comparison with data reported in the literature will be always carried out to ensure that the data collected are reasonable.

Moreover, data will be reviewed by different experts in the field.

## 3. Allocation of resources

### If applicable, indicate any allocation of resources to data management

No resources have been allocated to data management.

## 4. Ethical aspects

### Please indicate if you have identified any ethical or legal aspect that could impact the data sharing

No ethical or legal aspects that could impact the data sharing have been identified.

## 5. Data security

### Indicate the provisions in place to ensure data security

Before making the data usable for the consortium or for the public, UniLodz data will be stored in UniLodz computers, Microsoft OneDrive cloud. Such platforms can only be accessed through encrypted accounts, that ensure the avoidance of unwanted external access.

**Name of Beneficiary: STAM Srl**

**1. Data summary: Non-personal data**

<b>Dataset identifier</b>
FRONTSH1P_STAM_MicroalgaeTreatment_DDMMYY_v00
<b>WP and Task</b>
WP5 and T5.3
<b>Dataset description</b>
<i>Describe the dataset in a few lines.</i> Results of experiments towards circular wastewater system with microalgae system. The containerised photobioreactor will be applied in Poland to treat urban and industrial wastewater.
<b>Purpose of the data</b>
<i>Explain the purpose of the data collection/generation and its relation to the objectives of the project.</i> The data aims to demonstrate the efficiency in the innovative method to decrease the percentage of C/N/P contained inside the wastewater to reach a level of nutrients appropriate to be then used for irrigation purpose in agriculture.
<b>Source of the data</b>
<input checked="" type="checkbox"/> Text, e.g., field or laboratory notes, survey responses <input checked="" type="checkbox"/> Numeric, e.g., tables, counts, measurements <input checked="" type="checkbox"/> Audiovisual, e.g., images, sound recordings, video <input type="checkbox"/> Models, computer code <input type="checkbox"/> Other (please specify): <a href="#">click here to enter text</a>
<b>Type of data regarding the form</b>
<input checked="" type="checkbox"/> Text: plain text (TXT), HTML, XML, PDF/A <input checked="" type="checkbox"/> Databases: XML, CSV <input checked="" type="checkbox"/> Image: JPEG, JPG-2000, PNG, TIFF <input type="checkbox"/> Audio: AIFF, WAVE <input checked="" type="checkbox"/> Containers: TAR, GZIP, ZIP <input type="checkbox"/> Other (please specify): <a href="#">click here to enter text</a>
<b>Origin of the data</b>
<input checked="" type="checkbox"/> Newly collected/generated <input type="checkbox"/> Re-used (please explain): <a href="#">click here to enter text</a>
<b>Expected size of data</b>
<i>Give an estimation: e.g. a few kB/MB/GB, etc.</i> 5 GB <input checked="" type="checkbox"/> Fixed: never change after being collected or generated <input checked="" type="checkbox"/> Growing: new data may be added but the old data is never changed or deleted <input type="checkbox"/> Revisable: new data may be added, and old data may be changed or deleted
<b>Utility of the data</b>
The dataset will be useful to WP5 technical partners, such as INL, LNEG and NTUA, which will be taking advantage of the provided data in order to, respectively, implement the sensor system and perform Ecodesign and LCA studies.
<b>Software involved in the data processing</b>
Microsoft Office

## 2. FAIR Data

### 2.a.FAIR Data: Making data findable

#### Standard identification mechanism and metadata

*Are the data produced and/or used in the project discoverable with metadata, identifiable and locatable by means of a standard identification mechanism (e.g. persistent and unique identifiers such as Digital Object Identifiers).*

No, the type of data generated are not currently discoverable through metadata. Once put in the project repository, they might be characterized, using for example the data owner field, the publication data, the data frequency, etc.

#### Naming convention

*Indicate any naming convention that you follow.*

Files including data collected during the project will be named according to the following convention:

*FRONTSHP1P\_STAM\_descriptive\_name\_DDMMYY (VersionNumber)*

#### Keywords

*Provide keywords to optimise possibilities for re-use.*

Wastewater treatment, microalgae, photobioreactor, CO2

### 2.b. FAIR Data: Making data openly accessible

#### Dataset accessibility

*If confidential, explain why, clearly separating legal and contractual reasons from voluntary restrictions.*

Confidential data - X

Public data

Reason for confidentiality:

The data are confidential as the generated data belong to the pilot plant involved partners, they are then subject to specific agreements before publishing them.

#### Software tools

*Indicate what methods or software tools are needed to access the data.*

Microsoft Word, Excel, Pdf reader, image viewer

#### Repository to be used to deposit the dataset

*Where will the data and metadata be deposited? Preference should be given to certified repositories which support open access where possible.*

All data and metadata will be deposited in the internal repository of STAM's servers.

Data to be shared with the consortium will be uploaded in the common Google Drive folder created by the coordinators.

After a careful evaluation, data that are deemed public could also be deposited in ZENODO or other repositories.

### 2.c.FAIR Data: Making data interoperable

#### Are the data interoperable?



*Brief description of the tools/vocabularies used to make the data usable by other researchers, institutions, etc.*

The data will be always accompanied by a legend clearly explaining the meaning of the nomenclature and the acronyms used. Moreover, graphics will be designed taking into account colour blind reader. This will increase the readability of the data collected making them more accessible.

Since data are generally intended for a scientific audience, technical terms will be used. Such terms will be retrieved from the existing peer-reviewed literature, where conceptual definitions can be traced back.

## 2.d. FAIR Data: Increasing data re-use

### Restrictions

*If applicable, define the data licensing approach to permit the widest re-use possible. Indicate the chosen license tools.*

Not identified yet

### Indicate for how long it is intended that the data remains re-usable

*Click here to enter text.*

After the terminus of the project, the data will be maintained for 5 years (at least).

### Explain how data quality is assured

*Click here to enter text.*

Data will be carefully collected applying (if possible) a statistical approach. A cross check carried out by at least another staff member than responsible for collection will be foreseen whenever possible.

A comparison with data reported in the literature will be always carried out to ensure that the data collected are reasonable.

## 3. Allocation of resources

### If applicable, indicate any allocation of resources to data management

*Click here to enter text.*

No resources have been allocated to data management.

## 4. Ethical aspects

### Please indicate if you have identified any ethical or legal aspect that could impact the data sharing

*Click here to enter text.*

No ethical or legal aspects that could impact the data sharing have been identified

## 5. Data security

### Indicate the provisions in place to ensure data security

*Click here to enter text.*

The data back-up will be stored in a cloud network of STAM accessible only through authentication by the STAM team.

**Name of Beneficiary: INL**

**1. Data summary: Non-personal data**

<b>Dataset identifier</b>
FRONTSHP_INL_SERSCO2sensor_DDMMYY_v00
<b>WP and Task</b>
WP5, task 5.4 (SERS-based sensor for CO2 detection)
<b>Dataset description</b>
Mainly, spectroscopic data (SERS spectra) from SERS-based sensor for dissolved CO2 detection. The size of each spectrum file goes from 176 to 12 KB. Then, some electron microscopy, DLS/NTA and UV-VIS-NIR data will be acquired for SERS substrate characterization.
<b>Purpose of the data</b>
<i>Explain the purpose of the data collection/generation and its relation to the objectives of the project.</i> These data will give information about the concentration of dissolved CO2 in microalga' water using a SERS-based sensor developed during the project.
<b>Source of the data</b>
<input type="checkbox"/> Text, e.g., field or laboratory notes, survey responses <input checked="" type="checkbox"/> Numeric, e.g., tables, counts, measurements <input checked="" type="checkbox"/> Audiovisual, e.g., images, sound recordings, video <input type="checkbox"/> Models, computer code <input type="checkbox"/> Other (please specify): <i>click here to enter text</i>
<b>Type of data regarding the form</b>
<input checked="" type="checkbox"/> Text: plain text (TXT), HTML, XML, PDF/A <input type="checkbox"/> Databases: XML, CSV <input checked="" type="checkbox"/> Image: JPEG, JPG-2000, PNG, TIFF <input type="checkbox"/> Audio: AIFF, WAVE <input type="checkbox"/> Containers: TAR, GZIP, ZIP <input checked="" type="checkbox"/> Other (please specify): spectroscopic data:.spc and TEM: .dm3 and .dm4
<b>Origin of the data</b>
<input checked="" type="checkbox"/> Newly collected/generated <input type="checkbox"/> Re-used (please explain): <i>click here to enter text</i>
<b>Expected size of data</b>
<i>Give an estimation: e.g. a few kB/MB/GB, etc.</i> Few GBs (mainly due to electron microscopies [session in TEM can generate 2.5 GB imaging data] and NTA data [each measurement can generate 1.2 GB data. The spectroscopic data is not heavy.
<input type="checkbox"/> Fixed: never change after being collected or generated <input checked="" type="checkbox"/> Growing: new data may be added but the old data is never changed or deleted <input type="checkbox"/> Revisable: new data may be added, and old data may be changed or deleted
<b>Utility of the data</b>
<i>Indicate to whom the data might be useful e.g. partners, stakeholders, citizens, etc.</i>

The target groups include the members of the project and the consortium, the EC, external researchers, research communities and the public.

#### Software involved in the data processing

Free software for spectroscopic data analysis: spectragyph

Graph and statistics: Origin 9.0 and Excel.

Free software for Electron microscopies analysis: Image J and GMS3 (free licence).

## 2. FAIR Data

### 2.a.FAIR Data: Making data findable

#### Standard identification mechanism and metadata

*Are the data produced and/or used in the project discoverable with metadata, identifiable and locatable by means of a standard identification mechanism (e.g. persistent and unique identifiers such as Digital Object Identifiers).*

For project outputs such as publications and SOPs and some open access data repositories generate DOI (e.g. ZENODO).

Data generated in certain scientific equipment include metadata inside of the file/image (e.g. Raman system and TEM) such as equipment information, date of data acquisition, units of measurement, protocol information, etc.

#### Naming convention

*Indicate any naming convention that you follow.*

There is not a standard naming convention on SERS or Raman spectroscopy. Normally, the file' name in SERS data contains: ANALYTE\_CONCENTRATION\_[RAMAN-REPORTER]\_SERS-SUBSTRATE\_REPLICATE\_LASER\_LASER-POWER\_ACQUISITION-TIME\_1,...N.txt(or .spc)

#### Keywords

*Provide keywords to optimise possibilities for re-use.*

[Type of LASER]: i.e. 785nm, 633nm or 532nm

SERS

[CO<sub>2</sub>]; we can include more information in this keyword such as source of CO<sub>2</sub>.

[Wastewater]; we can include more information in this keyword such as wastewater source, N/P ratio, etc.

[Raman-reporter]; we have to select what Raman reporter will use to detect CO<sub>2</sub>.

### 2.b. FAIR Data: Making data openly accessible

#### Dataset accessibility

*If confidential, explain why, clearly separating legal and contractual reasons from voluntary restrictions.*

Public data: YES.

Data will be available in an open-data platform (it can be used freely). Data will be shared with the WP partners to support the project work. All deliverables and milestones will be shared within the consortium and the EC.

Confidential data: YES

Reason for confidentiality: The data relating to internal processes involved in developing the SERS-Based sensor for CO2 detection, as it may have intellectual property (IP) issues, may have restricted access in the repository.

#### Software tools

*Indicate what methods or software tools are needed to access the data.*

Web browser for web content, open-source tools for SOPs, reports files and experimental data (e.g., Fiji or Image J for .tiff and SpectraGryph for .spc, .cvs).

#### Repository to be used to deposit the dataset

*Where will the data and metadata be deposited? Preference should be given to certified repositories which support open access where possible.*

Via the project website and the selected trusted open access institutional repositories (ZENODO at INL).

### 2.c. FAIR Data: Making data interoperable

#### Are the data interoperable?

*Brief description of the tools/vocabularies used to make the data usable by other researchers, institutions, etc.*

### 2.d. FAIR Data: Increasing data re-use

#### Restrictions

*If applicable, define the data licensing approach to permit the widest re-use possible. Indicate the chosen license tools.*

Data will be licensed using standard licenses (i.e., Creative Commons licenses) in line with the obligations set out in the Grant Agreement.

Data will be available straight after publication. However, the raw data for a publication must be uploaded to an open access repository (e.g., Zenodo) before the manuscript is accepted. Therefore, the data will be in the open access repository, but not accessible until the paper is accepted and a DOI is created (kind of embargo period).

#### Indicate for how long it is intended that the data remains re-usable

*Click here to enter text.*

After the terminus of the project, the data will be maintained for 5 years (at least).

#### Explain how data quality is assured

*Click here to enter text.*

Internal revision before submission to validate data and to ensure the quality (completeness, accuracy, relevance, appearance and structure) of deliverables and milestones.

### 3. Allocation of resources

**If applicable, indicate any allocation of resources to data management**

*Click here to enter text.*

All costs for making data FAIR are integrated within the project.

Long term preservation of data will be ensured by the project and by the partners themselves.

### 4. Ethical aspects

**Please indicate if you have identified any ethical or legal aspect that could impact the data sharing**

*Click here to enter text.*

### 5. Data security

**Indicate the provisions in place to ensure data security**

*Click here to enter text.*

In all case, data will be stored in at least two locations (i.e. INL repository, EC portal and FRONTSH1P webpage/repository) to provide for data backup, recovery and secure storage for a limited time. Transfer of sensitive data will use secure protocols (i.e., username and password,...).

## WP6

### Name of Beneficiary: Lodz University of Technology (TUL)

#### 1. Data summary: Non-personal data

<b>Dataset identifier</b>
FRONTSH1P_TUL_Extrusion_DDMMYY_v00
<b>WP and Task</b>
WP6; T6.4,
<b>Dataset description</b>
<p>Activities carried out in the Institute of Turbomachinery, TUL concentrate on the numerical simulations of the extrusion and foaming of the LDPE, HDPE and NBR rubber-based materials. Therefore, the dataset which needs to be managed consists of the data necessary for the definition of the numerical tasks, the simulations results and the outcomes of results processing and analysis. The essential part of the data is in electronic form.</p> <p>The dataset in the Institute of Polymer and Dye Technology, TUL, contains the information and research results about the properties (mechanical, rheological etc.) of rubber mixtures and their additives. Data in the project will come from laboratory equipment and discussions with experts.</p>
<b>Purpose of the data</b>
<p>The data collected and generated within the project are used to develop the numerical model of the extrusion and foaming of the LDPE, HDPE and NBR rubber-based materials. The additional aim is to characterize rheological properties in different temperatures and different shear stresses of rubber with defined Mooney viscosity. They are required to better understand the processes of extrusion and foaming with the use of supercritical CO<sub>2</sub>, which allows for the design of efficient devices. These data will be also useful during the development of the foaming process which is described in the Grant Agreement.</p>
<b>Source of the data</b>
<input checked="" type="checkbox"/> Text, e.g., field or laboratory notes, survey responses <input checked="" type="checkbox"/> Numeric, e.g., tables, counts, measurements <input checked="" type="checkbox"/> Audiovisual, e.g., images, sound recordings, video <input checked="" type="checkbox"/> Models, computer code <input checked="" type="checkbox"/> Other (please specify): technical drawings, technical documentation
<b>Type of data regarding the form</b>
<input checked="" type="checkbox"/> Text: plain text (TXT), HTML, XML, PDF/A <input checked="" type="checkbox"/> Databases: XML, CSV <input checked="" type="checkbox"/> Image: JPEG, JPG-2000, PNG, TIFF <input type="checkbox"/> Audio: AIFF, WAVE <input checked="" type="checkbox"/> Containers: TAR, GZIP, ZIP <input checked="" type="checkbox"/> Other (please specify): Native formats of software used for simulations
<b>Origin of the data</b>
<input checked="" type="checkbox"/> Newly collected/generated <input type="checkbox"/> Re-used (please explain): <i>click here to enter text</i>
<b>Expected size of data</b>
<p>A few TB.</p> <input type="checkbox"/> Fixed: never change after being collected or generated <input type="checkbox"/> Growing: new data may be added but the old data is never changed or deleted <input checked="" type="checkbox"/> Revisable: new data may be added, and old data may be changed or deleted

#### Utility of the data

The data might be useful for partners and stakeholders in the Frontsh1p project and other companies, citizens, academy and government especially in lodzkie region.

#### Software involved in the data processing

Microsoft Word, Excel, PowerPoint, MonControl, NanoSurf Naio, SmartMode, TRIOS and Ansys software package.

## 2. FAIR Data

### 2.a.FAIR Data: Making data findable

#### Standard identification mechanism and metadata

The most scientifically relevant data produced will be published in article form in international journals to which a DOI is generally associated. According to the article content, it will be also possible to associate metadata to it in a dedicated repository usually suggested by the journal and made available to readers.

#### Naming convention

Files and folders including data collected during the project will be named according to the following pattern:

FRONTSH1P\_descriptive(number)\_name\_date

For example, the file collected during the viscosity test will be saved as: FRONTSH1P\_viscosity\_stdubber\_26.07.2022 or FRONTSH1P\_simulation\_26\_07\_2022 In case of software not allowing for very long file names data will be stored in folders and subfolders i.e. FRONTSH1P/Viscosity/test(date)/number\_of\_test

#### Keywords

polymer technology, foaming process, numerical simulation, supercritical CO<sub>2</sub>, polymer extrusion, mathematical modelling of foaming, rubber, rubber extrusion, rubber foaming

### 2.b. FAIR Data: Making data openly accessible

#### Dataset accessibility

Confidential data X

Public data

Reason for confidentiality: Delivered data can be treated as know-how of the TUL or consortium leader or partners. All data will be considered confidential (although available to all the consortium members) until accepted by partners to be published in international journals.

#### Software tools

Generally, the text and other standard data will be accessible through software such as PDF readers, graphic and video viewers or Microsoft Excel and Word.

Codes, scripts and specific engineering software data will be accessible either through dedicated compilers or particular engineering software i.e. Matlab, Ansys Workbench, MonControl, NanoSurf Naio, SmartMode, TRIOS.

#### Repository to be used to deposit the dataset

Raw data from the experiments and simulations will be treated as official data. The master copy will be stored in the internal backup system of local servers based on RAID3 or RAID5 configuration. Next, the working copy of raw data will be used for processing and analysing to prevent overwriting. All working copies of data will after analysis be decrypted by metadata and will be deposited in the internal repository of TUL servers NS on One Drive Cloud.

Data shared with the consortium will be uploaded in the common Google Drive folder created by the coordinators.

It is acceptable to publish data and metadata produced by the project in repositories or open access data of scientific journals only with the consent of the partners.

### 2.c. FAIR Data: Making data interoperable

#### Are the data interoperable?

The data will be always accompanied by a legend clearly explaining the meaning of the used nomenclature and the acronyms.

Since data are generally intended for a scientific audience, technical terms will be used. Such terms will be retrieved from the existing peer-reviewed literature, where conceptual definitions can be traced back.

### 2.d. FAIR Data: Increasing data re-use

#### Restrictions

Once published, data will have to submit to the standard licenses as the Creative Commons International License.

Moreover, data restrictions will comply with the Grant Agreement.

#### Indicate for how long it is intended that the data remains re-usable

Once published in article form or in dedicated repositories, data could be re-used as long as they will be considered useful and up-to-date.

Experimental and simulation data in form of files will be stored as long as TUL repository servers on One Drive Cloud or other systems in the future will be accessible.

#### Explain how data quality is assured

Data will be carefully collected applying (if possible) a statistical approach. A cross-check carried out by at least another staff member than responsible for collection will be foreseen whenever possible.

A comparison with data reported in the literature will be always carried out to ensure that the data collected are reasonable.

Moreover, data will be reviewed by different experts in the field.

## 3. Allocation of resources

#### If applicable, indicate any allocation of resources to data management

No resources have been allocated to data management.



#### 4. Ethical aspects

Please indicate if you have identified any ethical or legal aspect that could impact the data sharing

No ethical or legal aspects that could impact the data sharing have been identified.

#### 5. Data security

Indicate the provisions in place to ensure data security

A part of the data (pdf, text, Word, Excel, PowerPoint, etc.) files are stored in the dedicated SharePoint accessible by the research team members only.

The recent files of the numerical simulation are stored on the hard drives of the computer with access limited to the project team members. Data usable for partners from the consortium will be stored in TUL computers and shared via the Microsoft OneDrive cloud. Such platforms can only be accessed through encrypted accounts, which ensure the avoidance of unwanted external access. All the files are stored on external drives secured with passwords and accessible to the project team members only.

The master copy will be stored in the internal backup system of local servers based on RAID3 or RAID5 configuration.

### Name of Beneficiary: LEDA POLYMER

#### 1. Data summary: Non-personal data

##### Dataset identifier

FRONTSH1P\_LP\_3DPrinting\_DDMMYY\_v00

##### WP and Task

WP6, Task 6.2

##### Dataset description

*Describe the dataset in a few lines.*

The dataset will include the results of the market campaign provided from OPUS, comprising data about obtaining feedstock for the 3D-printing process from plastic waste produced in FRONTSH1P. LEDA will provide knowledge and technical experience necessary for preparing said analysis .

The technical dataset of LEDA will include the knowledge on the functioning of FDM 3D-printing process and its operation. LEDA will also collect data on the material properties of the provided feedstock (plastic waste) and its transferring into ready-for-printing filament. LEDA will also store and provide data on the amount of material and the time needed to print the selected object.

##### Purpose of the data

*Explain the purpose of the data collection/generation and its relation to the objectives of the project.*

The market data obtained from OPUS will be combined with the technical knowledge of LEDA, including the potential difficulties and possibilities of the 3D-printing process, to develop a route of

transferring the feedstock into filament which will later be used for developing an exemplary product- choosing the right 3D model and printing it.

#### Source of the data

- Text, e.g., field or laboratory notes, survey responses
- Numeric, e.g., tables, counts, measurements
- Audiovisual, e.g., images, sound recordings, video
- Models, computer code
- Other (please specify): *click here to enter text*

#### Type of data regarding the form

- Text: plain text (TXT), HTML, XML, PDF/A
- Databases: XML, CSV
- Image: JPEG, JPG-2000, PNG, TIFF
- Audio: AIFF, WAVE
- Containers: TAR, GZIP, ZIP
- Other (please specify): STL

#### Origin of the data

- Newly collected/generated
- Re-used (please explain): *click here to enter text*

#### Expected size of data

*Give an estimation: e.g. a few kB/MB/GB, etc.*

- Fixed: never change after being collected or generated
- Growing: new data may be added but the old data is never changed or deleted
- Revisable: new data may be added, and old data may be changed or deleted

#### Utility of the data

*Indicate to whom the data might be useful e.g. partners, stakeholders, citizens, etc.*

The data set will be useful for WP6 partners, such as OPUS for evaluating and comparing the results of their market analysis with the information on technical possibilities provided by LEDA. Data on 3D-printer performance could be useful for OPUS for developing a training program for employees. Data could also be useful for K-FLEX to be able to transfer their waste streams into filament.

The dataset can also bring value for NGOs within replication in fellow regions, and filament manufacturers could use the information on the technical process itself.

#### Software involved in the data processing

Microsoft Excel  
 Microsoft Word  
 Microsoft 3D Viewer  
 Ultimaker Cura

## 2. FAIR Data

### 2.a.FAIR Data: Making data findable

#### Standard identification mechanism and metadata

*Are the data produced and/or used in the project discoverable with metadata, identifiable and locatable by means of a standard identification mechanism (e.g. persistent and unique identifiers such as Digital Object Identifiers).*

The most relevant data produced will be shared with the consortium in the final report file. Part of the data will be used in market analysis and business plan. None of them will require DOI unless agreed with consortium to publish the outcomes of the report.

#### Naming convention

*Indicate any naming convention that you follow.*

FRONTSH1P\_YYMMDD\_descriptive name(VersionNumber)

For example for the file regarding material properties of the plastic waste feedstock:

FRONTSH1P\_220907\_plastic\_waste\_properties

#### Keywords

*Provide keywords to optimise possibilities for re-use.*

FDM, Fused Deposition Modelling, filament, 3D Printing , model, polymer, plastic, waste

### 2.b. FAIR Data: Making data openly accessible

#### Dataset accessibility

*If confidential, explain why, clearly separating legal and contractual reasons from voluntary restrictions.*

Confidential data X only for consortium partners

Public data

Reason for confidentiality: data will remain confidential, except those necessary for public report "repair and play"

#### Software tools

*Indicate what methods or software tools are needed to access the data.*

Accessing the data will be possible from Microsoft Excel, Microsoft Word and PDF Readers.

Any models will be accessible from 3D computer graphics software, such as Microsoft 3D Viewer , and the information on the time and the amount of the material needed to print the selected object will be collected through slicing software such as Ultimaker Cura and then transferred into a Microsoft Word or a PDF file.

#### Repository to be used to deposit the dataset

*Where will the data and metadata be deposited? Preference should be given to certified repositories which support open access where possible.*

All data and metadata will be deposited in the internal repository of LEDA's servers.

Data to be shared with the consortium will be uploaded in the common Google Drive folder created by the coordinators.

### 2.c. FAIR Data: Making data interoperable

#### Are the data interoperable?

*Brief description of the tools/vocabularies used to make the data usable by other researchers, institutions, etc.*

The data will contain legend explaining the meaning of the nomenclature and the acronyms used.

Technical terms, commonly occurring in scientific and technical papers, will be used.

### 2.d. FAIR Data: Increasing data re-use

#### Restrictions

*If applicable, define the data licensing approach to permit the widest re-use possible. Indicate the chosen license tools.*

Once published, data will have to submit to the standard licenses as the Creative Commons International License.

Moreover, data restrictions will comply with the Grant Agreement.

#### Indicate for how long it is intended that the data remains re-usable

Once published in article form or in dedicated repositories, data could be re-used as long as they will be considered useful and up-to-date.

#### Explain how data quality is assured

Data will be carefully collected applying (if possible) a statistical approach. A cross check carried out by at least another staff member than responsible for collection will be foreseen whenever possible.

A comparison with data reported in the literature will be always carried out to ensure that the data collected are reasonable.

Moreover, data will be reviewed by different experts in the field.

## 3. Allocation of resources

#### If applicable, indicate any allocation of resources to data management

No resources have been allocated to data management.

#### 4. Ethical aspects

Please indicate if you have identified any ethical or legal aspect that could impact the data sharing

No legal or ethical aspects that could impact the data sharing have been identified.

