

# D1.2 – Data Management Plan (DMP) at M6



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## Document control sheet

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<sup>1</sup> Dissemination level: **PU** = Public, **PP** = Restricted to other programme participants (including the JU), **RE** = Restricted to a group specified by the consortium (including the JU), **CO** = Confidential, only for members of the consortium (including the JU)

<sup>1</sup> Nature of the deliverable: R = Document, report; DEM = Demonstrator, pilot, prototype; DEC = Websites, patent filings, videos, etc.; ETHICS = Ethics requirement; ORDP = Open Research Data Pilot; OTHER.

<sup>1</sup> Creation, modification, final version for evaluation, revised version following evaluation, final

## Abstract/Executive summary

This deliverable provides a first version of the data management plan (DMP) for the project. The DMP provides an analysis of the various datasets that will be produced by the project and the main elements of the data management policy that will be used by the beneficiaries with regard to all these datasets. As the data management plan is considered to be a living document the content of the data management plan will be subject to change, adaptation and expansion throughout the project's lifetime. Two additional deliverables (D1.3 and D1.4) are planned at M24 and M40.

## List of abbreviations

Consortium Agreement: CA  
Data Management Plan: DMP  
European Commission: EC  
European Union: EU  
FAIR: Findable, Accessible, Interoperable and Re-usable  
Grant Agreement: GA  
Intellectual Property: IP  
rDME: renewable dimethyl ether  
SEDMEs: Sorption Enhanced Dimethyl Ether Synthesis  
SNG: synthetic natural gas  
Work Package: WP

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# 1. Introduction

This deliverable describes the Data Management Plan (DMP) of the BUTTERFLY project. It contains guidelines and procedures to be used by the consortium partners to manage the data generated in the project.

The DMP covers the following aspect:

- Description of the types and formats of data generated.
- Findability, accessibility, interoperability, and reusability (FAIR) data management
- Issues related to data security and ethics.
- Description of the datasets expected to be generated in the project (Appendix)

The DMP will be continuously revised and updated throughout the implementation of the project. New versions of the DMP will be created when important changes to the project occur due to inclusion of new data sets, changes in consortium policies or other external factors. Two additional deliverables (D1.3 and D1.4) are planned at M24 and M40. Generic descriptions regarding this data management plan are according to the adjacent TNO projects GOLD (GA number 101006873) and HYPELIGNUM (GA number 101070302) and text has been re-used with minor adjustments specific to BUTTERFLY.

# 2. Data Summary

The purpose of the data that is generated or re-used is to support the objectives of BUTTERFLY to demonstrate three flexible complete value chains (at TRL7) with three families of residual feedstocks to produce advanced biofuels and renewable fuels (rDME and SNG, at a tuneable ratio). We will show how these value chains can economically incorporate captured CO<sub>2</sub> from flue gas (biobased or non-biobased industrial processes) conversion, as well as green hydrogen and renewable electricity, in order to maximize the product yields while ensuring the highest overall energy efficiency. The three flexible value chains towards rDME and SNG are shown in Figure 1.

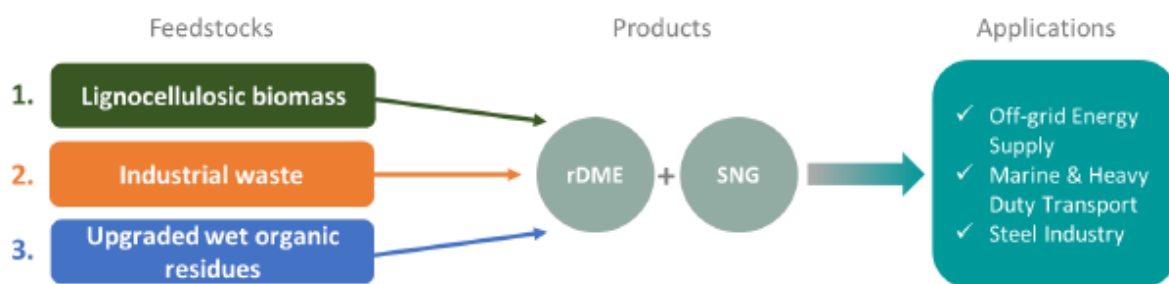


Figure 1: The three flexible complete value chains of BUTTERFLY.

