



HarvREST
Greener Farming with RES

D1.5

Data Management Plan (mid-term update)

20/ 06 / 2025



Funded by
the European Union

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PROJECT INFORMATION

ACRONYM	HarvRESt
PROJECT NAME	Harnessing the vast potential of RES for sustainable farming
PROGRAMME	Horizon Europe
TOPIC	HORIZON-CL6-2023-CLIMATE-01-7
TYPE OF ACTION	HORIZON Research and Innovation Actions
PROJECT NUMBER	101136904
START DAY	1 January 2024
DURATION	36 months

DOCUMENT INFORMATION

TITLE	D.1.5 Data Management Plan (mid-term update)
WORK PACKAGE	WP1
TASK	T1.3
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CONTRIBUTORS	All partners
DATE	20/06/2025
DISSEMINATION LEVEL	Public

DOCUMENT HISTORY

VERSION	DATE	CHANGES	RESPONSIBLE PARTNER
0.1	14/05/2025	First draft version	CIRCE
0.2	06/06/2025	Comments, suggestions and addition of data	All partners
0.3	13/06/2025	Final draft	CIRCE
1.0	20/06/2024	Final version submitted to EC	CIRCE

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This project has used a standard methodology already developed in the NENUPHAR project (Grant Agreement number: 101082169). *Ad hoc* modifications were added to comply with the conditions of the Grant Agreement for HarvRESt project (Grant Agreement number: 101136904).

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ABBREVIATIONS

AVPP	Agricultural Virtual Power Plant
C&D	Communication and Dissemination
CA	Consortium Agreement
CATI	Computer Assisted Telephone Interviewing
DK	Denmark
DLV	Deliverable
DMP	Data Management Plan
DOI	Digital Object Identifier
DSS	Decision Support System
EC	European Commission
EOSC	European Open Science Cloud
ES	Spain
EU	European Union
FAIR	Findable, Accessible, Interoperable, and Reusable
GA	General Assembly
GDPR	General Data Protection Regulation
ID	Identification
IPR	Intellectual Property Rights
ISO	International Organization for Standardization
JEL	Journal of Economic Literature
KER	Key Exploitable Result
KPI	Key Project Indicator
MCDA	Multi Criteria Decision Analysis
ML	Machine Learning
NUE	Nitrogen Use Efficiency (NUE)
PC	Project Coordinator
RES	Renewable Energy System
RWG	Regional Working Group
UC	Use Case
WP	Work Package
WPL	Work Package Leader

1. EXECUTIVE SUMMARY

As part of the European Commission's commitment to advancing Open Science policies and practices, data management is a critical component of Horizon Europe projects. It ensures long-term accessibility and preservation of data both during and after the project's duration.

This deliverable, the "Data Management Plan (mid-term update) (D1.5)," developed under WP1 Management & Coordination of the HarvRESt project, is based on the Horizon Europe Data Management Plan template [1] and aligns with the Consortium Agreement clauses signed by the partners. It establishes the framework for managing data creation, use, and handling throughout the project and it is an update of "Data Management Plan (first draft) (D1.2),"

The Data Management Plan (DMP) outlines the types of data that HarvRESt are generating, detailing their exploitation or accessibility for verification and reuse, and describing their treatment and preservation. The DMP aims to improve research efficiency, save time and resources, enhance data security, and minimize the risk of data loss. It emphasizes making data findable, accessible, interoperable, and reusable according to the FAIR principles.

Additionally, the document includes guidelines, recommendations, and useful information on repositories, strategies, and data management practices following the FAIR principles. It also provides a specific explanation of GDPR compliance, detailing how data will be handled in accordance with these regulations. Finally, a table with all the data set generated and used so far has been added.

2. INTRODUCTION

Competitive conflicts for land use between the energy and food sectors have appeared, which could be mitigated by the vertical integration of Renewable Energy Sources (RES) in farms through new circular business models. By this approach, farms will become climate neutral, optimising their production and reducing their impact on natural resources and biodiversity, on top of providing energy services to communities and diversifying their economic income.

HarvRESt is trying to solve this problem improving the existing knowledge of the use of RES in the agro food sector. For that an Agricultural Virtual Power Plant will be developed able to run different scenarios and farm configurations to determine the best operation procedures for a given RES solution. This data will be then provided to a decision support system able to weight trade-offs and key indicators to provide ad-hoc recommendations to farmers and policy makers, thus enabling the consecution of improved production rates on renewable energy, food & feed within agro communities.

To achieve these ambitious objectives, data collection, creation, and management is needed during and after the project execution. The aim of this DMP is to present information regarding what data the project is generating, whether and how it is being exploited or accessible for verification and re-use, and how it is curated and preserved. It is expected that the DMP increases research efficiency, saves time and resources in the long run, enhances data security and minimizes the risk of data loss.

In order to be clear with the content updated in this version, all original content defined in D1.2 served as a basis for this deliverable, will be kept in black colour, and only new text included in the present deliverable D1.5 will be coloured in blue. Furthermore, it's also relevant to remark at this early stage that the list of DMP deliverables follows the EC proposed structure templates and the analysis and methodology already performed and executed by CIRCE as Project Coordinator has in other projects.

Important definitions followed in this document are:

- **Input Data** under the frame of the HarvRESt project should be understood as the needed inputs to carry out the mapping and linking with best practices and existing initiatives on farms decarbonisation, interviews with key stakeholders, surveys, characterisation of demos, demo tests, AVPP, DSS, models, methodologies, technologies (research outputs), warm-up events, workshops, C&D and capacity building activities, among others.
- **Derived Data** under the frame of the HarvRESt project should be understood as workflows, policy recommendations, business models, equipment, tools and any other tentative result created by project partners.

The objective of previous D1.2 Data Management Plan (first version), was to set up the basis for the Data Management in HarvRESt. This current D1.5 aims at updating the content, providing a first identification of data each partner executing technical work used and generated during the project to check if any further adaptations are needed to comply with initial defined methodology. HarvRESt coordinator, CIRCE, has prepared the first version of DMP at the beginning of the project (M6) and now it is presented the updated version in M18. The DMP will be updated another last time at M36 (D1.8) with all types of data resulting from HarvRESt, and how they have been managed by the Consortium.

3. DATA SUMMARY

Following the EU's guidelines regarding the DMP, this section aims to address:

- The purpose of the data collection/generation and its relation to the objectives of the project
- Types and formats of data generated/collected by the project
- Sharing/access policies applied to each dataset
- Expected size of the data
- Origin of the data
- Re-use of any existing data
- Data utility

This section provides a description of those elements in order to ensure their understanding by the partners of the consortium. [Moreover, in annex 3, a table with all the information about the data used and generated until now during the execution of the project can be consulted. This information has been obtained from partners through a questionnaire that all partners have filled in.](#)

3.1 Purpose of data collection

As stated in the introductory section, HarvRESt is a project that relies on data collection and use/re-use during the project's implementation. In order to fulfil the objectives of HarvRESt, the project team expects to be collecting data of various kinds, sizes and qualities.

[With the general purpose of the project in mind, the plan showed in D1.2 to reuse and obtain existing data for other research projects, bibliography, etc. has been followed. Additionally, HarvRESt aims to generate new datasets based on the project's activities. This process is ongoing throughout the project's execution. Intermediate data, such as preliminary experimental results and other desk research, are being archived in the repositories of the respective partners, and only final results such as deliverables or data needed from partners for developing the algorithm, digital tools, etc. are being put available to the rest of the Consortium.](#)

[As illustrated in the annex, various data types \(questionnaires, surveys, deliverables, technical documentation, etc.\) are accessible across multiple work packages \(WPs\) within the project for demonstration activities. This list is expected to increase until the end the project.](#) Additionally, during dissemination and communication efforts, the project will generate further datasets, including public deliverables, scientific reports, articles, and other publicly accessible communications. Within the consortium, a broad array of data is exchanged for management purposes, such as emails and financial reports. Many of these management-related activities involve sensitive and confidential information, which is restricted to the relevant parties. All sensitive and confidential data concerning individuals and companies collected during HarvRESt activities will be handled in accordance with data privacy laws and the terms of the HarvRESt Grant Agreement and Consortium Agreement.

In summary, it is clear that a variety of data are made available throughout the project. The subsequent sections are detailing how HarvRESt partners plan to manage these different datasets, following the template provided by the European Commission (EC).

3.2 Types and formats of data

HarvRESt project covers many activities with varied data needs across the different tasks and demo sites, such as relevant parameters monitored, tests results, measurements, observations resulting from fieldwork, surveys results, interviews recordings with key stakeholders and images, deliverables, publications, etc. In addition, data [is reused](#) if derived from other sources (old projects, public sources, etc.) or generated by the project partners (by means of measurement campaigns). Some of the types and/or formats of data used and/or collected in the project are identified below.

Types of data

- Numerical, quantitative, data defining specific characteristics or values for variables. Either existing or generated (physical and chemical characteristics, technology, sizing, other market data, data to define existing regulatory conditions, etc.).
- Derived data, that arises from data analytics or further processing of raw data, such as that might be generated by the models developed in the project, or any data processing in research.
- Qualitative data relating to results of and project activities, like research data, surveys, questionnaires, etc.
- Project Management data, such as meeting attendance lists, contact lists, financial information, and other data on the project activities.

Formats

To ensure that it can be easily shared and worked with by all partners involved, mainly widespread usage data types are used (for the data types as presented above). For the management activities of the project:

- Microsoft Office formats readable in Excel, Word, PowerPoint (.doc, .docx, .xls, .xlsx, .ppt, .pptx. etc)
- General file types readable by a range of software (.csv, .xml, .json and .txt)
- Illustrations and graphic designs: Microsoft Visio (.vsd), Adobe Photoshop, Canva, Illustrator and InDesign (.jpg, .png, .tiff and .ai files)
- PDF: Variety of documents such as reports, roll-ups and leaflets
- Audio/Video files: .mp3, .wav, .avi, Windows Media Video or QuickTime Movie

Formats that are proprietary, not widely used or not supported by commonly available software [are being avoided](#). Where unavoidable an attempt should be made (by the responsible partner- data subject) to facilitate the reuse within the project.

3.3 Sharing/access policies applied to each dataset

Based on access policies, the data types can be categorized as follows:

- **General Data Protection Regulation (GDPR) Covered Data:** This includes all personal data collected for the project. Such data must be collected and handled in compliance with the GDPR and relevant national regulations. The data collector is responsible for its proper handling. Personal data cannot be shared outside the partnership without prior notification and agreement from the involved parties.

Consequently, this data cannot be included in any public repository and can only be shared in specific situations in accordance with the regulations.

- **Restricted Scope:** This category includes data, metadata, restricted documents, and other information that are reused and generated for various tasks but require limited access. These materials should be stored in different repositories with specific rules applicable to each situation. This allows partners to have restricted access to certain data and metadata as needed.
- **General Scope Inside the Consortium:** This encompasses data, metadata, deliverables, working documents, bibliographic research lists, and common information necessary for the collaborative tasks and overall project development. All partners have access to this data and the relevant repositories where it is stored.
- **General Scope Outside the Consortium:** This includes public deliverables, conference presentations, press releases, dissemination materials, newsletters, and other information that can be made available to the general public through HarvRESt's webpage, CORDIS, or other public repositories.