#### 5. Data security

Indicate the provisions in place to ensure data security

Data possessed by LEDA will be stored on internal laptops and internal servers- both encrypted to avoid unwanted external access.

#### 1. Data summary: Non-personal data

##### Dataset identifier

FRONTSH1P\_LP\_NIPUFoaming\_DDMMYY\_v00

##### WP and Task

WP6, Task 6.4

##### Dataset description

*Describe the dataset in a few lines.*

The dataset of LEDA will include the technical knowledge and experience on foaming NIPU materials. This includes the detailed information on the substrates and their availability, the material recipe, the technical parameters of the supercritical CO<sub>2</sub> (scCO<sub>2</sub>) foaming process. Since PROPLAST and PROMIX will assist LEDA in the optimization of the production process of the scCO<sub>2</sub> NIPU foam, the data obtained from them will also be collected and used.

##### Purpose of the data

*Explain the purpose of the data collection/generation and its relation to the objectives of the project.*

The dataset will be used to develop and optimise the facility for producing NIPU foams using supercritical CO<sub>2</sub>. It will comprise specific technical information to ensure the optimal production process, and thus, obtaining a final product with the best possible quality.

##### Source of the data

Text, e.g., field or laboratory notes, survey responses

Numeric, e.g., tables, counts, measurements

Audiovisual, e.g., images, sound recordings, video

Models, computer code

Other (please specify): [click here to enter text](#)

##### Type of data regarding the form

<input checked="" type="checkbox"/> Text: plain text (TXT), HTML, XML, PDF/A <input type="checkbox"/> Databases: XML, CSV <input checked="" type="checkbox"/> Image: JPEG, JPG-2000, PNG, TIFF <input type="checkbox"/> Audio: AIFF, WAVE <input checked="" type="checkbox"/> Containers: TAR, GZIP, ZIP <input type="checkbox"/> Other (please specify):
<b>Origin of the data</b>
<input checked="" type="checkbox"/> Newly collected/generated <input checked="" type="checkbox"/> Re-used (please explain): Data previously collected by LEDA (i.e. in BIOMOTIVE project), including material recipes and optimal processing conditions of the NIPU foam will be used.
<b>Expected size of data</b>
<i>Give an estimation: e.g. a few kB/MB/GB, etc.</i> <input type="checkbox"/> Fixed: never change after being collected or generated <input checked="" type="checkbox"/> Growing: new data may be added but the old data is never changed or deleted <input type="checkbox"/> Revisable: new data may be added, and old data may be changed or deleted
<b>Utility of the data</b>
<i>Indicate to whom the data might be useful e.g. partners, stakeholders, citizens, etc.</i> The dataset will be useful for other WP6 partners such as KFLEX, PROPLAST and PROMIX to validate the used technology. Moreover it would be useful for other companies, NGOs and research institutes for later development of NIPU foams.
<b>Software involved in the data processing</b>
Microsoft Excel Microsoft Word

## 2. FAIR Data

### 2.a.FAIR Data: Making data findable

<b>Standard identification mechanism and metadata</b>
<i>Are the data produced and/or used in the project discoverable with metadata, identifiable and locatable by means of a standard identification mechanism (e.g. persistent and unique identifiers such as Digital Object Identifiers).</i> The most relevant data produced will be shared with the consortium in the final report file. Part of the data will be provided by PROPLAST and PROMIX. None of them will require DOI.
<b>Naming convention</b>
<i>Indicate any naming convention that you follow.</i> FRONTSH1P_YYMMDD_descriptive name(VersionNumber)  For example for the file regarding material properties of the plastic waste feedstock:  FRONTSH1P_220907_plastic_waste_properties
<b>Keywords</b>

*Provide keywords to optimise possibilities for re-use.*

NIPU, supercritical, carbon dioxide, polyurethane, non-isocyanate, biobased, PU, foam,

## 2.b. FAIR Data: Making data openly accessible

### Dataset accessibility

*If confidential, explain why, clearly separating legal and contractual reasons from voluntary restrictions.*

Confidential data X only for consortium partners

Public data

Reason for confidentiality: data will remain confidential, except those necessary for public report  
“Decarbonisation of foaming processes”

### Software tools

*Indicate what methods or software tools are needed to access the data.*

Accessing the data will be possible from Microsoft Excel, Microsoft Word and PDF Readers.

### Repository to be used to deposit the dataset

*Where will the data and metadata be deposited? Preference should be given to certified repositories which support open access where possible.*

All data and metadata will be deposited in the internal repository of LEDA's servers.

Data to be shared with the consortium will be uploaded in the common Google Drive folder created by the coordinators.

## 2.c. FAIR Data: Making data interoperable

### Are the data interoperable?

*Brief description of the tools/vocabularies used to make the data usable by other researchers, institutions, etc.*

The data will contain legend explaining the meaning of the nomenclature and the acronyms used.  
Technical terms, commonly occurring in scientific and technical papers, will be used.

## 2.d. FAIR Data: Increasing data re-use

### Restrictions

Once published, data will have to submit to the standard licenses as the Creative Commons International License.

Moreover, data restrictions will comply with the Grant Agreement.

### Indicate for how long it is intended that the data remains re-usable

Once published in article form or in dedicated repositories, data could be re-used as long as they will be considered useful and up-to-date

Once published in article form or in dedicated repositories, data could be re-used as long as they will be considered useful and up-to-date.

Data will be carefully collected applying (if possible) a statistical approach. A cross check carried out by at least another staff member than responsible for collection will be foreseen whenever possible.

A comparison with data reported in the literature will be always carried out to ensure that the data collected are reasonable.

Moreover, data will be reviewed by different experts in the field

### 3. Allocation of resources

**If applicable, indicate any allocation of resources to data management**

*Click here to enter text.*

No resources have been allocated to data management.

### 4. Ethical aspects

**Please indicate if you have identified any ethical or legal aspect that could impact the data sharing**

*Click here to enter text.*

No legal or ethical aspects that could impact the data sharing have been identified.

### 5. Data security

**Indicate the provisions in place to ensure data security**

*Click here to enter text.*

Data possessed by LEDA will be stored on internal laptops and internal servers- both encrypted to avoid unwanted external access.

## Name of Beneficiary: Consorzio per la promozione della cultura plastica (Proplast)

### 1. Data summary: Non-personal data

**Dataset identifier**

FRONTSH1P\_PROPLAST\_FoamingTests\_DDMMYY\_v00

**WP and Task**

*Click here to enter text*

WP6 and T6.4

**Dataset description**



*Describe the dataset in a few lines.*

The dataset refers to CSS4 and includes the results of the experimental campaign conducted on

- the foaming extrusion line equipped with promix static mixer and the CO<sub>2</sub> where foaming test on vulcanizable rubber and TPE rubbers will be realized
- mixing foaming unit for PUR and NIPU

All data related to the experimental investigations carried out in Proplast facility will be collected. In particular pressure, temperature, CO<sub>2</sub> solubility, residence time, throughput, will be monitored and stored for each of the planned test. For some of the test vulcanization parameters, cell dimensions will also be collected and analyzed.

#### **Purpose of the data**

*Explain the purpose of the data collection/generation and its relation to the objectives of the project.*

The data will be essential for providing a basic understanding of proper processing condition to reach the desired foam structure both for traditional and TPE rubber. Furthermore, in case of PU and NIPU a new process will be set based on the collected data.

#### **Source of the data**

- Text, e.g., field or laboratory notes, survey responses
- Numeric, e.g., tables, counts, measurements
- Audio-visual, e.g., images, sound recordings, video
- Models, computer code
- Other (please specify): [click here to enter text](#)

#### **Type of data regarding the form**

- Text: plain text (TXT), HTML, XML, PDF/A
- Databases: XML, CSV
- Image: JPEG, JPG-2000, PNG, TIFF
- Audio: AIFF, WAVE
- Containers: TAR, GZIP, ZIP
- Other (please specify): [click here to enter text](#)

#### **Origin of the data**

- Newly collected/generated
- Re-used (please explain): [click here to enter text](#)

#### **Expected size of data**

*Give an estimation: e.g. a few kB/MB/GB, etc.*

- Fixed: never change after being collected or generated
- Growing: new data may be added but the old data is never changed or deleted
- Revisable: new data may be added, and old data may be changed or deleted

#### **Utility of the data**

*Indicate to whom the data might be useful e.g. partners, stakeholders, citizens, etc.*

Data will be then used by the partners (K-Flex, Sirmax and LEDA) to carry out their activities from pilot to industrial scale to produce new foamed panels for insulation. Data will also be used by the technology provider (PROMIX) to improve their equipments and wider their knowledge on the use of the technology for new polymers.

#### **Software involved in the data processing**

Excel  
Origin  
Matlab

## 2. FAIR Data

### 2.a.FAIR Data: Making data findable

#### Standard identification mechanism and metadata

*Are the data produced and/or used in the project discoverable with metadata, identifiable and locatable by means of a standard identification mechanism (e.g. persistent and unique identifiers such as Digital Object Identifiers).*

The most relevant data produced can be published in article form in international journals. According to the article content, it will be also possible to associate metadata to it in a dedicated repository usually suggested by the journal and made available to readers.

#### Naming convention

*Indicate any naming convention that you follow.*

Files including data collected during the project will be named according to the following convention:

FRONTSHP\_Yymmdd\_polymer\_ Number

Polymers type (VRubber, TPE, PU,NIPU)

#### Keywords

*Provide keywords to optimise possibilities for re-use.*

Foaming, extrusion, design of experiment, pressure, solubility, melt viscosity, viscosity

### 2.b. FAIR Data: Making data openly accessible

#### Dataset accessibility

*If confidential, explain why, clearly separating legal and contractual reasons from voluntary restrictions.*

Confidential data

Public data

Reason for confidentiality: *click here to enter text*

#### Software tools

*Indicate what methods or software tools are needed to access the data.*

Generally, the data will be accessible through software such as PDF readers and Microsoft Excel

#### Repository to be used to deposit the dataset

*Where will the data and metadata be deposited? Preference should be given to certified repositories which support open access where possible.*

All data and metadata will be deposited in the internal repository of PROPLAST's servers.

Data to be shared with the consortium will be uploaded in the common Google Drive folder created by the coordinators.

Data that are intended to be published on international scientific journals will need to wait for the publication acceptance before being deposited in public repositories.

### 2.c.FAIR Data: Making data interoperable

#### Are the data interoperable?

*Brief description of the tools/vocabularies used to make the data usable by other researchers, institutions, etc.*

The data will be always accompanied by a legend clearly explaining the meaning of the nomenclature and the acronyms used.

Since data are generally intended for a scientific audience, technical terms will be used.

## 2.d. FAIR Data: Increasing data re-use

### Restrictions

*If applicable, define the data licensing approach to permit the widest re-use possible. Indicate the chosen license tools.*

*Data restrictions will comply with the Grant Agreement*

*In accordance with the other partners involved in the activity special need of licencing approach will be defined during the project duration*

### Indicate for how long it is intended that the data remains re-usable

*Click here to enter text.*

*Once published in article form or in dedicated repositories, data could be re-used as long as they will be considered useful and up-to-date.*

### Explain how data quality is assured

*Click here to enter text.*

*Data will be carefully collected applying (if possible) a statistical approach.*

*A cross check carried out by at least another staff member than the responsible for collection will be foreseen.*

*Moreover, data will be reviewed by different experts in the field and all the partners involved in the experimental phase*

## 3. Allocation of resources

### If applicable, indicate any allocation of resources to data management

*Click here to enter text.*

No special resources have been allocated to data management.

## 4. Ethical aspects

### Please indicate if you have identified any ethical or legal aspect that could impact the data sharing

*Click here to enter text.*

No ethical or legal aspect that could impact the data sharing are foreseen

## 5. Data security

### Indicate the provisions in place to ensure data security

*Click here to enter text.*

The data stored in the Proplast repository server platforms can only be accessed through encrypted accounts, that ensure the avoidance of unwanted external access. Once they will be uploaded in the Fronthship repository the access will be granted by coordinators

## Name of Beneficiary: Waste4ME (W4ME)

### 1. Data summary: Non-personal data

<b>Dataset identifier</b>
FRONTSHP_W4ME_Dechlorination_DDMMYY_v00
<b>WP and Task</b>
WP6 and T6.3
<b>Dataset description</b>
<i>Describe the dataset in a few lines.</i> The dataset refers to CSS4 and includes the inputs and results of the technology development process of dechlorination technology by Waste4ME with material of K-Flex and plastic scraps from the Lodzkie region. It comprises data related to the functioning of the process, composition of material in and out plus engineering data for future integration.
<b>Purpose of the data</b>
<i>Explain the purpose of the data collection/generation and its relation to the objectives of the project.</i> To develop the dechlorination technology, design for integration with K-Flex's processes and register products for use in the market.
<b>Source of the data</b>
<input checked="" type="checkbox"/> Text, e.g., field or laboratory notes, survey responses <input checked="" type="checkbox"/> Numeric, e.g., tables, counts, measurements <input checked="" type="checkbox"/> Audiovisual, e.g., images, sound recordings, video <input checked="" type="checkbox"/> Models, computer code <input checked="" type="checkbox"/> Other (please specify): compositional data <a href="#">click here to enter text</a>
<b>Type of data regarding the form</b>
<input checked="" type="checkbox"/> Text: plain text (TXT), HTML, XML, PDF/A <input checked="" type="checkbox"/> Databases: XML, CSV <input checked="" type="checkbox"/> Image: JPEG, JPG-2000, PNG, TIFF <input type="checkbox"/> Audio: AIFF, WAVE <input type="checkbox"/> Containers: TAR, GZIP, ZIP <input type="checkbox"/> Other (please specify): <a href="#">click here to enter text</a>
<b>Origin of the data</b>
<input checked="" type="checkbox"/> Newly collected/generated <input checked="" type="checkbox"/> Re-used (please explain): compositional data of K-Flex's material <a href="#">click here to enter text</a>
<b>Expected size of data</b>
<i>Give an estimation: e.g. a few kB/MB/GB, etc.</i> <input type="checkbox"/> Fixed: never change after being collected or generated <input checked="" type="checkbox"/> Growing: new data may be added but the old data is never changed or deleted <input type="checkbox"/> Revisable: new data may be added, and old data may be changed or deleted
<b>Utility of the data</b>
<i>Indicate to whom the data might be useful e.g. partners, stakeholders, citizens, etc.</i> The dataset will be useful to WP6 technical partners, such as NTUA and K-FLEX, who will envision to integrate the developed technology in their operational processes.

Moreover, data on char and its possible applications in agriculture or plastic industry could be useful to other stakeholders working in these sectors.

#### Software involved in the data processing

Microsoft Excel  
Python  
Matlab  
GaBi  
...

## 2. FAIR Data

### 2.a.FAIR Data: Making data findable

#### Standard identification mechanism and metadata

The most relevant data produced will be published in article form or patent, whichever is most appropriate.

#### Naming convention

*Indicate any naming convention that you follow.*

Files including data collected during the project will be named according to the following convention:

*FRONTSHIP descriptive name(VersionNumber) YYMMDD*

#### Keywords

*Provide keywords to optimise possibilities for re-use.*

Dechlorination, chlorine, plastic waste, PVC, rubbers, pyrolysis.

### 2.b. FAIR Data: Making data openly accessible

#### Dataset accessibility

*If confidential, explain why, clearly separating legal and contractual reasons from voluntary restrictions.*

Confidential data - X

Operating data, process and technology setup and overall process.

Reason for confidentiality: patent pending.

#### Software tools

*Indicate what methods or software tools are needed to access the data.*

Generally the data will be accessible through software such as PDF readers and Microsoft Excel.

#### Repository to be used to deposit the dataset

*Where will the data and metadata be deposited? Preference should be given to certified repositories which support open access where possible.*

All data and metadata will be deposited in the internal Waste4ME storage methods.

Data to be shared with the consortium will be uploaded in the common Google Drive folder created by the coordinators.

After a careful evaluation, data that are deemed public could also be deposited in other repositories.

Data that are intended to be published on international scientific journals will need to wait for the publication acceptance before being deposited in public repositories.

Data required for patent filing will remain unpublished until publishing will not threaten the patent filing process.

### 2.c. FAIR Data: Making data interoperable

#### Are the data interoperable?

*Brief description of the tools/vocabularies used to make the data usable by other researchers, institutions, etc.*

The data will be always accompanied by a legend clearly explaining the meaning of the nomenclature and the acronyms used. Moreover, graphics will be designed taking into account colour blind reader. This will increase the readability of the data collected making them more accessible.

Since data are generally intended for a scientific audience, technical terms will be used. Such terms will be retrieved from the existing peer-reviewed literature, where conceptual definitions can be traced back.

### 2.d. FAIR Data: Increasing data re-use

#### Restrictions

*If applicable, define the data licensing approach to permit the widest re-use possible. Indicate the chosen license tools.*

Once published, data will have to submit to the standard licenses as the Creative Commons International License.

Moreover, data restrictions will comply with the Grant Agreement.

Patents if filed will remain property of Waste4ME.

#### Indicate for how long it is intended that the data remains re-usable

*Click here to enter text.*

Once published in article form or in dedicated repositories, data could be re-used as long as they will be considered useful and up-to-date.

#### Explain how data quality is assured

*Click here to enter text.*

Data will be carefully collected applying (if possible) a statistical approach. A cross check carried out by at least another staff member than responsible for collection will be foreseen whenever possible.

A comparison with data reported in the literature will be always carried out to ensure that the data collected are reasonable.

Moreover, data will be reviewed by different experts in the field.

## 3. Allocation of resources

#### If applicable, indicate any allocation of resources to data management

*Click here to enter text.*

No resources have been allocated to data management.

#### 4. Ethical aspects

Please indicate if you have identified any ethical or legal aspect that could impact the data sharing

No ethical or legal aspects that could impact the data sharing have been identified.

#### 5. Data security

Indicate the provisions in place to ensure data security

Before making the data usable for the consortium or for the public, Waste4ME data will be stored in Waste4ME sharepoint. Such platforms can only be accessed through encrypted accounts, that ensure the avoidance of unwanted external access.

Name of Beneficiary: PROMIX

#### 6. Data summary: Non-personal data

**Dataset identifier**

FRONTSH1P\_PROMIX\_FoamingTrials\_DDMMYY\_v00

**WP and Task**

WP6, T6.1, 6.4 and 6.5

**Dataset description**

Describe the dataset in a few lines.

The data generated and or obtained within the stated tasks will be related to the planning, installation, implementation, and running of foam extrusion equipment delivered to the company K-Flex.

**Purpose of the data**

Explain the purpose of the data collection/generation and its relation to the objectives of the project.

The data recorded is needed to improve and promote/expedite the use of CO2 physical foaming equipment in the production of XPE and rubber foam products.

**Source of the data**

Text, e.g., field or laboratory notes, survey responses

Numeric, e.g., tables, counts, measurements

Audiovisual, e.g., images, sound recordings, video

Models, computer code

Other (please specify): [click here to enter text](#)

**Type of data regarding the form**

- Text: plain text (TXT), HTML, XML, PDF/A
- Databases: XML, CSV
- Image: JPEG, JPG-2000, PNG, TIFF
- Audio: AIFF, WAVE
- Containers: TAR, GZIP, ZIP
- Other (please specify): [click here to enter text](#)

#### Origin of the data

- Newly collected/generated
- Re-used (please explain): [click here to enter text](#)

#### Expected size of data

Give an estimation: e.g. a few kB/MB/GB, etc.

- Fixed: never change after being collected or generated
- Growing: new data may be added but the old data is never changed or deleted
- Revisable: new data may be added, and old data may be changed or deleted

#### Utility of the data

Indicate to whom the data might be useful e.g. partners, stakeholders, citizens, etc.

The gained data will be useful for K-Flex, Promix, Proplast and other partners with direct involvement in the tasks stated above.

#### Software involved in the data processing

Microsoft 365 (in particular Word, Excel, Powerpoint)  
ImageJ (for analysis of microscopy images)

## 7. FAIR Data

### 2.e. FAIR Data: Making data findable

#### Standard identification mechanism and metadata

Are the data produced and/or used in the project discoverable with metadata, identifiable and locatable by means of a standard identification mechanism (e.g. persistent and unique identifiers such as Digital Object Identifiers).

The full data will not be made available to the public via DOI. However, the relevant data required for the deliverables within the Frontship project will be made available to the Work package leaders.

#### Naming convention

Indicate any naming convention that you follow.

The data does not have a convention related to the project itself. However, the structure and nomenclature of the data will be organized in a way that is self explaining: e.g. Folder 'Technology' with subfolder 'Drawings'/'Pictures'/'Analysis' etc.

#### Keywords

Provide keywords to optimise possibilities for re-use.

Mixing, foaming, cooling, CO2, XPE, foaming



## 2.f. FAIR Data: Making data openly accessible

### Dataset accessibility

If confidential, explain why, clearly separating legal and contractual reasons from voluntary restrictions.

Confidential data

Public data

Reason for confidentiality: [click here to enter text](#)

### Software tools

Indicate what methods or software tools are needed to access the data.

PDF reader, image/movie visualization software

### Repository to be used to deposit the dataset

Where will the data and metadata be deposited? Preference should be given to certified repositories which support open access where possible.

The data will be stored on Promix's servers. Documents that are relevant for multiple partners will be shared while the partners in questions will be responsible for data storage on their side.

## 2.g. FAIR Data: Making data interoperable

### Are the data interoperable?

Brief description of the tools/vocabularies used to make the data usable by other researchers, institutions, etc.

All data (pictures, analyses, trial summaries) will be saved in a self-explaining manner in a way that if they are to be analysed and read by external people.

## 2.h. FAIR Data: Increasing data re-use

### Restrictions

If applicable, define the data licensing approach to permit the widest re-use possible. Indicate the chosen license tools.

The data has to submit to the standard creative commons international license.

### Indicate for how long it is intended that the data remains re-usable

[Click here to enter text.](#)

The data is expected to be re-usable with no time limit.

### Explain how data quality is assured

[Click here to enter text.](#)

Data quality is assessed by the different people involved in the tasks within Promix company. At Promix, the four eyes principle applies. As such at least two people are making sure that the documents and data gained within the Frontship project comply with general data generation practice.

## 8. Allocation of resources

**If applicable, indicate any allocation of resources to data management**

[Click here to enter text.](#)

Basic data management is included in Promix's way of working. No specific additional resources have been attributed to this task.

## 9. Ethical aspects

**Please indicate if you have identified any ethical or legal aspect that could impact the data sharing**

[Click here to enter text.](#)

There are no ethical or legal aspects impacting the sharing of data gained solely within the Frontship project.

## 10. Data security

**Indicate the provisions in place to ensure data security**

[Click here to enter text.](#)

Promix is making all efforts necessary to ensure data security. Owing to the increasing risks in IT security, Promix is even increasing its IT security standards. Nevertheless, there is always a remaining risk in the area of IT, in such a case Promix would immediately inform the relevant partners within the Frontship project.

WP8

Name of Beneficiary: STRESS - 13; GAL IRPINIA – 15; CARMASCIANDO - 18

1. Data summary: Non-personal data

<b>Dataset identifier</b>
FRONTSH1P_STRESS_GALLrpinia_Carmasciando_DataWP8_DDMMYY_v00
<b>WP and Task</b>
WP8; T8.4
<b>Dataset description</b>
The dataset will be referred to the data collected in Campania Region (and at Italian National Level) in relation to the needs and analysis for the different CSSs. It will mainly of: <ul style="list-style-type: none"> <li>- Questionnaires on local data;</li> <li>- Local survey results;</li> <li>- Public data sets.</li> <li>- Geographic data sets.</li> </ul>
<b>Purpose of the data</b>
Collect information to define a roadmap and to deploy the project tools in Campania Region.
<b>Source of the data</b>
<input checked="" type="checkbox"/> Text, e.g., field or laboratory notes, survey responses <input checked="" type="checkbox"/> Numeric, e.g., tables, counts, measurements <input type="checkbox"/> Audiovisual, e.g., images, sound recordings, video <input type="checkbox"/> Models, computer code <input checked="" type="checkbox"/> Other (please specify): Geographic data sets
<b>Type of data regarding the form</b>
<input checked="" type="checkbox"/> Text: plain text (TXT), HTML, XML, PDF/A <input checked="" type="checkbox"/> Databases: XML, CSV <input checked="" type="checkbox"/> Image: JPEG, JPG-2000, PNG, TIFF <input type="checkbox"/> Audio: AIFF, WAVE <input type="checkbox"/> Containers: TAR, GZIP, ZIP <input checked="" type="checkbox"/> Other (please specify): .shp, ESRI Geodatabase
<b>Origin of the data</b>
<input checked="" type="checkbox"/> Newly collected/generated <input checked="" type="checkbox"/> Re-used (please explain): we will partially re-use data from Regione Campania or other local/national databases, but also directly collect new data.
<b>Expected size of data</b>
Estimated: a few GB (if Raster data will be needed). <input type="checkbox"/> Fixed: never change after being collected or generated <input type="checkbox"/> Growing: new data may be added but the old data is never changed or deleted <input checked="" type="checkbox"/> Revisable: new data may be added, and old data may be changed or deleted
<b>Utility of the data</b>
The data will be useful for local analysis aimed at applying the tools and methodologies aimed at replicating at Regional level the CSSs developed in the project.
<b>Software involved in the data processing</b>
Microsoft Office, Adobe Photoshop, Adobe Acrobat, Google software tools, QGIS, ArcGIS.

## 2. FAIR Data

### 2.a.FAIR Data: Making data findable

#### Standard identification mechanism and metadata

Specific metadata will be associated to the single files, based on the repository rules. It will belong to different categories: Descriptive metadata; Structural metadata, Administrative metadata.

#### Naming convention

<Project Name>\_<Description.ID >\_< Name>\_ < Status >

Where:

- <Project Name> is FRONTSH1P for all document types
- < Description.ID > is a description of the content + Number
- < Name> is the specific Content Name
- <Status> is Draft/Revised/Final

FRONTSH1P\_wastewater.1\_Campania\_Final will be the filename of the 1st dataset representing the wastewater streams in the Campania Region.