The specific objectives of the BUTTERFLY project are:

- Validate SEDMES compatibility with different types of gasifiers operated on various feedstocks and de-risk the process integration
- Demonstrate integration of indirect gasification of residual feedstocks, SEDMES and methanation reactors to co-produce rDME and SNG with a tuneable ratio based on green hydrogen availability and market demand
- Assess sustainability, costs of production and define new value chains and business cases

- iv. Evaluate quality and standards of renewable fuels with end-users in heavy duty transport and marine transport and off-grid domestic, industrial and residential heating

In addition to project management (WP1) and dissemination & communication (WP6), the BUTTERFLY project is structured in four technical work packages:

- WP2: Supporting activities for validation of SEDMES connected to gasification at TRL5
- WP3: Demonstration of flexible rDME and SNG production at TRL7
- WP4: Value chains digitalisation and optimization assessment
- WP5: Market identification and technology exploitation

The data expected to be generated in each work package is described in the Appendix.

## **2.1. Types and formats of data generated**

The BUTTERFLY project will generate data such as text documents, spreadsheets, laboratory notebooks, diaries, reports and similar. Additionally, measurement raw data, simulation data and datasets will be generated. A preliminary assessment of types and formats of data expected to be generated in BUTTERFLY can be found in the Appendix. More detailed information about the types and formats of data will be updated in the upcoming versions of the Data Management Plan once the information is available.

## **2.2. Possible re-use of the data**

The project will use the data available within the consortium members and the one published defining the state of the art of the field (from scientific and/or industrial sources). If during the implementation and after the end of the project will raise the possibility to improve or exploit results and the technology obtained, the data could be used for that purpose. Data is stored/archived at the partners as indicated in the Appendix. Common file types as are currently in use are applied for the generation and storage of data (e.g. MS Word, Excel, Powerpoint, comma-separated values, non-unicode txt, OpenDocument text, Adobe Acrobat reader, etc).

## **2.3. Origin of the data**

The data has two main origins: the state of the art and the project itself. On the one hand the project will reuse available and existing data from the scientific and industrial community and on the other hand it will generate its own data that will be the result of the research and development activities.

## **2.4. Data utility**

First, the data will be used by the consortium partners to achieve the objectives of the project and then for their future or related research activities. Second, the data will be used, mainly in association with scientific publications, by the scientific community and industries working in the field.

Regarding the use of the data by parties outside the project consortium, particular attention will be paid to the data sharing of confidential information and the IPR agreements included in the Consortium Agreement (CA).

### 3. FAIR data

This DMP, coherently with the EU guidelines, describes the data management procedures according to FAIR (findable, accessible, interoperable, and re-usable) data management. Commonly identified as the four main features of project research data, they are relevant for allowing their maximum knowledge circulation as well as final return on investment (“scientific ROI”). This is in line with the indications provided by the European Council<sup>1</sup>.

#### 3.1. Making data findable, including provisions for metadata

This DMP recommends that BUTTERFLY uses the ZENODO repository as the main tool to make data findable in accordance with the Open Access Mandate.

Through ZENODO all public datasets, deliverables and scientific publications can be uploaded. In addition, uploads to ZENODO can be linked easily to OpenAIRE, which will maximise findability. All uploads will be enriched with standard ZENODO metadata, including Grant Agreement Number, Project Acronym, version control and automatically assigned DOIs to all uploaded elements.

Metadata is defined as: structured information describing the characteristics of a resource. Examples of metadata are: the dates associated with a dataset or the title and author of a book. Metadata supports discovery, re-use and long-term preservation of resources. The needs for Metadata may vary across scientific fields, but typically cover general descriptive and access metadata, data characteristics, archive terms and access policies.

