D7.7. Initial Data Management Plan

PHOTOELECTROCATALYTIC SYSTEMS FOR SOLAR FUELS ENERGY INTEGRATION INTO THE INDUSTRY WITH LOCAL RESOURCES

Grant Agreement Number 101118129

Deliverable name:	D7.7 Initial Data Management Plan
Deliverable number:	7.7
Deliverable type:	DMP
Work Package:	WP7: Communication, dissemination and exploitation
Lead beneficiary:	IDE
Contact person:	María Tripiana Serrano / maria.tripiana@idener.ai
Dissemination Level:	Public
Due date for deliverable:	February 29, 2024

Funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or CINEA. Neither the European Union nor the granting authority can be held responsible for them.

DOCUMENT CONTROL PAGE

Author(s):	María Tripiana Serrano
Contributor(s):	All partners
Reviewer(s):	-
Version number:	2.0
Contractual delivery date:	29-02-2024
Actual delivery date:	27-02-2024
Status:	Final document

REVISION HISTORY

Version	Date	Author/Reviewer	Notes
v.1.0	01-02-2024	María Tripiana (IDE)	Creation, First Draft
v.1.1	26-02-2024	María Tripiana (IDE)	Version with partners inputs
v.2.0	27-02-2024	María Tripiana (IDE)	Final version submitted

ACKNOWLEDGEMENTS

The work described in this publication was subsidised by Horizon Europe (HORIZON) framework through the Grant Agreement Number 101118129.

DISCLAIMER

All the contributors to this deliverable declare that they:

▪ *Are aware that plagiarism and/or literal utilisation (copy) of materials and texts from other Projects, works and deliverables must be avoided and may be subject to disciplinary actions against the related partners and/or the Project consortium by the EU.*

▪ *Confirm that all their individual contributions to this deliverable are genuine and their own work or the work of their teams working in the Project, except where it is explicitly indicated otherwise.*

▪ *Have followed the required conventions in referencing the thoughts, ideas and texts made outside the Project.*

TABLE OF CONTENTS

DOCUMENT CONTROL PAGE 2
REVISION HISTORY 2
ACKNOWLEDGEMENTS 2
DISCLAIMER 2
TABLE OF CONTENTS 4
EXECUTIVE SUMMARY 5
1. INTRODUCTION 6
1.1 DESCRIPTION OF THE DOCUMENT AND PURSUE 6
1.2 WPS AND TASKS RELATED WITH THE DELIVERABLE 6
2. DATA SUMMARY 7
3. FAIR DATA 16
3.1 MAKING DATA FINDABLE, INCLUDING PROVISIONS FOR METADATA 16
3.2 MAKING DATA ACCESIBLE 21
3.3 MAKING DATA INTEROPERABLE 28
3.4 INCREASE DATA RE-USE 34
4. ALLOCATION OF RESOURCES 42
5. DATA SECURITY 42
6. ETHICAL ASPECTS 42
7. OTHER ISSUES 43

EXECUTIVE SUMMARY

Deliverable *D7.7 – Initial Data Management Plan* presents the basis of the data management that will be followed through the lifetime of the PHOTOSINT project. This document will be updated regularly during the project. New versions will be provided within the Technical Reports after each Reporting Period in M18, M30, and M48.

Within this deliverable, the identification and enumeration of the different datasets that are used in the project are categorized and detailed technically in terms of data collection, processing and generation. It also specifies the different standards and methodologies that have been followed for the different datasets present in the project. In addition, the dissemination level of the data is stated in terms of open access, and it is also detailed on how long data will be curated and preserved.

To do so, the document is divided into different sections to be aligned with the Horizon Europe Data Management Plan Template[1].

[1] European Commission, 'Template Horizon Europe Data Management Plan, April 2022': https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/temp-form/report/data-management-plan_he_en.docx

1. INTRODUCTION

1.1 DESCRIPTION OF THE DOCUMENT AND PURSUE

Large data sets are typically produced by research and innovation projects like PHOTOSINT. A crucial component of PHOTOSINT's effective data management is its Data Management Plan (DMP). The data management life cycle for the data that a Horizon Europe project will generate, process, and/or collect is covered in this deliverable. In keeping with the goal of making research data findable, accessible, interoperable, and reusable (FAIR), the following details are included in this DMP:

- Handling of research data during and after the end of the project
- What data will be collected, processed and/or generated
- Applied methodology and standards
- Whether data will be shared/made open access and
- How data will be curated and preserved (including after the end of the project)

This deliverable has been built using the information and the template provided by the European Commission[1]. This first version will set the basis of the plan to be followed regarding data management during the project's complete lifetime. As it is an initial version, at this stage, it is not possible to specify some data information. For that reason, and in some cases, the field regarding the datasets will be stated as 'not known at the moment' or 'N/A. To overcome that, three more official versions will be provided by IDE to the European Commission at the end of each reporting period:

- **RP1**: from month 1 to month 18 (1/IX/2023 – 28/II/2025)
- **RP2**: from month 19 to month 30 (1/III/2025 – 28/II/2026)
- **RP3**: from month 31 to month 48 (1/III/2026 – 31/VIII/2027)

Besides, this document will be revised by the consortium at least in each Consortium Meeting (every six months) to keep it up to date and aligned with the European Commission requirements. For that reason, this deliverable has been considered a living document that could constantly be suffering modifications as (but not limited to):

- New data or updates
- Changes in consortium policies (e.g. innovation potential, the decision to file for a patent)
- Changes in consortium composition and external factors (e.g. new consortium members joining or old members leaving)

In this first version, all partners except NIC and UPA provided inputs regarding the potential datasets. As mentioned before, this information will be updated in the coming versions.

1.2 WPS AND TASKS RELATED WITH THE DELIVERABLE

This deliverable refers to *Task 7.5 – Data Management Plan* included in *WP7: Communication, dissemination and exploitation*. This deliverable is led by IDE but accounts for the collaboration of the rest of the partners from the PHOTOSINT consortium, as it contains the definitions of datasets and experimental results to be collected, processed, and/or generated in the complete project life cycle.

2. DATA SUMMARY

In this section, each partner of the consortium identifies, analyses and defines their preliminary data usage and generation in the project. This is detailed in the datasets that are presented in the following tables. For every dataset found in the PHOTOSINT project research, a question-and-answer process was used to detail the data summary.

PARTNER: IDE – Dataset #1	
Identifier	Data for model validation
Dataset description	In this dataset, the experimental data generated and gathered during the project will be used for the validation of the models.
Purpose of the Data	Model validation, the definition of input and output streams, the definition of operational conditions
Type of Data	Reused data
Form of the data	Results from experiments and pilots' performance
Format of the data	PDF/A, Plain text
Origin of the data	Data gathered from involved partners of the consortium
Dataset is:	Growing (new data may be added, but the old data is never changed or deleted)

PARTNER: ICIQ-CERCA – Dataset #1	
Identifier	Data regarding electrochemical characterization of catalysts
Dataset description	Experimental data generated will be assessed for the performance and stability of different catalysts.
Purpose of the Data	Ranking the suitable catalysts for making device-level electrodes.
Type of Data	Data from the electrochemical instruments and material characterization instruments.
Form of the data	Results from the experiments and characterizations.
Format of the data	PNG, TIFF, JPG, XLX, CSV, OPJ, PDFs, proprietary formats (from various instruments).
Origin of the data	Direct data from instruments.
Dataset is:	Growing (new data may be added, but the old data is never changed or deleted)

PARTNER: CSM – Dataset #1	
Identifier	Data for CO2 purification process
Dataset description	Experimental data generated during the purification test
Purpose of the Data	The definition of input, the definition of operational conditions