#### Keywords

Circular Economy, Circular Systemic solutions, Stakeholder groups, Stakeholder Network

### 2.b. FAIR Data: Making data openly accessible

#### Dataset accessibility

*If confidential, explain why, clearly separating legal and contractual reasons from voluntary restrictions.*

**Confidential data**

**Public data**

Reason for confidentiality: *click here to enter text*

#### Software tools

The data will be generally accessible through common Browsers or Software (Chrome, Edge, Firefox, Safari, Microsoft Office, Google software tools, PDF reader) or with QGIS Open access software

#### Repository to be used to deposit the dataset

*Where will the data and metadata be deposited? Preference should be given to certified repositories which support open access where possible.*

All data and metadata will be deposited in the internal repository of each of the involved partners (STRESS, GAL Irpinia, Carmasciando) based on Google Drive.

Data shared will be also shared with the consortium through a common project platform (Confluence) created by the coordinators.

### 2.c.FAIR Data: Making data interoperable

#### Are the data interoperable?

*Brief description of the tools/vocabularies used to make the data usable by other researchers, institutions, etc.*

All the data will be produced in easily readable standards allowing data exchange between researchers, institutions, organisations, countries, etc.

All data will include an executive summary and a definitions section clearly explaining terms and acronyms.

## 2.d. FAIR Data: Increasing data re-use

### Restrictions

*If applicable, define the data licensing approach to permit the widest re-use possible. Indicate the chosen license tools.*

The data will be generally public, restrictions may be applied to comply with the Grant Agreement.

### Indicate for how long it is intended that the data remains re-usable

The data will always be re-usable.

### Explain how data quality is assured

In general the initial data quality is assured by the fact that will be collected from institutional Statistics databases at regional/national level.

Data will be collected by different staff members and will be reviewed by different experts in the field whenever possible.

## 3. Allocation of resources

### If applicable, indicate any allocation of resources to data management

No specific project resources have been to data management, the internal quality procedures will be applied.

## 4. Ethical aspects

### Please indicate if you have identified any ethical or legal aspect that could impact the data sharing

No ethical or legal aspects that could impact the data sharing have been identified.

## 5. Data security

### Indicate the provisions in place to ensure data security

When the data is stored in the internal repository of each of the involved partners (STRESS, GAL Irpinia, Carmasciando) it can only be accessed through encrypted accounts following the company's security procedures.

**Name of Beneficiary: Novamont S.p.A.**

## 1. Data summary: Non-personal data

<b>Dataset identifier</b>
FRONTSHP_NVMT_DataWP8_DDMMYY_v00
<b>WP and Task</b>
WP8 Task 8.1, 8.4 and 8.6
<b>Dataset description</b>
Data related to: <ul style="list-style-type: none"> <li>• Circular Economy action plan;</li> <li>• incentives and barriers of existing socio-economic policy instruments on their regional level.</li> <li>• Value chains in the different territorial clusters</li> <li>• Characteristics of the different local context for replication activities.</li> </ul>
<b>Purpose of the data</b>
Replicate circular governance models developed in the project in the Campania Region in Italy
<b>Source of the data</b>
<input checked="" type="checkbox"/> Text, e.g., field or laboratory notes, survey responses <input checked="" type="checkbox"/> Numeric, e.g., tables, counts, measurements <input type="checkbox"/> Audiovisual, e.g., images, sound recordings, video <input type="checkbox"/> Models, computer code <input type="checkbox"/> Other (please specify): <i>click here to enter text</i>
<b>Type of data regarding the form</b>
<input checked="" type="checkbox"/> Text: plain text (TXT), HTML, XML, PDF/A <input checked="" type="checkbox"/> Databases: XML, CSV <input checked="" type="checkbox"/> Image: JPEG, JPG-2000, PNG, TIFF <input type="checkbox"/> Audio: AIFF, WAVE <input checked="" type="checkbox"/> Containers: TAR, GZIP, ZIP <input type="checkbox"/> Other (please specify): <i>click here to enter text</i>
<b>Origin of the data</b>
<input checked="" type="checkbox"/> Newly collected/generated <input checked="" type="checkbox"/> Re-used (please explain): Public data
<b>Expected size of data</b>
<i>Give an estimation: e.g. a few kB/MB/GB, etc.</i> <input type="checkbox"/> Fixed: never change after being collected or generated <input type="checkbox"/> Growing: new data may be added but the old data is never changed or deleted <input checked="" type="checkbox"/> Revisable: new data may be added, and old data may be changed or deleted
<b>Utility of the data</b>
The data will be used by WP8 technical partners, who will participate in the replication activities.
<b>Software involved in the data processing</b>
Excel, Word, Power Point

## 2. FAIR Data

### 2.a.FAIR Data: Making data findable

#### Standard identification mechanism and metadata

Not defined
<b>Naming convention</b>
Files including data collected during the project will be named according to the following convention: WP8_FRONTSH1P_YYMMDD_descriptive_name(VersionNumber)
<b>Keywords</b>
Not defined

## 2.b. FAIR Data: Making data openly accessible

<b>Dataset accessibility</b>
Confidential data: data shared are restricted to consortium Public data Reason for confidentiality: all data will be considered as confidential unless specified otherwise.
<b>Software tools</b>
<i>Excel, Word, Power Point</i>
<b>Repository to be used to deposit the dataset</b>
<i>The shared data will be copied in the Novamont repository servers and may be collected in the project shared folders (i.e. Google Cloud)</i>

## 2.c. FAIR Data: Making data interoperable

<b>Are the data interoperable?</b>
<i>DATA will be made available with common type software files and shared via e-mail (e.g. Word, Excel, power point, ...).</i>

## 2.d. FAIR Data: Increasing data re-use

<b>Restrictions</b>
<i>Not defined</i>
<i>Indicate for how long it is intended that the data remains re-usable</i>
<i>Data are usable until the end of the Frotnsh1p project, unless otherwise specified.</i>
<b>Explain how data quality is assured</b>
<i>If a scientific article is produced, it will be subjected to peer review before publishing If internal, data quality is subject to internal procedure (e.g. ISO 9001 certification)</i>

## 3. Allocation of resources

<b>If applicable, indicate any allocation of resources to data management</b>
Company resources are involved in data management for internal company repository servers but not allocated to the project.

#### 4. Ethical aspects

Please indicate if you have identified any ethical or legal aspect that could impact the data sharing

Not applicable

#### 5. Data security

Indicate the provisions in place to ensure data security

Internal server have standard security processes: restricted access, backup periodically, all security parameters accomplished

### Name of Beneficiary: Municipality of Levadia (MLEV)

#### 1. Data summary: Non-personal data

##### Dataset identifier

FRONTSH1P\_MLEV\_Replication\_DDMMYY\_v00

##### WP and Task

WP8 T8.1 & T8.3

##### Dataset description

The dataset will contribute to the achievement of the project's goals and especially for the SS1 and SS2. The data will contribute as a roadmap for the development of different tools for the simulation of the circular economic approach in this WP8. Also they will identify the incentives and barriers of existing socio-economic policy instruments on our regional level for the circular economy development and will facilitate the transition to the green economy in the region.

##### Purpose of the data

The main goal of the data will be to provide information about

- The annual outgoing flows of waste for (a) wood packaging and wood remnants (b) food and fodder remains (c) sewage (d) plastic and rubber garbage
- Statistical data of the region, such as population, rate of development (GPD)
- Data about region's industrial and agricultural sector
- Evaluation of the existing system of waste gathering and waste management
- Community's system for strengthening consumers and buyers and for enhancing citizens' active involvement in the cycle of waste exploitation
- Provide strategic proposal (i.e. card for the citizens who participate to sustainable waste management)
- Information about the existing regulatory framework concerning the promotion of local economy and the funding Small – Medium Enterprises (SMS) for theirs' development

##### Source of the data



Text, e.g., field or laboratory notes, survey responses

Numeric, e.g., tables, counts, measurements

Audiovisual, e.g., images, sound recordings, video

Models, computer code

Other (please specify): [click here to enter text](#)

#### Type of data regarding the form

Text: plain text (TXT), HTML, XML, PDF/A

Databases: XML, CSV

Image: JPEG, JPG-2000, PNG, TIFF

Audio: AIFF, WAVE

Containers: TAR, GZIP, ZIP

Other (please specify): [click here to enter text](#)

#### Origin of the data

Newly collected/generated

Re-used (please explain): Data that we have already available

#### Expected size of data

Fixed: never change after being collected or generated

Growing: new data may be added but the old data is never changed or deleted

Revisable: new data may be added, and old data may be changed or deleted

#### Utility of the data

The dataset will be useful to WP8 technical partners, INL and CRGR who are responsible for the tasks T8.1 and T8.3. The data will provide to them the necessary information about the annual outgoing flows of waste for (a) wood packaging and wood remnants (b) food and fodder remains (c) sewage (d) plastic and rubber garbage. As well as the evaluation of the existing system of waste gathering and waste management and the strengthening of consumers and buyers and enhancing citizens' active involvement in the cycle of waste exploitation.

#### Software involved in the data processing

Microsoft Excel

## 2. FAIR Data

### 2.a.FAIR Data: Making data findable

#### Standard identification mechanism and metadata

The most relevant data produced will be published in article form in international journals to which a DOI is generally associated. According to the article content, it will be also possible to associate metadata to it in a dedicated repository usually suggested by the journal and made available to readers.

#### Naming convention

Files including data collected during the project will be named according to the following convention:

FRONTSH1P\_YYMMDD\_descriptive\_name(Version Number)

**Keywords**

Wood packaging and wood remnants, food and fodder remains, sewage, plastic and rubber garbage

**2.b. FAIR Data: Making data openly accessible**

**Dataset accessibility**

**Public data**

**Software tools**

Generally the data will be accessible through software such as PDF readers and Microsoft Excel.

**Repository to be used to deposit the dataset**

All data and metadata will be deposited in the internal repository of MLEV servers.

Data to be shared with the consortium will be uploaded in the common Google Drive folder created by the coordinators.

Data that are intended to be published on international scientific journals will need to wait for the publication acceptance before being deposited in public repositories.

**2.c. FAIR Data: Making data interoperable**

**Are the data interoperable?**

The data will be always accompanied by a legend clearly explaining the meaning of the acronyms used. Moreover, graphics will be designed taking into account colour blind reader. This will increase the readability of the data collected making them more accessible.

Since data are generally intended for a scientific audience, technical terms will be used. Such terms will be retrieved from the existing peer-reviewed literature, where conceptual definitions can be traced back.

**2.d. FAIR Data: Increasing data re-use**

**Restrictions**

Once published, data will have to submit to the standard licenses as the Creative Commons International License.

Moreover, data restrictions will comply with the Grant Agreement.

**Indicate for how long it is intended that the data remains re-usable**

Once published in article form or in dedicated repositories, data could be re-used as long as they will be considered useful and up-to-date.

**Explain how data quality is assured**

Data will be carefully collected applying (if possible) a statistical approach. A cross check carried out by at least another staff member than responsible for collection will be foreseen whenever possible.

A comparison with data reported in the literature will be always carried out to ensure that the data collected are reasonable.

Moreover, data will be reviewed by different experts in the field.

### 3. Allocation of resources

**If applicable, indicate any allocation of resources to data management**

No resources have been allocated to data management.

### 4. Ethical aspects

**Please indicate if you have identified any ethical or legal aspect that could impact the data sharing**

No ethical or legal aspects that could impact the data sharing have been identified.

### 5. Data security

**Indicate the provisions in place to ensure data security**

Before making the data usable for the consortium or for the public, MLEV data will be stored in MLEV computers, Microsoft One Drive cloud. Such platforms can only be accessed through encrypted accounts, that ensure the avoidance of unwanted external access.

## Name of Beneficiary: INL

### 1. Data summary: Non-personal data

#### Dataset identifier

FRONTSH1P\_INL\_RegionalCEAP\_DDMMYY\_v00

#### WP and Task

WP8 – T8.1, T8.2

#### Dataset description

1. Financial support schemes, funding opportunities and granted projects
2. Good practices for Regional Replication in Europe

#### Purpose of the data

*Explain the purpose of the data collection/generation and its relation to the objectives of the project.*

1. The collection of information on financial support schemes and funding opportunities will allow regional stakeholders and in general European actors to identify financial opportunities to carry ideas on circular schemes and to find inspiration in projects that have already use cases or examples of circular actions. It is align with the objectives of the project as it will empower European regions to put in practise Circular Systemic Solutions.

2. The Good practices for Regional Replication in Europe will showcase the learning outcomes of the project. We will collect those results that will enable other regions to put in practise the Circular Systemic Solutions and will be targeting different actors (policy makers, industry, administrations and citizens)

#### Source of the data

- Text, e.g., field or laboratory notes, survey responses
- Numeric, e.g., tables, counts, measurements
- Audiovisual, e.g., images, sound recordings, video
- Models, computer code
- Other (please specify): *click here to enter text*

#### Type of data regarding the form

- Text: plain text (TXT), HTML, XML, PDF/A
- Databases: XML, CSV
- Image: JPEG, JPG-2000, PNG, TIFF
- Audio: AIFF, WAVE
- Containers: TAR, GZIP, ZIP
- Other (please specify): *click here to enter text*

#### Origin of the data

- Newly collected/generated
- Re-used (please explain):

#### Expected size of data

- A few kB
- Fixed: never change after being collected or generated
- Growing: new data may be added but the old data is never changed or deleted
- Revisable: new data may be added, and old data may be changed or deleted

#### Utility of the data

Data will be useful for the policy makers, industry, administrations and citizens.

#### Software involved in the data processing

Microsoft office (Excel, Word, PDF)

## 2. FAIR Data

### 2.a.FAIR Data: Making data findable

#### Standard identification mechanism and metadata

*Are the data produced and/or used in the project discoverable with metadata, identifiable and locatable by means of a standard identification mechanism (e.g. persistent and unique identifiers such as Digital Object Identifiers).*

A DOI will be generated once the documents are uploaded in the repository (Zenodo).

#### Naming convention

TBD

#### Keywords

*To be defined. Provide keywords to optimise possibilities for re-use.*

TBD

## 2.b. FAIR Data: Making data openly accessible

<b>Dataset accessibility</b>
Public data
<b>Software tools</b>
PDF viewer
<b>Repository to be used to deposit the dataset</b>
<p><i>Where will the data and metadata be deposited? Preference should be given to certified repositories which support open access where possible.</i></p> <p>Via the project website and European Commission repositories (Funding and Tenders portal). It will be deposited in Zenodo.</p>

## 2.c. FAIR Data: Making data interoperable

<b>Are the data interoperable?</b>
<p><i>Brief description of the tools/vocabularies used to make the data usable by other researchers, institutions, etc.</i></p> <p>NA</p>

## 2.d. FAIR Data: Increasing data re-use

<b>Restrictions</b>
<p><i>If applicable, define the data licensing approach to permit the widest re-use possible. Indicate the chosen license tools.</i></p> <p>NA</p>
<b>Indicate for how long it is intended that the data remains re-usable</b>
<p><i>Click here to enter text.</i></p> <p>After the terminus of the project, the data will be maintained for 5 years (at least).</p>
<b>Explain how data quality is assured</b>
<p><i>Click here to enter text.</i></p> <p>Internal revision before submission to validate data and to ensure the quality (completeness, accuracy, relevance, appearance and structure).</p>

## 3. Allocation of resources

<b>If applicable, indicate any allocation of resources to data management</b>
Long term preservation of data will be ensured by the project and by the partners themselves.

#### 4. Ethical aspects

Please indicate if you have identified any ethical or legal aspect that could impact the data sharing

No

#### 5. Data security

Indicate the provisions in place to ensure data security

In all case, data will be stored in at least two locations (i.e. INL repository, EC portal and FRONTSH1P webpage/repository) to provide for data backup, recovery and secure storage for a limited time.

**Name of Beneficiary: CCDR-Norte**

#### 1. Data summary: Non-personal data

**Dataset identifier**

FRONTSH1P\_CCDR-N\_RegionalCEAP\_DDMMYY\_v00

**WP and Task**

WP8. Replication Strategies, T8.2 Portuguese replication development

**Dataset description**

3. The collection of information on methodologies and tools developed in WP7 for for Portuguese replication development of the agrofood system.
4. A mapping of the existing networks for the valorisation of the waste generated by the agrofood system.

**Purpose of the data**

*Explain the purpose of the data collection/generation and its relation to the objectives of the project.*

3. The collection of information on methodologies and tools will allow regional stakeholders and actors to identify opportunities to carry ideas on circular schemes and to find inspiration in projects that have already use cases or examples of circular actions. It is aligned with the objectives of the project as it will empower European regions to put in practise Circular Systemic Solutions.
4. The collected information of the existing networks will be used to promote the establishment of a platform for dialogue and cooperation between different actors (policy makers, industry, administrations, and citizens) to put in practise the Circular Systemic Solution for "SS2 - Food and Feed".

**Source of the data**

- Text, e.g., field or laboratory notes, survey responses
- Numeric, e.g., tables, counts, measurements
- Audiovisual, e.g., images, sound recordings, video
- Models, computer code
- Other (please specify): *click here to enter text*

**Type of data regarding the form**

<input checked="" type="checkbox"/> Text: plain text (TXT), HTML, XML, PDF/A <input checked="" type="checkbox"/> Databases: XML, CSV <input checked="" type="checkbox"/> Image: JPEG, JPG-2000, PNG, TIFF <input type="checkbox"/> Audio: AIFF, WAVE <input checked="" type="checkbox"/> Containers: TAR, GZIP, ZIP <input type="checkbox"/> Other (please specify): <i>click here to enter text</i>
<b>Origin of the data</b>
<input checked="" type="checkbox"/> Newly collected/generated <input type="checkbox"/> Re-used (please explain):
<b>Expected size of data</b>
A few kB <input type="checkbox"/> Fixed: never change after being collected or generated <input type="checkbox"/> Growing: new data may be added but the old data is never changed or deleted <input checked="" type="checkbox"/> Revisable: new data may be added, and old data may be changed or deleted
<b>Utility of the data</b>
Data will be useful for the policy makers, industry, administrations and citizens.
<b>Software involved in the data processing</b>
Microsoft office (Excel, Word, PDF)

## 2. FAIR Data

### 2.a.FAIR Data: Making data findable

<b>Standard identification mechanism and metadata</b>
<i>Are the data produced and/or used in the project discoverable with metadata, identifiable and locatable by means of a standard identification mechanism (e.g. persistent and unique identifiers such as Digital Object Identifiers).</i> The most relevant data produced will be published following the Open Data standard identifiers and metadata, including Geographical data according to the INSPIRE European directive.
<b>Naming convention</b>
TBD
<b>Keywords</b>
<i>To be defined. Provide keywords to optimise possibilities for re-use.</i> TBD

### 2.b. FAIR Data: Making data openly accessible

<b>Dataset accessibility</b>
Public data
<b>Software tools</b>
Generally the data will be accessible through software such as PDF readers and spreadsheets and document editors such as LibreOffice and Microsoft Excel.
<b>Repository to be used to deposit the dataset</b>

*Where will the data and metadata be deposited? Preference should be given to certified repositories which support open access where possible.*

All data and metadata will be deposited in the internal repository of CCDR-N servers  
Data to be shared with the consortium will be uploaded to the project website and European Commission repositories (Funding and Tenders portal).

### 2.c. FAIR Data: Making data interoperable

#### Are the data interoperable?

*Brief description of the tools/vocabularies used to make the data usable by other researchers, institutions, etc.*

Data will be stored and shared in National and European open standard formats.

### 2.d. FAIR Data: Increasing data re-use

#### Restrictions

*If applicable, define the data licensing approach to permit the widest re-use possible. Indicate the chosen license tools.*

Once published, data will have to submit to the standard licenses as the Creative Commons International License.

Moreover, data restrictions will comply with the Grant Agreement.

#### Indicate for how long it is intended that the data remains re-usable

*Click here to enter text.*

After the terminus of the project, data could be re-used as long as it will be considered useful and up-to-date.

#### Explain how data quality is assured

*Click here to enter text.*

Data will be carefully collected and validated to ensure the quality (completeness, accuracy, relevance, appearance and structure). A cross check carried out by at least another staff member than responsible for collection will be foreseen whenever possible.

### 3. Allocation of resources

#### If applicable, indicate any allocation of resources to data management

No resources have been allocated to data management.

### 4. Ethical aspects

#### Please indicate if you have identified any ethical or legal aspect that could impact the data sharing

No ethical or legal aspects that could impact the data sharing have been identified.



## 5. Data security

### Indicate the provisions in place to ensure data security

Data will be stored in at least two locations (i.e. CCDR-N servers and FRONTSH1P webpage/repository) to provide for data backup, recovery and secure storage for a limited time. Before making the data usable for the consortium or for the public, CCDR-N data will be stored in laptops and Teams folders. Such platforms can only be accessed through encrypted accounts, that ensure the avoidance of unwanted external access.

1. Data summary: Non-personal data

<b>Dataset identifier</b>	FRONTSH1P_OPUS_Communication_DDMMYY_v00 OPUS
<b>WP and Task</b>	WP9 – T. 9.1, 9.2
<b>Dataset description</b>	Non-personal data on information about the circular economy, knowledge of circular economy-related concepts will be used, including: analysis of data available on the websites of National Statistics, Eurostat, and selected Offices, others institutions; expert discussions; expert analyses, questionnaire; surveys; public data sets.
<b>Purpose of the data</b>	Data will be collected in order to increase public involvement in the dissemination of the circular economy idea in the Łódź Province and to replicate its solutions in other locations. The purpose of data collection is implementation of activities in accordance with the assumptions of the FrontSh1p
<b>Source of the data</b>	<input checked="" type="checkbox"/> Text, e.g., field or laboratory notes, survey responses <input checked="" type="checkbox"/> Numeric, e.g., tables, counts, measurements <input type="checkbox"/> Audiovisual, e.g., images, sound recordings, video <input type="checkbox"/> Models, computer code <input type="checkbox"/> Other (please specify): <i>click here to enter text</i>
<b>Type of data regarding the form</b>	<input checked="" type="checkbox"/> Text: plain text (TXT), HTML, XML, PDF/A <input checked="" type="checkbox"/> Databases: XML, CSV <input checked="" type="checkbox"/> Image: JPEG, JPG-2000, PNG, TIFF <input checked="" type="checkbox"/> Audio: AIFF, WAVE <input checked="" type="checkbox"/> Containers: TAR, GZIP, ZIP <input type="checkbox"/> Other (please specify): <i>click here to enter text</i>
<b>Origin of the data</b>	<input checked="" type="checkbox"/> Newly collected/generated <input type="checkbox"/> Re-used (please explain): <i>click here to enter text</i>
<b>Expected size of data</b>	<input type="checkbox"/> Fixed: never change after being collected or generated <input type="checkbox"/> Growing: new data may be added but the old data is never changed or deleted <input checked="" type="checkbox"/> Revisable: new data may be added, and old data may be changed or deleted
<b>Utility of the data</b>	The data will be useful for the proper organisation of the events planned during the implementation of WP9, the dissemination of the circular economy idea
<b>Software involved in the data processing</b>	OPUS_GoogleWorkspace_drives , Microsoft Office

## 2. FAIR Data

### 2.a.FAIR Data: Making data findable

#### Standard identification mechanism and metadata

The most relevant data produced will be published on OPUS and partners web sides and article form in local, international journals . According to the article content, it will be also possible to associate metadata to it in a dedicated repository usually suggested by the journal and made available to readers.

#### Naming convention

Files including data collected during the project will be named according to the following pattern:  
*FRONTSH1P\_descriptive\_name(date)*

For example, data on the amount of waste will be saved as: *FRONTSH1P\_amount\_of\_information\_01.02.2022*

#### Keywords

Circular economy, citizens engagement, CSS, local activity,

### 2.b. FAIR Data: Making data openly accessible

#### Dataset accessibility

Confidential data

Public data – X

#### Software tools

Generally the data will be accessible through software such as PDF readers and Microsoft Excel, Microsoft Word, Google Docs, Google Sheets, .

#### Repository to be used to deposit the dataset

All data and metadata will be deposited in OPUS servers.

Data to be shared with the consortium will be uploaded in the common OPUS GoogleWorkspace Drive folder created by the coordinators.

### 2.c.FAIR Data: Making data interoperable

#### Are the data interoperable?

According to the glossary, the data will always be accompanied by a legend clearly explaining the scope of the data to which it relates.

### 2.d. FAIR Data: Increasing data re-use

#### Restrictions

Once published, data will have to submit to the standard licenses as the Creative Commons International License.

Moreover, data restrictions will comply with the Grant Agreement.

Indicate for how long it is intended that the data remains re-usable

Once published data could be re-used as long as they will be considered useful and up-to-date.

**Explain how data quality is assured**

Data will be carefully collected applying (if possible) a statistical approach. .  
 A comparison with data reported in the literature will be always carried out to ensure that the data collected are reasonable.  
 Moreover, data will be reviewed by different experts in the field

**3. Allocation of resources**

**If applicable, indicate any allocation of resources to data management**

No resources have been allocated to data management.

**4. Ethical aspects**

**Please indicate if you have identified any ethical or legal aspect that could impact the data sharing**

No ethical or legal aspects that could impact the data sharing have been identified.

**5. Data security**

**Indicate the provisions in place to ensure data security**

Before making the data available for use by partners or to the public, the data will be stored on OPUS computers and servers. Access to them is possible only through encrypted accounts that ensure the avoidance of unwanted access from outside.