A metadata record consists of a set of predefined elements that define specific attributes of a resource. Each element can have one or more values; for example, a dataset may have multiple creators. Documenting data enables other researchers to understand the data itself. Metadata about the nature of the files is critical to the proper management of digital resources over time.

The project partners will agree on specific ways to manage metadata, including:

- Each dataset will be described in English.
- The data will be organised or formatted to ensure that current and future users know the origins of the data.
- Files that are distributed to other project partners should be named in a way that makes it possible to identify the file easily. Please use the following format:
  - [ACRONYM]\_[FID]\_[DATE]\_[NAME]
  - ACRONYM: is the project acronym, in our project use “BUTTERFLY”
  - FID: File identifier indicates the document type. This can be a deliverable, a report, an Excel table with results etc. Use a self-explaining text or shortcut. For example, if you submit Deliverable 2.3 write “Deliverable2\_3” or report title.
  - DATE is the date you saved, modified the document. This makes it easy to identify a version of a document. Use Year, Month and Day i.e. “2023-09-19”.
  - NAME is the partner name and your initials. Use the company short name for this and your initials for example TNO-AvZ.

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<sup>1</sup> <https://www.rd-alliance.org/groups/metadata-standards-directory-working-group.html>

- Adequate metadata will be provided within the dataset (e.g. field labels or column headings) in order to easily be able to interpret the data.  
Other examples of information that the data need to contain includes:
  - Title (name given to the data)
  - Creator (entity primarily responsible for generating the data)
  - Date and/or data collection period
  - File formats
  - Version number
  - Data collection methods/processes and related information (e.g. source, frequency)
  - Confidentiality information and release policy including dissemination rules and purposes.
  - Keywords (keywords or phrases that describe the subject or content of the data)
  - Project funding information: European Union logo, information about Grant Agreement number, and name of the action/program that funds the project.
  - Geographic coverage of the dataset (if applicable)
  - Comments
- Identification of different versions: It is proposed in each data set to include a versioning table, additionally to use the suffix “\_v1” in each file/document name relevant to the versioning table. For versioning the rule that will be followed will be the use of a sequentially numbered system: v1, v2, v3, etc and “Final” for the final version. If changes need to be done in the final version, then the name of the document will change including the relevant sequential version number, ensuring that the document with the “Final” suffix is indeed the final one.
- At a minimum, metadata records should be kept in a fielded form, such as a spreadsheet, CSV file, or tab-delimited file. Auxiliary information necessary to interpret the metadata – such as explanations of codes, abbreviations, or algorithms used – should be included as accompanying documentation.
- DataCite’s metadata standard offers a list of core metadata properties chosen for accurate and consistent identification of a resource for citation and retrieval purposes, with recommended use instructions in the documentation.
- Zenodo or SND DORIS, for example, are open dissemination research data repositories following FAIR principles.

### 3.2. Making data accessible

Data related to Public Deliverables will be openly available as by default. The data related to IPR protection or to relevant provisions made in the Consortium Agreement will be eligible to be shared under the defined conditions.

According to the type of data and its level of confidentiality, the data will be made accessible on the project’s communication channels (e.g. project website) or recognized repositories (for raw data of publication or data sets) which uses standard communications protocols. This will be defined during the project once the data is better defined and known.

To ensure the safety of the data, the involved project partners will use their available local file servers to periodically create backups of the relevant materials.

All other relevant documentation created during the project (e.g. deliverables) will be archived and preserved in TNO SharePoint repository. It allows users to store, edit and share files within the project consortium.



All research data and associated material will be preserved for at least 5 years after the end of the project as prescribed by the European Commission.

The coordinator of the BUTTERFLY project will be responsible for the data management.

### 3.3. Making data interoperable

Whenever possible, open standard and data formats (e.g. not requiring proprietary software) will be preferred. Standard and formats will be those that are commonly used as supporting material for the journal that the dataset will be submitted to.