Type of Data	Test data
Form of the data	Results from experiments
Format of the data	PDF/A, Plain text
Origin of the data	Data generated during test
Dataset is:	Growing (new data may be added, but the old data is never changed or deleted)
PARTNER: CSM – Dataset #2	
Identifier	Data for LCA, LCCA
Dataset description	In this dataset, data generated and gathered during the project will be used for LCA analysis
Purpose of the Data	Input for LCA analysis
Type of Data	Technical datasheet
Form of the data	Design, Results from experiments, pilots' performance
Format of the data	PDF/A, Plain text
Origin of the data	Data gathered from involved partners of the consortium
Dataset is:	Growing (new data may be added, but the old data is never changed or deleted)

PARTNER: BNIG – Dataset #1	
Identifier	First & second supply of CO2 for prototype testing and piloting
Dataset description	Composition of CO2 as determined from available documents and analyses.
Purpose of the Data	Provide background details on CO2, including its purity and usage conditions. Furnish general information about on-site locations.
Type of Data	Background
Form of the data	Existing data
Format of the data	Word, excel, pdf
Origin of the data	BNIG
Dataset is:	Defined during WP1 & WP3
PARTNER: BNIG – Dataset #2	
Identifier	Technology integration engineering at BNIG
Dataset description	MeOH will be tested in an HTPEM fuel cell for direct electricity production.
Purpose of the Data	Create a mathematical model to replicate the behavior of PHOTOSINT processes
Type of Data	Generated
Form of the data	Technical data

Format of the data	Measurements in Excel (.xlsx) or other numeric format (.csv, .dat), text (.docx, .txt), images (.jpg, .tif, technical drawings (.jpg, .pdf)
Origin of the data	Process documents
Dataset is:	Defined during WP3
PARTNER: BNIG – Dataset #3	
Identifier	HYSY data WP5
Dataset description	A list of the required inputs that industrial partners.
Purpose of the Data	Energy consumption will be defined, and the plant layout will be provided with indications of unit procedures.
Type of Data	Background
Form of the data	Existing data
Format of the data	Word, excel, pdf
Origin of the data	HYSY
Dataset is:	Defined during WP5
PARTNER: BNIG – Dataset #4	
Identifier	Exploitation data
Dataset description	Exploitation plan assessment and exploitation of project
Purpose of the Data	Utilization of technology and exploration of market prospects for the technology.
Type of Data	Interviews, stakeholder s questionnaires, partner's needs, analysis of project
Form of the data	Interviews, reports
Format of the data	Word pdf
Origin of the data	Data on stakeholder's interviews/ value chain partners
Dataset is:	Growing

PARTNER: STE – Dataset #1	
Identifier	Data from experiments and prototype testing for hydrogen production
Dataset description	Experimental data generated and gathered during the prototype testing (WP2, T2.6)
Purpose of the Data	Input for operation and testing of the pilot for hydrogen production (WP3, T3.6)
Type of Data	Reused data from WP2 (T2.6)
Form of the data	Results from experiments and prototype testing
Format of the data	PDF, plain text (.docx, .txt), excel (.xlsx), another numeric format (.csv)

Origin of the data	Data gathered from involved partners of the consortium, results from experiments and prototype testing (WP2, T2.6)
Dataset is:	Generated
PARTNER: STE – Dataset #2	
Identifier	Data from pilot testing for hydrogen production
Dataset description	Measurements from pilot testing for hydrogen production (pilot #2)
Purpose of the Data	Input for the scale up and integration into industrial testing, and to carry out a sustainability assessment (LCA, LCCA and SLCA)-WP6 and dissemination.
Type of Data	Generated data
Form of the data	Measuring results from pilot#2 testing (WP3, 3.6)
Format of the data	PDF, plain text (.docx, .txt), excel (.xlsx), another numeric format (.csv), image (.jpg, tif)
Origin of the data	Data generated from pilot#2 testing
Dataset is:	Generated
PARTNER: STE – Dataset #3	
Identifier	Production/pilot site data
Dataset description	Data about boundary conditions (characteristics of input streams, required characteristics of output streams), study of energy consumption and creation of process blueprints.
Purpose of the Data	Defining requirements for the pilot#2 integration on STE
Type of Data	Generated data
Form of the data	Technical data
Format of the data	PDF, plain text (.docx, .txt), excel (.xlsx), another numeric format (.csv), image (.jpg, tif)
Origin of the data	Data generated during WP3 and WP5
Dataset is:	Generated

PARTNER: KNEIA – Dataset #1	
Identifier	Contact form website for stakeholders' queries
Dataset description	The gathered contact information will be only used for responding queries and/or connecting with related projects.
Purpose of the Data	Reply to queries about the project. Contact with stakeholders who requires additional information through the contact form
Type of Data	Database
Form of the data	Contact form
Format of the data	.xlsx

Origin of the data	Contact form - Website
Dataset is:	Growing (contact forms will be received throughout the project's lifetime)

PARTNER: EMU – Dataset #1	
Identifier	Testing the products at industrial applications WP3, T3.7
Dataset description	Methanol (liquid fuel) and hydrogen (gas fuel) will be tested using some load regimes in a dual-fuel engine for energy production. Solar fuels will replace up to 50% of diesel, measuring torque, rotational speed, fuel consumption and analyzing the emissions of exhaust gases. Engine optimization in dual-fuel mode will be carried out by direct and in-direct injection methods.
Purpose of the Data	Optimizing the use of fuels
Type of Data	Literature overview, measured, calculated
Form of the data	Technical data with overview of the scientific literature, test methodology and engine test data, analysis and results.
Format of the data	Measurements in Excel (.xlsx) or other numeric format (.csv, .dat), text (.docx, .txt), images (.jpg, .tif,). Analysis, results, overview in word or PDF format.
Origin of the data	WP3, T3.7, EMU
Dataset is:	Defined during WP3

PARTNER: HYSY – Dataset #1	
Identifier	Engineering documentation
Dataset description	Process blueprints for technology implementation, PFD, M&EB, P&ID, plot plan
Purpose of the Data	Technology implementation into industry and products integration
Type of Data	Engineering documentation
Form of the data	New data
Format of the data	.pdf
Origin of the data	Developed by HYSY
Dataset is:	To be generated

PARTNER: CSIC – Dataset #1	
Identifier	Photovoltaic parameters
Dataset description	J-V curves obtained from the characterization of the cells and the modules fabricated.
Purpose of the Data	Check the parameters of the cells and modules fabricated

Type of Data	Current-voltage curves, with open circuit voltage, short circuit current density, fill factor, efficiency and active area data.
Form of the data	Text and experimental data (two column values)
Format of the data	Txt files
Origin of the data	Experimental characterization
Dataset is:	Growing (new data will be added to a folder with same type of data)

PARTNER: RDM – Dataset #1	
Identifier	Cell design data set
Dataset description	Technical drawings, specifications, list of changes in the design for each versions and revisions.
Purpose of the Data	Documentation of the design process for all team members involved in the design.
Type of Data	Reused data
Form of the data	Drawings, text
Format of the data	PDFs
Origin of the data	Data collected by the engineering team at RDM in collaboration with other partners
Dataset is:	Growing (new data may be added, but the old data is never changed or deleted)
PARTNER: RDM – Dataset #2	
Identifier	Hardware validation
Dataset description	Protocols from quality control and other hardware tests. Protocols from experimental runs
Purpose of the Data	Documenting tests and inspections will allow you to easily detect the causes of failures if they occur.
Type of Data	Reused data
Form of the data	Drawings, text
Format of the data	PDFs
Origin of the data	Data collected by the engineering team at RDM in collaboration with other partners
Dataset is:	Growing (new data may be added, but the old data is never changed or deleted)