**Name of Beneficiary: University of Lodz (UniLodz)**

**1. Data summary: Non-personal data**

**Dataset identifier**

FRONTSH1P\_UNILODZ\_DataWP9\_DDMMYY\_v00

**WP and Task**

WP9 and T9.1, T9.2

**Dataset description**

The dataset contains the information and research results about potential and market failure of stakeholder CE in lodzkie region. Data in the project will come from various sources:

- analysis of data available on the websites of National Statistics, Eurostat, and selected Offices;
- expert discussions;
- questionnaire, and FGI;
- surveys ;
- public data sets such as: BDL, REGON, etc

<b>Purpose of the data</b>
The aim is generate interest for activity in scope of circular economy that contribute to overcoming market failures in the areas covered by the systemic solutions implemented in the lodzkie region.
<b>Source of the data</b>
<input checked="" type="checkbox"/> Text, e.g., field or laboratory notes, survey responses <input checked="" type="checkbox"/> Numeric, e.g., tables, counts, measurements <input type="checkbox"/> Audiovisual, e.g., images, sound recordings, video <input type="checkbox"/> Models, computer code <input type="checkbox"/> Other (please specify):
<b>Type of data regarding the form</b>
<input checked="" type="checkbox"/> Text: plain text (TXT), HTML, XML, PDF/A <input checked="" type="checkbox"/> Databases: XML, CSV <input checked="" type="checkbox"/> Image: JPEG, JPG-2000, PNG, TIFF <input type="checkbox"/> Audio: AIFF, WAVE <input type="checkbox"/> Containers: TAR, GZIP, ZIP <input checked="" type="checkbox"/> Other (please specify): shp
<b>Origin of the data</b>
<input checked="" type="checkbox"/> Newly collected/generated <input type="checkbox"/> Re-used (please explain):
<b>Expected size of data</b>
<input type="checkbox"/> Fixed: never change after being collected or generated <input type="checkbox"/> Growing: new data may be added but the old data is never changed or deleted <input checked="" type="checkbox"/> Revisable: new data may be added, and old data may be changed or deleted
<b>Utility of the data</b>
The dataset will be useful to all partners in the Frontsh1p project and other company, citizens, academy and government especially in lodzkie region.
<b>Software involved in the data processing</b>
Microsoft Excel, ArcGIS, QGis,

## 2. FAIR Data

### 2.a.FAIR Data: Making data findable

<b>Standard identification mechanism and metadata</b>
The most relevant data produced will be published in article form in international journals (as a article) to which a DOI is generally associated. According to the article content, it will be also possible to associate metadata to it in a dedicated repository usually suggested by the journal and made available to readers.
<b>Naming convention</b>
Files including data collected during the project will be named according to the following pattern: <i>FRONTSH1P_descriptive_name(date)</i> For example, the file collected during FGI will be saved as: <i>FRONTSH1P_Circular Regional Cluster_Newsletter_15.04.2022</i>
<b>Keywords</b>

Regional stakeholders, circular territorial cluster, circular solution, systemic solution, citizen engagement

## 2.b. FAIR Data: Making data openly accessible

### Dataset accessibility

Confidential data  
Public data - X

### Software tools

Generally the data will be accessible through software such as PDF readers and Microsoft Excel, Microsoft Word.

### Repository to be used to deposit the dataset

All data and metadata will be deposited in the internal repository of UniLodz servers on One Drive Cloud.

Data shared with the consortium will be uploaded in the common Google Drive folder created by the coordinators.

Data that are intended to be published on international scientific journals will need to wait for the publication acceptance before being deposited in public repositories.

## 2.c. FAIR Data: Making data interoperable

### Are the data interoperable?

The data will be always accompanied by a legend clearly explaining the meaning of the used nomenclature and the acronyms.

Since data are generally intended for a scientific audience, technical terms will be used. Such terms will be retrieved from the existing peer-reviewed literature, where conceptual definitions can be traced back.

## 2.d. FAIR Data: Increasing data re-use

### Restrictions

Once published, data will have to submit to the standard licenses as the Creative Commons International License.

Moreover, data restrictions will comply with the Grant Agreement.

### Indicate for how long it is intended that the data remains re-usable

Once published in article form or in dedicated repositories, data could be re-used as long as they will be considered useful and up-to-date.

### Explain how data quality is assured

Data will be carefully collected applying (if possible) a statistical approach. A cross check carried out by at least another staff member than responsible for collection will be foreseen whenever possible.

A comparison with data reported in the literature will be always carried out to ensure that the data collected are reasonable.

Moreover, data will be reviewed by different experts in the field.

### 3. Allocation of resources

**If applicable, indicate any allocation of resources to data management**

No resources have been allocated to data management.

### 4. Ethical aspects

**Please indicate if you have identified any ethical or legal aspect that could impact the data sharing**

No ethical or legal aspects that could impact the data sharing have been identified.

### 5. Data security

**Indicate the provisions in place to ensure data security**

Before making the data usable for the consortium or for the public, UniLodz data will be stored in UniLodz computers, Microsoft OneDrive cloud. Such platforms can only be accessed through encrypted accounts, that ensure the avoidance of unwanted external access.

## Name of Beneficiary: Inter-Municipal Union BZURA

### 1. Data summary: Non-personal data

#### Dataset identifier

FRONTSH1P\_BZURA\_DataWP9\_DDMMYY\_v00

#### WP and Task

WP9 – Task 9.1, 9.2

#### Dataset description

Non-personal data on information about the circular economy, knowledge of circular economy-related concepts will be used, including: analysis of data available on the websites of National Statistics, Eurostat, and selected Offices; expert discussions; questionnaire; surveys; public data sets.

#### Purpose of the data

Data will be collected in order to increase public involvement in the dissemination of the circular economy idea in the Łódź Province and to replicate its solutions in other locations. The purpose of data collection is implementation of activities in accordance with the assumptions of the FrontSh1p

#### Source of the data

- Text, e.g., field or laboratory notes, survey responses
- Numeric, e.g., tables, counts, measurements
- Audiovisual, e.g., images, sound recordings, video
- Models, computer code
- Other (please specify): *click here to enter text*

#### Type of data regarding the form

<input checked="" type="checkbox"/> Text: plain text (TXT), HTML, XML, PDF/A <input checked="" type="checkbox"/> Databases: XML, CSV <input checked="" type="checkbox"/> Image: JPEG, JPG-2000, PNG, TIFF <input checked="" type="checkbox"/> Audio: AIFF, WAVE <input checked="" type="checkbox"/> Containers: TAR, GZIP, ZIP <input type="checkbox"/> Other (please specify): <i>click here to enter text</i>
<b>Origin of the data</b>
<input checked="" type="checkbox"/> Newly collected/generated <input type="checkbox"/> Re-used (please explain): <i>click here to enter text</i>
<b>Expected size of data</b>
<input type="checkbox"/> Fixed: never change after being collected or generated <input type="checkbox"/> Growing: new data may be added but the old data is never changed or deleted <input checked="" type="checkbox"/> Revisable: new data may be added, and old data may be changed or deleted
<b>Utility of the data</b>
The data will be useful for the proper organisation of the events planned during the implementation of WP9, the dissemination of the circular economy idea
<b>Software involved in the data processing</b>
OneDrive, Microsoft Office

## 2. FAIR Data

### 2.a.FAIR Data: Making data findable

<b>Standard identification mechanism and metadata</b>
The most relevant data produced will be published in article form in international journals to which a DOI is generally associated. According to the article content, it will be also possible to associate metadata to it in a dedicated repository usually suggested by the journal and made available to readers.
<b>Naming convention</b>
Files including data collected during the project will be named according to the following pattern: <i>FRONTSH1P_descriptive_name(date)</i> For example, data on the amount of waste will be saved as: <i>FRONTSH1P_amount of waste_01.02.2022</i>
<b>Keywords</b>
Circular economy, <i>the Regional Circularity Booster toolkits</i> , waste, raw materials

### 2.b. FAIR Data: Making data openly accessible

<b>Dataset accessibility</b>
Confidential data Public data - X
<b>Software tools</b>
Generally the data will be accessible through software such as PDF readers and Microsoft Excel, Microsoft Word.
<b>Repository to be used to deposit the dataset</b>



All data and metadata will be deposited in BZURA's servers.  
Data to be shared with the consortium will be uploaded in the common Google Drive folder created by the coordinators.

### 2.c. FAIR Data: Making data interoperable

#### Are the data interoperable?

According to the glossary, the data will always be accompanied by a legend clearly explaining the scope of the data to which it relates.

### 2.d. FAIR Data: Increasing data re-use

#### Restrictions

Once published, data will have to submit to the standard licenses as the Creative Commons International License.  
Moreover, data restrictions will comply with the Grant Agreement.

#### Indicate for how long it is intended that the data remains re-usable

Once published in article form or in dedicated repositories, data could be re-used as long as they will be considered useful and up-to-date.

#### Explain how data quality is assured

Data will be carefully collected applying (if possible) a statistical approach. A cross check carried out by at least another staff member than responsible for collection will be foreseen whenever possible.  
A comparison with data reported in the literature will be always carried out to ensure that the data collected are reasonable.  
Moreover, data will be reviewed by different experts in the field

## 3. Allocation of resources

#### If applicable, indicate any allocation of resources to data management

No resources have been allocated to data management.

## 4. Ethical aspects

#### Please indicate if you have identified any ethical or legal aspect that could impact the data sharing

No ethical or legal aspects that could impact the data sharing have been identified.

## 5. Data security

#### Indicate the provisions in place to ensure data security

Before making the data available for use by partners or to the public, the data will be stored on BZURA computers and servers. Access to them is possible only through encrypted accounts that ensure the avoidance of unwanted access from outside.

**Name of Beneficiary: NTUA – National Technical University of Athens**

**1. Data summary: Non-personal data**

<b>Dataset identifier</b>
FRONTSH1P_NTUA_LCARResults_DDMMYY_v00
<b>WP and Task</b>
WP9, Task 9.1
<b>Dataset description</b>
<i>Describe the dataset in a few lines.</i> Results from LCA, LCC, s-LCA analysis in the framework of WP3,4,5,6 Results from the experiments performed at the integrated system (gasifier, burner, PCC unit) in the framework of WP3
<b>Purpose of the data</b>
<i>Explain the purpose of the data collection/generation and its relation to the objectives of the project.</i> Publications, Conference participations presenting results in relation to the investigation of the environmental impact and the specific footprint of the Circular Systemic Solutions in terms of GHG emissions and a series of other indicators regarding human health, climate impact and ecosystem quality. Also, they may be accompanied by a scale up costing assessment for variable facility capacity considering process optimisation through sensitivity analysis. Development of a design tool for the overall bio-syngas utilization in industrial boiler with PCC. Operation mapping, optimised parameters and configurations for demo and industrial technology deployment. Optimum management of the overall process.
<b>Source of the data</b>
<input checked="" type="checkbox"/> Text, e.g., field or laboratory notes, survey responses <input checked="" type="checkbox"/> Numeric, e.g., tables, counts, measurements <input checked="" type="checkbox"/> Audiovisual, e.g., images, sound recordings, video <input checked="" type="checkbox"/> Models, computer code <input type="checkbox"/> Other (please specify): <i>click here to enter text</i>
<b>Type of data regarding the form</b>
<input checked="" type="checkbox"/> Text: plain text (TXT), HTML, XML, PDF/A <input checked="" type="checkbox"/> Databases: XML, CSV <input checked="" type="checkbox"/> Image: JPEG, JPG-2000, PNG, TIFF <input checked="" type="checkbox"/> Audio: AIFF, WAVE <input checked="" type="checkbox"/> Containers: TAR, GZIP, ZIP <input type="checkbox"/> Other (please specify): <i>click here to enter text</i>
<b>Origin of the data</b>
<input checked="" type="checkbox"/> Newly collected/generated <input type="checkbox"/> Re-used (please explain): <i>click here to enter text</i>
<b>Expected size of data</b>
Large size of data expected

<input type="checkbox"/> Fixed: never change after being collected or generated <input checked="" type="checkbox"/> Growing: new data may be added but the old data is never changed or deleted <input type="checkbox"/> Revisable: new data may be added, and old data may be changed or deleted
<b>Utility of the data</b>
<i>Indicate to whom the data might be useful e.g. partners, stakeholders, citizens, etc.</i> Researchers, Academics, Students, Citizens, Related Stakeholders
<b>Software involved in the data processing</b>
Aspen Plus, Microsoft PowerPoint, Microsoft Excel, Microsoft Visio, Teams, OneDrive, Microsoft Word

## 2. FAIR Data

### 2.a.FAIR Data: Making data findable

<b>Standard identification mechanism and metadata</b>
<i>Are the data produced and/or used in the project discoverable with metadata, identifiable and locatable by means of a standard identification mechanism (e.g. persistent and unique identifiers such as Digital Object Identifiers).</i> All data is collected and processed in accordance with Data Protection Legislation.
<b>Naming convention</b>
Files including data collected during the project will be named according to the following convention: FRONTSH1P_YYMMDD_description(VersionNumber)
<b>Keywords</b>
<i>Provide keywords to optimise possibilities for re-use.</i> LCA, LCC, s-LCA, bio-syngas utilization, PCC, process, simulation

### 2.b. FAIR Data: Making data openly accessible

<b>Dataset accessibility</b>
<i>If confidential, explain why, clearly separating legal and contractual reasons from voluntary restrictions.</i> Confidential data: Raw data used for modelling and life cycle analysis. Raw data from experiments. Deliverable D3.4 Public data: Deliverables D3.6, D4.6, D5.4, D6.5, publications in journals and presentations in conferences Reason for confidentiality: For businesses and industries to protect operational integrity and unauthorized access to sensitive data that can expose intellectual property, trade secrets and confidential communications.
<b>Software tools</b>
<i>Indicate what methods or software tools are needed to access the data.</i> Aspen Plus, GaBi 8.5 Sphera™, Microsoft Office (Word, Excel, PowerPoint, Teams, Outlook), pdf readers
<b>Repository to be used to deposit the dataset</b>
<i>Where will the data and metadata be deposited? Preference should be given to certified repositories which support open access where possible.</i>

All data and metadata will be deposited in the internal repository of NTUA's servers.  
 Data to be shared with the consortium will be uploaded in the common Google Drive folder created by the coordinators.  
 Data that are intended to be published on international scientific journals will need to wait for the publication acceptance before being deposited in public repositories.

### 2.c. FAIR Data: Making data interoperable

#### Are the data interoperable?

*Brief description of the tools/vocabularies used to make the data usable by other researchers, institutions, etc.*

Document with titles and definitions of parameters and processes involved in LCA, LCC, s-LCA analysis and the integrated system (gasifier, burner, PCC unit) accessible by the consortium, Public deliverables.

Legend with nomenclature and acronyms.

Technical terms retrieved from the existing literature, where conceptual definitions can be traced back.

### 2.d. FAIR Data: Increasing data re-use

#### Restrictions

*If applicable, define the data licensing approach to permit the widest re-use possible. Indicate the chosen license tools.*

#### Indicate for how long it is intended that the data remains re-usable

*Click here to enter text.*

Data could be re-used as long as they will be considered useful and up-to-date.

#### Explain how data quality is assured

*Click here to enter text.*

ISO 14040/44, 21930 and other applicable standards for life cycle,

Accepted publications by journals

Cross check on the data collected.

Comparison with data reported in the literature to ensure that the data collected are reasonable.

### 3. Allocation of resources

#### If applicable, indicate any allocation of resources to data management

*Click here to enter text.*

### 4. Ethical aspects

Please indicate if you have identified any ethical or legal aspect that could impact the data sharing

[Click here to enter text](#)

No ethical or legal aspects that could impact the data sharing have been identified.

## 5. Data security

### Indicate the provisions in place to ensure data security

[Click here to enter text.](#)

Protocols and provisions prescribed by software involved in the data processing (Aspen Plus, GaBi 8.5 Sphera™, Microsoft Office (Excel, Teams, OneDrive, Outlook)).

Can be accessed by encrypted accounts.

## Name of Beneficiary: Municipality of Levadia

### 1. Data summary: Non-personal data

<b>Dataset identifier</b>
FRONTSHP_MLEV_AnalysisWaste_DDMMYY_v00
<b>WP and Task</b>
WP9 T9.1, T9.2 & T9.3
<b>Dataset description</b>
The data in the project will come from various sources, such as analysis of data available on the websites of National Statistics and from the National Electronic File of Waste of our region.
<b>Purpose of the data</b>
The purpose of the data will focus on the feedback regarding the findings of the 4 systemic solutions implemented in Levadia.
<b>Source of the data</b>
<input checked="" type="checkbox"/> xText, e.g., field or laboratory notes, survey responses <input checked="" type="checkbox"/> x Numeric, e.g., tables, counts, measurements <input type="checkbox"/> Audiovisual, e.g., images, sound recordings, video <input type="checkbox"/> Models, computer code <input type="checkbox"/> Other (please specify): <a href="#">click here to enter text</a>
<b>Type of data regarding the form</b>
<input checked="" type="checkbox"/> xText: plain text (TXT), HTML, XML, PDF/A <input checked="" type="checkbox"/> xDatabases: XML, CSV <input type="checkbox"/> Image: JPEG, JPG-2000, PNG, TIFF <input type="checkbox"/> Audio: AIFF, WAVE <input type="checkbox"/> Containers: TAR, GZIP, ZIP <input type="checkbox"/> Other (please specify): <a href="#">click here to enter text</a>
<b>Origin of the data</b>
<input checked="" type="checkbox"/> xNewly collected/generated <input type="checkbox"/> xRe-used (please explain): Data that we have already available
<b>Expected size of data</b>
<input type="checkbox"/> Fixed: never change after being collected or generated <input type="checkbox"/> Growing: new data may be added but the old data is never changed or deleted

xRevisable: new data may be added, and old data may be changed or deleted

**Utility of the data**

The dataset will be useful to all partners in the Frontsh1p project and other company, citizens, academy and government

**Software involved in the data processing**

Microsoft Excel and plain texts

**2. FAIR Data**

**2.a.FAIR Data: Making data findable**

**Standard identification mechanism and metadata**

The most relevant data produced will be published in article form in international journals to which a DOI is generally associated. According to the article content, it will be also possible to associate metadata to it in a dedicated repository usually suggested by the journal and made available to readers.

**Naming convention**

Files including data collected during the project will be named according to the following convention:

*FRONTSH1P\_YYMMDD\_descriptive\_name(Version Number)*

**Keywords**

Wood packaging and wood remnants, food and fodder remains, sewage, plastic and rubber garbage

**2.b. FAIR Data: Making data openly accessible**

**Dataset accessibility**

Public data

**Software tools**

Generally the data will be accessible through software such as PDF readers and Microsoft Excel.

**Repository to be used to deposit the dataset**

All data and metadata will be deposited in the internal repository of MLEV servers.

Data to be shared with the consortium will be uploaded in the common Google Drive folder created by the coordinators.

Data that are intended to be published on international scientific journals will need to wait for the publication acceptance before being deposited in public repositories.

**2.c.FAIR Data: Making data interoperable**

**Are the data interoperable?**

The data will be always accompanied by a legend clearly explaining the meaning of the acronyms used. Moreover, graphics will be designed taking into account colour blind reader. This will increase the readability of the data collected making them more accessible.

Since data are generally intended for a scientific audience, technical terms will be used. Such terms will be retrieved from the existing peer-reviewed literature, where conceptual definitions can be traced back.

## 2.d. FAIR Data: Increasing data re-use

### Restrictions

Once published, data will have to submit to the standard licenses as the Creative Commons International License.

Moreover, data restrictions will comply with the Grant Agreement.

### Indicate for how long it is intended that the data remains re-usable

Once published in article form or in dedicated repositories, data could be re-used as long as they will be considered useful and up-to-date.

### Explain how data quality is assured

Data will be carefully collected applying (if possible) a statistical approach. A cross check carried out by at least another staff member than responsible for collection will be foreseen whenever possible.

A comparison with data reported in the literature will be always carried out to ensure that the data collected are reasonable.

Moreover, data will be reviewed by different experts in the field.

## 3. Allocation of resources

### If applicable, indicate any allocation of resources to data management

No resources have been allocated to data management.

## 4. Ethical aspects

### Please indicate if you have identified any ethical or legal aspect that could impact the data sharing

No ethical or legal aspects that could impact the data sharing have been identified.

## 5. Data security

### Indicate the provisions in place to ensure data security

Before making the data usable for the consortium or for the public, MLEV data will be stored in MLEV computers, Microsoft One Drive cloud. Such platforms can only be accessed through encrypted accounts, that ensure the avoidance of unwanted external access.

## Personal inputs

WP2

Name of Beneficiary: University of Lodz (UniLodz)

### 1. Data processing: Personal data

<b>Dataset identifier</b>
FRONTSHP1P_UNILODZ_PersonalDataWP2_DDMMYY_v00
<b>WP and Task</b>
WP2 and T2.1, T2.4
<b>Dataset description</b>
<ul style="list-style-type: none"> <li>- Collection of email addresses, address code.</li> <li>- Registration of research participants e.g: FGI, in-depth interviews, etc.</li> <li>- Audio recordings of the realization of selected studies requiring transcription.</li> </ul>
<b>Purpose of the data</b>
<p>The dataset contains the results of stakeholder surveys for effective implementation among CSS. In particular, human data will be the main source of inference and implementation of the following project goals:</p> <ul style="list-style-type: none"> <li>- define the proper model for effective governance of the regional/ territorial circular cluster;</li> <li>- identification of incentives and barriers of existing in current socio-economic policy instruments;</li> <li>- identification of market failures in scope of circular economy;</li> <li>- identification system of public and private investments and public procurement pull for new solutions;</li> <li>- definition of policy recommendations.</li> </ul>
<b>Processing activity</b>
<p>Human-related data in the project will come from various sources:</p> <ul style="list-style-type: none"> <li>- expert discussions;</li> <li>- questionnaire and FGI;</li> <li>- surveys;</li> <li>- In-depth interviews.</li> </ul>
<b>Type of data</b>
Name, company/institution, email, number phone, address, position at work.
<b>Special categories of data</b>
No.
<b>Expected size of data</b>
<p><i>Do you process criminal offence data?</i></p> <p><input type="checkbox"/>Yes</p> <p><input checked="" type="checkbox"/>No</p>
<b>Data classification</b>
<p><input type="checkbox"/>Public</p> <p><input checked="" type="checkbox"/>Confidential</p> <p><input type="checkbox"/>Other: <a href="#">Click here to enter text</a></p>
<b>Software involved in the data processing</b>
Microsoft Forms, Excel, OneDrive.



**Retention period**

The data will be kept only as long as necessary. At most until the end of the project/the final reporting.

**2. Data collection**

**Source**

Directly from respondents using: Microsoft Forms, personal, email and phone correspondence, survey forms.

Indirectly from the institution's internal databases.

**Means of collection**

Data was collected using: Microsoft Forms, personal, email and phone correspondence, survey forms

**3. Data usage**

**Legal basis**

The licenses for using data for scientific purposes will base on the requirements indicated by the data providers, e.g., Copernicus Land Monitoring Service - part of the Copernicus Program, United States Geological Survey, RapidEye operated by Planet and public administration. The method of managing legal issues is described in the Regulations for managing copyright and related rights as well as industrial property rights and the principles of commercialization at the University of Lodz, Resolution No. 674 of the Senate of the University of Lodz of 24.02.2020.

**Purpose of processing**

Implementation of the following project goals:

- define the proper model for effective governance of the regional/ territorial circular cluster;
- identification of incentives and barriers of existing socio-economic policy instruments;
- identification of market failures in scope of circular economy;
- identification system of public and private investments and public procurement pull for new solutions;
- definition of policy recommendations.

**4. A29WP DPIA Criteria**

**Evaluation or scoring: do you carry out any form of profiling?**

Yes

No

**Automated decision making: do the data procesing involve automated decision making without human intervention?**

Yes

No

**Systematic monitoring: are the data used to observe, monitor or control data subject?**

Yes

No

**Sensitive data: do you process special categories of data and/or criminal offence data?**

<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Matching or combining datasets: do you match/combine different data from different controllers and/or taken for different purpose?</b>
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>Vulnerable groups: data from children, workers, employees, ill persons, or asylum seekers?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Use of innovative technologies: e.g., facial recognition, high-risk AI, etc.</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Prevention: as a result, could the data subjects be prevented from exercising a right or using a service or a contract?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

## 5. Data sharing

<b>Internal data sharing</b>
Collected primary data will be made available only to members of the research team in the scope of their project tasks. The data will be used to formulate research results and to achieve deliverables. This knowledge will be needed by other project partners to implement the next stages of the project. The funds will need for the purchase of external drives that allow to create backups and finally data archives. The project team will use data in subsequent scientific endeavors. Vector data interoperability will ensure through the use of standards following the Act on Spatial Information Infrastructure and its implementing acts and the INSPIRE Directive.
<b>External data sharing</b>
No. Data processed as a result of their analysis will be presented during scientific conferences and symposia and published in the form of scientific articles.
<b>Purpose of the data sharing</b>
These data may be useful for project managers directly involved in the implementation of project activities in the Lodzkie region. This data can facilitate the realization of deliverables in other WPs.
<b>Legal basis for the data sharing</b>
Processing is necessary for the purposes of the legitimate interests pursued by the controller. The method of managing legal issues is described in the Regulations for managing copyright and related rights as well as industrial property rights and the principles of commercialization at the University of Lodz, Resolution No. 674 of the Senate of the University of Lodz of 24.02.2020.
<b>DSA/DPA/JCA</b>
Not needed.

## 6. Location – Data transfer

<b>Location</b>
All data and metadata will be deposited in the internal repository of UniLodz servers on Microsoft OneDrive Cloud. The material collected data will store in a secure room and then, after the end of the project, destroyed by a specialized entity acting on behalf of and authorized by the University of Lodz. The alternative is to deposit data in the Repository of the University of Lodz in closed access.
<b>Country(ies) where data is transferred?</b>
No.
<b>Transfer mechanism</b>
No.
<b>Are any Special Categories of data transferred?</b>
No.

## 7. Data security

<b>Security measures</b>
Access to the data is restricted and password protected.
<b>Anonymisation or pseudonymisation techniques</b>
Qualitative data - the material will be presented without manipulating personal data, enabling specific entities to be associated with the given statements. Quantitative research data will be presented only in the form of summary statements.

## 8. General principles

<b>Information to Data Subjects</b>
Yes.
<b>Principles of processing</b>
Compliant with the principles.