To achieve Interoperable data, however, partners can check FAIRsharing.org for the standards that apply to their data type and use them. Ensure that the data repository they choose allows them to include links or references to other related data and use open, non-proprietary file formats for their data.

### 3.4. Increase data re-use

This remains to be defined in the course of the project as the partners gain a better idea of what data they generate and how to ensure that the data is re-used for further research activities. Re-use is subordinated to legitimate interests of rights holders and protection of confidentiality and personal information.

The EC Open Access policy asks researchers to make available in Open Access their 'peer reviewed articles'. This is easiest to comply with when the researcher retains his/her copyright and only gives the publisher of the article a 'licence to publish'. In that case, the article can be deposited in a repository and made publicly accessible without further permission of the publisher. If the licence stipulates an embargo period, of course that must be respected.

When data is uploaded to a repository, partners should choose a license which makes data available to the widest audience possible and makes the widest range of uses possible. Thus, it is proposed that partners opt for the Creative Commons license, preferably:

**CC0** (authors give up their copyright and allowing re-users to distribute, remix, adapt, and build upon the material in any medium or format, even for commercial purposes) or

**CC-BY 4.0** (This license requires that re-users give credit to the authors. It allows re-users to distribute, remix, adapt, and build upon the material in any medium or format, even for commercial purposes).

## 4. Other research outputs

No other research output than listed in the previous sections are foreseen for the time being. In case other outputs are generated during the implementation of the project, the DMP will be updated accordingly.

## 5. Allocation of resources

The coordinator of the BUTTERFLY project is responsible for the overall data management of the project. In addition, each partner is contributing at technical level to provide information about the type of data produced and how to use and re-use it.

Project partners are responsible for implementing the DMP within their respective work packages. Each partner is the solely responsible for his or her processed data and for data that are potentially important for reuse by a larger community.

The BUTTERFLY project will use standard tools and a free of charge research data repository. The costs of data management activities are limited to project management costs and will be covered by allocated resources in the project budget of the coordinator and all partners.

## 6. Data security

The data produced during the project will be stored on internal servers or institutional data platforms of the project partners. In addition, backups will be made to ensure the preservation of the data. Other data will be accessible through the project's document repository (external audience sharepoint at TNO) for sharing within the consortium.

All individuals from the BUTTERFLY partners need to be registered at TNO to obtain a TNO Partner account for the External audience sharepoint to use the document repository system. The TNO Partner account provides the user with a password for login. A 2-step verification process is used for login, the partner receives a login code on the mobile phone. Every partner institute can register up to 5 users of the Sharepoint site.

## 7. Ethics

In accordance with Article 14 (Ethics and Values) and Annex 5 of the Grant Agreement, the beneficiaries will carry out the project in line with the highest ethical standards and the applicable EU, international and national law on ethical principles.

In short, partners shall not perform activities that are prohibited in all EU Member States or prohibited in the Member State of the specific partner. Such activities are also not eligible for funding.

Partners must also pay particular attention to the principle of proportionality, the right to privacy, the right to the protection of personal data, the right to the physical and mental integrity of persons, the right to non-discrimination, the need to ensure protection of the environment and high levels of human health protection.

Partners must ensure that the activities under the action have an exclusive focus on civil applications and do not involve human embryonal and/or cloning activities.

In addition, the beneficiaries must respect the fundamental principle of research integrity — as set out in the European Code of Conduct for Research Integrity. This implies compliance with the following principles:

- **reliability** in ensuring the quality of research reflected in the design, the methodology, the analysis and the use of resources
- **honesty** in developing, undertaking, reviewing, reporting and communicating research
- in a transparent, fair and unbiased way
- **respect** for colleagues, research participants, society, ecosystems, cultural heritage and the environment

- **accountability** for the research from idea to publication, for its management and organisation, for training, supervision and mentoring, and for its wider impacts and means that beneficiaries must ensure that persons carrying out research tasks follow the good research practices including ensuring, where possible, openness, reproducibility and traceability and refrain from the research integrity violations described in the Code.