According to the open data principles, data should be "as open as possible, as closed as necessary". Thus, the project partners must aim to use and generate General Scope, although different categories exist for the cases that are needed.

3.4 Expected size of data

Data generated from project activities (such as deliverables, communication materials, and reports) [are being](#) stored in Microsoft SharePoint, which serves as the project's internal repository. Additional repositories [are used](#) based on access rights, such as a website for public deliverables. To avoid issues with email recipients, a maximum file size of 15 MB [is enforced](#). However, SharePoint is available to accommodate larger files when necessary.

In any case, some dataset, models, etc. may have a big size (e.g., 40 GB) although the number of the data assets to be considered is limited. In any case, the Consortium (and more specifically the partners who are responsible to store the data generated from the technical activities performed in the project and to create the AVPP and DSS) [are taking](#) all measurements to ensure the prompt storage of the HarvRESt datasets.

3.5 Origin of the data collection & re-use of existing data

During the project, HarvRESt partners [are generating](#) their own data from measurements and analyses of variables and models. Additionally, existing data [are being reused](#) alongside the new data generated within the project. In addition to the expertise and own knowledge of the project partners, HarvRESt [is using](#) previous research efforts, existing literature, and experiences from other projects and sector-specific studies. Data [is collected](#) from ongoing or completed projects, bibliographic data from scientific papers, and other well-known public sources. All gathered data [is properly cited](#), referenced, and stored.

3.6 Data utility

During and after the project, the data outputs of HarvRESt may be utilized to disseminate the results to many different stakeholders. As target groups for the different innovations of the HarvRESt project, the following list of stakeholders may be interested in the data generated during the project (a detailed stakeholder mapping [is being carried out](#) in Task 3.1.):

- Farmers
- Agricultural associations
- Energy cooperatives
- Medium and large sized energy industries
- Energy consultants and service providers
- Fertiliser producers
- Policy makers and public bodies
- Technical experts and scientific community
- Society as a whole

It is clear that there is significant interest in the results generated by the project. Therefore, whenever possible and practical, project partners [are adopting](#) the FAIR principles (Findable, Accessible, Interoperable, and Reusable) to open and make available data and results that could benefit professionals in research, investigation, planning, and other fields. As the project progresses and the focus on exploitation becomes clearer, the data and findings [are being](#) updated to further the exploitation goals of the partners.

4. FAIR DATA

This DMP is based on the concept of FAIR data, that stands for data that is Findable, Accessible, Interoperable and Reusable, even if the access will not be always open (Figure 1). Following FAIR principles aids in data use/reuse within the consortium to complete the actions required under the Grant Agreement and facilitates reuse beyond the HarvRESt project.

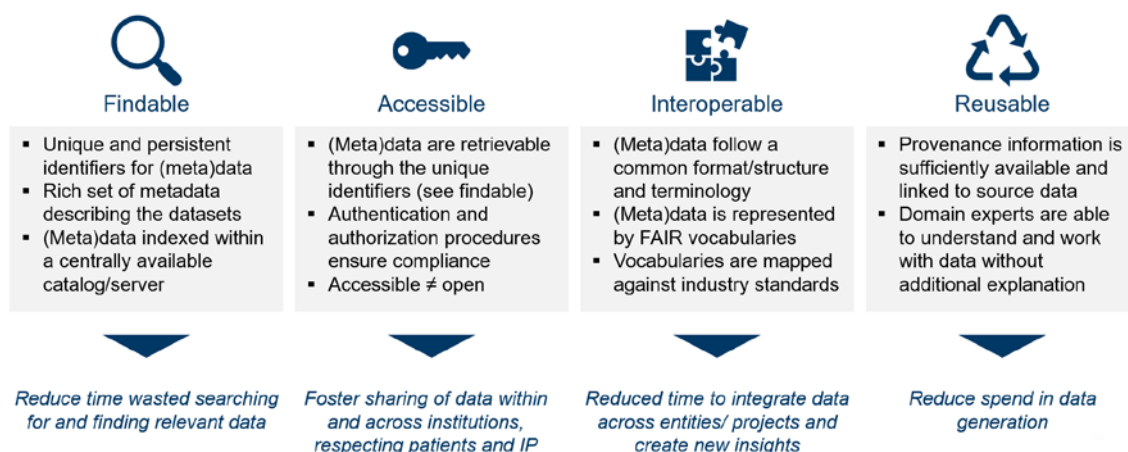


Figure 1. Criteria for and direct value generated by FAIR data [2]

Within this subsection general information and recommendations for partners are provided to make project data FAIR.

4.1 Making data findable

In creating FAIR digital resources, consistent data, that is persistent and with unique identifiers is needed. Towards this direction, a series of actions should be considered for creating data that are findable:

- Define the way the data can be discovered (including metadata provisions)
- Define the way the data can be identified referring to a standard identification mechanism.
- Define the way naming conventions to be used.
- Define the way method towards search keywords.
- Define the way for versioning control.
- Define the way the standards for metadata generation (if any).

The details of the different steps are presented below.

4.1.1 Data identification and naming

Data findability can be greatly enhanced following a consistent set of naming conventions. Because of this, HarvRESt is promoting the creation of consistent data file names that provide clues to their content, status and versioning, while also increasing their discoverability. In doing so, project partners as well as interested stakeholders are easily identifying a file as well as classify and sort them.

A key principle in establishing naming conventions is to craft concise, yet informative, names for data files, that facilitate classification. It is advisable to avoid the utilisation of spaces, dots, or special characters (such as

& or !) in the naming convention, while underscores (_) are recommended for delineating elements within the file name and enhancing readability. Additionally, integrating versioning into the naming convention is essential for transparently delineating modifications and updates to a file.

For instance, a suggested naming convention for datasets within the project could be structured as follows:

- WP number associated with the dataset
- Acronym of the partner responsible for creating/collecting and managing the dataset, specifically the short name as presented in Grant Agreement
- Descriptive data set name;
- Numerical data set sub index (starting from 1) so as to identify data sets created/collected at different times with individual metadata.

The proposed format [is followed](#) for naming the data sets (enabling that way the identification of the data sets internally and when published as open dataset) and a naming example is shown below:

HarvRESt_[Wpnumber]_[Description]_[Responsible_Partner]_[Data_set_Sub_Index]

Example: HarvRESt_WP2_bestpractices_CKIC_1

Similar process [is being followed](#) for deliverables. These files should have an alphanumeric code included in the name which identifies the version number and date of creation of the version.

HarvRESt_DX.X [Name of the deliverable]_[Responsible Partner]

Example: HarvRESt_D1.2 Data Management Plan (first draft)_CIRCE

To avoid potential localization and informatic issues when using SharePoint, the naming of datasets should be limited to approximately 50 characters.

When possible, Digital Object Identifier (DOI) are being used to identify content and provide a persistent link to its location on the Internet. DOI is a unique alphanumeric string assigned by a registration agency (the International DOI Foundation). The publisher assigns a DOI when an article is published and made available electronically.

The DOI is typically located on the first page of the electronic journal article, near the copyright notice. The DOI can also be found on the database landing page for the article. The DOI system has been standardised through the International Standards Organisation, ISO (within the responsibility of committee ISO TC46/SC9, Identification and documentation) as ISO 26324, Digital Object Identifier System.

All DOI numbers begin with a 10 and contain a prefix and a suffix separated by a slash. The prefix is a unique number of four or more digits assigned to organizations; the suffix is assigned by the publisher and was designed to be flexible with publisher identification standards.

4.1.2 *Keywords*

In general, keywords are a subset of metadata and include words and phrases used to name data. In the context of HarvRESt, keywords [are used](#) to add valuable information to the data collected/generated as well as to facilitate the description and interpretation of its content and value. Along these lines, the project's strategy on keywords is underpinned by the following principles:

- The who, the what, the when, the where, and the why should be covered.

- Consistency among the different keyword tags needs to be ensured.
- Relevant, understandable, and clear keywording ought to be sought.

The keywords must accurately reflect the content of the datasets and avoid words used only once or twice within them.

When possible, deliverables that produce core output could be tagged with keywords following the [JEL Classification System](#). Moreover, all the scientific papers that will be produced during the execution of the project will include a list of keywords that will make their search easier.

4.1.3 *Metadata generation*

In creating FAIR digital resources, metadata can (and should) be generous and extensive, including descriptive information about the context, quality and condition, or characteristics of the data. The definition of metadata should obviously be relevant to the specific data sets used/generated by consortium members for their different project tasks.

For this reason, the creation of metadata is considered as a good practice within the HarvRESt project. Metadata should include the following information:

- Datasets (description, date of deposit, author(s), venue and embargo)
- Horizon Europe
- Potential of RES for sustainable farming
- HarvRESt (101136904);
- Licensing terms of the data
- Persistent identifiers for the dataset
- Authors involved in the action, and, if possible, their organisations

Examples of metadata standards can be found in the reference [3]. Metadata is usually presented in two formats – contextual information about the data in a text-based document and ISO 19115 standard metadata in an xml file–. These two formats for metadata provide a full explanation of the data (text format) and ensure compatibility with international standards (.xml format).

4.2 Making data accessible

In line with the accessibility principles of the HarvRESt project, it is crucial to specify which data will be openly available and to justify why certain datasets remain closed. This involves detailing where the data, along with associated metadata, documentation, and code, will be deposited and how it can be accessed. The project follows the principle of "making data as open as possible and as closed as necessary." This approach encourages project partners to disseminate data that offers long-term value to external stakeholders without compromising the confidentiality and privacy of those who contributed to the data collection or generation. The goal is to maximize the beneficial impact of HarvRESt.

HarvRESt partners are dedicated to promoting collaborative work and the systematic sharing of knowledge and tools throughout the research process. This commitment is being addressed through the application of open science practices:

- **Early and open sharing of research:** In the first stage of WP where technologies are being developed (WP3-WP6) and validated (WP6), HarvRESt partners [are presenting partners the methodology to increase transparency about the purposes and methods of the study. This methodology is included in the deliverables, and public deliverables are be posted on the HarvRESt public website.](#)
- **Involvement of relevant knowledge actors, including citizens:** HarvRESt [is](#) engaging the citizens and key local stakeholders through the information sessions, workshops, awareness raising campaigns, events to foster participation on the project topics and gather their main concerns in the area, providing insights for the development of HarvRESt overall solutions. Engagement and awareness creation through knowledge sharing [are being](#) key to support farmers, agricultural stakeholders, agro-food industry and citizens in a transition to a more decarbonized food production value chain.
- **Research output management and measures to ensure reproducibility of research outputs:** HarvRESt [is ensuring](#) the reproducibility of the outputs by covering the three main research processes that reproducibility is based on: reproduction, replication, and re-use. All these processes rest on the availability of data and methods from the original study. All the outputs of the project (data, reports, publications, etc.) will be available in Open Access repositories through publications in open repositories, journals [or project website.](#)
- **Open access to research outputs and participation in open peer-review:** A dedicated budget for open access scientific publications is reserved. Open access clauses [appear](#) in the Consortium Agreement (CA) and the Grant Agreement (GA). For every publication, no later than 6 months after the publication is released, a machine readable electronic copy of the published manuscript will be available on the website. Research data and bibliographic metadata needed to validate published results will be stored in the repository respective area. Finally, to make project knowledge publicly available, the dissemination leader will exploit EC open access portals and tools (e.g., OpenAIRE, Horizon the EU Research and Innovation Magazine, Research*EU Results Magazine, etc.).