Name of Beneficiary: Związek Międzygminny “BZURA”

### 1. Data processing: Personal data

<b>Dataset identifier</b>
FRONTSHP1P_BZURA_PersonalDataWP2_DDMMYY_v00
<b>WP and Task</b>
WP 2 T.2.1, 2.2, 2.3,
<b>Dataset description</b>
<p><i>As part of the activities, the following data will be processed:</i></p> <ul style="list-style-type: none"> <li>— <i>collecting e-mail addresses of professional employees working in offices,</i></li> <li>— <i>data of employees and other contractors,</i></li> <li>— <i>data of participants in training courses and educational works.</i></li> </ul>

<b>Purpose of the data</b>
<i>The purpose of collecting data is to carry out activities in accordance with the guidelines of the leaders of individual tasks and in accordance with the assumptions of the FrontSh1p project</i>
<b>Processing activity</b>
<p><i>Personal data will be processed in several categories:</i></p> <ul style="list-style-type: none"> <li>— <i>Recruitment of employees (subcontractors),</i></li> <li>— <i>recruitment of meeting participants,</i></li> <li>— <i>recruitment of survey participants,</i></li> <li>— <i>recruiting participants of a study trip</i></li> </ul>
<b>Type of data</b>
<i>Name and surname, name of the company or institution, official position, contact details</i>
<b>Special categories of data</b>
No
<b>Expected size of data</b>
<p><i>Do you process criminal offense data?</i></p> <p><input type="checkbox"/> Yes</p> <p><input checked="" type="checkbox"/> No</p>
<b>Data classification</b>
<p><input checked="" type="checkbox"/> Public</p> <p><input checked="" type="checkbox"/> Confidential</p> <p><input type="checkbox"/> Other: <i>Click here to enter text</i></p>
<b>Microsoft Office, OneDrive</b>
Microsoft Office, OneDrive
<b>Retention period</b>
<i>The data will be kept only as long as necessary. At most until the end of the project/the final reporting.</i>

## 2. Data collection

<b>Source</b>
<i>Data is collected directly from those involved.</i>
<b>Means of collection</b>
<i>Data is collected in person or via electronic means of communication.</i>

## 3. Data usage

<b>Legal basis</b>
<i>Regulation of the European Parliament and of the Council (EU) 2016/679 of 27 April 2016 on the protection of individuals with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46 / EC (General Data Protection Regulation).</i>
<b>Purpose of processing</b>
<i>Collection of data necessary for specific activities in the implementation of the main tasks of WP 2.</i>

#### 4. A29WP DPIA Criteria

<b>Evaluation or scoring: do you carry out any form of profiling?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Automated decision making: do the data processing involve automated decision making without human intervention?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Systematic monitoring: are the data used to observe, monitor or control data subject?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Sensitive data: do you process special categories of data and / or criminal offense data?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Matching or combining datasets: do you match / combine different data from different controllers and / or taken for different purpose?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Vulnerable groups: data from children, workers, employees, ill persons, or asylum seekers?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Use of innovative technologies: eg, facial recognition, high-risk AI, etc.</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Prevention: as a result, could the data subjects be prevented from exercising a right or using a service or a contract?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

#### 5. Data sharing

<b>Internal data sharing</b>
<i>The data will be made available only to members of the research team in the scope of their project tasks.</i>
<b>External data sharing</b>
<i>The data will not be shared.</i>
<b>Purpose of the data sharing</b>
<i>Internal data exchange will take place in order to implement the project</i>
<b>Legal basis for the data sharing</b>
<i>No</i>

**DSA / DPA / JCA**

No

## 6. Location - Data transfer

**Location**

Data is processed at Związek Międzygminny "BZURA" headquarters and in the IT system.

**Country (ies) where data is transferred?**

No

**Transfer mechanism**

No

**Are any Special Categories of data transferred?**

No

## 7. Data security

**Security measures**

Access to the data is restricted and password protected.

**Anonymisation or pseudonymisation techniques**

No

## 8. General principles

**Information to Data Subjects**

Yes.

**Principles of processing**

Compliant with the principles.

**Name of Beneficiary: Circulair Friesland**

### 1. Data processing: Personal data

**Dataset identifier**

FRONTSH1P\_CIRC.FRL\_PersonalDataWP2\_DDMMYY\_v00

**WP and Task**

WP2 – Regional Systemic Circular Economic Approach

**Dataset description**

*Describe the dataset in a few lines.*

The dataset comprises of data retrieved from the innovatiespotter.nl database, which uses artificial intelligence to combine open-access data about organisations. This dataset is focused on mapping the (circular) plastics ecosystem within the province of Friesland, the Netherlands. Apart from that, supplementary data is acquired by conversations and interviews with entrepreneurs.

**Purpose of the data**

*Explain the purpose of the data collection/generation and its relation to the objectives of the project.*

The data is used to obtain insights in the current activities (ecosystem) concerned with (circular) plastics within Friesland. This relates to WP2: Regional Systemic Circular Economic Approach. Obtaining insights in what is happening within the region helps by designing a systemic approach towards a circular economy.

**Processing activity**

*Enter the name of the processing activity, e.g. marketing activities, extracting data from social networks etc.*

Extracting data from publicly available sources and connections.

**Type of data**

*E.g., name, email address, phone, IP address etc.*

Name of organisation, address, legal form, NACE Code, website.

**Special categories of data**

*Do you process any of the following categories of data: racial or ethnic origin, political opinions, religious or philosophical beliefs, or trade union membership, genetic data, biometric data, health, sexual orientation? If yes, specify which one.*

No.

**Expected size of data**

*Do you process criminal offence data?*

Yes

No

**Data classification**

Public

Confidential

Other: [Click here to enter text](#)

**Software involved in the data processing**

*Enter the key IT systems(s) used to process or store the data.*

Microsoft Excel

Microsoft Word

**Retention period**

*How long will you keep the data for?*

The data will be kept until the research is completed or as long as necessary.

## 2. Data collection

<b>Source</b>
<i>Where do the data come from?</i> Websites of organisations, the database of innovatiespotter.nl and through acquaintances.
<b>Means of collection</b>
<i>How were the data collected, obtained or generated?</i> By using the innovatiespotter.nl tool, searching on the internet or by talking to acquaintances (members) of the Circulair Friesland Association.

## 3. Data usage

<b>Legal basis</b>
<i>What is the legal basis for processing according to Article 6 the GDPR?</i> In case of publicly available information, this is either put on the website of the organisation or on the website of the Dutch Regional Chamber of Commerce (KvK).
<b>Purpose of processing</b>
<i>Briefly describe the reason(s) why the data is used / processed.</i> To obtain insights in the Frisian ecosystem of circular plastics and to contact organisations for conversations or interviews if necessary.

## 4. A29WP DPIA Criteria

<b>Evaluation or scoring: do you carry out any form of profiling?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Automated decision making: do the data processing involve automated decision making without human intervention?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Systematic monitoring: are the data used to observe, monitor or control data subject?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Sensitive data: do you process special categories of data and/or criminal offence data?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Matching or combining datasets: do you match/combine different data from different controllers and/or taken for different purpose?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No



<b>Vulnerable groups: data from children, workers, employees, ill persons, or asylum seekers?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Use of innovative technologies: e.g., facial recognition, high-risk AI, etc.</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Prevention: as a result, could the data subjects be prevented from exercising a right or using a service or a contract?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

## 5. Data sharing

<b>Internal data sharing</b>
<i>Will the data be shared with other beneficiaries? Specify.</i> Personal data will not be shared with other beneficiaries unless consent is given and it is useful for the project.
<b>External data sharing</b>
<i>Will the data be shared with third parties outside the GA? Specify.</i> Personal data will not be shared with other beneficiaries unless consent is given and it is useful for the project.
<b>Purpose of the data sharing</b>
<i>Why (purpose) are the data being shared?</i> To inform other organisations who are interested in setting up a CSS within a region and to obtain the right contacts.
<b>Legal basis for the data sharing</b>
<i>Specify the legal basis for the data sharing according to Article 6 GDPR.</i> Not applicable.
<b>DSA/DPA/JCA</b>
<i>If the data is shared (with other beneficiaries or third parties) indicate the type of Agreement in place (if needed): Data Sharing (DSA), Data Processing, (DPA) or Joint Controller Agreement (JCA).</i> Not applicable.

## 6. Location – Data transfer

<b>Location</b>
<i>Where are the data being processed?</i> On the internal computers and closed Google Drive accounts of Circulair Friesland.
<b>Country(ies) where data is transferred?</b>
<i>Are the data being transferred outside the EEA? If yes, to which country(ies)?</i>

Not applicable.

**Transfer mechanism**

*Indicate the data transfer mechanism in place.*

Not applicable.

**Are any Special Categories of data transferred?**

*Indicate whether the transfer involves the transfer of special categories of data and/or criminal convictions and offences.*

Not applicable.

**7. Data security**

**Security measures**

*Briefly describe the security measures applied to safeguard the data.*

Access to the data is restricted and password protected.

**Anonymisation or pseudonymisation techniques**

Does not apply.

**8. General principles**

**Information to Data Subjects**

*Article 13 and 14 of the GDPR: Has the information been provided to data subjects? If no, please specify if any exemption applies.*

Yes.

**Principles of processing**

*Specify whether you comply with all the principles of the data processing or you have any concerns you may not meet any or some of them.*

Compliant with the principles.

## WP3

Name of Beneficiary: Centrum Promocji i Rozwoju Obywatelskich "OPUS"

### 1. Data processing: Personal data

<b>Dataset identifier</b>
FRONTSHP1P_UPOS_PersonalDataWP3_DDMMYY_v00
<b>WP and Task</b>
WP 3 T.3.4
<b>Dataset description</b>
<p>As part of the activities, the following data will be processed:</p> <ol style="list-style-type: none"> <li>1. Project personnel, contractors,</li> <li>2. Participants in the activities related to the launch of a social enterprise - analysis of the possibilities of social and professional activation in the area of WP 3</li> <li>3. Participants of information activities to the extent to which activities will be carried out by the OPUS Center in consultation with Veltha (Wp 7)</li> </ol>
<b>Purpose of the data</b>
The purpose of data collection is implementation of activities in accordance with the assumptions of the FrontSh1p
<b>Processing activity</b>
<p>Recruitment of employees (project staff, subcontractors)</p> <p>Recruitment of participants,</p> <p>Settlement of settlements with employees, keeping a register of employees,</p> <p>Keeping a register of participants</p>
<b>Type of data</b>
<p>Project staff Employees: surname and first names, date of birth, number PESEL, address of residence, no telephone number, education, profession, business telephone number, private telephone number, e-mail address, payment account number,</p> <p>Contractor: surname and first names, date of birth, PESEL number, residence address, telephone number, education, profession, business telephone number, private telephone number, e-mail address, payment account number,</p> <p>Participants of activities: surnames and forenames, address of residence or stay, e-mail telephone number.</p> <p>Legal guardians of underage participants: name, surname, address, telephone number</p>
<b>Special categories of data</b>
Not applicable
<b>Expected size of data</b>
<p>Do you process criminal offense data?</p> <p><input type="checkbox"/> Yes</p> <p><input checked="" type="checkbox"/> No</p>
<b>Data classification</b>

<input checked="" type="checkbox"/> Public <input checked="" type="checkbox"/> Confidential <input type="checkbox"/> Other: <a href="#">Click here to enter text</a>
<b>Software involved in the data processing</b>
<b>OPUS Center CRM system</b> <b>Narzedzia Google Workplace</b>
<b>Retention period</b>
<p><i>In connection with the provisions of the contract article 18.1, the period of storage of documents is min. 5 years from payment of the balance. In addition, Polish regulations apply to:</i></p> <ul style="list-style-type: none"> <li>- <i>sending marketing information - until the consent is withdrawn;</i></li> <li>- <i>recording and publishing the image - until the consent is withdrawn;</i></li> <li>- <i>participation in the project - 5 years from the end of the project;</i></li> <li>- <i>in order to perform legal obligations imposed on the Administrator, among others project settlement - 5 years from the end of the project;</i></li> <li>- <i>in order to establish and pursue claims or defend against claims - 5 years from the end of the project;</i></li> <li>- <i>establishing contact with the legal guardian - 5 years from the end of the project.</i></li> </ul>

## 2. Data collection

<b>Source</b>
<i>Personal data will come directly from interested persons.</i>
<b>Means of collection</b>
<i>Personal data will be collected during the recruitment process.</i>

## 3. Data usage

<b>Legal basis</b>
<p><i>Art. 6 par. 1 lit. a, b, c, e, f of the Regulation of the European Parliament and of the Council (EU) 2016/679 of 27 April 2016 on the protection of individuals with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46 / EC (General Data Protection Regulation).</i></p>
<b>Purpose of processing</b>
<p><i>Personal data are processed in order to:</i></p> <ul style="list-style-type: none"> <li>- <i>record and publish the image,</i></li> <li>- <i>send marketing information,</i></li> <li>- <i>participate in the project,</i></li> <li>- <i>in order to perform legal obligations imposed on the Administrator, including settlement of the project,</i></li> <li>- <i>in order to establish and pursue claims or defend against claims by</i></li> <li>- <i>contacting a legal guardian</i></li> </ul>



#### 4. A29WP DPIA Criteria

<b>Evaluation or scoring: do you carry out any form of profiling?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Automated decision making: do the data processing involve automated decision making without human intervention?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Systematic monitoring: are the data used to observe, monitor or control data subject?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Sensitive data: do you process special categories of data and / or criminal offense data?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Matching or combining datasets: do you match / combine different data from different controllers and / or taken for different purpose?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Vulnerable groups: data from children, workers, employees, ill persons, or asylum seekers?</b>
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>Use of innovative technologies: eg, facial recognition, high-risk AI, etc.</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Prevention: as a result, could the data subjects be prevented from exercising a right or using a service or a contract?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

#### 5. Data sharing

<b>Internal data sharing</b>
<i>The data will not be shared with other beneficiaries.</i>
<b>External data sharing</b>
<i>The data will not be shared.</i>
<b>Purpose of the data sharing</b>
N
<b>Legal basis for the data sharing</b>
N

**DSA / DPA / JCA**

N

**6. Location - Data transfer**

**Location**

*Data is processed at OPUS headquarters and in the IT system.*

**Country (ies) where data is transferred?**

N

**Transfer mechanism**

N

**Are any Special Categories of data transferred?**

*Does not apply.*

**7. Data security**

**Security measures**

The building has an alarm, anti-burglary glass and stairs are secured with an anti-burglary grille. All rooms in which personal data are processed are locked. All computers have software from legal sources. They are protected with basic antivirus programs. Computers are password protected. Only authorized employees with an individual login and password have access to the databases. The staff undergoes training in the field of personal data protection and the application of these provisions at least once a year.

**Anonymisation or pseudonymisation techniques**

*Not introduced.*

**8. General principles**

**Information to Data Subjects**

*Employees, co-participants, participants of activities, guardians of underage participants in activities were informed in a concise, transparent, comprehensible and easily accessible form, in clear and simple language about the processing of their personal data in accordance with art. 13 and 14 GDPR. All information and messages addressed to children about the processing of their personal data have been formulated in a way that will make it easy for them to understand it.*

**Principles of processing**

*OPUS processes data in accordance with the principles of the Regulation of the European Parliament and of the Council (EU) 2016/679 of 27 April 2016:*

- *The principle of lawfulness, transparency and fairness.*
- *The principle of limitation of the purpose of processing.*

- The principle of data minimization.
- Principle of data correctness.
- Principle of limiting data storage.
- Principle of integrity and confidentiality.
- The principle of accountability.

**Name of Beneficiary: : University of Lodz (UniLodz)**

**1. Data processing: Personal data**

<b>Dataset identifier</b>
Data on the structure, material and intangible capital, financial results of economic entities involved in the circular economy.
<b>WP and Task</b>
WP3 and T3.1
<b>Dataset description</b>
<ul style="list-style-type: none"> <li>– Collection of email addresses, address code.</li> <li>– Registration of research participants eg: FGI, in-depth interviews, etc.</li> <li>– Audio recordings of the realization of selected studies requiring transcription.</li> </ul>
<b>Purpose of the data</b>
<p>The dataset contains the results of stakeholder surveys for effective implementation among CSS1. In particular, human data will be the main source of inference and implementation of the following project goals:</p> <ul style="list-style-type: none"> <li>– Identification, involvement, needs and expectations from regional stakeholders involved in CSS1</li> <li>– Requirements and success criteria to satisfy the implementation of non-technological solutions required in CSS1</li> </ul>
<b>Processing activity</b>
<p>Human-related data in the project will come from various sources:</p> <ul style="list-style-type: none"> <li>– expert discussions;</li> <li>– questionnaire, and FGI;</li> <li>– surveys;</li> <li>– In-depth interviews.</li> </ul>
<b>Type of data</b>
Name, company/institution, email, number phone, address, position at work.
<b>Special categories of data</b>
No.
<b>Expected size of data</b>
<p><i>Do you process criminal offence data?</i></p> <p><input type="checkbox"/>Yes</p> <p><input checked="" type="checkbox"/>No</p>
<b>Data classification</b>
<p><input type="checkbox"/>Public</p> <p><input checked="" type="checkbox"/>Confidential</p> <p><input type="checkbox"/>Other: <a href="#">Click here to enter text</a></p>
<b>Software involved in the data processing</b>

Microsoft Forms, Excel, OneDrive.

**Retention period**

The data will be kept only as long as necessary. At most until the end of the project/the final reporting.

**2. Data collection**

**Source**

Directly from respondents using: Microsoft Forms, personal, email and phone correspondence, survey forms.

Indirectly from the institution's internal databases.

**Means of collection**

Data was collected using: Microsoft Forms, personal, email and phone correspondence, survey forms

**3. Data usage**

**Legal basis**

The licenses for using data for scientific purposes will base on the requirements indicated by the data providers, e.g., Copernicus Land Monitoring Service - part of the Copernicus Program, United States Geological Survey, RapidEye operated by Planet and public administration. The method of managing legal issues is described in the Regulations for managing copyright and related rights as well as industrial property rights and the principles of commercialization at the University of Lodz, Resolution No. 674 of the Senate of the University of Lodz of 24.02.2020.

**Purpose of processing**

Implementation of the following project goals:

- Identification, involvement, needs and expectations from regional stakeholders involved in CSS1
- Requirements and success criteria to satisfy the implementation of non-technological solutions required in CSS1

**4. A29WP DPIA Criteria**

**Evaluation or scoring: do you carry out any form of profiling?**

Yes

No

**Automated decision making: do the data procesing involve automated decision making without human intervention?**

Yes

No

**Systematic monitoring: are the data used to observe, monitor or control data subject?**

Yes

No

**Sensitive data: do you process special categories of data and/or criminal offence data?**



<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Matching or combining datasets: do you match/combine different data from different controllers and/or taken for different purpose?</b>
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>Vulnerable groups: data from children, workers, employees, ill persons, or asylum seekers?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Use of innovative technologies: e.g., facial recognition, high-risk AI, etc.</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Prevention: as a result, could the data subjects be prevented from exercising a right or using a service or a contract?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

## 5. Data sharing

<b>Internal data sharing</b>
Collected primary data will be made available only to members of the research team in the scope of their project tasks. The data will be used to formulate research results and to achieve deliverables. This knowledge will be needed by other project partners to implement the next stages of the project. The funds will need for the purchase of external drives that allow to create backups and finally data archives. The project team will use data in subsequent scientific endeavors. Vector data interoperability will ensure through the use of standards following the Act on Spatial Information Infrastructure and its implementing acts and the INSPIRE Directive.
<b>External data sharing</b>
No. Data processed as a result of their analysis will be presented during scientific conferences and symposia and published in the form of scientific articles.
<b>Purpose of the data sharing</b>
These data may be useful for project managers directly involved in the implementation of project activities in the Lodzkie region. This data can facilitate the realization of deliverables in other WPs.
<b>Legal basis for the data sharing</b>
Processing is necessary for the purposes of the legitimate interests pursued by the controller. The method of managing legal issues is described in the Regulations for managing copyright and related rights as well as industrial property rights and the principles of commercialization at the University of Lodz, Resolution No. 674 of the Senate of the University of Lodz of 24.02.2020.
<b>DSA/DPA/JCA</b>
Not needed.

## 6. Location – Data transfer

<b>Location</b>
All data and metadata will be deposited in the internal repository of UniLodz servers on Microsoft OneDrive Cloud. The material collected data will store in a secure room and then, after the end of the project, destroyed by a specialized entity acting on behalf of and authorized by the University of Lodz. The alternative is to deposit data in the Repository of the University of Lodz in closed access.
<b>Country(ies) where data is transferred?</b>
No.
<b>Transfer mechanism</b>
No.
<b>Are any Special Categories of data transferred?</b>
No.

## 7. Data security

<b>Security measures</b>
Access to the data is restricted and password protected.
<b>Anonymisation or pseudonymisation techniques</b>
Qualitative data - the material will be presented without manipulating personal data, enabling specific entities to be associated with the given statements. Quantitative research data will be presented only in the form of summary statements.

## 8. General principles

<b>Information to Data Subjects</b>
Yes.
<b>Principles of processing</b>
Compliant with the principles.

## WP4

Name of Beneficiary: Centrum Promocji i Rozwoju Obywatelskich "OPUS" in Łódź

### 1. Data processing: Personal data

<b>Dataset identifier</b>
FRONTSHP_UPOS_PersonalDataWP4_DDMMYY_v00
<b>WP and Task</b>
WP 4 T.4.2 /T4.6
<b>Dataset description</b>
<p>As part of the activities, the following data will be processed:</p> <ol style="list-style-type: none"> <li>1. Project personnel, contractors,</li> <li>2. Participants in farmer training provided by NVMT (action transferred from WP4 to WP7)</li> <li>3. Participants in activities related to the testing of an IT tool to measure household involvement in the circular economy (action transferred from WP4 to WP7)</li> <li>4. Participants in activities related to testing and launching a tool related to "local currency" - inhabitants of Parzęczew municipality (action transferred from WP4 to WP7)</li> <li>5. Participants in activities related to the start-up of a social enterprise in the area of feed &amp; food (action transferred from WP 4 to WP 7)</li> <li>6. Participants of information activities to the extent to which activities will be carried out by the OPUS Center in consultation with Veltha</li> </ol>
<b>Purpose of the data</b>
The purpose of data collection is implementation of activities in accordance with the assumptions of the FrontSh1p
<b>Processing activity</b>
<p>Recruitment of employees (project staff, subcontractors)          Recruitment of participants,          Settlement of settlements with employees, keeping a register of employees,          Keeping a register of participants</p>
<b>Type of data</b>
<p>Project staff Employees: surname and first names, date of birth, number PESEL, address of residence, no telephone number, education, profession, business telephone number, private telephone number, e-mail address, payment account number,          Contractor: surname and first names, date of birth, PESEL number, residence address, telephone number, education, profession, business telephone number, private telephone number , e-mail address, payment account number,          Participants of activities: surnames and forenames, address of residence or stay, e-mail telephone number.          Legal guardians of underage participants: name, surname, address, telephone number</p>
<b>Special categories of data</b>
Not applicable
<b>Expected size of data</b>
<p>Do you process criminal offense data?</p> <p><input type="checkbox"/>Yes  <input checked="" type="checkbox"/>No</p>
<b>Data classification</b>

<input checked="" type="checkbox"/> Public <input checked="" type="checkbox"/> Confidential <input type="checkbox"/> Other: <a href="#">Click here to enter text</a>
<b>Software involved in the data processing</b>
<b>OPUS Center CRM system</b> <b>Narzedzia Google Workplace</b>
<b>Retention period</b>
<p><i>In connection with the provisions of the contract article 18.1, the period of storage of documents is min. 5 years from payment of the balance. In addition, Polish regulations apply to:</i></p> <ul style="list-style-type: none"> <li>- <i>sending marketing information - until the consent is withdrawn;</i></li> <li>- <i>recording and publishing the image - until the consent is withdrawn;</i></li> <li>- <i>participation in the project - 5 years from the end of the project;</i></li> <li>- <i>in order to perform legal obligations imposed on the Administrator, among others project settlement - 5 years from the end of the project;</i></li> <li>- <i>in order to establish and pursue claims or defend against claims - 5 years from the end of the project;</i></li> <li>- <i>establishing contact with the legal guardian - 5 years from the end of the project.</i></li> </ul>

## 2. Data collection

<b>Source</b>
<i>Personal data will come directly from interested persons.</i>
<b>Means of collection</b>
<i>Personal data will be collected during the recruitment process.</i>

## 3. Data usage

<b>Legal basis</b>
<p><i>Art. 6 par. 1 lit. a, b, c, e, f of the Regulation of the European Parliament and of the Council (EU) 2016/679 of 27 April 2016 on the protection of individuals with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46 / EC (General Data Protection Regulation).</i></p>
<b>Purpose of processing</b>
<p><i>Personal data are processed in order to:</i></p> <ul style="list-style-type: none"> <li>- <i>record and publish the image,</i></li> <li>- <i>send marketing information,</i></li> <li>- <i>participate in the project,</i></li> <li>- <i>in order to perform legal obligations imposed on the Administrator, including settlement of the project,</i></li> <li>- <i>in order to establish and pursue claims or defend against claims by</i></li> <li>- <i>contacting a legal guardian</i></li> </ul>

## 4. A29WP DPIA Criteria

<b>Evaluation or scoring: do you carry out any form of profiling?</b>
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<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Automated decision making: do the data processing involve automated decision making without human intervention?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Systematic monitoring: are the data used to observe, monitor or control data subject?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Sensitive data: do you process special categories of data and / or criminal offense data?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Matching or combining datasets: do you match / combine different data from different controllers and / or taken for different purpose?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Vulnerable groups: data from children, workers, employees, ill persons, or asylum seekers?</b>
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>Use of innovative technologies: eg, facial recognition, high-risk AI, etc.</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Prevention: as a result, could the data subjects be prevented from exercising a right or using a service or a contract?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

## 5. Data sharing

<b>Internal data sharing</b>
<i>The data will not be shared with other beneficiaries.</i>
<b>External data sharing</b>
<i>The data will not be shared.</i>
<b>Purpose of the data sharing</b>
N
<b>Legal basis for the data sharing</b>
N
<b>DSA / DPA / JCA</b>
N

## 6. Location - Data transfer

<b>Location</b>
-----------------

*Data is processed at OPUS headquarters and in the IT system.*

**Country (ies) where data is transferred?**

*N*

**Transfer mechanism**

*N*

**Are any Special Categories of data transferred?**

*Does not apply.*

## 7. Data security

**Security measures**

The building has an alarm, anti-burglary glass and stairs are secured with an anti-burglary grille. All rooms in which personal data are processed are locked.

All computers have software from legal sources. They are protected with basic antivirus programs. Computers are password protected. Only authorized employees with an individual login and password have access to the databases.

The staff undergoes training in the field of personal data protection and the application of these provisions at least once a year.