PARTNER: AZO – Dataset #1	
Identifier	CO2 composition (based on existing documents and lab analysis

Dataset description	CO2 composition (based on existing documents and lab analysis
Purpose of the Data	Design of the electrochemical device
Type of Data	Table data
Form of the data	Table data
Format of the data	.XLS
Origin of the data	Process documents
Dataset is:	-
PARTNER: AZO – Dataset #2	
Identifier	Safety related data to be integrated in the scale-up model
Dataset description	HAZOP analysis
Purpose of the Data	Identification of potential risk and mitigation measurements for Scale-up
Type of Data	analysis
Form of the data	Table based
Format of the data	.xls
Origin of the data	HAZOP analysis
Dataset is:	-

PARTNER: TOR – Dataset #1	
Identifier	WP1 Specifications ceramic smelter and CO2
Dataset description	Specifications on process at, ceramic smelter operation, CO2 streams , flow and fumes compositions.
Purpose of the Data	Define CO2 background information , purity and use conditions. General information on onsite locations
Type of Data	Background
Form of the data	Existing data
Format of the data	Word, excel, pdf
Origin of the data	Torrecid process
Dataset is:	Defined
PARTNER: TOR – Dataset #2	
Identifier	Technology integration engineering at demo Torrecid
Dataset description	Photosint system integration at Torrecid. Blueprints, engineering drawings, material specifications for CO2 capture, connection to grid, power, water supply auxiliaries. Reuse of H2 into burners, needs on gas skid, burners, pipes.
Purpose of the Data	To be defined

Type of Data	Generated
Form of the data	Technical data coming from engineering department
Format of the data	Measurements in Excel (.xlsx) or other numeric format (.csv, .dat), text (.docx, .txt), images (.jpg, .tif, technical drawings (.jpg, .pdf),cad cam drawings
Origin of the data	WP5 T5.2 Torrecid and Wp4
Dataset is:	Defined during WP3, WP5
PARTNER: TOR – Dataset #3	
Identifier	Technology assesment CO2 conversion in Ceramic smelter WP5
Dataset description	Data on performance of demo for converison of CO2 into valuable products, reuse of H2.
Purpose of the Data	Generate data during validation for TEA and LCA
Type of Data	Generated
Form of the data	Data coming from experimental work
Format of the data	Measurements in Excel (.xlsx) or other numeric format (.csv, .dat), text (.docx, .txt), images (.jpg, .tif, technical drawings (.jpg, .pdf),
Origin of the data	Experimental wp5 at demo smelter units
Dataset is:	To be defined
PARTNER: TOR – Dataset #4	
Identifier	WP6 TEC analysis for CO2 to metahnol/ H2 in ceramid demo
Dataset description	Techno economic analysis of CO2 capture and methanol synthesis, H2 production and H2 use , powers supply, waste generation at Torrecid .
Purpose of the Data	Obtain cost associated, CAPEX,OPEX for Photosint solution
Type of Data	Generated data
Form of the data	Result from demo use, measurements and study on the solutions
Format of the data	Word, excel pdf,
Origin of the data	WP5 demo case Torrecid, WP3 equipments; Techno economic analysis of TRS solution based on data generated in WP3,6.
Dataset is:	Generated / growing
PARTNER: TOR – Dataset #5	
Identifier	LCA data WP6
Dataset description	Data gathering within the LCA is driven by an intensive literature research, collection of experimental data, parameters, process chains, data bases for thermodynamic

	simulation. Data from demo case in Torrecid. Material and energy flows
Purpose of the Data	Generate LCA assement from demo case in Torrecid
Type of Data	Generated data, bibliography
Form of the data	Results from experiments, pilots' performance and LCA assessment
Format of the data	. Mass flow and energy analysis, sustainability analysis and others will be reported in different formats such as Excel (.xlsx), (.csv,.dat, .m), text (.docx, .txt), images (.jpg,.tif, .jpg, .pdf), .pptx, .opj
Origin of the data	WP6 – WP5
Dataset is:	Generated / growing
PARTNER: TOR – Dataset #5	
Identifier	WP7 exploitation data
Dataset description	Exploitation plan assessment, identification of IPR and exploitation of project
Purpose of the Data	Exploitation of technology, search for market opportunities of technology
Type of Data	Interviews, stakeholder s questionnaires, partner's needs, analysis of project
Form of the data	Interviews, reports
Format of the data	Word pdf
Origin of the data	Data on stakeholder's interviews/ value chain partners
Dataset is:	growing

3. FAIR DATA

3.1 MAKING DATA FINDABLE, INCLUDING PROVISIONS FOR METADATA

In order to make the previously defined datasets findable, the following tables detail the strategy that will be followed by each partner regarding their datasets.

PARTNER: IDE – Dataset #1	
Will data be identified by a persistent identifier?	Yes, and the public dataset will be included in the ZENODO platform.
What metadata will be created? What disciplinary or general standards will be followed?	No metadata is envisaged for this dataset.
Will search keywords be provided in the metadata to optimize the possibility for discovery and then potential re-use?	N/A
Will metadata be offered in such a way that it can be harvested and indexed?	N/A

PARTNER: ICIQ-CERCA – Dataset #1	
Will data be identified by a persistent identifier?	Yes, and the public dataset will be included in the ZENODO platform.
What metadata will be created? What disciplinary or general standards will be followed?	Metadata possible in the data collected from certain instruments. They will be retained as such for future use.
Will search keywords be provided in the metadata to optimize the possibility for discovery and then potential re-use?	Yes (depends on the priority of the data)
Will metadata be offered in such a way that it can be harvested and indexed?	Yes (depends on the priority of the data)

PARTNER: CSM – Dataset #1	
Will data be identified by a persistent identifier?	N/A
What metadata will be created? What disciplinary or general standards will be followed?	No metadata is envisaged for this dataset.
Will search keywords be provided in the metadata to optimize the possibility for discovery and then potential re-use?	N/A
Will metadata be offered in such a way that it can be harvested and indexed?	N/A

PARTNER: CSM – Dataset #2	
Will data be identified by a persistent identifier?	Yes, and the public dataset will be included in the ZENODO platform
What metadata will be created? What disciplinary or general standards will be followed?	No metadata is envisaged for this dataset.
Will search keywords be provided in the metadata to optimize the possibility for discovery and then potential re-use?	N/A
Will metadata be offered in such a way that it can be harvested and indexed?	N/A

PARTNER: BNIG – Dataset #1	
Will data be identified by a persistent identifier?	No
What metadata will be created? What disciplinary or general standards will be followed?	No (will de added to the exiting metadata)
Will search keywords be provided in the metadata to optimize the possibility for discovery and then potential re-use?	To be defined
Will metadata be offered in such a way that it can be harvested and indexed?	provided data will de added to the exiting metadata
PARTNER: BNIG – Dataset #2, #3, #4	
Will data be identified by a persistent identifier?	Yes, and the public dataset will be included in the ZENODO platform.
What metadata will be created? What disciplinary or general standards will be followed?	No metadata is created for this dataset.
Will search keywords be provided in the metadata to optimize the possibility for discovery and then potential re-use?	N/A
Will metadata be offered in such a way that it can be harvested and indexed?	N/A

PARTNER: STE – Dataset #1	
Will data be identified by a persistent identifier?	N/A for public sharing
What metadata will be created? What disciplinary or general standards will be followed?	No metadata is envisaged for this dataset.
Will search keywords be provided in the metadata to optimize the possibility for discovery and then potential re-use?	Title of the dataset, Author(s), Affiliation(s), Date of publication, Version of the dataset…
Will metadata be offered in such a way that it can be harvested and indexed?	N/A