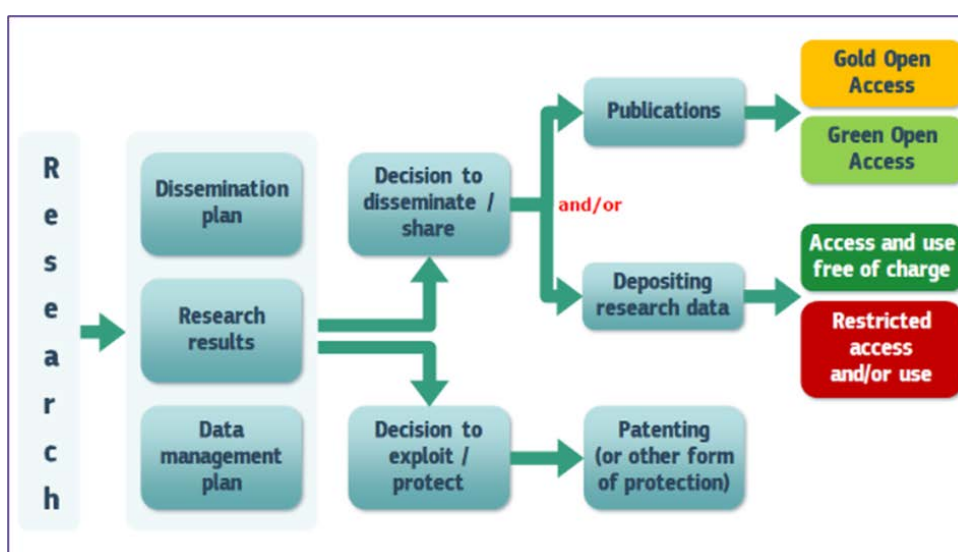


Figure 2. Open Access strategy for publications and scientific data [4]

Open Access to scientific publications may be achieved in two ways as presented above in Figure 2 figure:

- **Self-archiving / “Green” open access:** these are the publications that can be made available in an online repository before, at the same time as, or after publication (with no extra costs to be required). Green open access implies no publishing costs for the project, but the final version of the article will only be available to journal subscribers. With green access, the author's version of the article (not the journal version) can be published elsewhere, in HarvREST's case on the project website and ZENODO. Many of the major journals in the field require a 24-month embargo with green access schemes.
- **Open access publishing / “Gold” open access:** the article is immediately published in open access mode but require a fee to be paid. In that case the publication costs are usually covered by the entity (university, institute, etc.) funding the research. In other cases, the costs of open access publishing are covered by subsidies or other funding models. Publishing under the gold access scheme typically costs between 2 000€ and 3 000€ per article. However, it is important to remark that this cost is only accepted within Horizon Europe rules in “full open access publishing venues”. Gold access will be preferred within the limits of the project budget.

To comply with the open access principles, HarvREST **is applying** a hybrid of gold and green access schemes. Choosing the scheme **is determined** by the project coordinator, the dissemination lead, and the partners concerned on a case-by-case basis.

The project target is to publish **at least 8 scientific and technical publications**, and a dedicated budget for open access scientific publications is reserved in the project. However, in cases where the budget falls short, and in order to allocate dissemination resources effectively, the utilization of gold access should be applied selectively for each case.

According to the Consortium Agreement signed by the partners article 8.4.2:

“8.4.2 Dissemination of own (including jointly owned) Results.

8.4.2.1

During the Project and for a period of 1 year after the end of the Project, the dissemination of own results by one or several Parties including but not restricted to publications and presentations, shall be governed by the procedure of Article 17.4 of the Grant Agreement and its Annex 5, Section Dissemination, subject to the following provisions.

Prior notice of any planned publication shall be given to the other Parties at least 30 calendar days before the publication. Any objection to the planned publication shall be made in accordance with the Grant Agreement by written notice to the Coordinator and to the Party or Parties proposing the dissemination within 15 calendar days after receipt of the notice. If no objection is made within the time limit stated above, the publication is permitted.”

Thus, **prior to any publication all the involved parties must notify CIRCE as coordinator and FBCD as C&D Leader**, to ensure that the process is followed accordingly.

4.2.1 Repository

The general repository for the project outcomes and work is Microsoft SharePoint and CIRCE has provided access to all partners. This repository must store information from the partners-related tasks such as drafts versions of reports, data for the work, bibliographic information, etc. The information available in this

SharePoint [is](#) accessible by all partners. In addition to the project internal repository, additional repositories are considered under the FAIR principles.

The publicly available reports and other documents related to the project [are](#) accessible from the HarvRESt project website, as well as the CORDIS results webpage (<https://cordis.europa.eu/project/id/101136904>). Moreover, for making its research data FAIR, HarvRESt partners are encouraged to use the free ZENODO repository (more information regarding ZENODO at Annex 2 ZENODO). A HarvRESt community has been established on the ZENODO website (<https://zenodo.org/communities/harvrest>), where all public datasets and deliverables, as well as possible scientific publications with green open access, will be uploaded. It is also possible to allow open access through organisations own solutions, such as via direct links to papers.

4.2.2 *Results “As open as possible, as closed as necessary”*

The Consortium [are doing](#) the best to make data open and accessible. As an exception, the beneficiaries do not have to ensure open access to specific parts of their research data, if the achievement of the action's main objective (as described in Annex 1 of the Grant Agreement) would be jeopardised by making those specific parts of the research data openly accessible. In this case, the Data Management Plan must contain the reasons for not giving access.

Following the methodology of the Open Access strategy towards defining which data are to be made openly accessible, here it is presented a simple structural approach formed by a list of simple (but important) questions that must be answered to classify the different datasets or information as part of the DMP:

- Q1: Does a result provide significant value to others or is it necessary to understand a scientific conclusion?
 If Yes, then the result is classified as public (i.e., granted for open access). If the answer to Q1 is No, the result is classified as non-public. (e.g., code that is very specific to a platform (e.g., a database initialization) is usually of no scientific interest to anyone, nor does it add any significant contribution.
- Q2: Does a result include personal information that is not the author's name?
 If Q2 is answered with Yes, the result is classified as non-public. Any personal information further than the name must be removed if it should be published according to the ethics management plan of the project.
- Q3: Does a result allow the identification of individuals even without the name?
 If Q3 is answered with Yes, the result is classified as non-public.
- Q4: Can a result be abused for a purpose that is undesired by society in general or contradict with societal norms and the project's ethics?
 If Q4 is answered with Yes, the result should be classified as non-public. This is also managed by the ethics management plan of the project.
- Q5: Does a result include business or trade secrets of one or more partners of the project?
 If Q5 is answered with Yes, the result should be classified as non-public. Any business or trade secrets need to be deleted in accordance with all partners' requirements prior to being published.

- Q6: Does a result name technology that consist of an ongoing, project-related patent application?

If Q6 is answered with Yes, the result should be classified as non-public. The result can be published once a patent has been filed.

- Q7: Does a result break security interests for any project partner?

If Q7 is answered with Yes, the result should be classified as non-public.

In any case, it is important to point out that HarvRESt partners are obliged to comply with the Annex V of the Grant Agreement, when referring to Open Science:

“Open science: research data management

The beneficiaries must manage the digital research data generated in the action (‘data’) responsibly, in line with the FAIR principles and by taking all of the following actions:

- *establish a data management plan (‘DMP’) (and regularly update it)*
- *as soon as possible and within the deadlines set out in the DMP, deposit the data in a trusted repository; if required in the call conditions, this repository must be federated in the EOSC in compliance with EOSC requirements*
- *as soon as possible and within the deadlines set out in the DMP, ensure open access — via the repository — to the deposited data, under the latest available version of the Creative Commons Attribution International Public License (CC BY) or Creative Commons Public Domain Dedication (CC 0) or a licence with equivalent rights, **following the principle ‘as open as possible as closed as necessary’**, unless providing open access would in particular:*
 - *be against the beneficiary’s legitimate interests, including regarding commercial exploitation, or*
 - *be contrary to any other constraints, in particular the EU competitive interests or the beneficiary’s obligations under this Agreement; if open access is not provided (to some or all data), this must be justified in the DMP*
- *provide information via the repository about any research output or any other tools and instruments needed to re-use or validate the data.*

Metadata of deposited data must be open under a Creative Common Public Domain Dedication (CC 0) or equivalent (to the extent legitimate interests or constraints are safeguarded), in line with the FAIR principles (in particular machine-actionable) and provide information at least about the following: datasets (description, date of deposit, author(s), venue and embargo); Horizon Europe or Euratom funding; grant project name, acronym and number; licensing terms; persistent identifiers for the dataset, the authors involved in the action, and, if possible, for their organisations and the grant. Where applicable, the metadata must include persistent identifiers for related publications and other research outputs.”

4.2.3 *Metadata*

From the Annex V of the Grant Agreement, when referring to Open Science:

“Metadata of deposited data must be open under a Creative Common Public Domain Dedication (CC 0) or equivalent (to the extent legitimate interests or constraints are safeguarded), in line with the FAIR principles (in particular machine-actionable) [...]”

Even if the original data is missing, tracking down people, institutions or publications associated with the original research can be extremely useful. For this reason, as a good practice, the partners should prepare the metadata when needed, and are encouraged to make it publicly available. Metadata should be stored in the general repository or even if considered as a good practice, make publicly available by means of the project webpage, or open access repositories as ZENODO.

For the general purposes, data and the metadata stored in the SharePoint of the project will remain available for one (1) extra year and for four (4) additional ones CIRCE will store them and provided it to partners under request.

Project website and the materials stored on them will be available and active two (2) years after the end of the project.

Considering the utilization of external repositories (CORDIS, ZENODO, etc.) the data/metadata that could be open at that stage will be made available after the end of the project for further use. There are no specific limitations about the period data will be made available and findable.

Other specific situations need to be studied in detail. Nevertheless, according to the Grant Agreement two (2) years are expected according to the record keeping obligation.

4.3 Making data interoperable

The data produced and generated in HarvRESt must facilitate data exchange and reuse among researchers, institutions, organizations, and countries. To ensure interoperability, (meta)data must utilize a formal, accessible, shared, and broadly applicable language for knowledge representation, adhere to vocabularies that follow FAIR principles, and include qualified references to other (meta)data.

Therefore, in line with the interoperability principles of the HarvRESt project, it is essential to predefine the standard or field-specific data and metadata vocabularies and methods to be used to enable data exchange, reuse, and interoperability. While the project does not intend to use uncommon data models or create project-specific ontologies or vocabularies, the consortium is committed to making project-specific information as publicly available as possible for further reuse.