## 8. Other issues

In accordance with Article 13 (Confidentiality and Security) of the Grant Agreement, all beneficiaries must keep confidential any data, documents or other material (in any form) that is identified as sensitive in writing ('sensitive information') during the implementation of the action and for at least until the time-limit set out in the Data Sheet.

Standard time-limits after project end:

- Confidentiality: for 5 years after final payment
- Record-keeping: for 5 years after final payment

The parties must handle classified information in accordance with the applicable EU, international or national laws on classified information (in particular, Decision 2015/444 and its implementing rules).

In accordance with Article 15 (Data Protection) of the Grant Agreement, the beneficiaries must process personal data under the Agreement in compliance with the applicable EU, international and national laws on data protection (in particular, Regulation 2016/679).

## 9. Appendix

Table 1: WP2: Supporting activities for validation of SEDMES connected to gasification at TRL5 (WP leader: TNO)

Data set reference & name	Data set description	Metadata and standards (if relevant)	Data sharing	Archiving and preservation (including storage & backup)
Feedstock composition (TNO)	Ultimate, proximate and elemental analysis of the feedstocks to be tested	B.N002; B.N203; B.N202; B.N211; B.N035; B.S231/B.S241	Data is Confidential, only for members of the consortium and accessible through deliverables in the project. Data will be public when scientific papers or conference contributions are made.	Data will be stored on TNO sharepoint only, and shared with other consortium members only as required for deliverables. Backed up according to normal sharepoint backup procedures.
Product Gas from Indirect gasification (TNO)	Composition of the product gas from the indirect gasification tests analysed with online/offline GC's and wet chemical analysis	Tar Guideline Method	Data is Confidential, only for members of the consortium and accessible through deliverables in the project. Data will be public when scientific papers or conference contributions are made.	Data is Confidential, only for members of the consortium and accessible through deliverables in the project. Data will be public when scientific papers or conference contributions are made.
Flue gas from Indirect gasification (TNO)	Composition of the flue gas from the indirect gasification tests analysed with online GC and wet chemical analysis		Data is Confidential, only for members of the consortium and accessible through deliverables in the project. Data will be public when scientific	Data is Confidential, only for members of the consortium and accessible through deliverables in the project. Data will be

			papers or conference contributions are made.	public when scientific papers or conference contributions are made.
Solids collected after indirect gasification (TNO)	Elemental analyses of the collected solids to identify inorganics	Own method based on ISO standards: B.N035; B.N211	Data is Confidential, only for members of the consortium and accessible through deliverables in the project. Data will be public when scientific papers or conference contributions are made.	Data will be stored on TNO sharepoint only, and shared with other consortium members only as required for deliverables. Backed up according to normal sharepoint backup procedures.
Modelling results on SEDMES cycle design (TNO)	rDME productivity and selectivity for different cycle designs using an in-house SEDMES MATLAB model		Data is Confidential, only for members of the consortium and accessible through deliverables in the project. Data will be public when scientific papers or conference contributions are made.	Data is Confidential, only for members of the consortium and accessible through deliverables in the project. Data will be public when scientific papers or conference contributions are made.
Product Gas from SEDMES (TNO)	Experimental results in terms of composition of the product gas from SEDMES tests at TRL5 using as a feedstock a real syngas from indirect gasification. The SEDMES gas composition is analysed qualitatively by means of a MS and quantitatively by means of Infrared analysis		Data is Confidential, only for members of the consortium and accessible through deliverables in the project. Data will be public when scientific papers or conference contributions are made.	Data is Confidential, only for members of the consortium and accessible through deliverables in the project. Data will be public when scientific papers or conference contributions are made.