PARTNER: STE – Dataset #2	
Will data be identified by a persistent identifier?	Yes, and the public dataset will be included in the ZENODO platform.
What metadata will be created? What disciplinary or general standards will be followed?	E.g. emission profiles, combustion efficiency, product quality….
Will search keywords be provided in the metadata to optimize the possibility for discovery and then potential re-use?	N/A
Will metadata be offered in such a way that it can be harvested and indexed?	N/A
PARTNER: STE – Dataset #3	
Will data be identified by a persistent identifier?	N/A for public sharing
What metadata will be created? What disciplinary or general standards will be followed?	No metadata is envisaged for this dataset.
Will search keywords be provided in the metadata to optimize the possibility for discovery and then potential re-use?	N/A
Will metadata be offered in such a way that it can be harvested and indexed?	N/A

PARTNER: KNEIA – Dataset #1	
Will data be identified by a persistent identifier?	No
What metadata will be created? What disciplinary or general standards will be followed?	No metadata is envisaged for this dataset
Will search keywords be provided in the metadata to optimize the possibility for discovery and then potential re-use?	N/A
Will metadata be offered in such a way that it can be harvested and indexed?	N/A

PARTNER: EMU – Dataset #1	
Will data be identified by a persistent identifier?	Yes, and the public dataset will be included in the ZENODO platform as well as through open access articles
What metadata will be created? What disciplinary or general standards will be followed?	No metadata is envisaged for this dataset.
Will search keywords be provided in the metadata to optimize the possibility for discovery and then potential re-use?	N/A

Will metadata be offered in such a way that it can be harvested and indexed?	N/A

PARTNER: HYSY – Dataset #1	
Will data be identified by a persistent identifier?	No
What metadata will be created? What disciplinary or general standards will be followed?	None
Will search keywords be provided in the metadata to optimize the possibility for discovery and then potential re-use?	N/A
Will metadata be offered in such a way that it can be harvested and indexed?	N/A

PARTNER: CSIC – Dataset #1	
Will data be identified by a persistent identifier?	Yes
What metadata will be created? What disciplinary or general standards will be followed?	No
Will search keywords be provided in the metadata to optimize the possibility for discovery and then potential re-use?	n/a
Will metadata be offered in such a way that it can be harvested and indexed?	n/a

PARTNER: RDM – Dataset #1	
Will data be identified by a persistent identifier?	Yes, and the public dataset will be included in the ZENODO platform.
What metadata will be created? What disciplinary or general standards will be followed?	No metadata is envisaged for this dataset.
Will search keywords be provided in the metadata to optimize the possibility for discovery and then potential re-use?	N/A
Will metadata be offered in such a way that it can be harvested and indexed?	N/A
PARTNER: RDM – Dataset #2	
Will data be identified by a persistent identifier?	Yes, and the public dataset will be included in the ZENODO platform.
What metadata will be created? What disciplinary or general standards will be followed?	No metadata is envisaged for this dataset.
Will search keywords be provided in the metadata to optimize the possibility for discovery and then potential re-use?	N/A

Will metadata be offered in such a way that it can be harvested and indexed?	N/A

PARTNER: AZO – Dataset #1	
Will data be identified by a persistent identifier?	NO
What metadata will be created? What disciplinary or general standards will be followed?	NO (provided data will de added to the exiting metadata)
Will search keywords be provided in the metadata to optimize the possibility for discovery and then potential re-use?	To be defined
Will metadata be offered in such a way that it can be harvested and indexed?	provided data will de added to the exiting metadata
PARTNER: AZO – Dataset #2	
Will data be identified by a persistent identifier?	NO
What metadata will be created? What disciplinary or general standards will be followed?	NO (provided data will de added to the exiting metadata)
Will search keywords be provided in the metadata to optimize the possibility for discovery and then potential re-use?	To be defined
Will metadata be offered in such a way that it can be harvested and indexed?	provided data will de added to the exiting metadata

PARTNER: TOR – Dataset #All	
Will data be identified by a persistent identifier?	Yes, and the public dataset will be included in the ZENODO platform.
What metadata will be created? What disciplinary or general standards will be followed?	No metadata is envisaged for this dataset.
Will search keywords be provided in the metadata to optimize the possibility for discovery and then potential re-use?	N/A
Will metadata be offered in such a way that it can be harvested and indexed?	N/A

3.2 MAKING DATA ACCESIBLE

One of the project's goals is to provide open access to the data, although there may be some drawbacks (e.g., intellectual property) that could limit this. In light of this, the access to the various datasets included in the project is described in depth in the following tables.

PARTNER: IDE – Dataset #1	
Will the data be deposited in a trusted repository?	Yes, it will be included in the ZENODO platform.
Will all data and/or metadata be made openly available?	As most of the data will come from the project partners, it will have to be agreed previously.
How long will the data and/or metadata remain available and findable?	No limit
Will documentation or reference about any software be needed to access or read the data be included?	Yes

PARTNER: ICIQ-CERCA – Dataset #1	
Will the data be deposited in a trusted repository?	Yes, it will be included in the ZENODO platform
Will all data and/or metadata be made openly available?	Yes
How long will the data and/or metadata remain available and findable?	Indefinite
Will documentation or reference about any software be needed to access or read the data be included?	Yes

PARTNER: CSM – Dataset #1	
Will the data be deposited in a trusted repository?	Yes, it will be included in the ZENODO platform.
Will all data and/or metadata be made openly available?	As most of the data will come from the project partners, it will have to be agreed previously.
How long will the data and/or metadata remain available and findable?	No limit
Will documentation or reference about any software be needed to access or read the data be included?	Yes

PARTNER: CSM – Dataset #2	
Will the data be deposited in a trusted repository?	Yes, it will be included in the ZENODO platform.
Will all data and/or metadata be made openly available?	As most of the data will come from the project partners, it will have to be agreed previously.
How long will the data and/or metadata remain available and findable?	No limit
Will documentation or reference about any software be needed to access or read the data be included?	Yes

PARTNER: BNIG – Dataset #all	
Will the data be deposited in a trusted repository?	Relies on the database tasked with incorporating the given data.
Will all data and/or metadata be made openly available?	Relies on the database tasked with incorporating the given data.
How long will the data and/or metadata remain available and findable?	Relies on the database tasked with incorporating the given data.
Will documentation or reference about any software be needed to access or read the data be included?	Relies on the database tasked with incorporating the given data.