To support this effort, standard vocabularies [are being applied](#) to all data types within the dataset, promoting interdisciplinary interoperability. For example, acronyms [are being explained](#) in brackets upon their first use. Additionally, each deliverable [is including](#) a comprehensive list of acronyms and abbreviations, along with the necessary definitions, to ensure proper interoperability among users and consumers.

The following typographic conventions are used in this specification:

- 1) A variable in pseudo-code or in an algorithm description is in italics (*variable*).
- 2) A definition of a term, to be used elsewhere in this or other specifications, is in bold and italics (***definition***)

- 3) A reference to a definition in this document is underlined and is also an active link to the definition itself (definition reference)
- 4) A reference to a definition in this document, when the reference itself is also a markup, is underlined, red-orange monospace font, and is also an active link to the definition itself (markup definition reference)
- 5) A hyperlink is underlined and in green (hyperlink).
- 6) A document reference (normative or informative) is numbered in order of appearance, enclosed in square brackets and linked to the references section [reference].

Furthermore, the consortium is committed to explicitly stating references to other project data or datasets from previous research, if available, to maintain transparency and traceability.

4.4 Making data reusable

To ensure reusability, (meta)data must possess a range of accurate and relevant attributes, be released with a clear and accessible data usage license, include information about their provenance, and adhere to domain-relevant community standards.

Given the significance of the HarvRESt project, it is essential that all generated information and data can potentially be reused in future projects and experiments, contingent upon the consortium's agreement. The consortium should strive to make a broad array of curated data available for further reuse. For instance, partners who generate or reuse data are encouraged to use readme files or other documentation, which can be stored in the general SharePoint.

While the Consortium is not obligated to make all data available, it will review the data for potential availability to ensure the widest possible reuse. In such cases, data will be licensed using standard reuse licenses, in accordance with the Grant Agreement obligations. Research publications and their underlying data will be subject to a Creative Commons (CC) license, typically CC BY, unless there are compelling reasons, such as intellectual property rights (IPR), to choose a different license [5]. The CC BY license allows for distribution, remixing, adaptation, and building upon the material in any medium or format, provided the author is credited, and also permits commercial use. For monographs and other long-text formats, licenses excluding commercial use, such as CC BY-NC and CC BY-ND, may be used. Additionally, the metadata of deposited publications must be open under CC0.

Although reuse is not the primary focus at this stage of the project, it is crucial that all partners aim for data reuse. This practice is encouraged by CIRCE as a standard to follow.

Finally, it is important to note that data reuse is facilitated when datasets are consistent: they should be of the same type, organized in a standardized manner, use well-established and sustainable file formats, and have documentation (metadata) that follows a common template and uses common vocabulary. Community standards or best practices for data archiving and sharing should be adhered to whenever they exist.

5. ALLOCATION OF RESOURCES

As the Coordinator of the HarvRESt Project, CIRCE is ultimately responsible for data management. However, to ensure the proper, effective, and secure handling of data collected and/or generated across different Work Packages, specific data management roles need to be established.

To this end, the following responsibilities have been assigned:

- **Project Coordinator (PC):** CIRCE, as the PC, oversees overall data management within the HarvRESt framework. This includes developing the DMP and updating it as needed with support from all partners. The PC also creates appropriate templates for informed consent forms and information sheets for use by project partners during relevant activities. Additionally, the PC collaborates closely with Work Package and Task Leaders to decide how collected and/or generated data during the project's lifespan is shared and made available for reuse.
- **Work Package Leaders (WPL):** WPLs coordinate the implementation of data processing activities within their respective Work Packages. They work with the PC and Task Leaders to determine whether and how the data gathered or produced under their WPs will be shared or reused. WPLs are also primarily responsible for ensuring the quality of data from their WP activities, assessing data quality, and indicating any needed improvements to Task Leaders.

In the HarvRESt project, costs related to making data FAIR (Findable, Accessible, Interoperable, and Reusable) and ensuring open access to research data include:

Efforts of the project partners:

1. Preparation and supervision of the DMP's applicability (CIRCE).
2. Compiling, handling, and adapting data to adhere to FAIR principles.
3. Preparing project reports and scientific publications.
4. Reviewing reports developed by other project partners.

Other direct costs:

1. Disseminating project results at relevant congresses/scientific events.
2. Translation services related to project data/publications.
3. Costs associated with making project results available in Open Access.
4. Indirect costs associated with the above efforts.

These costs are eligible under the Horizon Europe Grant, provided they comply with the Grant Agreement conditions. Initially, an estimated 50,000€ of the total project budget (1%) have been allocated to making data FAIR and ensuring open access to project results. This estimate does not include the cost of the Microsoft SharePoint license.

All partners [are using](#) their own repositories to store copies of the data, maintaining confidentiality and not disclosing any information. Specific discussions about data value and reuse potential could take place during General Assembly meetings as needed.

The Microsoft SharePoint will be accessible to all partners for one year after the project's end. After this period, CIRCE will store the data included in SharePoint for an additional four years and provide access upon request.

6. DATA SECURITY

As mentioned earlier, the HarvRESt project aims to ensure the findability, accessibility, interoperability, and reusability (FAIR) of the data produced during and beyond the project's duration.

Throughout the project's lifespan, all documents [are being stored](#) on the project's intranet (Microsoft SharePoint), ensuring access for all consortium members and providing a backup in case of technical issues with the public repository (website). Microsoft SharePoint's access control features [restrict](#) data visibility to HarvRESt project partners only. Partners must also apply user access control within their own organizations to safeguard HarvRESt project data from unauthorized access. Regular backups across these platforms and infrastructures [are ensuring](#) data retrieval in case of loss. When using data destruction techniques, methods must be permanent and irreversible, depending on the medium used. Additionally, CIRCE, the coordinator, [is retaining](#) a copy of all documentation whenever possible, both during and after the project's lifetime.

All project partners are responsible for protecting data processed on their private servers, ensuring necessary security controls are implemented to minimize the risk of information leaks and data destruction.

Confidential data refers to information that will remain closed and not be shared, as stipulated in Article 10: Non-disclosure of Information, signed by the HarvRESt partners in the Consortium Agreement. When gathering data, especially private data under GDPR or other confidential data, only the minimum amount necessary to perform the required activities should be collected. This approach enhances data security by limiting the storage of sensitive and commercial data. If sharing confidential data is necessary, only the minimum required for the activity should be shared. At the end of the project, the consortium will decide if long-term preservation of the data is necessary.

Additionally, non-disclosure agreements (NDAs) may be signed between industrial and technological partners to protect any confidential information that partners wish to safeguard.

Finally, public results [are being stored](#) in a public repository (e.g., ZENODO) and properly standardized following the FAIR principles.

7. ETHICS

Ethical aspects are also a key point of the DMP, specially related with personal data. The collection and/or generation of data from individuals participating in the project's activities is based upon a process of informed consent. Any personal data collected and/or generated in the framework of HarvREST is processed according to the principles laid out by the **Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016** as stated on the article 15 of the Grant Agreement on GDPR:

"ARTICLE 15 — DATA PROTECTION

15.1 Data processing by the granting authority

Any personal data under the Agreement will be processed under the responsibility of the data controller of the granting authority in accordance with and for the purposes set out in the Portal Privacy Statement.

For grants where the granting authority is the European Commission, an EU regulatory or executive agency, joint undertaking or other EU body, the processing will be subject to Regulation 2018/1725¹

15.2 Data processing by the beneficiaries

The beneficiaries must process personal data under the Agreement in compliance with the applicable EU, international and national law on data protection (in particular, Regulation 2016/679²).

They must ensure that personal data is:

- *processed lawfully, fairly and in a transparent manner in relation to the data subjects*
- *collected for specified, explicit and legitimate purposes and not further processed in a manner that is incompatible with those purposes*
- *adequate, relevant and limited to what is necessary in relation to the purposes for which they are processed accurate and, where necessary, kept up to date*
- *kept in a form which permits identification of data subjects for no longer than is necessary for the purposes for which the data is processed and*
- *processed in a manner that ensures appropriate security of the data.*

The beneficiaries may grant their personnel access to personal data only if it is strictly necessary for implementing, managing and monitoring the Agreement. The beneficiaries must ensure that the personnel is under a confidentiality obligation.

¹ Regulation (EU) 2018/1725 of the European Parliament and of the Council of 23 October 2018 on the protection of natural persons with regard to the processing of personal data by the Union institutions, bodies, offices and agencies and on the free movement of such data, and repealing Regulation (EC) No 45/2001 and Decision No 1247/2002/EC (OJ L 295, 21.11.2018, p. 39).

² Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC ('GDPR') (OJ L 119, 4.5.2016, p. 1).

The beneficiaries must inform the persons whose data are transferred to the granting authority and provide them with the Portal Privacy Statement.”

Added to the previous points, the Consortium Agreement stated the following conditions regarding the data protection.

“4.5 Specific responsibilities regarding data protection

Where necessary, the Parties shall cooperate in order to enable one another to fulfil legal obligations arising under applicable data protection laws (the Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data and relevant national data protection law applicable to said Party) within the scope of the performance and administration of the Project and of this Consortium Agreement.

In particular, the Parties shall, where necessary, conclude a separate data processing, data sharing and/or joint controller agreement before any data processing or data sharing takes place.

The Consortium partners **are ensuring** compliance with Regulation (EU) 2016/679 (GDPR) and its application at national and regional level in the member states involved in the HarvRESt project. Considering the personal data use within the project technical and demonstration activities (and in line with what has been defined in the Grant Agreement), a series of action points have been defined:

- All personal data **is being** collected, stored and destructed only with and accordingly to the explicit consent of the personal data holder.
- Personal data **is being stored** in secure server systems with protected user access control. Given that this data is usually held only by the original partner, the partner responsible should have its own secure storage. Data access **is being restricted** to only those directly using the data for project purposes, usually the partner with initial contact with the users. But in any case, a data controller/responsible must be assigned.
- No data **are being transmitted** to any person, company or organization not being involved on the HarvRESt project, and in any case the collected data **is being used** for commercial purposes.
- Where data sharing related to activities with specific users is required, data **is being anonymised** prior to sharing, with the user being represented only by an anonymised ID.
- Personal or confidential data **is being kept** for an absolute minimum of time and should be destroyed at the earliest opportunity (depending on use, or legitimate continued use for which permission has been granted by the subject).

As stated in the first point, prior to any data gathering process, **an informed consent required for the end users that will get voluntarily enrolled in project activities**. This is also specified in the relevant regulation: *“data cannot be collected without the explicit informed consent of people under observation; therefore no person unable to express a free and informed consent for age-related reasons, on-going medical and/or psychological conditions, mental incapacity, should be enrolled in any study/activity. Consent should be freely given, specific, informed and unambiguous by way of a request presented in clear and plain language. Consent should be given by an affirmative act, such as checking a box online or signing a form. When someone consents to the processing of their personal data, the processing of data must be strictly for the purposes for which consent was given.”*

For the collection of data (personal and technical data) related with technical activities of the project (technical developments, sectorial studies, stakeholders consultations...), as well as communication and dissemination tasks, in order to ensure the transparency of this process, an informed consent procedure [is being performed](#) following the next steps:

1. Initial communication from the partner to the external person to present the project and explain in detail the data collection purposes, the data that [is collected](#), the privacy risks and the outcome of the processing of collected data.
2. The external people that have explicitly mentioned that they do not wish to be informed or voluntarily participate in the technical activities [are excluded](#) from any further activity (and the personal data already gathered will be deleted).
3. Collecting potential participants contact details on a list must be approved by them.
4. Provision of the consent form to the participants that have declared that they would consider their participation in the technical activities and data collection processes of the HarvRESt project, ensuring that they are given enough time to read and sign it.