**Anonymisation or pseudonymisation techniques**

*Not introduced.*

## 8. General principles

**Information to Data Subjects**

*Employees, co-participants, participants of activities, guardians of underage participants in activities were informed in a concise, transparent, comprehensible and easily accessible form, in clear and simple language about the processing of their personal data in accordance with art. 13 and 14 GDPR. All information and messages addressed to children about the processing of their personal data have been formulated in a way that will make it easy for them to understand it.*

**Principles of processing**

*OPUS processes data in accordance with the principles of the Regulation of the European Parliament and of the Council (EU) 2016/679 of 27 April 2016:*

- *The principle of lawfulness, transparency and fairness.*
- *The principle of limitation of the purpose of processing.*
- *The principle of data minimization.*
- *Principle of data correctness.*
- *Principle of limiting data storage.*
- *Principle of integrity and confidentiality.*
- *The principle of accountability.*

**Name of Beneficiary: University of Lodz (UniLodz)**

### 1. Data processing: Personal data

**Dataset identifier**

FRONTSH1P_UNILODZ_PersonalDataWP4_DDMMYY_v00
<b>WP and Task</b>
WP4 and T4.2
<b>Dataset description</b>
<ul style="list-style-type: none"> <li>- Collection of email addresses, address code.</li> <li>- Registration of research participants eg: FGI, in-depth interviews, etc.</li> <li>- Audio recordings of the implementation of selected studies requiring transcription.</li> </ul>
<b>Purpose of the data</b>
<p>The dataset contains the results of stakeholder surveys for effective implementation among CSS2. In particular, human data will be the main source of inference and implementation of the following project goals:</p> <ul style="list-style-type: none"> <li>- Identification, involvement, needs and expectations from regional stakeholders involved in CSS2</li> <li>- Requirements and success criteria to satisfy the implementation of non-technological solutions required in CSS2.</li> </ul>
<b>Processing activity</b>
<p>Human-related data in the project will come from various sources:</p> <ul style="list-style-type: none"> <li>- expert discussions;</li> <li>- questionnaire, and FGI;</li> <li>- surveys;</li> <li>- In-depth interviews.</li> </ul>
<b>Type of data</b>
Name, company/institution, email, number phone, address, position at work.
<b>Special categories of data</b>
No.
<b>Expected size of data</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Data classification</b>
<input type="checkbox"/> Public <input checked="" type="checkbox"/> Confidential <input type="checkbox"/> Other:
<b>Software involved in the data processing</b>
Microsoft Forms, Excel, OneDrive.
<b>Retention period</b>
The data will be kept only as long as necessary. At most until the end of the project/the final reporting.

## 2. Data collection

**Source**

Directly from respondents using: Microsoft Forms, personal, email and phone correspondence, survey forms.

Indirectly from the institution's internal databases.

**Means of collection**

Data was collected using: Microsoft Forms, personal, email and phone correspondence, survey forms

**3. Data usage**

**Legal basis**

The licenses for using data for scientific purposes will base on the requirements indicated by the data providers, e.g., Copernicus Land Monitoring Service - part of the Copernicus Program, United States Geological Survey, RapidEye operated by Planet and public administration. The method of managing legal issues is described in the Regulations for managing copyright and related rights as well as industrial property rights and the principles of commercialization at the University of Lodz, Resolution No. 674 of the Senate of the University of Lodz of 24.02.2020.

**Purpose of processing**

Implementation of the following project goals:

- Identification, involvement, needs and expectations from regional stakeholders involved in CSS2
- Requirements and success criteria to satisfy the implementation of non-technological solutions required in CSS2.

**4. A29WP DPIA Criteria**

**Evaluation or scoring: do you carry out any form of profiling?**

Yes

No

**Automated decision making: do the data procesing involve automated decision making without human intervention?**

Yes

No

**Systematic monitoring: are the data used to observe, monitor or control data subject?**

Yes

No

**Sensitive data: do you process special categories of data and/or criminal offence data?**

Yes

No

**Matching or combining datasets: do you match/combine different data from different controllers and/or taken for different purpose?**



<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>Vulnerable groups: data from children, workers, employees, ill persons, or asylum seekers?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Use of innovative technologies: e.g., facial recognition, high-risk AI, etc.</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Prevention: as a result, could the data subjects be prevented from exercising a right or using a service or a contract?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

## 5. Data sharing

<b>Internal data sharing</b>
<p>Collected primary data will be made available only to members of the research team in the scope of their project tasks. The data will be used to formulate research results and to achieve deliverables. This knowledge will be needed by other project partners to implement the next stages of the project. The funds will need for the purchase of external drives that allow to create backups and finally data archives. The project team will use data in subsequent scientific endeavors. Vector data interoperability will ensure through the use of standards following the Act on Spatial Information Infrastructure and its implementing acts and the INSPIRE Directive.</p>
<b>External data sharing</b>
<p>No.</p> <p>Data processed as a result of their analysis will be presented during scientific conferences and symposia and published in the form of scientific articles.</p>
<b>Purpose of the data sharing</b>
<p>These data may be useful for project managers directly involved in the implementation of project activities in the Lodzkie region. This data can facilitate the realization of deliverables in other WPs.</p>
<b>Legal basis for the data sharing</b>
<p>Processing is necessary for the purposes of the legitimate interests pursued by the controller. The method of managing legal issues is described in the Regulations for managing copyright and related rights as well as industrial property rights and the principles of commercialization at the University of Lodz, Resolution No. 674 of the Senate of the University of Lodz of 24.02.2020.</p>
<b>DSA/DPA/JCA</b>
<p>Not needed.</p>

## 6. Location – Data transfer

<b>Location</b>
-----------------

All data and metadata will be deposited in the internal repository of UniLodz servers on Microsoft OneDrive Cloud. The material collected data will store in a secure room and then, after the end of the project, destroyed by a specialized entity acting on behalf of and authorized by the University of Lodz. The alternative is to deposit data in the Repository of the University of Lodz in closed access.

**Country(ies) where data is transferred?**

No.

**Transfer mechanism**

No.

**Are any Special Categories of data transferred?**

No.

**7. Data security**

**Security measures**

Access to the data is restricted and password protected.

**Anonymisation or pseudonymisation techniques**

Qualitative data - the material will be presented without manipulating personal data, enabling specific entities to be associated with the given statements. Quantitative research data will be presented only in the form of summary statements.

**8. General principles**

**Information to Data Subjects**

Yes.

**Principles of processing**

Compliant with the principles.

**Name of Beneficiary: Związek Międzygminny "BZURA"**

**1. Data processing: Personal data**

**Dataset identifier**

FRONTSH1P\_BZURA\_PersonalDataWP4\_DDMMYY\_v00

**WP and Task**

WP 4 T.4.1 -4,6

**Dataset description**

*As part of the activities, the following data will be processed:*

- *collecting e-mail addresses of professional employees working in offices,*
- *data of employees and other contractors,*
- *data of farmers participating in WP4 tasks*

**Purpose of the data**

*The purpose of collecting data is to carry out activities in accordance with the guidelines of the leaders of individual tasks and in accordance with the assumptions of the FrontSh1p project*

### Processing activity

Personal data will be processed in several categories:

- Recruitment of employees (subcontractors),
- recruitment of meeting participants,
- recruitment of survey participants,
- the involvement of farmers to co-create solutions in the field of the circular economy and to maximize the benefits for the entire region

### Type of data

Name and surname, name of the company or institution, official position, contact details

### Special categories of data

No

### Expected size of data

Do you process criminal offense data?

- Yes  
 No

### Data classification

- Public  
 Confidential  
 Other: [Click here to enter text](#)

### Software involved in the data processing

Microsoft Office, OneDrive

### Retention period

The data will be kept only as long as necessary. At most until the end of the project/the final reporting.

## 2. Data collection

### Source

Data is collected directly from those involved.

### Means of collection

Data is collected in person or via electronic means of communication.

## 3. Data usage

### Legal basis

Regulation of the European Parliament and of the Council (EU) 2016/679 of 27 April 2016 on the protection of individuals with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46 / EC (General Data Protection Regulation).

### Purpose of processing

Collection of data necessary for specific activities in the implementation of the main tasks of WP 4.

## 4. A29WP DPIA Criteria

### Evaluation or scoring: do you carry out any form of profiling?

- Yes  
 No

<b>Automated decision making: do the data processing involve automated decision making without human intervention?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Systematic monitoring: are the data used to observe, monitor or control data subject?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Sensitive data: do you process special categories of data and / or criminal offense data?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Matching or combining datasets: do you match / combine different data from different controllers and / or taken for different purpose?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Vulnerable groups: data from children, workers, employees, ill persons, or asylum seekers?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Use of innovative technologies: eg, facial recognition, high-risk AI, etc.</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Prevention: as a result, could the data subjects be prevented from exercising a right or using a service or a contract?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

## 5. Data sharing

<b>Internal data sharing</b>
<i>The data will be made available only to members of the research team in the scope of their project tasks.</i>
<b>External data sharing</b>
<i>The data will not be shared.</i>
<b>Purpose of the data sharing</b>
<i>Internal data exchange will take place in order to implement the project</i>
<b>Legal basis for the data sharing</b>
<i>N</i>
<b>DSA / DPA / JCA</b>
<i>N</i>

## 6. Location - Data transfer

<b>Location</b>
<i>Data is processed at Związek Międzygminny "BZURA" headquarters and in the IT system.</i>
<b>Country (ies) where data is transferred?</b>
<i>N</i>
<b>Transfer mechanism</b>
<i>N</i>

**Are any Special Categories of data transferred?**

N

## 7. Data security

**Security measures**

Access to the data is restricted and password protected.

**Anonymisation or pseudonymisation techniques**

N

## 8. General principles

**Information to Data Subjects**

Yes.

**Principles of processing**

Compliant with the principles.

**Name of Beneficiary: Związek Międzygminny "BZURA"**

### 1. Data processing: Personal data

**Dataset identifier**

FRONTSH1P\_BZURA\_PersonalDataWP4\_DDMMYY\_v00

**WP and Task**

WP 4 T.4.1 -4,6

**Dataset description**

*As part of the activities, the following data will be processed:*

- *collecting e-mail addresses of professional employees working in offices,*
- *data of employees and other contractors,*
- *data of farmers participating in WP4 tasks*

**Purpose of the data**

*The purpose of collecting data is to carry out activities in accordance with the guidelines of the leaders of individual tasks and in accordance with the assumptions of the FrontSh1p project*

**Processing activity**

*Personal data will be processed in several categories:*

- *Recruitment of employees (subcontractors),*
- *recruitment of meeting participants,*
- *recruitment of survey participants,*
- *the involvement of farmers to co-create solutions in the field of the circular economy and to maximize the benefits for the entire region*

**Type of data**

*Name and surname, name of the company or institution, official position, contact details*

**Special categories of data**

No

<b>Expected size of data</b>
Do you process criminal offense data? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Data classification</b>
<input checked="" type="checkbox"/> Public <input checked="" type="checkbox"/> Confidential <input type="checkbox"/> Other: <a href="#">Click here to enter text</a>
<b>Software involved in the data processing</b>
Microsoft Office, OneDrive
<b>Retention period</b>
The data will be kept only as long as necessary. At most until the end of the project/the final reporting.

## 2. Data collection

<b>Source</b>
Data is collected directly from those involved.
<b>Means of collection</b>
Data is collected in person or via electronic means of communication.

## 3. Data usage

<b>Legal basis</b>
Regulation of the European Parliament and of the Council (EU) 2016/679 of 27 April 2016 on the protection of individuals with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46 / EC (General Data Protection Regulation).
<b>Purpose of processing</b>
Collection of data necessary for specific activities in the implementation of the main tasks of WP 4.

## 4. A29WP DPIA Criteria

<b>Evaluation or scoring: do you carry out any form of profiling?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Automated decision making: do the data processing involve automated decision making without human intervention?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Systematic monitoring: are the data used to observe, monitor or control data subject?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Sensitive data: do you process special categories of data and / or criminal offense data?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

**Matching or combining datasets: do you match / combine different data from different controllers and / or taken for different purpose?**

- Yes  
 No

**Vulnerable groups: data from children, workers, employees, ill persons, or asylum seekers?**

- Yes  
 No

**Use of innovative technologies: eg, facial recognition, high-risk AI, etc.**

- Yes  
 No

**Prevention: as a result, could the data subjects be prevented from exercising a right or using a service or a contract?**

- Yes  
 No

## 5. Data sharing

**Internal data sharing**

*The data will be made available only to members of the research team in the scope of their project tasks.*

**External data sharing**

*The data will not be shared.*

**Purpose of the data sharing**

*Internal data exchange will take place in order to implement the project*

**Legal basis for the data sharing**

N

**DSA / DPA / JCA**

N

## 6. Location - Data transfer

**Location**

*Data is processed at Związek Międzygminny "BZURA" headquarters and in the IT system.*

**Country (ies) where data is transferred?**

N

**Transfer mechanism**

N

**Are any Special Categories of data transferred?**

N

## 7. Data security

**Security measures**

*Access to the data is restricted and password protected.*

**Anonymisation or pseudonymisation techniques**

N

## 8. General principles

<b>Information to Data Subjects</b>
Yes.
<b>Principles of processing</b>
Compliant with the principles.



## WP5

Name of Beneficiary: : University of Lodz (UniLodz)

### 1. Data processing: Personal data

Dataset identifier
FRONTSH1P_UNILODZ_PersonalDataWP5_DDMMYY_v00
WP and Task
WP5 and T5.1, T5.2
Dataset description
<ul style="list-style-type: none"> <li>- Collection of email addresses, address code.</li> <li>- Registration of research participants eg: FGI, in-depth interviews, etc.</li> <li>- Audio recordings of the implementation of selected studies requiring transcription.</li> </ul>
Purpose of the data
<p>The dataset contains the results of stakeholder surveys for effective implementation among CSS3. In particular, human data will be the main source of inference and implementation of the following project goals:</p> <ul style="list-style-type: none"> <li>- Identification, involvement, needs and expectations from regional stakeholders involved in CSS3</li> <li>- Requirements and success criteria to satisfy the implementation of non-technological solutions required in CSS3</li> <li>- Identification and availability of wastewaters.</li> </ul>
Processing activity
<p>Human-related data in the project will come from various sources:</p> <ul style="list-style-type: none"> <li>- expert discussions;</li> <li>- questionnaire, and FGI;</li> <li>- surveys;</li> <li>- In-depth interviews.</li> </ul>
Type of data
Name, company/institution, email, number phone, address, position at work.
Special categories of data
No.
Expected size of data
<p>Do you process criminal offence data?</p> <p><input type="checkbox"/>Yes</p> <p><input checked="" type="checkbox"/>No</p>
Data classification
<p><input type="checkbox"/>Public</p> <p><input checked="" type="checkbox"/>Confidential</p> <p><input type="checkbox"/>Other: <a href="#">Click here to enter text</a></p>
Software involved in the data processing
Microsoft Forms, Excel, OneDrive.

**Retention period**

The data will be kept only as long as necessary. At most until the end of the project/the final reporting.

**2. Data collection**

**Source**

Directly from respondents using: Microsoft Forms, personal, email and phone correspondence, survey forms.

Indirectly from the institution's internal databases.

**Means of collection**

Data was collected using: Microsoft Forms, personal, email and phone correspondence, survey forms

**3. Data usage**

**Legal basis**

The licenses for using data for scientific purposes will base on the requirements indicated by the data providers, e.g., Copernicus Land Monitoring Service - part of the Copernicus Program, United States Geological Survey, RapidEye operated by Planet and public administration. The method of managing legal issues is described in the Regulations for managing copyright and related rights as well as industrial property rights and the principles of commercialization at the University of Lodz, Resolution No. 674 of the Senate of the University of Lodz of 24.02.2020.

**Purpose of processing**

Implementation of the following project goals:

- Identification, involvement, needs and expectations from regional stakeholders involved in CSS3
- Requirements and success criteria to satisfy the implementation of non-technological solutions required in CSS3
- Identification and availability of wastewaters

**4. A29WP DPIA Criteria**

**Evaluation or scoring: do you carry out any form of profiling?**

Yes

No

**Automated decision making: do the data procesing involve automated decision making without human intervention?**

Yes

No

**Systematic monitoring: are the data used to observe, monitor or control data subject?**

Yes

No

**Sensitive data: do you process special categories of data and/or criminal offence data?**

Yes

No

**Matching or combining datasets: do you match/combine different data from different controllers and/or taken for different purpose?**

Yes

No

**Vulnerable groups: data from children, workers, employees, ill persons, or asylum seekers?**

Yes

No

**Use of innovative technologies: e.g., facial recognition, high-risk AI, etc.**

Yes

No

**Prevention: as a result, could the data subjects be prevented from exercising a right or using a service or a contract?**

Yes

No

## 5. Data sharing

### Internal data sharing

Collected primary data will be made available only to members of the research team in the scope of their project tasks. The data will be used to formulate research results and to achieve deliverables. This knowledge will be needed by other project partners to implement the next stages of the project. The funds will need for the purchase of external drives that allow to create backups and finally data archives. The project team will use data in subsequent scientific endeavors. Vector data interoperability will ensure through the use of standards following the Act on Spatial Information Infrastructure and its implementing acts and the INSPIRE Directive.

### External data sharing

No.

Data processed as a result of their analysis will be presented during scientific conferences and symposia and published in the form of scientific articles.

### Purpose of the data sharing

These data may be useful for project managers directly involved in the implementation of project activities in the Lodzkie region. This data can facilitate the realization of deliverables in other WPs.

### Legal basis for the data sharing

Processing is necessary for the purposes of the legitimate interests pursued by the controller. The method of managing legal issues is described in the Regulations for managing copyright and related

rights as well as industrial property rights and the principles of commercialization at the University of Lodz, Resolution No. 674 of the Senate of the University of Lodz of 24.02.2020.

**DSA/DPA/JCA**

Not needed.

**6. Location – Data transfer**

**Location**

All data and metadata will be deposited in the internal repository of UniLodz servers on Microsoft OneDrive Cloud. The material collected data will store in a secure room and then, after the end of the project, destroyed by a specialized entity acting on behalf of and authorized by the University of Lodz. The alternative is to deposit data in the Repository of the University of Lodz in closed access.

**Country(ies) where data is transferred?**

No.

**Transfer mechanism**

No.

**Are any Special Categories of data transferred?**

No.

**7. Data security**

**Security measures**

Access to the data is restricted and password protected.

**Anonymisation or pseudonymisation techniques**

Qualitative data - the material will be presented without manipulating personal data, enabling specific entities to be associated with the given statements. Quantitative research data will be presented only in the form of summary statements.

**8. General principles**

**Information to Data Subjects**

Yes.

**Principles of processing**

Compliant with the principles.

## WP8

Name of Beneficiary: **STRESS - 13; GAL IRPINIA – 15; CARMASCIANDO - 18**

### 1. Data processing: Personal data

<b>Dataset identifier</b>
FRONTSH1P_STRESS_GALIrpinia_Carmasciando_PersonalDataWP8_DDMMYY_v00
<b>WP and Task</b>
WP8 :T8.4
<b>Dataset description</b>
The dataset will be mainly composed of mailing lists or other information for collection of of research data in Campania Region and at Italian National Level.
<b>Purpose of the data</b>
The management of the local contact points for data collection.
<b>Processing activity</b>
Enter the name of the processing activity, e.g. marketing activities, extracting data from social networks etc. The data will be collected trough a specific form and archived in local databases.
<b>Type of data</b>
E.g., name, email address, phone, IP address etc. Basically: name, email address, phone, company name.
<b>Special categories of data</b>
No sensible data will be collected within the project activities.
<b>Expected size of data</b>
Do you process criminal offence data? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Data classification</b>
<input type="checkbox"/> Public <input type="checkbox"/> Confidential <input checked="" type="checkbox"/> Other: The collected data is basically confidential but in many cases it will be collected also though already public databases. It will not be made available, outside the consortium
<b>Software involved in the data processing</b>
Microsoft Office or Google software tools
<b>Retention period</b>
How long will you keep the data for? For the project duration.

### 2. Data collection

**Source**

Where do the data come from?

Directly from the interested persons.

Indirectly from public databases.

**Means of collection**

Questionnaires, forms, personal contacts, email and phone correspondence.

### 3. Data usage

**Legal basis**

What is the legal basis for processing according to Article 6 the GDPR?

Questionnaire

The data subject will give consent to the processing of his or her personal data for specific project purposes.

**Purpose of processing**

Briefly describe the reason(s) why the data is used / processed.

The purpose of the data use is related to the creation of a network of stakeholders and for the creation of a local network of contact points for other (non-personal ) data collection

### 4. A29WP DPIA Criteria

**Evaluation or scoring: do you carry out any form of profiling?**

Yes

No

**Automated decision making: do the data procesing involve automated decision making without human intervention?**

Yes

No

**Systematic monitoring: are the data used to observe, monitor or control data subject?**

Yes

No

**Sensitive data: do you process special categories of data and/or criminal offence data?**

Yes

No

**Matching or combining datasets: do you match/combine different data from different controllers and/or taken for different purpose?**

Yes

No

**Vulnerable groups: data from children, workers, employees, ill persons, or asylum seekers?**

Yes

No

**Use of innovative technologies: e.g., facial recognition, high-risk AI, etc.**

Yes

No

**Prevention: as a result, could the data subjects be prevented from exercising a right or using a service or a contract?**

Yes

No

## 5. Data sharing

### Internal data sharing

Will the data be shared with other beneficiaries? Specify.

Collected primary data will be shared among the members of the research team of the local project beneficiaries (STRESS; GAL IRPINIA; CARMASCIANDO) within the aim of the project tasks, it will be also shared with other project partners, if needed for research activities.

### External data sharing

Will the data be shared with third parties outside the GA? Specify.

No, the data will not be shared with third parties outside the GA.

### Purpose of the data sharing

Why (purpose) are the data being shared?

If needed for research activities, the data will be also shared with other project partners.

### Legal basis for the data sharing

Specify the legal basis for the data sharing according to Article 6 GDPR.

The data subject will give consent to the processing and sharing of his or her personal data for specific project purposes.

### DSA/DPA/JCA

If the data is shared (with other beneficiaries or third parties) indicate the type of Agreement in place (if needed): Data Sharing (DSA), Data Processing, (DPA) or Joint Controller Agreement (JCA).

The data subject will give consent to the processing and sharing of his or her personal data for specific project purposes.

## 6. Location – Data transfer

### Location

Where are the data being processed?

When the data is stored and processed in the internal systems of each of the involved partners (STRESS, GAL Irpinia, Carmasciando) it can only be accessed through encrypted accounts following the company's security procedures.

### Country(ies) where data is transferred?

Are the data being transferred outside the EEA? If yes, to which country(ies)?

NO

### Transfer mechanism

Indicate the data transfer mechanism in place.

NO

**Are any Special Categories of data transferred?**

Indicate whether the transfer involves the transfer of special categories of data and/or criminal convictions and offences.

NO

**7. Data security**

**Security measures**

Briefly describe the security measures applied to safeguard the data.

Access to all the data will be restricted and it can only be accessed through encrypted accounts following the company's security procedures.

**Anonymisation or pseudonymisation techniques**

Specify whether any anonymisation or pseudonymisation techniques have been put in place.

YES

**8. General principles**

**Information to Data Subjects**

Article 13 and 14 of the GDPR: Has the information been provided to data subjects? If no, please specify if any exemption applies.

Data has not been collected yet, when Personal data will be collected, the data subjects will be provided all the necessary information and will give specific consent.

**Principles of processing**

Specify whether you comply with all the principles of the data processing or you have any concerns you may not meet any or some of them.

No specific concern at the present stage.

**Name of Beneficiary: INL**

**1. Data processing: Personal data**

**Dataset identifier**

FRONTSH1P\_INL\_PersonalDataWP8\_DDMMYY\_v00

**WP and Task**

WP8. Replication Strategies, T8.2 Portuguese replication development, T8.6 Replication results and beyond

**Dataset description**





Regional stakeholders contacts from the North region of Portugal, related to activities developed in T8.2 for the Portuguese replication development, and stakeholders data from all around Europe related to the development of the Good Practices for Regional Replication in Europe (T8.6). Associated consultations to the above stakeholders will be collected and treated.

**Purpose of the data**

Data from the mentioned stakeholders (policy makers, administrations, industries, citizens) will help to define and model the documents that will result from the project, taking into account their feedback and discovering additional good practices and synergies.

**Processing activity**

Extraction from institutional and project databases, and marketing activities (newsletter and social media)

**Type of data**

Name, nationality, email address, phone, institution, feedback on the project results exposed or any initiatives and problematics identified.

**Special categories of data**

Do you process any of the following categories of data: racial or ethnic origin, political opinions, religious or philosophical beliefs, or trade union membership, genetic data, biometric data, health, sexual orientation? If yes, specify which one.

No special categories of data.

**Expected size of data**

A few KB

Do you process criminal offence data?

Yes

No

**Data classification**

Public: General outcomes of the consultations and surveys, anonymising data

Confidential: Rest of personal details (contact and personal data)

Other:

**Software involved in the data processing**

Excel databases, online surveys (such as SurveyMonkey)

**Retention period**

At least for 5 years after the end of the project.

**2. Data collection**

**Source**

Where do the data come from?

From institutional and project databases; marketing activities (social media and newsletters), phone and e-mail direct contacts, and from participants in workshops organised within WP8.

**Means of collection**

From institutional and project databases; marketing activities (social media and newsletters), phone and e-mail direct contacts, and from participants in workshops organised within WP8.

### 3. Data usage

#### Legal basis

(a) The data subject has given consent to the processing of his or her personal data for one or more specific purposes;

(f) processing is necessary for the purposes of the legitimate interests pursued by the controller or by a third party, except where such interests are overridden by the interests or fundamental rights and freedoms of the data subject which require protection of personal data, in particular where the data subject is a child.

#### Purpose of processing

Creation of a network of stakeholders to obtain feedback regarding the findings of the 4 systemic solutions implemented as well as their review on the strategies developed to replicate the solutions in the chosen Portuguese, Greek and Italian regions.

### 4. A29WP DPIA Criteria

#### Evaluation or scoring: do you carry out any form of profiling?

Yes

No

#### Automated decision making: do the data processing involve automated decision making without human intervention?

Yes

No

#### Systematic monitoring: are the data used to observe, monitor or control data subject?

Yes

No

#### Sensitive data: do you process special categories of data and/or criminal offence data?

Yes

No

#### Matching or combining datasets: do you match/combine different data from different controllers and/or taken for different purpose?

Yes

No

#### Vulnerable groups: data from children, workers, employees, ill persons, or asylum seekers?

Yes

No

#### Use of innovative technologies: e.g., facial recognition, high-risk AI, etc.

Yes

No

**Prevention: as a result, could the data subjects be prevented from exercising a right or using a service or a contract?**

Yes

No

## 5. Data sharing

### Internal data sharing

Data may be shared between partners, especially data that comes from regions to provide outcomes of the project such as Good Practises at European level, as well as contacts collected at project level (website and other contacts)

### External data sharing

No

### Purpose of the data sharing

Get more feedback from participants on initiatives and needs at regional level in Europe, in relation to the documents produced in the project.