PARTNER: STE – Dataset #1	
Will the data be deposited in a trusted repository?	N/A for public sharing
Will all data and/or metadata be made openly available?	As most of the data will come from the project partners, it will have to be agreed previously.
How long will the data and/or metadata remain available and findable?	No limit
Will documentation or reference about any software be needed to access or read the data be included?	Yes
PARTNER: STE – Dataset #2	
Will the data be deposited in a trusted repository?	Yes, it will be included in the ZENODO platform.
Will all data and/or metadata be made openly available?	No. The data related to plant operation / production

	data, models, layouts and other plant and/or technology-specific know-how (including feedstock, energy, resources, compositions, technologies, waste streams, suppliers, customers, subcontractors. etc.) are considered confidential information.
How long will the data and/or metadata remain available and findable?	No limit
Will documentation or reference about any software be needed to access or read the data be included?	Yes
PARTNER: STE – Dataset #3	
Will the data be deposited in a trusted repository?	N/A for public sharing
Will all data and/or metadata be made openly available?	No. The data related to plant operation / production data, models, layouts and other plant and/or technology-specific know-how (including feedstock, energy, resources, compositions, technologies, waste streams, suppliers, customers, subcontractors. etc.) are considered confidential information.
How long will the data and/or metadata remain available and findable?	No limit
Will documentation or reference about any software be needed to access or read the data be included?	Yes

PARTNER: KNEIA – Dataset #1	
Will the data be deposited in a trusted repository?	N/A
Will all data and/or metadata be made openly available?	No. For internal use only.
How long will the data and/or metadata remain available and findable?	During the project execution +5 years after the end of the project

Will documentation or reference about any software be needed to access or read the data be included?	Microsoft Excel program or other capable to read .xlsx files

PARTNER: EMU – Dataset #1	
Will the data be deposited in a trusted repository?	Yes, it will be included in the ZENODO platform. It will also be publicized on the website of the EMU laboratory
Will all data and/or metadata be made openly available?	YES
How long will the data and/or metadata remain available and findable?	In case of ZENODO, No limit.
Will documentation or reference about any software be needed to access or read the data be included?	Yes

PARTNER: HYSY – Dataset #1	
Will the data be deposited in a trusted repository?	N/A
Will all data and/or metadata be made openly available?	N/A
How long will the data and/or metadata remain available and findable?	N/A
Will documentation or reference about any software be needed to access or read the data be included?	N/A
PARTNER: HYSY – Dataset #2	
Will the data be deposited in a trusted repository?	N/A
Will all data and/or metadata be made openly available?	N/A
How long will the data and/or metadata remain available and findable?	N/A
Will documentation or reference about any software be needed to access or read the data be included?	N/A

PARTNER: CSIC – Dataset #1	
Will the data be deposited in a trusted repository?	Yes, it will be included in the ZENODO platform

Will all data and/or metadata be made openly available?	Yes
How long will the data and/or metadata remain available and findable?	No limit
Will documentation or reference about any software be needed to access or read the data be included?	Yes

PARTNER: RDM – Dataset #1	
Will the data be deposited in a trusted repository?	Yes, it will be included in the ZENODO platform.
Will all data and/or metadata be made openly available?	As most of the data will come from the project partners, it will have to be agreed previously.
How long will the data and/or metadata remain available and findable?	No limit
Will documentation or reference about any software be needed to access or read the data be included?	Yes
PARTNER: RDM – Dataset #2	
Will the data be deposited in a trusted repository?	Yes, it will be included in the ZENODO platform.
Will all data and/or metadata be made openly available?	As most of the data will come from the project partners, it will have to be agreed previously.
How long will the data and/or metadata remain available and findable?	No limit
Will documentation or reference about any software be needed to access or read the data be included?	Yes

PARTNER: AZO – Dataset #1	
Will the data be deposited in a trusted repository?	Depends on the database that will integrate provided data
Will all data and/or metadata be made openly available?	Depends on the database that will integrate provided data
How long will the data and/or metadata remain available and findable?	Depends on the database that will integrate provided data

Will documentation or reference about any software be needed to access or read the data be included?	Depends on the database that will integrate provided data
PARTNER: AZO – Dataset #2	
Will the data be deposited in a trusted repository?	Depends on the database that will integrate provided data
Will all data and/or metadata be made openly available?	Depends on the database that will integrate provided data
How long will the data and/or metadata remain available and findable?	Depends on the database that will integrate provided data
Will documentation or reference about any software be needed to access or read the data be included?	Depends on the database that will integrate provided data

PARTNER: TOR – Dataset #1	
Will the data be deposited in a trusted repository?	Yes Torrecid keep records on their data and copy on server.
Will all data and/or metadata be made openly available?	PHOTOSINT repository
How long will the data and/or metadata remain available and findable?	No
Will documentation or reference about any software be needed to access or read the data be included?	No limit
PARTNER: TOR – Dataset #2	
Will the data be deposited in a trusted repository?	Yes, Torrecid keep records on their data and copy on server.
Will all data and/or metadata be made openly available?	PHOTOSINT repository
How long will the data and/or metadata remain available and findable?	No
Will documentation or reference about any software be needed to access or read the data be included?	No limit
PARTNER: TOR – Dataset #3	
Will the data be deposited in a trusted repository?	Yes, Torrecid keep records on their data and copy on server.

Will all data and/or metadata be made openly available?	Deliverables and internal records on PHOTOSINT repository partners documents, partners servers
How long will the data and/or metadata remain available and findable?	No
Will documentation or reference about any software be needed to access or read the data be included?	No limit
PARTNER: TOR – Dataset #4	
Will the data be deposited in a trusted repository?	Yes, Torrecid keep records on their data and copy on server.
Will all data and/or metadata be made openly available?	Deliverables and internal records on PHOTOSINT repository partners documents, partners servers
How long will the data and/or metadata remain available and findable?	No
Will documentation or reference about any software be needed to access or read the data be included?	No limit
PARTNER: TOR – Dataset #5	
Will the data be deposited in a trusted repository?	Torrecid keep records on their data and copy on server.
Will all data and/or metadata be made openly available?	Deliverables and internal records on PHOTOSINT repository partners documents, partners servers
How long will the data and/or metadata remain available and findable?	D6.3 is public.
Will documentation or reference about any software be needed to access or read the data be included?	No limit
PARTNER: TOR – Dataset #6	
Will the data be deposited in a trusted repository?	Torrecid keep records on their data and copy on server.
Will all data and/or metadata be made openly available?	Deliverables and internal records on PHOTOSINT repository, public deliverables, partners documents, partners servers

How long will the data and/or metadata remain available and findable?	Deliverable 7.4 is sensitive. Information for stakeholders open
Will documentation or reference about any software be needed to access or read the data be included?	No limit

3.3 MAKING DATA INTEROPERABLE

The interoperability approach is described in the following tables at the dataset level.

PARTNER: IDE – Dataset #1	
What data and metadata vocabularies, standards, formats or methodologies will you follow to make your data interoperable to allow data exchange and re-use within and across disciplines?	N/A
In case it is unavoidable that you use uncommon or generate project specific ontologies or vocabularies, will you provide mappings to more commonly used ontologies? Will you openly publish the generated ontologies or vocabularies to allow reusing, refining or extending them?	N/A
Will your data include qualified references to other data (e.g. other data from your project, or datasets from previous research)?	N/A

PARTNER: ICIQ-CERCA – Dataset #1	
What data and metadata vocabularies, standards, formats or methodologies will you follow to make your data interoperable to allow data exchange and re-use within and across disciplines?	N/A
In case it is unavoidable that you use uncommon or generate project specific ontologies or vocabularies, will you provide mappings to more commonly used ontologies? Will you openly publish the generated ontologies or vocabularies to allow reusing, refining or extending them?	N/A
Will your data include qualified references to other data (e.g. other data from your project, or datasets from previous research)?	N/A

PARTNER: CSM – Dataset #1	
What data and metadata vocabularies, standards, formats or methodologies will you follow to make your data interoperable to allow data exchange and re-use within and across disciplines?	N/A
In case it is unavoidable that you use uncommon or generate project specific ontologies or vocabularies, will you provide mappings to more commonly used ontologies? Will you openly publish the generated ontologies or vocabularies to allow reusing, refining or extending them?	N/A
Will your data include qualified references to other data (e.g. other data from your project, or datasets from previous research)?	N/A
PARTNER: CSM – Dataset #2	
What data and metadata vocabularies, standards, formats or methodologies will you follow to make your data interoperable to allow data exchange and re-use within and across disciplines?	N/A
In case it is unavoidable that you use uncommon or generate project specific ontologies or vocabularies, will you provide mappings to more commonly used ontologies? Will you openly publish the generated ontologies or vocabularies to allow reusing, refining or extending them?	N/A
Will your data include qualified references to other data (e.g. other data from your project, or datasets from previous research)?	N/A