Examples and models of the documentation to get used as the informed consent material for the users can be found in Annex 1.

8. OTHER ISSUES

At the current stage of the project, the usage of any other procedure for data management is not foreseen.

9. CONCLUSIONS

As mentioned, this document is the [mid-term update](#) version of the Data Management Plan (DMP). The purpose of this report is to outline the methodologies and standards for data collection and handling, detail the procedures for information sharing and open access to HarvRESt data, and explain how the data will be curated and preserved.

This DMP establishes the procedures for data sharing within the project, adhering to the FAIR principles to ensure that research data is Findable, Accessible, Interoperable, and Reusable. Additionally, the plan addresses key considerations such as resource allocation, data security, and ethical aspects. [Moreover, a table with information about the data generated in the project has been included by task.](#)

It is important to note that the DMP is a living document, allowing for updates as the project progresses and significant changes occur. Therefore, at least [one more version](#) of the DMP will be issued during the implementation of the HarvRESt project [by Month 36 \(D1.8\)](#).

10. REFERENCES

- [1] European Commission. (October of 2023). Funding and Tender's portal. Horizon Europe Data Management Plan Template. [Link](#).
- [2] Enlightenbio. (2021). FAIR Data or the Journey Towards Data-Centricity – Pushing Towards Making Data Discoverable, Accessible, Interoperable, and Reusable. [Link](#).
- [3] University of Bath. (October of 2023). Metadata Standards Catalogue. [Link](#).
- [4] European Commission (May 2024). Funding and Tender's portal. Open access to research data. [Link](#).
- [5] Creative Commons. (May of 2023). Creative Commons. [Link](#).

11. ANNEXES

11.1 Annex 1 Models/ templates to the Informed Consent Forms of HarvRESt participant

Each beneficiary of HarvRESt project, as established in the Consortium Agreement, shall be responsible for the respectively collected and processed personal data. In order to meet the General Data Protection Regulation, this annex shows some models that HarvRESt partners can follow and adapt to their corresponding organization/countries requirements, to request authorization from for external to the personal data treatment in HarvRESt.

Clause to register in HarvRESt's events/ workshops

EVENT TITLE

Form for the registration

Full name:

Email:

Organisation:

Role:

Country:

BASIC INFORMATION ON DATA PROTECTION. According to the General Data Protection Regulation. (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016. **Responsible:** Consortium partners Project HarvRESt. **Purpose:** Your data may be used under your consent, with the aim of registration to the event **and receiving newsletters** in order to keep you informed about the dissemination activities of the project HarvRESt. **Exercise your rights:** You are entitled to exercise your rights of access, rectification, elimination, limitation, opposition, portability and to not be subject to a decision based solely on automated processing by contacting by **email protection data project (from partner organizing the event)** **More information:** **Check our Privacy Policy (link to the Privacy Policy of the partner organizing the event)**

- ☐ I have been informed about the treatment of my data **Compulsory check**
- ☐ I wish to receive newsletters about the dissemination activities of the project HarvRESt **Optional**

Clause to inform externals regarding the processing of their data and for collecting image use permission

According to the Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016, you are informed that due to the monitoring and control obligations to which **[Organizer/Responsible of data]** (hereinafter, "**short name**") is subject in the project HarvRESt "Harnessing the vast potential of RES for sustainable farming", hereinafter, the "**Project**", in their condition of collaborator of the mentioned Project together with the rest of consortium partners, are obliged to keep records of the activities carried out, including meetings, training and/or dissemination of Project activities, interviews, among others, in the frame

of the Project, aiming at performing the actions required by the control bodies and any other competent authorities of the Project.

With this consent, you are informed that your personal data can be sent to control bodies and any other competent authorities of the Project and to the rest of the consortium partners in order to comply with the control requirements under **[Name of the partner]** 's obligations in the frame of the Project, and will be kept until the end of the Project and for the limited periods of the responsibilities that may result enforceable.

- ☐ I have been informed about the treatment of my data by **[Name of the partner]** and I authorize their use.

As a collaborator of the Project, you are informed that all contributions added in the document **[name of deliverable/task/service]** of the Project will be able to be published in the appropriate wherewithal for the project.

- ☐ I confirm that I have received, reviewed the document before publishing it on the different public platforms and I agree with the publication of the data provided within it.

Likewise, we inform that the event which you have been summoned/invited/registered could be filmed and photographed, **[Name of the partner]** may be entitled to publish these videos and images in its Web Site and social networks, as well as, to send these videos and images to the Media in order to contribute to the dissemination of the Project, and also to the rest of the Partners of the Project to comply with their obligations and to be published in their corresponding web Sites and social networks.

We will only use your image if you authorized your consent by checking the following box.

- ☐ I hereby authorize the use of my personal image in order to contribute to the implementation of the Project activities.

Additionally, if you expressly authorize it, by checking the box below, your data may be used under your consent, with the aim of sending bulletins and informative news, and other commercial and promotional communications, in order to keep you informed about events, workshops, activities and services run by the Project.

- ☐ I wish to receive from **[Name of the partner]** commercial and promotional communications.

You are entitled to exercise your rights of access, rectification, elimination, limitation, opposition, portability and to not be subject to a decision based solely on automated processing by contacting **[HarvRESt email]**.

The data controller is **[Name of the partner, address, VAT ID, contact]**

[City], [Date]

Signature

[Name and Surname]

Clause to consent image use

According to the Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016, you are informed that due to the monitoring and control obligations to which **[Organizer/Responsible of data]**

(hereinafter, “**short name**”) is subject in the project HarvRESt “Harnessing the vast potential of RES for sustainable farming”, hereinafter, the “Project”, in their condition of collaborator of the mentioned Project together with the rest of consortium partners, are obliged to keep records of the activities carried out, including meetings, training and/or dissemination of Project activities, interviews, among others, in the frame of the Project, aiming at performing the actions required by the control bodies and any other competent authorities of the Project.

With this consent, you are informed that the event **[write the description of the event]** which you have been invited could be filmed and photographed, **[Partner short name]** may be entitled to publish these videos and images in its Web Site and social networks, as well as, to send these videos and images to the Media in order to contribute to the dissemination of the Project, and also to the rest of the Partners of the Project to comply with their obligations and to be published in their corresponding web Sites and social networks.

Additionally, you are informed that you may only take photographs related to the project. Under no circumstances may you take pictures of other equipment and facilities located at **[Location]**.

You are entitled to exercise your rights of access, rectification, elimination, limitation, opposition, portability and to not be subject to a decision based solely on automated processing by contacting **[Partners email]**.

The data controller is **[Name of the partner, address, VAT ID, contact]**

[City], [Date]

Signature

[Name and Surname]

Clause to compile inputs/forms/questionnaires/interviews from externals

“Form/Questionnaire/Interview title”

Organisation name: **<Insert Partner Name>**

Address: **<Insert Partner Address>**

Phone: **<Insert Partner Phone>**

Email: **<Insert Partner Generic e-mail Address>**

Who we are?

HarvRESt is a European Project (GA 101136904) that aims to integrate Renewable Energy Systems (RES) in farms looking for synergies between the energy and food sectors. By this approach, farms will become climate neutral, optimising their production and reducing their impact on natural resources and biodiversity, on top of providing energy services to communities and diversifying their economic income. For that, HarvRESt will develop an Agricultural Virtual Power Plant able to run different scenarios and farm configurations to determine the best operation procedures for a given RES solution. The full approach of HarvRESt will be supported and executed at 4 use cases representing different topologies of farms, a diversity of stakeholders and organizational structures, distinct geographical conditions and a wide variety of RES technologies.

What do we need from you?

You have been invited to take part in this interview because you have been identified as a key stakeholder for HarvRESt. In this context, we would like to learn more about your views on RES integration at the farm level to understand what framework conditions might act as a barrier or an enabler for the up-taking of RES.

The interview is expected to last no more than 45 minutes and **your participation is entirely voluntary**. Partners will take written notes.

If you decide to participate in this HarvRESt activity, we will ask you to sign a HarvRESt Informed Consent Form (provided at the end of this document) to collect and process your data. The project will last 36 months but your involvement would only be for as long as you wish.

What will we do with your data?

The information you will provide will be confidential and anonymous. HarvRESt project will handle your data according to the General Data Protection Regulation. (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016.

Responsible: HarvRESt Consortium

Purpose: Your data may be used under your consent, to participate in this interview. Once the data is analysed, a report of the findings may be submitted. The project's deliverables that may be derived from this **activity will not include your data** or any other information that could identify you. The results of this project activity may be also shared with European Union representatives (e.g., the Project Officer evaluating the project's progress, etc.) Only broad trends will be reported, and **it will not be possible to identify any individuals**. No risks are involved.

Exercise your rights: According to the General Data Protection Regulation (GDPR), you are entitled to exercise your rights of access, rectification, elimination, limitation, opposition, and portability and to not be subject to a decision based solely on automated processing by contacting by email to info@foodbiocluster.dk. If you wish to access detailed information on how the HarvRESt project handles data, you might check the HarvRESt Privacy Policy Project (<https://www.harvrest.eu/privacy-policy/>).

I hereby give my consent to the processing of my data needed for:

*(Please, tick the boxes below to confirm that you give us your consent for the respective subject. Any boxes left unticked mean that **you do not consent** to that specific subject).*

#	Consent Subject	Tick box
1	I have been informed about the treatment of my data (mandatory)	x
2	I consent to participate in the form/questionnaire/interview to learn more about my views on RES integration at the farm level (mandatory)	x
3	I am interested in joining other HarvRESt activities (optional)	
4	I wish to receive newsletters about the dissemination activities of HarvRESt (optional)	x

 Name of participant

 Date

 Signature

Clause to include in bilateral agreements between partners & externals

Each Party of this [indicate the type of contractual document applicable: i.e., contract/letter of intent/shareholder's agreement] (hereinafter the "Agreement") shall be responsible for the personal data referred to their employees, collaborators, trainees, and/or other possible categories of data subjects, while the Consortium Agreement is in force.

In this sense, regarding the personal data made available to the rest of Partners on the occasion of the execution of the Project, the Partners shall reciprocally guarantee-in their condition of assignors -duly fulfil all the obligations under the General Data Protection Regulation, Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016, to their processing and subsequent communication to the rest of Partners and to third parties, such as granting entities, control bodies and any other competent authorities, in relation to the granting and justification of the Project.

In view of the above, the Partners shall not be liable in any case for any possible breaches on Data Protection Regulation in which the rest of the Partners may have incurred regarding the personal data conveyed. Therefore, the Partners shall hold harmless themselves of any consequence which may arise from such breaches, including the possible sanctions imposed by the competent control authority.