### Legal basis for the data sharing

(a) The data subject has given consent to the processing of his or her personal data for one or more specific purposes;

(f) processing is necessary for the purposes of the legitimate interests pursued by the controller or by a third party, except where such interests are overridden by the interests or fundamental rights and freedoms of the data subject which require protection of personal data, in particular where the data subject is a child.

### DSA/DPA/JCA

Confidential data will be just shared within the consortium (WP8 and WP9 participants)

## 6. Location – Data transfer

### Location

INL servers

### Country(ies) where data is transferred?

No data will be transferred outside the EU. It will be just transferred to members of WP8

### Transfer mechanism

Microsoft Teams, setting up secure file sharing, or e-mail

### Are any Special Categories of data transferred?

No

## 7. Data security

### Security measures

Data will be just shared with specific members of WP8 and WP9.

### Anonymisation or pseudonymisation techniques

Data are handled and processed only anonymized coded with a randomized participant-ID number, with the purpose of identifying and relating their individual answers across different data collection instances, e.g., during longitudinal studies. These codes will not entail any personal data and will always remain anonymous to researchers. The document containing the connection of subject-ID numbers and the personal data will be stored in a secured document on the server of ST, and will be only accessed by the project manager at ST.

## 8. General principles

### Information to Data Subjects

Information will be provided to data subjects in a transparent and clear way.

### Principles of processing

We comply with all the principles of the data processing.

## Name of Beneficiary: CCDR-Norte

### 1. Data processing: Personal data

#### Dataset identifier

FRONTSH1P\_CCDR-N\_PersonalDataWP8\_DDMMYY\_v00

#### WP and Task

*WP8. Replication Strategies, T8.2 Portuguese replication development*

#### Dataset description

1. The collection of information on Regional stakeholders contacts from the North region of Portugal, related to activities developed in T8.2 for the Portuguese replication development.
2. Registration of participants in events such as workshops, etc.

#### Purpose of the data

1. Data from the mentioned stakeholders (policy makers, administrations, industries, citizens) will help to define and model the documents that will result from the project, taking into account their feedback and discovering additional good practices and synergies.
2. Collection of contact data necessary for certain communication and dissemination of activities such as organisation of events.

#### Processing activity

Extraction from institutional and project databases, and marketing activities (newsletter and social media)

#### Type of data

Name, nationality, email address, phone, institution, feedback on the project results exposed or any initiatives and problematics identified. For events additionally job position.

#### Special categories of data

*Do you process any of the following categories of data: racial or ethnic origin, political opinions, religious or philosophical beliefs, or trade union membership, genetic data, biometric data, health, sexual orientation? If yes, specify which one.*

No special categories of data.

#### Expected size of data

A few KB

*Do you process criminal offence data?*

Yes

No

#### Data classification

Public: General outcomes of the consultations and surveys, anonymising data

Confidential: Rest of personal details (contact and personal data)

Other:

#### Software involved in the data processing

Spreadsheet databases, online surveys

#### Retention period

*The data will be kept only as long as necessary.*

## 2. Data collection

#### Source

*Where do the data come from?*

From institutional and project databases; marketing activities (social media and newsletters), phone and e-mail direct contacts, and from participants in workshops organised within WP8.

#### Means of collection

From institutional and project databases; marketing activities (social media and newsletters), phone and e-mail direct contacts, and from participants in workshops organised within WP8.

## 3. Data usage

#### Legal basis

(a) The data subject has given consent to the processing of his or her personal data for one or more specific purposes;

(f) processing is necessary for the purposes of the legitimate interests pursued by the controller or by a third party, except where such interests are overridden by the interests or fundamental rights and freedoms of the data subject which require protection of personal data, in particular where the data subject is a child.

#### Purpose of processing

Creation of a network of stakeholders to obtain feedback regarding the findings of the "SS2 - Food and Feed" solutions implemented, as well as its review on the strategies developed to replicate the solutions in the North Portuguese region.

#### 4. A29WP DPIA Criteria

<b>Evaluation or scoring: do you carry out any form of profiling?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Automated decision making: do the data processing involve automated decision making without human intervention?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Systematic monitoring: are the data used to observe, monitor or control data subject?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Sensitive data: do you process special categories of data and/or criminal offence data?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Matching or combining datasets: do you match/combine different data from different controllers and/or taken for different purpose?</b>
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>Vulnerable groups: data from children, workers, employees, ill persons, or asylum seekers?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Use of innovative technologies: e.g., facial recognition, high-risk AI, etc.</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Prevention: as a result, could the data subjects be prevented from exercising a right or using a service or a contract?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

#### 5. Data sharing

<b>Internal data sharing</b>
Data may be shared between partners, especially data that comes from regions to provide outcomes of the project such as Good Practises at European level, as well as contacts collected at project level (website and other contacts)
<b>External data sharing</b>
No
<b>Purpose of the data sharing</b>
Get more feedback from participants on initiatives and needs at regional level in Europe, in relation to the documents produced in the project.
<b>Legal basis for the data sharing</b>

(a) The data subject has given consent to the processing of his or her personal data for one or more specific purposes;

(f) processing is necessary for the purposes of the legitimate interests pursued by the controller or by a third party, except where such interests are overridden by the interests or fundamental rights and freedoms of the data subject which require protection of personal data, in particular where the data subject is a child.

**DSA/DPA/JCA**

Confidential data will be just shared within the consortium (WP8 and WP9 participants)

## 6. Location – Data transfer

<b>Location</b>
CCDR-N servers
<b>Country(ies) where data is transferred?</b>
No data will be transferred outside the EU. It will be just transferred to members of WP8
<b>Transfer mechanism</b>
Setting up secure file sharing system, or e-mail
<b>Are any Special Categories of data transferred?</b>
No

## 7. Data security

<b>Security measures</b>
Data will be just shared with specific members of WP8 and WP9. Access to the data is restricted and password protected.
<b>Anonymisation or pseudonymisation techniques</b>
Data are handled and processed only anonymized coded with a randomized participant-ID number, with the purpose of identifying and relating their individual answers across different data collection instances, e.g., during longitudinal studies. These codes will not entail any personal data and will always remain anonymous.

## 8. General principles

<b>Information to Data Subjects</b>
<i>Article 13 and 14 of the GDPR: Has the information been provided to data subjects? If no, please specify if any exemption applies.</i> Information will be provided to data subjects in a transparent and clear way.
<b>Principles of processing</b>
<i>Specify whether you comply with all the principles of the data processing or you have any concerns you may not meet any or some of them.</i> We comply with all the principles of the data processing.

**Name of Beneficiary: Province of Fryslan**

**1. Data processing: Personal data**

<b>Dataset identifier</b>	FRONTSH1P_FRL_PersonalDataWP8_DDMMYY_v00
<b>WP and Task</b>	WP8: 8.1, 8.5, 8.6
<b>Dataset description</b>	Collection of email addresses
<b>Purpose of the data</b>	Stakeholder engagement in project's outcomes and events organised by Frontsh1p
<b>Processing activity</b>	Human-related data in the project will come from various sources: <ul style="list-style-type: none"> <li>- Stakeholder meetings;</li> <li>- Interviews</li> </ul>
<b>Type of data</b>	Name, email address
<b>Special categories of data</b>	No
<b>Expected size of data</b>	<p><i>Do you process criminal offence data?</i></p> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Data classification</b>	<input type="checkbox"/> Public <input checked="" type="checkbox"/> Confidential <input type="checkbox"/> Other: <i>Click here to enter text</i>
<b>Software involved in the data processing</b>	Microsoft Forms, Excel, OneDrive.
<b>Retention period</b>	The data will be kept only as long as necessary. At most until the end of the project/the final reporting.

**2. Data collection**

<b>Source</b>	<p>Directly from respondents using: Microsoft Forms, personal, email and phone correspondence, survey forms.</p> <p>Indirectly from the institution's internal databases.</p>
<b>Means of collection</b>	Data was collected using: Microsoft Forms, personal, email and phone correspondence, survey forms



### 3. Data usage

<b>Legal basis</b>
Policy on data collection and processing of the Province of Fryslan (2021)
<b>Purpose of processing</b>
The aim is generate interest for activity in scope of circular economy that contribute to overcoming market failures in the areas covered by the systemic solutions implemented in the project

### 4. A29WP DPIA Criteria

<b>Evaluation or scoring: do you carry out any form of profiling?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Automated decision making: do the data processing involve automated decision making without human intervention?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Systematic monitoring: are the data used to observe, monitor or control data subject?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Sensitive data: do you process special categories of data and/or criminal offence data?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Matching or combining datasets: do you match/combine different data from different controllers and/or taken for different purpose?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Vulnerable groups: data from children, workers, employees, ill persons, or asylum seekers?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Use of innovative technologies: e.g., facial recognition, high-risk AI, etc.</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Prevention: as a result, could the data subjects be prevented from exercising a right or using a service or a contract?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

### 5. Data sharing

<b>Internal data sharing</b>
Yes

<b>External data sharing</b>
No
<b>Purpose of the data sharing</b>
The aim is generate interest for activity in scope of circular economy that contribute to overcoming market failures in the areas covered by the systemic solutions implemented in the project
<b>Legal basis for the data sharing</b>
Policy on data collection and protection, province of Fryslan (2021)
<b>DSA/DPA/JCA</b>
N/A

## 6. Location – Data transfer

<b>Location</b>
All data and metadata will be deposited in the internal repository of Province Fryslan servers on Microsoft OneDrive Cloud.
<b>Country(ies) where data is transferred?</b>
No
<b>Transfer mechanism</b>
N/A
<b>Are any Special Categories of data transferred?</b>
No

## 7. Data security

<b>Security measures</b>
Access to the data is restricted and password protected.
<b>Anonymisation or pseudonymisation techniques</b>
N/A

## 8. General principles

<b>Information to Data Subjects</b>
Yes
<b>Principles of processing</b>
Compliant with the principles.

WP9

Name of Beneficiary: Centrum Promocji i Rozwoju Obywatelskich "OPUS"

1. Data processing: Personal data

<b>Dataset identifier</b>
FRONTSH1P_OPUS_PersonalDataWP9_DDMMYY_v00
<b>WP and Task</b>
WP 9 T.9.1, T.9.2
<b>Dataset description</b>
As part of the activities, the following data will be processed: <ol style="list-style-type: none"> <li>1. Project personnel, contractors,</li> <li>2. Participants of information activities to the extent to which activities will be carried out by the OPUS Center in consultation with Eurada (T 9.1)</li> <li>3. participants of educational activities (e-learning) to the extent to which data will be provided to the OPUS Center (T. 9.2)</li> </ol>
<b>Purpose of the data</b>
The purpose of data collection is implementation of information and educational activities in accordance with the assumptions of the FrontSh1p
<b>Processing activity</b>
Recruitment of employees (project staff, subcontractors) Recruitment of participants, Settlement of settlements with employees, keeping a register of employees, Keeping a register of participants
<b>Type of data</b>
Project staff Employees: surname and first names, date of birth, number PESEL, address of residence, no telephone number, education, profession, business telephone number, private telephone number, e-mail address, payment account number, Contractor: surname and first names, date of birth, PESEL number, residence address, telephone number, education, profession, business telephone number, private telephone number , e-mail address, payment account number, Participants of activities: surnames and forenames, address of residence or stay, e-mail telephone number. Legal guardians of underage participants: name, surname, address, telephone number
<b>Special categories of data</b>
Not applicable
<b>Expected size of data</b>
Do you process criminal offense data? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Data classification</b>
<input checked="" type="checkbox"/> Public <input checked="" type="checkbox"/> Confidential <input type="checkbox"/> Other: <a href="#">Click here to enter text</a>
<b>Software involved in the data processing</b>
OPUS Center CRM system Narzedzia Google Workplace
<b>Retention period</b>

*In connection with the provisions of the contract article 18.1, the period of storage of documents is min. 5 years from payment of the balance. In addition, Polish regulations apply to:*

- *sending marketing information - until the consent is withdrawn;*
- *recording and publishing the image - until the consent is withdrawn;*
- *participation in the project - 5 years from the end of the project;*
- *in order to perform legal obligations imposed on the Administrator, among others project settlement - 5 years from the end of the project;*
- *in order to establish and pursue claims or defend against claims - 5 years from the end of the project;*
- *establishing contact with the legal guardian - 5 years from the end of the project.*

## 2. Data collection

<b>Source</b>
<i>Personal data will come directly from interested persons.</i>
<b>Means of collection</b>
<i>Personal data will be collected during the recruitment process.</i>

## 3. Data usage

<b>Legal basis</b>
<i>Art. 6 par. 1 lit. a, b, c, e, f of the Regulation of the European Parliament and of the Council (EU) 2016/679 of 27 April 2016 on the protection of individuals with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46 / EC (General Data Protection Regulation).</i>
<b>Purpose of processing</b>
<i>Personal data are processed in order to:</i> <ul style="list-style-type: none"> <li>- <i>record and publish the image,</i></li> <li>- <i>send marketing information,</i></li> <li>- <i>participate in the project,</i></li> <li>- <i>in order to perform legal obligations imposed on the Administrator, including settlement of the project,</i></li> <li>- <i>in order to establish and pursue claims or defend against claims by</i></li> <li>- <i>contacting a legal guardian</i></li> </ul>

## 4. A29WP DPIA Criteria

<b>Evaluation or scoring: do you carry out any form of profiling?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Automated decision making: do the data processing involve automated decision making without human intervention?</b>

<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Systematic monitoring: are the data used to observe, monitor or control data subject?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Sensitive data: do you process special categories of data and / or criminal offense data?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Matching or combining datasets: do you match / combine different data from different controllers and / or taken for different purpose?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Vulnerable groups: data from children, workers, employees, ill persons, or asylum seekers?</b>
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>Use of innovative technologies: eg, facial recognition, high-risk AI, etc.</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Prevention: as a result, could the data subjects be prevented from exercising a right or using a service or a contract?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

## 5. Data sharing

<b>Internal data sharing</b>
<i>The data will not be shared with other beneficiaries.</i>
<b>External data sharing</b>
<i>The data will not be shared.</i>
<b>Purpose of the data sharing</b>
<i>N</i>
<b>Legal basis for the data sharing</b>
<i>N</i>
<b>DSA / DPA / JCA</b>
<i>N</i>

## 6. Location - Data transfer

<b>Location</b>
<i>Data is processed at OPUS headquarters and in the IT system.</i>
<b>Country (ies) where data is transferred?</b>

N
<b>Transfer mechanism</b>
N
<b>Are any Special Categories of data transferred?</b>
<i>Does not apply.</i>

## 7. Data security

<b>Security measures</b>
<p>The building has an alarm, anti-burglary glass and stairs are secured with an anti-burglary grille. All rooms in which personal data are processed are locked.</p> <p>All computers have software from legal sources. They are protected with basic antivirus programs. Computers are password protected. Only authorized employees with an individual login and password have access to the databases.</p> <p>The staff undergoes training in the field of personal data protection and the application of these provisions at least once a year.</p>
<b>Anonymisation or pseudonymisation techniques</b>
<i>Not introduced.</i>

## 8. General principles

<b>Information to Data Subjects</b>
<p><i>Employees, co-participants, participants of activities, guardians of underage participants in activities were informed in a concise, transparent, comprehensible and easily accessible form, in clear and simple language about the processing of their personal data in accordance with art. 13 and 14 GDPR. All information and messages addressed to children about the processing of their personal data have been formulated in a way that will make it easy for them to understand it.</i></p>
<b>Principles of processing</b>
<p><i>OPUS processes data in accordance with the principles of the Regulation of the European Parliament and of the Council (EU) 2016/679 of 27 April 2016:</i></p> <ul style="list-style-type: none"> <li>● <i>The principle of lawfulness, transparency and fairness.</i></li> <li>● <i>The principle of limitation of the purpose of processing.</i></li> <li>● <i>The principle of data minimization.</i></li> <li>● <i>Principle of data correctness.</i></li> <li>● <i>Principle of limiting data storage.</i></li> <li>● <i>Principle of integrity and confidentiality.</i></li> <li>● <i>The principle of accountability.</i></li> </ul>

**Name of Beneficiary: University of Lodz (UniLodz)**

**1. Data processing: Personal data**

<b>Dataset identifier</b>
FRONTSH1P_UNILODZ_PersonalDataWP9_DDMMYY_v00
<b>WP and Task</b>
WP9 and T9.1, T9.2
<b>Dataset description</b>
<ul style="list-style-type: none"> <li>- Collection of email addresses, address code.</li> <li>- Registration of research participants eg: FGI, in-depth interviews, etc.</li> <li>- Audio recordings of the implementation of selected studies requiring transcription.</li> </ul>
<b>Purpose of the data</b>
The aim is generate interest for activity in scope of circular economy that contribute to overcoming market failures in the areas covered by the systemic solutions implemented in the Lodzkie region.
<b>Processing activity</b>
Human-related data in the project will come from various sources: <ul style="list-style-type: none"> <li>- expert discussions;</li> <li>- questionnaire, and FGI;</li> <li>- surveys;</li> <li>- In-depth interviews.</li> </ul>
<b>Type of data</b>
Name, company/institution, email, number phone, address, position at work.
<b>Special categories of data</b>
No.
<b>Expected size of data</b>
Do you process criminal offence data? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Data classification</b>
<input type="checkbox"/> Public <input checked="" type="checkbox"/> Confidential <input type="checkbox"/> Other: <a href="#">Click here to enter text</a>
<b>Software involved in the data processing</b>
Microsoft Forms, Excel, OneDrive.
<b>Retention period</b>
The data will be kept only as long as necessary. At most until the end of the project/the final reporting.

## 2. Data collection

<b>Source</b>
Directly from respondents using: Microsoft Forms, personal, email and phone correspondence, survey forms. Indirectly from the institution's internal databases.
<b>Means of collection</b>
Data was collected using: Microsoft Forms, personal, email and phone correspondence, survey forms

## 3. Data usage

<b>Legal basis</b>
The licenses for using data for scientific purposes will base on the requirements indicated by the data providers, e.g., Copernicus Land Monitoring Service - part of the Copernicus Program, United States Geological Survey, RapidEye operated by Planet and public administration. The method of managing legal issues is described in the Regulations for managing copyright and related rights as well as industrial property rights and the principles of commercialization at the University of Lodz, Resolution No. 674 of the Senate of the University of Lodz of 24.02.2020.
<b>Purpose of processing</b>
The aim is generate interest for activity in scope of circular economy that contribute to overcoming market failures in the areas covered by the systemic solutions implemented in the Lodzkie region.

## 4. A29WP DPIA Criteria

<b>Evaluation or scoring: do you carry out any form of profiling?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Automated decision making: do the data procesing involve automated decision making without human intervention?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Systematic monitoring: are the data used to observe, monitor or control data subject?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Sensitive data: do you process special categories of data and/or criminal offence data?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Matching or combining datasets: do you match/combine different data from different controllers and/or taken for different purpose?</b>



<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>Vulnerable groups: data from children, workers, employees, ill persons, or asylum seekers?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Use of innovative technologies: e.g., facial recognition, high-risk AI, etc.</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Prevention: as a result, could the data subjects be prevented from exercising a right or using a service or a contract?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

## 5. Data sharing

<b>Internal data sharing</b>
Collected primary data will be made available only to members of the research team in the scope of their project tasks. The data will be used to formulate research results and to achieve deliverables. This knowledge will be needed by other project partners to implement the next stages of the project. The funds will need for the purchase of external drives that allow to create backups and finally data archives. The project team will use data in subsequent scientific endeavors. Vector data interoperability will ensure through the use of standards following the Act on Spatial Information Infrastructure and its implementing acts and the INSPIRE Directive.
<b>External data sharing</b>
No. Data processed as a result of their analysis will be presented during scientific conferences and symposia and published in the form of scientific articles.
<b>Purpose of the data sharing</b>
These data may be useful for project managers directly involved in the implementation of project activities in the Lodzkie region. This data can facilitate the realization of deliverables in other WPs.
<b>Legal basis for the data sharing</b>
Processing is necessary for the purposes of the legitimate interests pursued by the controller. The method of managing legal issues is described in the Regulations for managing copyright and related rights as well as industrial property rights and the principles of commercialization at the University of Lodz, Resolution No. 674 of the Senate of the University of Lodz of 24.02.2020.
<b>DSA/DPA/JCA</b>
Not needed.

## 6. Location – Data transfer

<b>Location</b>
-----------------

All data and metadata will be deposited in the internal repository of UniLodz servers on Microsoft OneDrive Cloud. The material collected data will store in a secure room and then, after the end of the project, destroyed by a specialized entity acting on behalf of and authorized by the University of Lodz. The alternative is to deposit data in the Repository of the University of Lodz in closed access.

**Country(ies) where data is transferred?**

No.

**Transfer mechanism**

No.

**Are any Special Categories of data transferred?**

No.

**7. Data security**

**Security measures**

Access to the data is restricted and password protected.

**Anonymisation or pseudonymisation techniques**

Qualitative data - the material will be presented without manipulating personal data, enabling specific entities to be associated with the given statements. Quantitative research data will be presented only in the form of summary statements.

**8. General principles**

**Information to Data Subjects**

Yes.

**Principles of processing**

Compliant with the principles.

**Name of Beneficiary: Inter-Municipal Union BZURA**

**1. Data processing: Personal data**

**Dataset identifier**

FRONTSH1P\_BZURA\_PersonalDataWP9\_DDMMYY\_v00

**WP and Task**

WP9 – Task 9.2

**Dataset description**

Collection of email addresses for the quarterly newsletter;  
Registration of participants in events such as workshops, etc

**Errore. Il segnalibro non è definito. Purpose of the data**

Data will be collected in order to increase public involvement in the dissemination of the circular economy idea in the Łódź Province and to replicate its solutions in other locations.

The purpose of data collection is implementation of activities in accordance with the assumptions of the FrontSh1p
<b>Processing activity</b>
Recruitment of participants for communication activities - workshops, meetings, e-learning
<b>Type of data</b>
Participants of activities: surnames and forenames, address of residence or stay, e-mail telephone number. Legal guardians of underage participants: name, surname, address, telephone number
<b>Special categories of data</b>
No.
<b>Expected size of data</b>
<i>Do you process criminal offence data?</i> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Data classification</b>
<input type="checkbox"/> Public <input checked="" type="checkbox"/> Confidential <input type="checkbox"/> Other: <a href="#">Click here to enter text</a>
<b>Software involved in the data processing</b>
OneDrive, environment Microsoft Office
<b>Retention period</b>
In connection with the provisions of the contract article 18.1, the period of storage of documents is min. 5 years from payment of the balance. In addition, Polish regulations apply to: - sending marketing information - until the consent is withdrawn; - recording and publishing the image - until the consent is withdrawn; - participation in the project - 5 years from the end of the project; - in order to perform legal obligations imposed on the Administrator, among others project settlement - 5 years from the end of the project; - in order to establish and pursue claims or defend against claims - 5 years from the end of the project; - establishing contact with the legal guardian - 5 years from the end of the project.

## 2. Data collection

<b>Source</b>
Directly from respondents using: personal, email and phone correspondence, survey forms. Indirectly from the institution's internal databases.
<b>Means of collection</b>
Personal data will be collected during the recruitment process.

## 3. Data usage

<b>Legal basis</b>
--------------------

Art. 6 par. 1 lit. a, b, c, e, f of the Regulation of the European Parliament and of the Council (EU) 2016/679 of 27 April 2016 on the protection of individuals with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46 / EC (General Data Protection Regulation).

**Purpose of processing**

In order to ensure a smooth project communication and dissemination process for the circular economy in the Lodz region and Europe.

**4. A29WP DPIA Criteria**

<b>Evaluation or scoring: do you carry out any form of profiling?</b>
<input type="checkbox"/> Yes
<input checked="" type="checkbox"/> No
<b>Automated decision making: do the data processing involve automated decision making without human intervention?</b>
<input type="checkbox"/> Yes
<input checked="" type="checkbox"/> No
<b>Systematic monitoring: are the data used to observe, monitor or control data subject?</b>
<input type="checkbox"/> Yes
<input checked="" type="checkbox"/> No
<b>Sensitive data: do you process special categories of data and/or criminal offence data?</b>
<input type="checkbox"/> Yes
<input checked="" type="checkbox"/> No
<b>Matching or combining datasets: do you match/combine different data from different controllers and/or taken for different purpose?</b>
<input type="checkbox"/> Yes
<input checked="" type="checkbox"/> No
<b>Vulnerable groups: data from children, workers, employees, ill persons, or asylum seekers?</b>
<input type="checkbox"/> Yes
<input checked="" type="checkbox"/> No
<b>Use of innovative technologies: e.g., facial recognition, high-risk AI, etc.</b>
<input type="checkbox"/> Yes
<input checked="" type="checkbox"/> No
<b>Prevention: as a result, could the data subjects be prevented from exercising a right or using a service or a contract?</b>
<input type="checkbox"/> Yes
<input checked="" type="checkbox"/> No

**5. Data sharing**

<b>Internal data sharing</b>
Personal data will not be shared with other beneficiaries
<b>External data sharing</b>
No.



<b>Purpose of the data sharing</b>
No.
<b>Legal basis for the data sharing</b>
No.
<b>DSA/DPA/JCA</b>
No.

## 6. Location – Data transfer

<b>Location</b>
Personal data are stored in the office of the Inter-Municipal Union BZURA in Łowicz
<b>Country(ies) where data is transferred?</b>
No.
<b>Transfer mechanism</b>
No.
<b>Are any Special Categories of data transferred?</b>
No.

## 7. Data security

<b>Security measures</b>
Data in paper form is stored in locked rooms - locked cabinets, to which only authorised employees have access; data in electronic form is stored on the BZURA server, to which only authorised employees have access; data and access to it are password-protected.
<b>Anonymisation or pseudonymisation techniques</b>
No.

## 8. General principles

<b>Information to Data Subjects</b>
Yes.
<b>Principles of processing</b>
Compliant with the principles.