PARTNER: BNIG – Dataset #all	
What data and metadata vocabularies, standards, formats or methodologies will you follow to make your data interoperable to allow data exchange and re-use within and across disciplines?	N/A
In case it is unavoidable that you use uncommon or generate project specific ontologies or vocabularies, will you provide mappings to more commonly used ontologies? Will you openly publish the generated ontologies or vocabularies to allow reusing, refining or extending them?	N/A
Will your data include qualified references to other data (e.g. other data from your project, or datasets from previous research)?	N/A

PARTNER: STE – Dataset #1	
What data and metadata vocabularies, standards, formats or methodologies will you follow to make your data interoperable to allow data exchange and re-use within and across disciplines?	N/A
In case it is unavoidable that you use uncommon or generate project specific ontologies or vocabularies, will you provide mappings to more commonly used ontologies? Will you openly publish the generated ontologies or vocabularies to allow reusing, refining or extending them?	N/A
Will your data include qualified references to other data (e.g. other data from your project, or datasets from previous research)?	N/A
PARTNER: STE – Dataset #2	
What data and metadata vocabularies, standards, formats or methodologies will you follow to make your data interoperable to allow data exchange and re-use within and across disciplines?	N/A
In case it is unavoidable that you use uncommon or generate project specific ontologies or vocabularies, will you provide mappings to more commonly used ontologies? Will you openly publish the generated ontologies or vocabularies to allow reusing, refining or extending them?	N/A
Will your data include qualified references to other data (e.g. other data from your project, or datasets from previous research)?	N/A
PARTNER: STE – Dataset #3	
What data and metadata vocabularies, standards, formats or methodologies will you follow to make your data interoperable to allow data exchange and re-use within and across disciplines?	N/A
In case it is unavoidable that you use uncommon or generate project specific ontologies or vocabularies, will you provide mappings to more commonly used ontologies? Will you openly publish the generated ontologies or vocabularies to allow reusing, refining or extending them?	N/A
Will your data include qualified references to other data (e.g. other data from your project, or datasets from previous research)?	N/A

PARTNER: KNEIA – Dataset #1	
What data and metadata vocabularies, standards, formats or methodologies will you follow to make your data interoperable to allow data exchange and re-use within and across disciplines?	N/A
In case it is unavoidable that you use uncommon or generate project specific ontologies or vocabularies, will you provide mappings to more commonly used ontologies? Will you openly publish the generated ontologies or vocabularies to allow reusing, refining or extending them?	N/A
Will your data include qualified references to other data (e.g. other data from your project, or datasets from previous research)?	N/A

PARTNER: EMU – Dataset #1	
What data and metadata vocabularies, standards, formats or methodologies will you follow to make your data interoperable to allow data exchange and re-use within and across disciplines?	N/A
In case it is unavoidable that you use uncommon or generate project specific ontologies or vocabularies, will you provide mappings to more commonly used ontologies? Will you openly publish the generated ontologies or vocabularies to allow reusing, refining or extending them?	N/A
Will your data include qualified references to other data (e.g. other data from your project, or datasets from previous research)?	Probably yes

PARTNER: HYSY – Dataset #1	
What data and metadata vocabularies, standards, formats or methodologies will you follow to make your data interoperable to allow data exchange and re-use within and across disciplines?	Data will be produced in different software formats (e.g, .dwg, step) and will be shared as pdf
In case it is unavoidable that you use uncommon or generate project specific ontologies or vocabularies, will you provide mappings to more commonly used ontologies? Will you openly publish the generated ontologies or vocabularies to allow reusing, refining or extending them?	N/A
Will your data include qualified references to other data (e.g. other data from your project, or datasets from previous research)?	N/A

PARTNER: CSIC – Dataset #1	
What data and metadata vocabularies, standards, formats or methodologies will you follow to make your data interoperable to allow data exchange and re-use within and across disciplines?	A comprehensive document detailing the format, vocabulary, and data types will be provided to facilitate data exchange.
In case it is unavoidable that you use uncommon or generate project specific ontologies or vocabularies, will you provide mappings to more commonly used ontologies? Will you openly publish the generated ontologies or vocabularies to allow reusing, refining or extending them?	Yes, an accompanying explanatory document will be provided
Will your data include qualified references to other data (e.g. other data from your project, or datasets from previous research)?	Reference will be included (if needed) to compare the data with analogous data set in literature or previous research results.

PARTNER: RDM – Dataset #1	
What data and metadata vocabularies, standards, formats or methodologies will you follow to make your data interoperable to allow data exchange and re-use within and across disciplines?	N/A
In case it is unavoidable that you use uncommon or generate project specific ontologies or vocabularies, will you provide mappings to more commonly used ontologies? Will you openly publish the generated ontologies or vocabularies to allow reusing, refining or extending them?	N/A
Will your data include qualified references to other data (e.g. other data from your project, or datasets from previous research)?	N/A
PARTNER: RDM – Dataset #2	
What data and metadata vocabularies, standards, formats or methodologies will you follow to make your data interoperable to allow data exchange and re-use within and across disciplines?	N/A
In case it is unavoidable that you use uncommon or generate project specific ontologies or vocabularies, will you provide mappings to more commonly used ontologies? Will you openly publish the generated ontologies or vocabularies to allow reusing, refining or extending them?	N/A
Will your data include qualified references to other data (e.g. other data from your project, or datasets from previous research)?	N/A

PARTNER: AZO – Dataset #1	
What data and metadata vocabularies, standards, formats or methodologies will you follow to make your data interoperable to allow data exchange and re-use within and across disciplines?	Depends on the database that will integrate provided data
In case it is unavoidable that you use uncommon or generate project specific ontologies or vocabularies, will you provide mappings to more commonly used ontologies? Will you openly publish the generated ontologies or vocabularies to allow reusing, refining or extending them?	YES
Will your data include qualified references to other data (e.g. other data from your project, or datasets from previous research)?	Depends on the database that will integrate provided data
PARTNER: AZO – Dataset #2	
What data and metadata vocabularies, standards, formats or methodologies will you follow to make your data interoperable to allow data exchange and re-use within and across disciplines?	Depends on the database that will integrate provided data
In case it is unavoidable that you use uncommon or generate project specific ontologies or vocabularies, will you provide mappings to more commonly used ontologies? Will you openly publish the generated ontologies or vocabularies to allow reusing, refining or extending them?	YES
Will your data include qualified references to other data (e.g. other data from your project, or datasets from previous research)?	Depends on the database that will integrate provided data

PARTNER: TOR – Dataset #All	
What data and metadata vocabularies, standards, formats or methodologies will you follow to make your data interoperable to allow data exchange and re-use within and across disciplines?	N/A
In case it is unavoidable that you use uncommon or generate project specific ontologies or vocabularies, will you provide mappings to more commonly used ontologies? Will you openly publish the generated ontologies or vocabularies to allow reusing, refining or extending them?	N/A
Will your data include qualified references to other data (e.g. other data from your project, or datasets from previous research)?	N/A

3.4 INCREASE DATA RE-USE

In this section, all the datasets are detailed in terms of licensing and the enablement of the use of the dataset after the end of the project.