Likewise, the Partners shall undertake to keep the strictest confidentiality of the personal data to which they have access with the occasion on the Project, and they shall maintain secrecy and shall not be entitled to communicate nor cease them to the rest of the Partners of the Project, unless necessary for Project implementation. Personal data shall not be disclosed in any case to any third party or published without the prior written consent by the person concerned.

Lastly, given the monitoring and control obligations to which [Short name of HarvRESt partner] and the rest of the Partners are subject to, in the frame of the project, [Short name of HarvRESt partner] will be obliged to graphically document the works carried out and the meetings held on the occasion of the project, with the aim to implement promotion and dissemination actions required by the entities and control bodies. To that effect, each Partner shall have to inform to their employees or collaborators who take part in the Project about the fact that the work meetings, formative and/or dissemination of Project activities in which they may participate, may be filmed and photographed. [Short name of HarvRESt partner] may be entitled to publish these videos and images in its Web Site and social networks, as well as to send them to the Media. Each Partner shall obtain the prior and express consent of their employees and collaborators in order to use their images to the aforementioned effects.

11.2 Annex 2 ZENODO

ZENODO is a multidisciplinary, open repository for educational material, research papers, data, and reports. Developed under the European OpenAIRE program, ZENODO is operated by CERN to support the principles of FAIR data. It allows the uploads to be citable and trackable through DOI, the uploading process is fast, the datasets can be updated with a versioning feature, the uploads provide usage statistics, and its GitHub integration allows for preserving GitHub repositories.

ZENODO generally accepts datasets up to 50 GB; however, larger datasets may be accepted under special circumstances. At present, there are no limits on the number of datasets per community, so there will not be any additional costs associated with making data FAIR through ZENODO.

Moreover, ZENODO will be used to store metadata of the publications and datasets. Metadata associated with each published dataset in ZENODO will include:

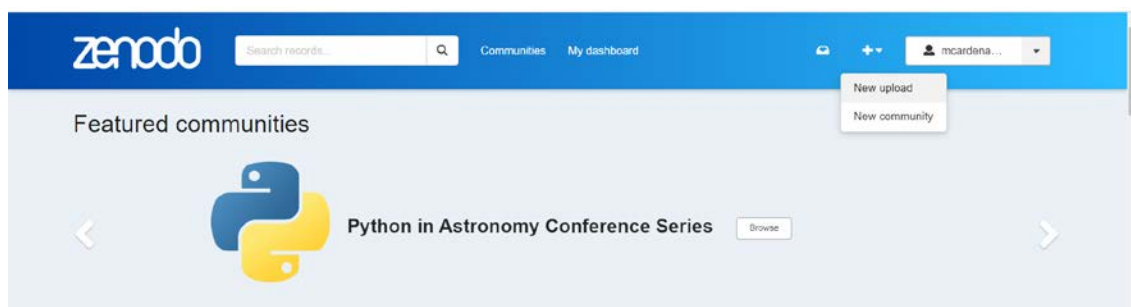
- Digital Object Identifiers (DOI)
- Abstract/description
- File sizes
- Keywords
- Related identifiers
- Version numbers
- Associated project and community
- Associated publications and reports
- Access and licensing info
- Language
- Grant agreement number
- Specific keywords

Rich metadata enhances the discoverability of data. Using JSON Schema as the internal representation of metadata, ZENODO offers export to other popular formats, such as Dublin Core and MARCXML. The metadata in ZENODO is openly available under the CC 0 license, which complies with the requirements of the European Commission.

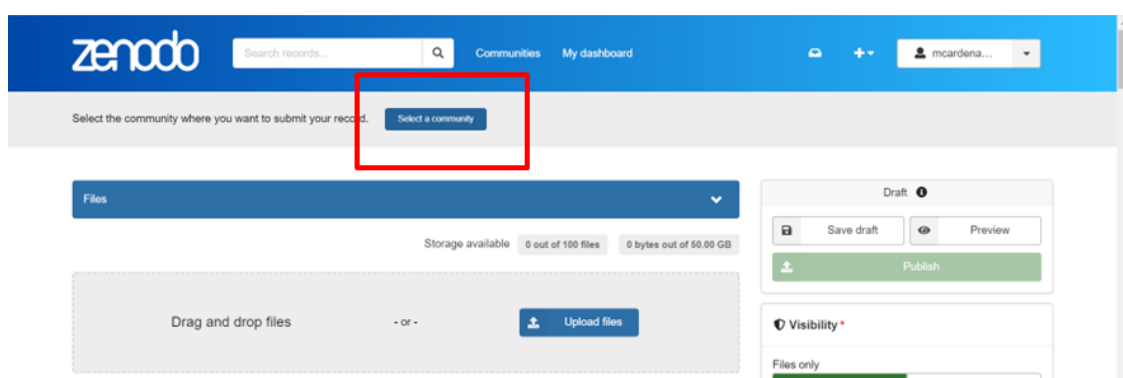
The portal enables researchers, scientists and institutions to share research data and results in a wide variety of formats including text, spreadsheets, audio, video. To each submitted data-set is attached a unique DOIs that enables referencing the data in research and institutional contexts. The OpenAIRE project, in the vanguard of the open access and open data movements in Europe was commissioned by the EC to support their nascent Open Data policy by providing a catch-all repository for EC funded research.

The submission of research data to ZENODO can be done through the following steps:

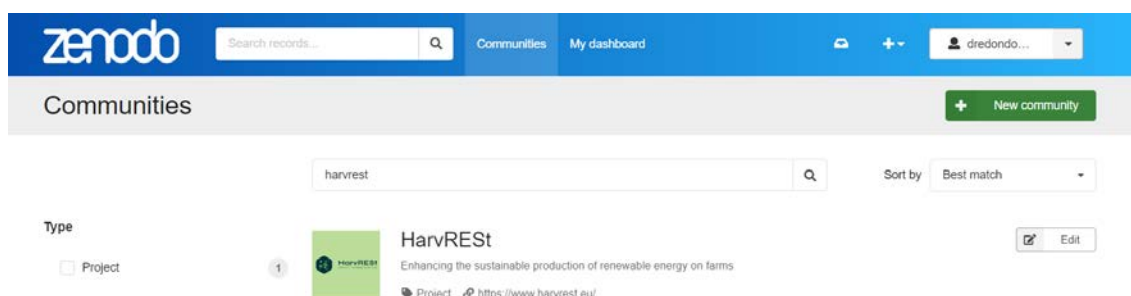
1. Enter the platform <https://zenodo.org/> . Sign in or register, if you do not have an account yet.
2. The upload procedure starts by clicking “new upload”:



- First, select the corresponding community, in this case “HarvRESt”:



Select a community



- Upload the file, and add a DOI, in case it has been assigned already. If not, ZENODO will assign it automatically. Preferably, check public visibility. Apply an embargo period, if needed.

Files

Storage available 0 out of 100 files 0 bytes out of 50.00 GB

Drag and drop files

- or -

Upload files

Basic information

Digital Object Identifier*

Do you already have a DOI for this upload? ☒ Yes ☐ No

Copy/paste your existing DOI here...

A DOI allows your upload to be easily and unambiguously cited. Example: 10.1234/foo.bar

Resource type*

Draft

Save draft

Preview

Publish

Visibility*

Files only

Public

Restricted

Public

The record and files are publicly accessible.

Options

Apply an embargo

Record or files protection must be restricted to apply an embargo.

- Successively the data must be classified according to given categories such as dataset (i.e., tables of numerical data), image and others:

Resource type*

Dataset

Other

Physical object

Poster

Presentation

Publication

Publication / Annotation collection

Publication / Book

Publication / Book chapter

Publication / Conference paper

Publication / Conference proceeding

Publication / Data paper

Publication / Dissertation

Publication / Journal

Publication / Journal article

Publication / Other

- Finally, the portal prompts for additional metadata such as authorship of data and sharing policies. The structure of the dataset must be specified here as well. Make sure to add the information related to the external conference/ journal where the publication was originally reviewed/published, if applicable. All publications shared in ZENODO must meet the publications policies of such external sources.

 **Title** *

+ Add titles

 **Publication date** *

In case your upload was already published elsewhere, please use the date of the first publication. Format: YYYY-MM-DD, YYYY-MM, or YYYY. For intervals use DATE/DATE, e.g. 1939/1945.

 **Creators** *

+ Add creator

 **Description**

Paragraph ▾ **B** *I*         

+ Add description

 **Licenses**

 **Creative Commons Attribution 4.0 International**
The Creative Commons Attribution license allows re-distribution and re-use of a licensed work on the condition that the creator is appropriately credited. [Read more](#)

+ Add standard + Add custom

[Edit](#) [Remove](#)

Recommended information ▾

 **Contributors**

+ Add contributor

 **Keywords and subjects**

Suggest from

 **Languages**

 **Dates**

Date *	Type *	Description
YYYY-MM-DD or YYYY-MM-DD/YYYY-MM-DD		

Format: DATE or DATE/DATE where DATE is YYYY or YYYY-MM or YYYY-MM-DD.

+ Add date

 **Version**

Mostly relevant for software and dataset uploads. A semantic version string is preferred see [semver.org](#), but any version string is accepted.

 **Publisher**

The publisher is used to formulate the citation, so consider the prominence of the role.

Funding ▼

Awards



Add award



Add custom

Alternate identifiers ▼

Alternate identifiers

Identifier *	Scheme *	
		x



Add identifier

Related works ▼

Specify identifiers of related works. Supported identifiers include DOI, Handle, ARK, PURL, ISSN, ISBN, PubMed ID, PubMed Central ID, ADS Bibliographic Code, arXiv, Life Science Identifiers (LSID), EAN-13, ISTD, URNs, and URLs.

Related works

Relation *	Identifier *	Scheme *	Resource type	
Select relation...				x



Add related work

References ▼

References

Reference string *	
	x



Add reference

Publishing information

Journal

Title

Title of the journal on which the article was published

ISSN

International Standard Serial Number

Volume

Issue

Pages

Imprint

Book title

Title of the book or report which this upload is part of.

ISBN

International Standard Book Number

Place

Place where the imprint was published

Pages

Thesis

Awarding university

Conference

Title

Acronym

Place

Location where the conference took place.

Dates

Website

Session

Session within the conference.

Part

Part within the session.