**Name of Beneficiary: Novamont S.p.A. (NVMT)**

### 1. Data processing: Personal data

<b>Dataset identifier</b>
FRONTSH1P_NVMT_PersonalDataWP9_DDMMYY_v00
<b>WP and Task</b>
WP9, Task 9.1 and 9.3
<b>Dataset description</b>

Registration of participants in events such as workshops, etc.
<b>Purpose of the data</b>
Collection of data necessary for certain communication and dissemination activities (organisation of events and workshops, social post, other communication activities);
<b>Processing activity</b>
Collection of personal information during events.
<b>Type of data</b>
Email address, name, telephone number, company name, role or job position
<b>Special categories of data</b>
No.
<b>Expected size of data</b>
<i>Do you process criminal offence data?</i>
<input type="checkbox"/> Yes
<input checked="" type="checkbox"/> No
<b>Data classification</b>
<input type="checkbox"/> Public
<input checked="" type="checkbox"/> Confidential
<input type="checkbox"/> Other: <i>Click here to enter text</i>
<b>Software involved in the data processing</b>
Word, Excel and social media platform's inherent analytics.
<b>Retention period</b>
The data will be kept only as long as necessary. At most until the end of the project.

## 2. Data collection

<b>Source</b>
Email subscription service; social media platform's inherent analytics; event registration services.
<b>Means of collection</b>
The data are generated automatically by usage of the online services and can be retrieved through the platforms. Sheet and forms.

## 3. Data usage

<b>Legal basis</b>
In case of events registration, the data subject has given consent to the processing of his or her personal data.
<b>Purpose of processing</b>
Collection of data necessary for certain communication and dissemination activities (events); Regular monitoring of communication activities vital to ensure a high-quality communication strategy execution.

## 4. A29WP DPIA Criteria

<b>Evaluation or scoring: do you carry out any form of profiling?</b>
---

<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Automated decision making: do the data processing involve automated decision making without human intervention?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Systematic monitoring: are the data used to observe, monitor or control data subject?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Sensitive data: do you process special categories of data and/or criminal offence data?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Matching or combining datasets: do you match/combine different data from different controllers and/or taken for different purpose?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Vulnerable groups: data from children, workers, employees, ill persons, or asylum seekers?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Use of innovative technologies: e.g., facial recognition, high-risk AI, etc.</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Prevention: as a result, could the data subjects be prevented from exercising a right or using a service or a contract?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

## 5. Data sharing

<b>Internal data sharing</b>
Data will be shared in aggregated form.
<b>External data sharing</b>
No.
<b>Purpose of the data sharing</b>
To keep the project partners informed on the success of communication and dissemination activities.
<b>Legal basis for the data sharing</b>
Processing is necessary for the purposes of the legitimate interests pursued by the controller
<b>DSA/DPA/JCA</b>
To be evaluated.

## 6. Location – Data transfer

<b>Location</b>
Company internal and proprietary servers.
<b>Country(ies) where data is transferred?</b>
No.
<b>Transfer mechanism</b>
No.
<b>Are any Special Categories of data transferred?</b>
No.

## 7. Data security

<b>Security measures</b>
Access to the data is restricted and protected.
<b>Anonymisation or pseudonymisation techniques</b>
No.

## 8. General principles

<b>Information to Data Subjects</b>
Yes.
<b>Principles of processing</b>
Compliant with the principles.

**Name of Beneficiary: NTUA – National Technical University of Athens**

### 1. Data processing: Personal data

<b>Dataset identifier</b>
FRONTSH1P_NTUA_PersonalDataWP9_DDMMYY_v00
<b>WP and Task</b>
WP9, Task 9.1, Task 9.2, Task 9.3
<b>Dataset description</b>
<i>Describe the dataset in a few lines.</i> Contact information of participants in workshop and events
<b>Purpose of the data</b>
<i>Explain the purpose of the data collection/generation and its relation to the objectives of the project.</i> Documentation and reporting
<b>Processing activity</b>



Enter the name of the processing activity, e.g. marketing activities, extracting data from social networks etc.

Workshops, events, dissemination.

Extracting data from common Google Drive folders and/or personal communication (e-mail, calls, etc.)

#### Type of data

E.g., name, email address, phone, IP address etc.

Name, email address, phone, affiliation of participants

#### Special categories of data

Do you process any of the following categories of data: racial or ethnic origin, political opinions, religious or philosophical beliefs, or trade union membership, genetic data, biometric data, health, sexual orientation? If yes, specify which one.

No

#### Expected size of data

Do you process criminal offence data?

Yes

No

#### Data classification

Public

Confidential

Other: [Click here to enter text](#)

#### Software involved in the data processing

Enter the key IT systems(s) used to process or store the data.

Microsoft Excel, Teams, OneDrive, Word

#### Retention period

How long will you keep the data for?

Until project completion

## 2. Data collection

#### Source

Where do the data come from?

By participants with their consent

#### Means of collection

How were the data collected, obtained or generated?

Hard copy, google forms

## 3. Data usage

#### Legal basis

What is the legal basis for processing according to Article 6 the GDPR?

The data subject has given consent to the processing of his or her personal data for one or more specific purposes; processing is necessary for the performance of a contract to which the data subject is party or in order to take steps at the request of the data subject prior to entering into a contract.

#### Purpose of processing

Briefly describe the reason(s) why the data is used / processed.

Reporting

#### 4. A29WP DPIA Criteria

**Evaluation or scoring: do you carry out any form of profiling?**

Yes

No

**Automated decision making: do the data processing involve automated decision making without human intervention?**

Yes

No

**Systematic monitoring: are the data used to observe, monitor or control data subject?**

Yes

No

**Sensitive data: do you process special categories of data and/or criminal offence data?**

Yes

No

**Matching or combining datasets: do you match/combine different data from different controllers and/or taken for different purpose?**

Yes

No

**Vulnerable groups: data from children, workers, employees, ill persons, or asylum seekers?**

Yes

No

**Use of innovative technologies: e.g., facial recognition, high-risk AI, etc.**

Yes

No

**Prevention: as a result, could the data subjects be prevented from exercising a right or using a service or a contract?**

Yes

No

#### 5. Data sharing

**Internal data sharing**

*Will the data be shared with other beneficiaries? Specify.*

Personal data will not be shared with other beneficiaries

**External data sharing**

*Will the data be shared with third parties outside the GA? Specify.*

Data will not be externally shared

**Purpose of the data sharing**

<i>Why (purpose) are the data being shared?</i>
<b>Legal basis for the data sharing</b>
<i>Specify the legal basis for the data sharing according to Article 6 GDPR.</i>
<b>DSA/DPA/JCA</b>
<i>If the data is shared (with other beneficiaries or third parties) indicate the type of Agreement in place (if needed): Data Sharing (DSA), Data Processing, (DPA) or Joint Controller Agreement (JCA).</i>

## 6. Location – Data transfer

<b>Location</b>
<i>Where are the data being processed?</i> All data will be deposited in the internal repository of NTUA's servers. Microsoft Excel, Teams, OneDrive, Word
<b>Country(ies) where data is transferred?</b>
<i>Are the data being transferred outside the EEA? If yes, to which country(ies)?</i>
<b>Transfer mechanism</b>
<i>Indicate the data transfer mechanism in place.</i>
<b>Are any Special Categories of data transferred?</b>
<i>Indicate whether the transfer involves the transfer of special categories of data and/or criminal convictions and offences.</i>

## 7. Data security

<b>Security measures</b>
<i>Briefly describe the security measures applied to safeguard the data.</i> Protocols and provisions prescribed by software involved in the data processing (GaBi 8.5 Sphera™, Microsoft Office (Excel, Teams, OneDrive, Outlook))
<b>Anonymisation or pseudonymisation techniques</b>
<i>Specify whether any anonymisation or pseudonymisation techniques have been put in place.</i> None

## 8. General principles

<b>Information to Data Subjects</b>
<i>Article 13 and 14 of the GDPR: Has the information been provided to data subjects? If no, please specify if any exemption applies.</i> None
<b>Principles of processing</b>
<i>Specify whether you comply with all the principles of the data processing or you have any concerns you may not meet any or some of them.</i> Yes

**Name of Beneficiary: INL**

**1. Data processing: Personal data**

<b>Dataset identifier</b>	FRONTSH1P_INL_PersonalDataWP9_DDMMYY_v00
<b>WP and Task</b>	WP9.2 Participatory definition of network of stakeholders e-learning requirements, final event
<b>Dataset description</b>	We will share data from WP8: 1. Data related from regional stakeholders from the North region of Portugal, related to activities developed in T8.2 for the Portuguese replication development; 2. Stakeholders' data from all around Europe related to the development of the Good Practices for Regional Replication in Europe (T8.6). 3. Results from consultations to the above stakeholders will be shared too.
<b>Purpose of the data</b>	Data sharing from WP8 will contribute to the activity T9.2 Participatory definition of network of stakeholders, namely to create the Stakeholder Network.
<b>Processing activity</b>	Extracting data from WP8 (check WP8 Personal data sharing for further descriptions on the processing activity)
<b>Type of data</b>	Name, nationality, e-mail address, phone, institution, feedback on the project results exposed or any initiatives and problematics identified.
<b>Special categories of data</b>	No special categories of data.
<b>Expected size of data</b>	<i>Do you process criminal offence data?</i> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Data classification</b>	<input checked="" type="checkbox"/> Public: General outcomes of the consultations and surveys, anonymising data <input checked="" type="checkbox"/> Confidential: Rest of personal details (contact and personal data) <input type="checkbox"/> Other: <a href="#">Click here to enter text</a>
<b>Software involved in the data processing</b>	Excel databases, online surveys (such as SurveyMonkey)
<b>Retention period</b>	At least 5 years after the end of the project.

**2. Data collection**

<b>Source</b>	From WP8 Replication Strategies.
<b>Means of collection</b>	From institutional and project databases; marketing activities (social media and newsletters), phone and e-mail direct contacts, and from participants in workshops organised within WP8.

### 3. Data usage

#### Legal basis

(a) The data subject has given consent to the processing of his or her personal data for one or more specific purposes;

(f) processing is necessary for the purposes of the legitimate interests pursued by the controller or by a third party, except where such interests are overridden by the interests or fundamental rights and freedoms of the data subject which require protection of personal data, in particular where the data subject is a child.

#### Purpose of processing

The data is used to identify needs in the specific regional areas as well as in Europe, as well as feedback on the Good Practises produced.

### 4. A29WP DPIA Criteria

#### Evaluation or scoring: do you carry out any form of profiling?

Yes

No

#### Automated decision making: do the data processing involve automated decision making without human intervention?

Yes

No

#### Systematic monitoring: are the data used to observe, monitor or control data subject?

Yes

No

#### Sensitive data: do you process special categories of data and/or criminal offence data?

Yes

No

#### Matching or combining datasets: do you match/combine different data from different controllers and/or taken for different purpose?

Yes

No

#### Vulnerable groups: data from children, workers, employees, ill persons, or asylum seekers?

Yes

No

#### Use of innovative technologies: e.g., facial recognition, high-risk AI, etc.

Yes

No

#### Prevention: as a result, could the data subjects be prevented from exercising a right or using a service or a contract?

Yes

No

## 5. Data sharing

<b>Internal data sharing</b>
Apart from participants of WP8, data will be shared with partners involved in WP9, namely with EURADA
<b>External data sharing</b>
No, unless for the public date (results of consultations)
<b>Purpose of the data sharing</b>
To contribute to the creation of the network of stakeholders and consequently to get more feedback from participants on initiatives and needs at regional level in Europe, in relation to the documents produced in the project.
<b>Legal basis for the data sharing</b>
(a) The data subject has given consent to the processing of his or her personal data for one or more specific purposes; (f) processing is necessary for the purposes of the legitimate interests pursued by the controller or by a third party, except where such interests are overridden by the interests or fundamental rights and freedoms of the data subject which require protection of personal data, in particular where the data subject is a child.
<b>DSA/DPA/JCA</b>
Data will be just shared within the consortium (mainly WP8 and WP9 participants)

## 6. Location – Data transfer

<b>Location</b>
Partners' servers
<b>Country(ies) where data is transferred?</b>
No data will be transferred outside the EU. It will be just transferred to members of WP9
<b>Transfer mechanism</b>
Microsoft Teams, setting up secure file sharing, or e-mail
<b>Are any Special Categories of data transferred?</b>
No

## 7. Data security

<b>Security measures</b>
Data will be just shared with specific members of WP9.
<b>Anonymisation or pseudonymisation techniques</b>
Data are handled and processed only anonymized coded with a randomized participant-ID number, with the purpose of identifying and relating their individual answers across different data collection instances, e.g., during longitudinal studies. These codes will not entail any personal data and will always remain anonymous to researchers. The document containing the connection of subject-ID numbers and the personal data will be stored in a secured document on the server of ST, and will be only accessed by the project manager at ST.

## 8. General principles

### Information to Data Subjects

Information will be provided to data subjects in a transparent and clear way.

### Principles of processing

We comply with all the principles of the data processing.

## Name of Beneficiary: CCDR-N

### 1. Data processing: Personal data

#### Dataset identifier

FRONTSHP1P\_CCDDR-N\_PersonalDataWP9\_DDMMYY\_v00

#### WP and Task

WP9, T9.2 Participatory definition of network of stakeholders, e-learning requirements, final event

#### Dataset description

3. Collection of information on Regional stakeholders contacts from the North region of Portugal, related to activities developed in the scope of WP8 for the Portuguese replication development.
4. Registration of participants in events such as workshops, etc.

#### Purpose of the data

3. Data from the mentioned stakeholders (policy makers, administrations, industries, citizens) will help to define and model the documents that will result from the project, taking into account their feedback and discovering additional good practices and synergies.
4. Collection of contact data necessary for certain communication and dissemination of activities such as organisation of events.

#### Processing activity

Extraction from institutional and project databases, and marketing activities (newsletter and social media)

#### Type of data

Name, nationality, email address, phone, institution, feedback on the project results exposed or any initiatives and problematics identified. For events additionally job position.

#### Special categories of data

*Do you process any of the following categories of data: racial or ethnic origin, political opinions, religious or philosophical beliefs, or trade union membership, genetic data, biometric data, health, sexual orientation? If yes, specify which one.*

No special categories of data.

#### Expected size of data

A few KB

*Do you process criminal offence data?*

Yes

No

#### Data classification

- Public: General outcomes of the consultations and surveys, anonymising data
- Confidential: Rest of personal details (contact and personal data)
- Other:

**Software involved in the data processing**

Spreadsheet databases, online surveys

**Retention period**

*The data will be kept only as long as necessary.*

## 2. Data collection

**Source**

*Where do the data come from?*

From institutional and project databases; marketing activities (social media and newsletters), phone and e-mail direct contacts, and from participants in workshops organised within WP8.

**Means of collection**

From institutional and project databases; marketing activities (social media and newsletters), phone and e-mail direct contacts, and from participants in workshops organised within WP8.

## 3. Data usage

**Legal basis**

- (a) The data subject has given consent to the processing of his or her personal data for one or more specific purposes;
- (f) processing is necessary for the purposes of the legitimate interests pursued by the controller or by a third party, except where such interests are overridden by the interests or fundamental rights and freedoms of the data subject which require protection of personal data, in particular where the data subject is a child.

**Purpose of processing**

Creation of a network of stakeholders to obtain feedback regarding the findings of the “SS2 - Food and Feed” solutions implemented, as well as its review on the strategies developed to replicate the solutions in the North Portuguese region.

## 4. A29WP DPIA Criteria

**Evaluation or scoring: do you carry out any form of profiling?**

- Yes
- No

**Automated decision making: do the data processing involve automated decision making without human intervention?**

- Yes
- No

**Systematic monitoring: are the data used to observe, monitor or control data subject?**

- Yes
- No



**Sensitive data: do you process special categories of data and/or criminal offence data?**

- Yes  
 No

**Matching or combining datasets: do you match/combine different data from different controllers and/or taken for different purpose?**

- Yes  
 No

**Vulnerable groups: data from children, workers, employees, ill persons, or asylum seekers?**

- Yes  
 No

**Use of innovative technologies: e.g., facial recognition, high-risk AI, etc.**

- Yes  
 No

**Prevention: as a result, could the data subjects be prevented from exercising a right or using a service or a contract?**

- Yes  
 No

## 5. Data sharing

**Internal data sharing**

Data may be shared between partners, especially data that comes from regions to provide outcomes of the project such as Good Practises at European level, as well as contacts collected at project level (website and other contacts)

**External data sharing**

No

**Purpose of the data sharing**

Get more feedback from participants on initiatives and needs at regional level in Europe, in relation to the documents produced in the project.

**Legal basis for the data sharing**

- (a) The data subject has given consent to the processing of his or her personal data for one or more specific purposes;
- (f) processing is necessary for the purposes of the legitimate interests pursued by the controller or by a third party, except where such interests are overridden by the interests or fundamental rights and freedoms of the data subject which require protection of personal data, in particular where the data subject is a child.

**DSA/DPA/JCA**

Confidential data will be just shared within the consortium (WP8 and WP9 participants)

## 6. Location – Data transfer

**Location**

CCDR-N servers

**Country(ies) where data is transferred?**

No data will be transferred outside the EU. It will be just transferred to members of WP8
<b>Transfer mechanism</b>
Setting up secure file sharing system, or e-mail
<b>Are any Special Categories of data transferred?</b>
No

## 7. Data security

<b>Security measures</b>
Data will be just shared with specific members of WP8 and WP9. Access to the data is restricted and password protected.
<b>Anonymisation or pseudonymisation techniques</b>
Data are handled and processed only anonymized coded with a randomized participant-ID number, with the purpose of identifying and relating their individual answers across different data collection instances, e.g., during longitudinal studies. These codes will not entail any personal data and will always remain anonymous.

## 8. General principles

<b>Information to Data Subjects</b>
<i>Article 13 and 14 of the GDPR: Has the information been provided to data subjects? If no, please specify if any exemption applies.</i> Information will be provided to data subjects in a transparent and clear way.
<b>Principles of processing</b>
<i>Specify whether you comply with all the principles of the data processing or you have any concerns you may not meet any or some of them.</i> We comply with all the principles of the data processing.

**Name of Beneficiary: Circulair Friesland**

### 1. Data processing: Personal data

<b>Dataset identifier</b>
<b>WP and Task</b>
WP9
<b>Dataset description</b>
<i>Describe the dataset in a few lines.</i> Analysis of communication metrics (social media and website) Registration of participants in events such as workshops, etc.
<b>Purpose of the data</b>

<i>Explain the purpose of the data collection/generation and its relation to the objectives of the project.</i>
Collection of data necessary for certain communication and dissemination activities.
<b>Processing activity</b>
<i>Enter the name of the processing activity, e.g. marketing activities, extracting data from social networks etc.</i>
Extracting data from social media platforms.
<b>Type of data</b>
<i>E.g., name, email address, phone, IP address etc.</i>
Name, number of likes, shares etc.
<b>Special categories of data</b>
<i>Do you process any of the following categories of data: racial or ethnic origin, political opinions, religious or philosophical beliefs, or trade union membership, genetic data, biometric data, health, sexual orientation? If yes, specify which one.</i>
No.
<b>Expected size of data</b>
<i>Do you process criminal offence data?</i>
<input type="checkbox"/> Yes
<input checked="" type="checkbox"/> No
<b>Data classification</b>
<input checked="" type="checkbox"/> Public
<input type="checkbox"/> Confidential
<input type="checkbox"/> Other: <i>Click here to enter text</i>
<b>Software involved in the data processing</b>
<i>Enter the key IT systems(s) used to process or store the data.</i>
Social media platform's inherent analytics.
<b>Retention period</b>
<i>How long will you keep the data for?</i>
As long as necessary, at most until the end of the project/the final reporting.

## 2. Data collection

<b>Source</b>
<i>Where do the data come from?</i>
Social media platform's inherent analytics; event registration services.
<b>Means of collection</b>
<i>How were the data collected, obtained or generated?</i>
The data are generated automatically by usage of the online services and can be retrieved through the platforms.

## 3. Data usage

<b>Legal basis</b>
<i>What is the legal basis for processing according to Article 6 the GDPR?</i>
In case of the communication metrics analysis, processing is necessary for the purposes of the legitimate interests pursued by the controller.

**Purpose of processing**

*Briefly describe the reason(s) why the data is used / processed.*

Regular monitoring of communication activities vital to ensure a high-quality communication strategy execution

**4. A29WP DPIA Criteria**

**Evaluation or scoring: do you carry out any form of profiling?**

- Yes
- No

**Automated decision making: do the data processing involve automated decision making without human intervention?**

- Yes
- No

**Systematic monitoring: are the data used to observe, monitor or control data subject?**

- Yes
- No

**Sensitive data: do you process special categories of data and/or criminal offence data?**

- Yes
- No

**Matching or combining datasets: do you match/combine different data from different controllers and/or taken for different purpose?**

- Yes
- No

**Vulnerable groups: data from children, workers, employees, ill persons, or asylum seekers?**

- Yes
- No

**Use of innovative technologies: e.g., facial recognition, high-risk AI, etc.**

- Yes
- No

**Prevention: as a result, could the data subjects be prevented from exercising a right or using a service or a contract?**

- Yes
- No

**5. Data sharing**

**Internal data sharing**

<p><i>Will the data be shared with other beneficiaries? Specify.</i></p> <p>No. Only if necessary for the project deliverables.</p>
<p><b>External data sharing</b></p>
<p><i>Will the data be shared with third parties outside the GA? Specify.</i></p> <p>No. Only if necessary for the project deliverables.</p>
<p><b>Purpose of the data sharing</b></p>
<p><i>Why (purpose) are the data being shared?</i></p> <p>To keep the project partners informed on the success of communication and dissemination activities.</p>
<p><b>Legal basis for the data sharing</b></p>
<p><i>Specify the legal basis for the data sharing according to Article 6 GDPR.</i></p> <p>Regular monitoring of communication activities vital to ensure a high-quality communication strategy execution.</p>
<p><b>DSA/DPA/JCA</b></p>
<p><i>If the data is shared (with other beneficiaries or third parties) indicate the type of Agreement in place (if needed): Data Sharing (DSA), Data Processing, (DPA) or Joint Controller Agreement (JCA).</i></p> <p>Not needed.</p>

## 6. Location – Data transfer

<p><b>Location</b></p>
<p><i>Where are the data being processed?</i></p> <p>On the internal computers and Google Drives of Circulair Friesland.</p>
<p><b>Country(ies) where data is transferred?</b></p>
<p><i>Are the data being transferred outside the EEA? If yes, to which country(ies)?</i></p> <p>No.</p>
<p><b>Transfer mechanism</b></p>
<p><i>Indicate the data transfer mechanism in place.</i></p> <p>No.</p>
<p><b>Are any Special Categories of data transferred?</b></p>
<p><i>Indicate whether the transfer involves the transfer of special categories of data and/or criminal convictions and offences.</i></p> <p>No.</p>

## 7. Data security

<p><b>Security measures</b></p>
<p><i>Briefly describe the security measures applied to safeguard the data.</i></p> <p>Access to the data is restricted and password protected.</p>
<p><b>Anonymisation or pseudonymisation techniques</b></p>

Specify whether any anonymisation or pseudonymisation techniques have been put in place.  
No.

## 8. General principles

### Information to Data Subjects

Article 13 and 14 of the GDPR: Has the information been provided to data subjects? If no, please specify if any exemption applies.  
Yes.

### Principles of processing

Specify whether you comply with all the principles of the data processing or you have any concerns you may not meet any or some of them.  
Compliant with the principles.

## Name of Beneficiary: Province of Fryslan

### 1. Data processing: Personal data

Dataset identifier	FRONTSH1P_FRL_PersonalDataWP9_DDMMYY_v00
WP and Task	WP9: 9.1, 9.2, 9.3
Dataset description	Collection of email addresses
Purpose of the data	Stakeholder engagement in project's outcomes and events organised by Frontsh1p
Processing activity	Human-related data in the project will come from various sources: <ul style="list-style-type: none"> <li>– Stakeholder meetings;</li> <li>– Interviews</li> </ul>
Type of data	Name, email address
Special categories of data	No
Expected size of data	Do you process criminal offence data? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

**Data classification**

- Public
- Confidential
- Other: [Click here to enter text](#)

**Software involved in the data processing**

Microsoft Forms, Excel, OneDrive.

**Retention period**

The data will be kept only as long as necessary. At most until the end of the project/the final reporting.

**2. Data collection**

**Source**

Directly from respondents using: Microsoft Forms, personal, email and phone correspondence, survey forms.  
Indirectly from the institution's internal databases.

**Means of collection**

Data was collected using: Microsoft Forms, personal, email and phone correspondence, survey forms

**3. Data usage**

**Legal basis**

Policy on data collection and processing of the Province of Fryslan (2021)

**Purpose of processing**

The aim is generate interest for activity in scope of circular economy that contribute to overcoming market failures in the areas covered by the systemic solutions implemented in the project

**4. A29WP DPIA Criteria**

**Evaluation or scoring: do you carry out any form of profiling?**

- Yes
- No

**Automated decision making: do the data procesing involve automated decision making without human intervention?**

- Yes
- No

**Systematic monitoring: are the data used to observe, monitor or control data subject?**

- Yes
- No

**Sensitive data: do you process special categories of data and/or criminal offence data?**



<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Matching or combining datasets: do you match/combine different data from different controllers and/or taken for different purpose?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Vulnerable groups: data from children, workers, employees, ill persons, or asylum seekers?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Use of innovative technologies: e.g., facial recognition, high-risk AI, etc.</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Prevention: as a result, could the data subjects be prevented from exercising a right or using a service or a contract?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

## 5. Data sharing

<b>Internal data sharing</b>
Yes
<b>External data sharing</b>
No
<b>Purpose of the data sharing</b>
The aim is generate interest for activity in scope of circular economy that contribute to overcoming market failures in the areas covered by the systemic solutions implemented in the project
<b>Legal basis for the data sharing</b>
Policy on data collection and protection, province of Fryslan (2021)
<b>DSA/DPA/JCA</b>
N/A

## 6. Location – Data transfer

<b>Location</b>
All data and metadata will be deposited in the internal repository of Province Fryslan servers on Microsoft OneDrive Cloud.
<b>Country(ies) where data is transferred?</b>
No
<b>Transfer mechanism</b>
N/A



<b>Are any Special Categories of data transferred?</b>
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No
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## 7. Data security

<b>Security measures</b>
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Access to the data is restricted and password protected.
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<b>Anonymisation or pseudonymisation techniques</b>
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N/A
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## 8. General principles

<b>Information to Data Subjects</b>
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Yes
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<b>Principles of processing</b>
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Compliant with the principles.
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