PARTNER: IDE – Dataset #1	
How will you provide documentation needed to validate data analysis and facilitate data re-use?	Readme files with suitable information will be provided.
Will your data be made freely available in the public domain to permit the widest re-use possible? Will your data be licensed using standard reuse licenses, in line with the obligations set out in the Grant Agreement?	The data agreed upon with the partners will be made freely available in the public domain to permit re-use.
Will the data produced in the project be useable by third parties, in particular after the end of the project?	Yes
Will the provenance of the data be thoroughly documented using the appropriate standards?	Yes, if necessary.

PARTNER: ICIQ-CERCA – Dataset #1	
How will you provide documentation needed to validate data analysis and facilitate data re-use?	As scientific research publication(s)
Will your data be made freely available in the public domain to permit the widest re-use possible? Will your data be licensed using standard reuse licenses, in line with the obligations set out in the Grant Agreement?	The data agreed upon with the partners will be made freely available in the public domain to permit re-use.
Will the data produced in the project be useable by third parties, in particular after the end of the project?	Yes
Will the provenance of the data be thoroughly documented using the appropriate standards?	Yes, if necessary

PARTNER: CSM – Dataset #1	
How will you provide documentation needed to validate data analysis and facilitate data re-use?	Readme files with suitable information will be provided.
Will your data be made freely available in the public domain to permit the widest re-use possible? Will your data be licensed using standard reuse licenses, in line with the obligations set out in the Grant Agreement?	The data agreed upon with the partners will be made freely available in the public domain to permit re-use.
Will the data produced in the project be useable by third parties, in particular after the end of the project?	Yes
Will the provenance of the data be thoroughly documented using the appropriate standards?	Yes, if necessary.

PARTNER: CSM – Dataset #2	
How will you provide documentation needed to validate data analysis and facilitate data re-use?	Readme files with suitable information will be provided.
Will your data be made freely available in the public domain to permit the widest re-use possible? Will your data be licensed using standard reuse licenses, in line with the obligations set out in the Grant Agreement?	The data agreed upon with the partners will be made freely available in the public domain to permit re-use.
Will the data produced in the project be useable by third parties, in particular after the end of the project?	Yes
Will the provenance of the data be thoroughly documented using the appropriate standards?	Yes, if necessary.

PARTNER: BNIG – Dataset #all	
How will you provide documentation needed to validate data analysis and facilitate data re-use?	Readme files with suitable information will be provided.
Will your data be made freely available in the public domain to permit the widest re-use possible? Will your data be licensed using standard reuse licenses, in line with the obligations set out in the Grant Agreement?	YES, If the technology licensor requests, confidentiality data will be appropriately labeled.
Will the data produced in the project be useable by third parties, in particular after the end of the project?	YES, If the technology licensor requests, confidentiality data will be appropriately labeled.
Will the provenance of the data be thoroughly documented using the appropriate standards?	Yes, if necessary.

PARTNER: STE – Dataset #1	
How will you provide documentation needed to validate data analysis and facilitate data re-use?	Readme files with suitable information will be provided.
Will your data be made freely available in the public domain to permit the widest re-use possible? Will your data be licensed using standard reuse licenses, in line with the obligations set out in the Grant Agreement?	No, use within consortium
Will the data produced in the project be useable by third parties, in particular after the end of the project?	N/A
Will the provenance of the data be thoroughly documented using the appropriate standards?	Yes, if necessary.
PARTNER: STE – Dataset #2	
How will you provide documentation needed to validate data analysis and facilitate data re-use?	Readme files with suitable information will be provided.

Will your data be made freely available in the public domain to permit the widest re-use possible? Will your data be licensed using standard reuse licenses, in line with the obligations set out in the Grant Agreement?	The data related to plant operation / production data, models, layouts and other plant and/or technology-specific know-how (including feedstock, energy, resources, compositions, technologies, waste streams, suppliers, customers, subcontractors. etc.) are considered confidential information.
Will the data produced in the project be useable by third parties, in particular after the end of the project?	No
Will the provenance of the data be thoroughly documented using the appropriate standards?	Yes, if necessary.
PARTNER: STE – Dataset #3	
How will you provide documentation needed to validate data analysis and facilitate data re-use?	Readme files with suitable information will be provided.
Will your data be made freely available in the public domain to permit the widest re-use possible? Will your data be licensed using standard reuse licenses, in line with the obligations set out in the Grant Agreement?	The data related to plant operation / production data, models, layouts and other plant and/or technology-specific know-how (including feedstock, energy, resources, compositions, technologies, waste streams, suppliers, customers, subcontractors. etc.) are considered confidential information.
Will the data produced in the project be useable by third parties, in particular after the end of the project?	No
Will the provenance of the data be thoroughly documented using the appropriate standards?	Yes, if necessary.

PARTNER: KNEIA – Dataset #1	
How will you provide documentation needed to validate data analysis and facilitate data re-use?	N/A
Will your data be made freely available in the public domain to permit the widest re-use possible? Will your data be licensed using	No

standard reuse licenses, in line with the obligations set out in the Grant Agreement?	
Will the data produced in the project be useable by third parties, in particular after the end of the project?	No
Will the provenance of the data be thoroughly documented using the appropriate standards?	N/A

PARTNER: EMU – Dataset #1	
How will you provide documentation needed to validate data analysis and facilitate data re-use?	Readme files with suitable information will be provided.
Will your data be made freely available in the public domain to permit the widest re-use possible? Will your data be licensed using standard reuse licenses, in line with the obligations set out in the Grant Agreement?	The data will be made freely available in the public domain to permit re-use.
Will the data produced in the project be useable by third parties, in particular after the end of the project?	Yes
Will the provenance of the data be thoroughly documented using the appropriate standards?	Yes, if necessary.

PARTNER: HYSY – Dataset #1	
How will you provide documentation needed to validate data analysis and facilitate data re-use?	N/A
Will your data be made freely available in the public domain to permit the widest re-use possible? Will your data be licensed using standard reuse licenses, in line with the obligations set out in the Grant Agreement?	The data that will not hinder the exploitation of the results as direct use or IP will be made freely available upon the agreement with the partners.
Will the data produced in the project be useable by third parties, in particular after the end of the project?	Yes, in case the data is not going to be used direct
Will the provenance of the data be thoroughly documented using the appropriate standards?	Yes, if necessary

PARTNER: CSIC – Dataset #1	
How will you provide documentation needed to validate data analysis and facilitate data re-use?	Text files containing raw data, along with an explanatory document (in PDF or PPT format), will be included.
Will your data be made freely available in the public domain to permit the widest re-use possible? Will your data be licensed using	Yes

standard reuse licenses, in line with the obligations set out in the Grant Agreement?	
Will the data produced in the project be useable by third parties, in particular after the end of the project?	Yes
Will the provenance of the data be thoroughly documented using the appropriate standards?	Yes

PARTNER: RDM – Dataset #1	
How will you provide documentation needed to validate data analysis and facilitate data re-use?	Readme files with suitable information will be provided.
Will your data be made freely available in the public domain to permit the widest re-use possible? Will your data be licensed using standard reuse licenses, in line with the obligations set out in the Grant Agreement?	No - use within consortium
Will the data produced in the project be useable by third parties, in particular after the end of the project?	No
Will the provenance of the data be thoroughly documented using the appropriate standards?	Yes, if necessary.
PARTNER: RDM – Dataset #2	
How will you provide documentation needed to validate data analysis and facilitate data re-use?	Readme files with suitable information will be provided.
Will your data be made freely available in the public domain to permit the widest re-use possible? Will your data be licensed using standard reuse licenses, in line with the obligations set out in the Grant Agreement?	The data agreed upon with the partners will be made freely available in the public domain to permit re-use.
Will the data produced in the project be useable by third parties, in particular after the end of the project?	An open feasibility report will be made public in zenodo
Will the provenance of the data be thoroughly documented using the appropriate standards?	Yes, if necessary.