11.3 Annex 3. List of datasets generated in HarvRESt

WP1- Management and Coordination (CIRCE)				
Parameter	T1.1 Overall project management (CIRCE)	T1.2 Progress monitoring and reporting (CIRCE)	T1.3 Quality assurance plan and project and data management plan (CIRCE)	T1.4 Integration of the Responsible Research and Innovation approach (CIRCE)
Purpose of the data collection	•Agreements & Legal documentation (Grant Agreement, Consortium Agreement, etc.) •Contact list •Internal management documentation	•Meetings documentation (agendas, minutes, assistant lists, etc.) •Interim & Periodic Reports	•Deliverables control	• N/A
Types and formats of data	•Files: .docx / .xlsx / .pdf / .pptx /	•Images: .jpg •Files: .docx / .xlsx / .pdf / .pptx	•Files: .docx / .xlsx / .pdf	• N/A
Sharing/access policies	•General Scope Inside the Consortium •General Data Protection Regulation (GDPR) Covered Data for contact list	•General Scope Inside the Consortium	•General Scope Inside the Consortium	• N/A
Size of data	•70,8 MB with an estimated of 38 files	•1,13 GB with an estimated of 195 files	•41 Kb with an estimation of 1 file	• N/A
Storage of data	•Project common files such as recommendations, guidelines, follow up files are all stored in Project SharePoint. This task only generates files of interest for the whole consortium, so everything is stored in project SharePoint. This task includes: deliverables, Gantt chart, contact lists, procedures, etc.	•In partner CIRCE repository, financial data from individual partners is stored. CIRCE as Project Coordinator has access to individual financial information reported and shared from partners. Project SharePoint gathers common aggregated data, and also periodic reports. •Project SharePoint is also used for saving the information related with the General Assemblies and other meetings: agenda, pictures, assistant list, presentations, etc.	•Project common files to organise the Data Management in the project. Everything generated is available for the whole consortium.	• N/A
Origin of the data collection & re-use of existing data	This task generates new data to help the partners manage the project. Structure and guidelines are based on CIRCE experience to manage project, but 90% files and content generated is customized for the project, and 10% includes templates from the EC, or general information for EC projects created from CIRCE.	•This task generates new data to present Consortium advances to the Project Coordinator and to the EC. 100% of data under this task is generated by the consortium.	•This task generates new data to organize data within the consortium. 90% is generated and 10% is data reused coming from EC and CIRCE templates. Final documents are customized for the project.	• N/A
Data utility	Data does not need to be anonymized, since this is not showing private information. Only contact list has personal data but this information is needed for contacting people within Consortium	•Sensitive data is stored in Project Coordinator CIRCE repository. - When needed to be anonymized for reporting purposes , anonymization criteria is to present aggregated data per WP, or cost category.	•Data does not need to be anonymized, since this is not showing private information	• N/A

WP2 – Knowledge and perceptions gathering through a multi-actor approach (BETA)					
Parameter	T2.1 Mapping and linking with best practices and existing initiatives on farms decarbonisation (CKIC)	T2.2 Analysis of socio-economic context, needs and framework conditions in target rural areas (WR)	T2.3 Characterisation of HarvREST use cases through a Multi-actor approach (BETA CT)	T2.4 Definition of KPIs and analysis of their interaction (SUITE5)	T2.5 Establishment of the use cases working groups, arrangement of HarvREST laboratory set-ups and initial trials (BETA CT)
Purpose of the data collection	Literature and initiatives review – identifying available technologies, good practices and existing initiatives related to the integration of renewable energy in EU farms.	The data collected in the framework of this task aims at understanding the needs of local stakeholders at each use case and shedding light on the framework conditions on the national/regional contexts of the HarvREST use cases as well as at the EU level.	Characterize use cases and stakeholder needs for RES integration	Desk research on best practices for KPIs definition	Support monitoring of RES performance, effectiveness of the agronomic trials, KPI tracking, and calibration of decision-support tools (AVPP, DSS).
Types and formats of data	- Excel table tab 1 – Literature review: Document title, Author, Date, Related project (if relevant), Link to publication - Excel table tab 2 – Projects and initiatives: Project acronym; Project/initiative full name; Link to project website. Additional tags: RES type; Country; Agricultural production type; Status; Related Technologies; Energy Management and supporting technologies; Socio-economic Aspects; Systems trade-offs	<u>Mapping framework conditions</u> - Data collected through desk research Grouping of research papers, pictures, graphs, figures. Format: docx, .ppt, .pdf, .xlsx, .jpg, .tiff - Data collected through stakeholder interviews. Format: .docx, .ppt, .pdf, .xlsx <u>Analysis of the needs and perceptions of stakeholders</u> - Data collected during online surveys (Anonymised excel files). Format: .csv, .xlsx	Stakeholder inputs, farm data, environmental context. Formats: text, Excel, survey data	List of KPIs devised, based on the characterisation of the Use Cases (energy production, food production, environmental aspects, economic aspects and social aspects) – text data	Energy (e.g., hourly PV output, battery usage), agronomic parameters (soil nutrients, yield), environmental (GHG, water), Formats: Report, CSV, Excel
Sharing/access policies	GDPR compliant information stored on the project SharePoint and shared in a public deliverable	<u>Mapping framework conditions</u> - Data collected through desk research: Open - Publicly available data to be analysed and reported. - Data collected through stakeholder interviews Open and Closed - Personal information data (captured answers) will not become available. Analysed/aggregated data to be reported in a public deliverable <u>Analysis of the needs and perceptions of stakeholders:</u> - Closed: Raw data closed. Only analysed/aggregated data to be reported to a public deliverable (D2.1)	GDPR compliant information shared in a public deliverable	Open data (KPIs available in a public deliverable)	Shared via SharePoint – Not public deliverable

Size of data	•75 Kb	•Mapping framework conditions - Desk research data: 500 KB per document / Approx. 3MB per photo. - Stakeholder interviews: 1MB per file •Analysis of the needs and perceptions of stakeholders: 10MB per .xlsx file	•Small to moderate (MB)	•~5MB	•Small to moderate per use case (MBs), large for Denmark (GBs). Expected growth as trials continue collecting data
Storage of data	•SharePoint	•In partner's WR repository	•SharePoint	•N/A (at the moment HarvREST project does not store KPI data)	•Project SharePoint and partner servers. Long-term integrated into AVPP and DSS
Origin of the data collection & re-use of existing data	•Reuse of existing data from Cordis, EIP Agri and EU CAP network platforms, project websites, scientific publications, and multiple other publicly available platforms and documents.	•Origin: See purpose of data collection Re-use: in Deliverables D2.1, D3.1, D3.3., D3.5	•Collected via stakeholder engagement and existing regional/environmental datasets	•This task generates KPIs and their measurement guidelines, to characterise and describe the performance of the project's Use Cases •Open reuse of the KPIs	•Primary: Field sensors, results from field trial soil and plant analyses, stakeholder feedback. •Secondary: Reuse of national registers (DK), baseline farm data (ES).
Data utility	•Deliverables D2.1, D2.2, D4.1	•Deliverables D2.1, D3.1, D3.3., D3.5	•Supports use case definition, stakeholder alignment, and drafting of D2.1	•Characterise and describe the performance of the project's Use Cases (i.e., the farms) from a production and sustainability point of view	•Used for DSS tools, and stakeholder training. Direct input to AVPP and cross-case impact assessment

WP3 - Stakeholder engagement strategies for the generation of cooperative agro communities (WR)					
Parameter	T3.1 HarvREST methodology for stakeholder engagement in agricultural communities (WR)	T3.2 Increase of regional awareness and social acceptance of renewable energy projects (WR)	T3.3 Definition of financial schemes and risks and identification of incentives (EnG)	T3.4 Capacity building towards the uptake of HarvREST outcomes for RES integration at farm level (WR)	T3.5 Development of HarvREST business models catalogue (EnG)
Purpose of the data collection	•Stakeholder engagement and empowerment	•Stakeholder engagement and empowerment via ARC	•To assess financial viability, risk factors, and incentives giving to interested stakeholders a deep overview of different available financial schemes	•Stakeholder engagement and empowerment via Capacity Building Material	•To catalogue and compare business models for HarvREST results and more in general Renewable energy technology deployment across target markets.
Types and formats of data	•Data collected during warm-up activities • Notes, videos, images presented in reports prepared by UC. Format: docx, .ppt, .pdf, .xlsx, .mp4, jpeg	•Data to be collected during awareness raising campaigns, info days Notes, videos, images presented in reports prepared by UC Format: docx, .ppt, .pdf, .xlsx, .mp4, jpeg,.MOV	•Report(PDF), risk matrices (PDF/Excel), surveys (CSV).	•Data to be collected during training workshops Notes, videos, images Format: docx, .ppt, .pdf, .xlsx, .mp4, .mov, .jpg, .tiff	•Business model canvases (PDF/PPT), case studies (PDF), stakeholder interviews (audio/text).
Sharing/access policies	•Open and Closed – •Open - participants sign consent forms for the potential distribution of images/video taken during the activity for promotional purposes. •Closed data will not be available to avoid misuse of the information collected and for sensitive personal information protection	•All participants sign consent forms for the potential distribution of the images/video taken during the activity for promotional purposes	•Restricted to consortium members	•Personal information data to be aggregated/anonymised before being made openly available. All participants sign consent forms for the potential distribution of the images/video taken during the activity for promotional purposes.	•Public
Size of data	•~1GB	•~6.5GB	•<100 MB (primarily spreadsheets and reports).	•Up to 20 MB for each doc, 500 KB for each .xlsx, 150 MB per video file, 3MB per image	•<500 MB
Storage of data	•In partner's WR repository	•In partner's WR repository	•Secure cloud repository (EU-compliant, e.g., Zenodo); access-controlled SharePoint for drafts.	•In partner's WR repository and HarvREST website (only for modules and aggregated data)	•Secure cloud repository (EU-compliant, e.g., Zenodo); access-controlled SharePoint for drafts.
Origin of the data collection & re-use of existing data	•Warm up activities Re-use: D3.1 and D3.5	•ARC carried out by the UC •Re use: D3.5	•Project-generated data; re-used open datasets (e.g., FiCompass, Eurostat, national incentive programs, Climate Ecosystem Databases).	•Origin: Training workshops carried out by the UC •Re-use: D3.3	•Project-generated models; re-used open-access business case templates (e.g., EC Horizon Europe toolkit, Netzero database).
Data utility	•Deliverables 3.1 and 3.5	•Deliverable D3.5	•Supports investment decisions and policy recommendations. Reusable for financial benchmarking in agri-tech.	•Deliverable D3.3	•Facilitates market uptake; adaptable to other renewable energy sectors. High utility for SMEs and policymakers

WP4 - Sustainable practices on agro communities (BETA)				
Parameter	T4.1 Compilation and analysis of measures related to the use of RES technologies in agricultural production (BETA CT)	T4.2 Developing KPIs to monitor the RES system (BETA CT)	T4.3 Experimental campaigns on nutrients recovery and improvement of the agricultural crop footprint methodology (BETA CT)	T4.4 Digital services for agricultural communities (CT)
Purpose of the data collection	•Compile and analyse existing and experimental data on RES impacts in agriculture to identify gaps and create D4.1	•Design and validate KPIs to monitor RES effect on the agricultural systems	•Collect experimental data and monitor the impact of applying different fractions of digestate and sludge on soil fertility and nutrient dynamics.	•Data on farm activity is collected as a pre-requisite for data analysis describing status, potential and environmental impact of manure based biogas production in DK.
Types and formats of data	•Literature-based and stakeholder data; best practices; technical data from WP2. Formats: reports, Excel, structured notes	•Quantitative and qualitative indicators. Formats: indicator tables, Excel, final reports	•Field and lab data (e.g., plant performance, soil nutrient content, NUE, GHG emissions, nutrient leaching). Formats: CSV, lab reports, Excel sheets.	•Numerical data extracted from nationwide databases containing farm specific activity data. Auxiliary data is imported in order to perform analysis and modelling.
Sharing/access policies	•Public deliverable as mitigation measures catalogue	•Final KPI set and thresholds to be shared through project public deliverable	•Internal for analysis; results to be summarized in project reports and WP4 outputs. Some data sensitive to be integrated in the novel methodology created by CIRCE	•Data compilations, analyses, maps etc. produced using collected and merged farm specific data will be made accessible through a user interface.
Size of data	•Moderate	•Small to moderate; mostly structured tables and supporting documentation.	•Large due to big sampling size and several trials.	•200 GB
Storage of data	•SharePoint and BETA internal serves	•SharePoint and BETA internal serves	•SharePoint and BETA internal serves	•Data will be stored on SQL-servers operated by ConTerra.
Origin of the data collection & re-use of existing data	•Sourced from WP2 mappings, stakeholder engagement, and literature review	•Builds on indicators from Task 2.4 and current agronomic trials and analyses	•Data generated through lab/field experiments	•Raw data origins from nationwide databases on farm activity data maintained as part of EU – Integrated Administration and Control System (IACS) supplemented with Danish databases established for extended monitoring purposes. Data access restricted to open data for farms registered as companies. Auxiliary data and calculation models is imported from open source sites administered by IPCC and Danish research institutions.
Data utility	•Feeds into D4.1 Mitigation Measures Catalogue and supports hybrid model inputs for T5.3	•Used to monitor RES performance and do sustainability assessments. Feeds into D4.2	•Validates impact of RES and circular practices (e.g., digestate use) on soil and crop performance. Feeds the CWA 17898:2022 for assessing soil quality and sustainability of the agroecosystem that will develop D4.3	•Only open and accessible data will be handled and rendered by the system and no personal/private data is stored or handled. No access to farm specific raw data.