PARTNER: AZO – Dataset #1	
How will you provide documentation needed to validate data analysis and facilitate data re-use?	In the format required by the WS leader
Will your data be made freely available in the public domain to permit the widest re-use possible? Will your data be licensed using standard reuse licenses, in line with the obligations set out in the Grant Agreement?	YES, if requested by technology licensor, the confidentiality data will be marked accordingly

Will the data produced in the project be useable by third parties, in particular after the end of the project?	YES, if requested by technology licensor, the confidentiality data will be marked accordingly
Will the provenance of the data be thoroughly documented using the appropriate standards?	YES
PARTNER: AZO – Dataset #2	
How will you provide documentation needed to validate data analysis and facilitate data re-use?	In the format required by the WS leader
Will your data be made freely available in the public domain to permit the widest re-use possible? Will your data be licensed using standard reuse licenses, in line with the obligations set out in the Grant Agreement?	YES, if requested by technology licensor, the confidentiality data will be marked accordingly
Will the data produced in the project be useable by third parties, in particular after the end of the project?	YES, if requested by technology licensor, the confidentiality data will be marked accordingly
Will the provenance of the data be thoroughly documented using the appropriate standards?	YES

PARTNER: TOR – Dataset #1	
How will you provide documentation needed to validate data analysis and facilitate data re-use?	Readme files with suitable information will be provided.
Will your data be made freely available in the public domain to permit the widest re-use possible? Will your data be licensed using standard reuse licenses, in line with the obligations set out in the Grant Agreement?	NO, use within consortium
Will the data produced in the project be useable by third parties, in particular after the end of the project?	N/A
Will the provenance of the data be thoroughly documented using the appropriate standards?	Yes, if necessary.
PARTNER: TOR – Dataset #2	
How will you provide documentation needed to validate data analysis and facilitate data re-use?	Readme files with suitable information will be provided.
Will your data be made freely available in the public domain to permit the widest re-use possible? Will your data be licensed using standard reuse licenses, in line with the obligations set out in the Grant Agreement?	No, use within consortium
Will the data produced in the project be useable by third parties, in particular after the end of the project?	No

Will the provenance of the data be thoroughly documented using the appropriate standards?	Yes, if necessary.
PARTNER: TOR – Dataset #3	
How will you provide documentation needed to validate data analysis and facilitate data re-use?	Readme files with suitable information will be provided.
Will your data be made freely available in the public domain to permit the widest re-use possible? Will your data be licensed using standard reuse licenses, in line with the obligations set out in the Grant Agreement?	No, use within consortium
Will the data produced in the project be useable by third parties, in particular after the end of the project?	An open feasibility report will be made public in zenodo
Will the provenance of the data be thoroughly documented using the appropriate standards?	Yes, if necessary.
PARTNER: TOR – Dataset #4	
How will you provide documentation needed to validate data analysis and facilitate data re-use?	Readme files with suitable information will be provided.
Will your data be made freely available in the public domain to permit the widest re-use possible? Will your data be licensed using standard reuse licenses, in line with the obligations set out in the Grant Agreement?	NO use within consortium
Will the data produced in the project be useable by third parties, in particular after the end of the project?	No
Will the provenance of the data be thoroughly documented using the appropriate standards?	Yes, if necessary.
PARTNER: TOR – Dataset #5	
How will you provide documentation needed to validate data analysis and facilitate data re-use?	Readme files with suitable information will be provided.
Will your data be made freely available in the public domain to permit the widest re-use possible? Will your data be licensed using standard reuse licenses, in line with the obligations set out in the Grant Agreement?	No, use within consortium . An open feasibility report will be made public in zenodo
Will the data produced in the project be useable by third parties, in particular after the end of the project?	No
Will the provenance of the data be thoroughly documented using the appropriate standards?	Yes, if necessary.
PARTNER: TOR – Dataset #6	
How will you provide documentation needed to validate data analysis and facilitate data re-use?	Readme files with suitable information will be provided.

Will your data be made freely available in the public domain to permit the widest re-use possible? Will your data be licensed using standard reuse licenses, in line with the obligations set out in the Grant Agreement?	Yes
Will the data produced in the project be useable by third parties, in particular after the end of the project?	Yes
Will the provenance of the data be thoroughly documented using the appropriate standards?	Yes, if necessary.

4. ALLOCATION OF RESOURCES

The PHOTOSINT consortium will make use of the free-of-charge Zenodo repository to make data accessible. As already explained in *D8.3 – Project Management Plan* (M2), Zenodo is a general-purpose open repository run by CERN that was created through the European OpenAIRE program. It enables the deposit of research papers, datasets, software, reports, and other digital artifacts relevant to the study. A persistent digital object identification (DOI) is created for each submission, making the saved materials easily citable and accessible. For the PHOTOSINT project, a specific PHOTOSINT community will be created in Zenodo.

Using the Zenodo repository, an OpenAIRE-compliant repository, the consortium will provide instant open access to all peer-reviewed scientific articles produced in the project (at the latest, at the time of publication) as well as all public datasets. To achieve the most significant impact among scholars, policymakers, and enterprises, the material deposited in Zenodo will be immediately indexed in OpenAIRE. Each consortium partner will additionally make available through the repository any research outputs, instruments, or tools required to verify the findings of the paper.

Accessible bibliographic metadata, such as the phrases European Union (EU) and Horizon Europe, the name of the action, its acronym, and its grant number, the publication date, and a persistent identifier, such as a DOI, will be used to identify the deposited publications. In order to maximize the impact of the project results, publication in fully open-access journals will be encouraged. However, some hybrid journals with a high impact in their field may also be taken into consideration (in this case, the money for the APC fees will come from other sources). Consideration will also be given to the publication in Open Research Europe. The associated costs will be claimed as part of the Horizon Europe grant.

All data management issues related to the project fall under the responsibility of the coordinator partner IDE. At this point, the person responsible for the data management in the PHOTOSINT project is María Tripiana Serrano from IDE (e-mail: maria.tripiana@idener.ai).

5. DATA SECURITY

Each consortium member is responsible for overseeing the security of their datasets and for ensuring that they are stored securely. To guarantee the backup operations of these, some datasets could be handwritten and transformed into digital records. On the other side, knowledgeable IT system administrators from each organization will securely store and oversee the digital assets and resources that are developed or used during the project. The consortium partner in charge of the repository (such as Hosted Cloud Service) will be responsible for the security of the data stored in those platforms if the data is being kept in a public or shared repository for the consortium. This partner will guarantee that the data is encrypted during transport and that there is fine-grained access control to the data based on the user and role in the PHOTOSINT project.

6. ETHICAL ASPECTS

In the PHOTOSINT project, no ethics or legal issues have been identified to have an impact on data sharing. According to the 'Ethics Summary Report,' the proposal and the project are 'ethics ready.' In *WP8 – Project management and coordination*, a task regarding ethics requirements, *Task 8.3 – Ethic issues management and polity recommendations*, has been included, and the results of this task will be presented in

deliverable *D8.1 – Ethics requirement report*. This task will be focused on the possible administrative issues related to the list of facility authorizations and relevant health and safety procedures. Besides, and if required, this document will contain the beneficiary's confirmation regarding GDPR compliance, including relevant systems and privacy practices, and deploy privacy-by-design and privacy-by-default.

7. OTHER ISSUES

The PHOTOSINT project does not make use of other national/funder/sectorial/departmental procedures for data management, and no other direct issues have been found in the data management plan.