WP5 - Modelling and optimization of renewable alternatives for agro communities (SUITE5)				
Parameter	T5.1 Forecasting of RES production at farm level (SUITE5)	T5.2 Library of renewable alternatives for agricultural communities (CIRCE)	T5.3 Development of HarvREST hybrid models for the definition of optimal operation modes (CIRCE)	T5.4 Development of smart energy systems and algorithms for maximizing energy performance (SUITE5)
Purpose of the data collection	•Train and evaluate analytics pipelines for PV energy generation forecasting in short-, mid- and long-term	•Gather and structure models and tools for the simulation and evaluation of RES technologies (solar, wind, biogas, etc.), including agro-energy tools, with the aim of integrating them into agricultural communities through the concept of an AVPP (Agro Virtual Power Plant).	• Develop hybrid energy system models tailored to the agricultural context, integrating multiple RES technologies and consumption profiles to define optimal operation strategies under technical and economic constraints.	•To be defined in the second period
Types and formats of data	•Datasets collected from the Use Cases (structured data) related to PV energy generation •Public datasets (structured data) from the bibliography related to PV energy generation •Public datasets (structured data) with weather data	•Public libraries and modelling tools (PVlib, SAM, PySAM, HOMER, PyADM1, APSIM, etc.) •Technical documentation and simulation data (PDF, .py, .ipynb, Excel) •Climatic and agricultural datasets (ERA5, AgroERA5, Copernicus) •Formats: .csv, .xlsx, .py, .pdf, .html	• Public modelling tools (HOMER). • Technical documentation and simulation data (PDF, .HOMER, Excel).	
Sharing/access policies	•Datasets from the Use Cases shared within the HarvREST project •Public datasets available on the Internet	•Public datasets from free APIS. •Internal: Simulation outputs and model configurations shared via HarvREST SharePoint and development repositories (not publicly available) •Public deliverable as a description of RES technologies library	• Models and simulation results shared internally via HarvREST SharePoint and CIRCE servers. • Input data based on publicly available sources; final models not publicly released, but results may be published in deliverables or papers.	
Size of data	•~100MB	•~10GB	• ~5–10GB (depending on scenario complexity and number of simulations)	
Storage of data	•HarvREST cloud data platform	•SharePoint and CIRCE internal servers	• SharePoint and CIRCE internal servers	
Origin of the data collection & re-use of existing data	•This task generates datasets with PV generation forecasts •Datasets with PV generation forecasts are available within the HarvREST project	•Origin: Public open-source modelling tools and climatic databases (e.g. Copernicus) •Reuse: Inputs for AVPP in T6.1.	• Origin: Results from T5.1 and T5.2; site-specific data from use cases. • Reuse: Used in WP6 for AVPP configuration, scenario evaluation and decision-making tools.	
Data utility	•Provide PV energy generation forecasting in short-, mid- and long-term	•Serve as technical foundation for the AVPP, support hybrid model development, scenario simulations, and energy strategy design in agro-communities.	• Enable the definition and testing of optimal operation modes for hybrid energy systems. • Support decision-making in AVPP configuration and strategy optimization for agro-communities.	

WP6 - Development of HarvREST AVPP and DSS based on a MCDA approach (CIRCE)					
Parameter	T6.1 Development of the Agricultural virtual power plant (CIRCE)	T6.2 Co-creation on procedures and weighting criteria for the MCDA (CIRCE)	T6.3 Programming of HarvREST DSS (SUITE5)	T6.4 Co-creation sessions, experimental trials and final validation of HarvREST use cases (BETA)	T6.5 Results gathering and AVPP and DSS fine-tuning based on obtained recommendations (SUITE5)
Purpose of the data collection	•To be defined in the second period	•To be defined in the second period	•To be defined in the second period	•To be defined in the second period	•To be defined in the second period
Types and formats of data					
Sharing/access policies					
Size of data					
Storage of data					
Origin of the data collection & re-use of existing data					
Data utility					

WP7 - Integrated assessment, knowledge transfer and development of recommendations (EnG)				
Parameter	T7.1 Assessing the overall impact of HarvRESt recommendations at farm level (EnG)	T7.2 Development of guidelines for agricultural communities business models (EnG)	T7.3 Strategy for advising and providing technical guidance on EU legislation and policy recommendations (HEC)	T7.4 Identification of future communities for deployment - Scaling Handbook (CKIC)
Purpose of the data collection	•To be defined in the second period	•To be defined in the second period	•Stakeholder engagement for the execution of three policy lab sessions	•To be defined in the second period
Types and formats of data			•Publicly available information, e.g. reports (PDFs, Word documents) •Data to be collected during on-site and virtual workshops (name, affiliation, country, email). Notes, videos, images - Format: docx, .ppt, .pdf, .xlsx, .mp4, .mov, .jpg, .tiff	
Sharing/access policies			•GDPR-compliant data requests (attendee and mailing lists) •Personal information data to be aggregated/anonymised before being made openly available. All participants sign consent forms for the potential distribution of the images/video taken during the activity for promotional purposes.	
Size of data			•Up to 20 MB for each doc (policy lab session report), 500 KB for each .xlsx (list of attendees), 150 MB per video file (2 virtual workshops), 3MB per image (ad-hoc amount)	
Storage of data			•In partner's HEC repository and HarvRESt website (only for aggregated data and reporting)	
Origin of the data collection & re-use of existing data			•Origin: Policy lab workshops carried out by the project partners (led by HEC) •Re-use: D3.3	
Data utility			•Deliverable D7.1	

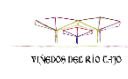
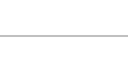
WP8 - Dissemination, Communication and Exploitation of HarvREST (FBCD)				
Parameter	T8.1 Design of dissemination and communication strategy (FBCD)	T8.2 Dissemination and communication actions (FBCD)	T8.3 IPR review and exploitation strategy (EnG)	T8.4 Stakeholder engagement exploitation of synergies at EU level (CKIC)
Purpose of the data collection	•Partner information used for communication and dissemination purposes.	•Log for Dissemination and communication activity	•To analyse IPR landscapes, identify commercialization barriers, and draft exploitation strategies for project outputs.	•Collect information on 1) Relevant project and initiatives; 2) Relevant events and workshops; 3) Relevant associations and organisations to develop HarvREST's stakeholder engagement and synergy exploitation strategy
Types and formats of data	•Logos, Partner descriptions, contact information for people working in the project. •Videos (interviews) and pictures of partners for communication purposes.	•Descriptions of activities, pictures, presentations	•Reports (PDF), patent databases (structured), market analyses (Excel/CSV).	•Publicly available information compiled into 3 Excel files: 1) Project and initiatives list; 2) Events and workshops list; 3) Associations and organisations list.
Sharing/access policies	•Public data used for homepage, and other communication	•Data is used for statistics, reporting and Documentation purposes. Information can be used for further communication purposes.	•Restricted to consortium members	•GDPR-compliant data available on the project's SharePoint and used for stakeholder engagement and synergy development strategy.
Size of data	•Small amount of data: 17 partners and 53 persons	•Small amount of data. (66 entries)	•<100 MB	•100 Kb (around 100 entries each)
Storage of data	•Partner information stored in FBCD Podio workspace. •Interviews/videos/pictures stored on FBCD servers	•Data stored in FBCD Podio workspace	•Secure cloud repository (EU-compliant, e.g., Zenodo); access-controlled SharePoint for drafts.	•Data stored on the HarvREST SharePoint
Origin of the data collection & re-use of existing data	•Data collected during project start, and adjusted as changes occur	•Data is supplied from project partners through online form	•Project-generated analyses; re-used public patent databases	•Data collected online from publicly available platforms
Data utility	•Dissemination actions	•Dissemination actions	•Critical for IPR protection and commercialization planning. High reuse potential for similar EU projects.	•D8.13 Clustering activity with other funded projects



The project

The HarvREST project aims to enhance the sustainable production of renewable energy at farm-level. This approach not only makes farms climate-neutral but also optimizes production, reduces their impact on natural resources and biodiversity, and provides energy services to communities, thereby diversifying economic income. However, deciding how best to integrate renewable energy sources (RES) on a farm is not without its challenges. The decision is a complex one, with many factors to consider. Due to this, HarvREST seeks to identify, understand, and overcome the existing barriers hindering the widespread adoption of this innovative approach. Current initiatives often overlook the complex interactions and factors within the farming and RES context, resulting in ineffective support for decision-making based on accurate projections, estimations, and forecasts. HarvREST will therefore consolidate and enhance existing knowledge, creating an Agricultural Virtual Power Plant capable of running diverse scenarios and farm configurations. This tool will determine the best operational procedures for a given RES solution, providing valuable data to a decision support system. This system will weigh trade-offs and key indicators, offering tailor-made recommendations to farmers and policymakers.

PARTNER		SHORT NAME
	CIRCE Research Centre	CIRCE
	BETA Technological Centre	UVic-UCC
	NORCE	NORCE
	Tecnoalimenti	TCA
	WHITE	WR
	Suite5 Data Intelligence Solutions Ltd.	Suite5
	EnGreen	EnG
	ConTerra	CT
	Confagricoltura	CONFAGRI

	Fattoria Solidale del Circeo	FSDC
	Viñas del Vero	VdV
	Viñedos del Rio Tajo	VRT
	Sorigué	ACSA
	Grønn Gårdsenergi AS	GGE
	Food & Bio Cluster Denmark	FBCD
	Climate KIC	CKIC
	HEC Paris	HEC

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 https://twitter.com/HarvRESt_eu