*WP3: Demonstration of flexible rDME and SNG production at TRL7 (WP leader: ENGIE)*

Data set reference & name		Data set description	Metadata and standards (if relevant)	Data sharing	Archiving and preservation (including storage & backup)
Experimental results on the impact of new feedstocks on the production of SNG at TRL7 (ENGIE)	<ul style="list-style-type: none"> <li>All data necessary to perform techno-economic and environmental studies as part of WP3, 4 and 5, such as produced gas (syngas, SNG) composition and flowrates, etc.</li> </ul>	Method is based on NREL protocols: - NREL/TP-510-42618 - NREL/TP-510-42619 - NREL/TP-510-42622	Data is Confidential, only for members of the consortium and accessible through deliverables in the project. Data will be public when scientific papers or conference contributions are made.		All data originating from the different partners will be stored at individual partners' servers, just as in any other project.
Experimental results of rDME and SNG co-production at TRL7 (ENGIE)	<ul style="list-style-type: none"> <li>All data necessary to perform techno-economic and environmental studies as part of WP3, 4 and 5, such as produced gas (syngas, SNG) and rDME composition and flowrates, etc.</li> </ul>				There is no particular time limit for the preservation of data on these servers.
Experimental results co-methanation of CO and CO <sub>2</sub> at TRL7 (ENGIE)	<ul style="list-style-type: none"> <li>All data necessary to perform techno-economic and environmental studies as part of WP3, 4 and 5, such as produced gas (syngas, SNG) composition and flowrates, etc.</li> </ul>				
Product Gas from SED-MES (TNO)	Composition of the product gas from the SEDMES	Data is Confidential, only for mem-	Data is Confidential, only for members of the consortium and accessible through deliverables in the project. Data will be public when scientific papers or conference contributions are made.		

pilot plant connected to the GAYA plant at TRL7. The gas composition is analysed in the SEDMES pilot plant by means of a GC.

bers of the consortium and accessible through deliverables in the project. Data will be public when scientific papers or conference contributions are made.

*WP4: Value chains digitalisation and optimization assessment (WP leader: POLIMI)*

Data set reference & name	Data set description	Metadata and standards (if relevant)	Data sharing	Archiving and preservation (including storage & backup)
Life Cycle Inventory (LCI) data (LUT)	Inventory data for different life cycle stages of the studied products, received from partners or obtained from Sphera database (aka GaBi). It contains processes' inputs and outputs, e.g. materials and electricity consumed, emissions and valuable products generated	ISO 14040 and 14044	Data is Confidential, only for members of the consortium and accessible through deliverables in the project. Data will be public when scientific papers or conference contributions are made. All articles will be published as open access articles. LCI data will be published in the articles and supplementary data files	All data originating from the different partners will be stored at individual partners' servers, just as in any other project.  There is no particular time limit for the preservation of data on these servers.
Life Cycle Impact Assessment (LCIA) data (LUT)	Data on the potential environmental impacts from the studied product obtained from the	ISO 14040 and 14044	Data is Confidential, only for members of the consortium and accessible through deliverables in the	All data originating from the different partners will be stored

	LCA for experts (aka GaBi) model. Different impact assessment categories can be included in the LCIA, e.g. Global Warming Potential, Acidification, etc.		project. Data will be public when scientific papers or conference contributions are made. All articles will be published as open access articles. LCIA data will be published in the articles and supplementary data files	at individual partners' servers, just as in any other project.  There is no particular time limit for the preservation of data on these servers.
Data-set for supply chain analysis of residual biomasses and of non-biological origin residues (CFE)	Number-oriented data such as statistics, tables, primary production data, spatial data, NUTS level, and technical data of biomasses and of non-biological origin residues	Eurostat, Faostat, Prodcorn, EOCED.stat databases and devoted scientific literature; Shapefiles in QGIS	Data is Confidential, only for members of the consortium and accessible through deliverables in the project. Data will be public when scientific papers or conference contributions are made.	All data originating from the different partners will be stored at individual partners' servers.  There is no particular time limit for the preservation of data storage.
Supply chain optimization model (CFE)	Code / Proprietary formats		Data is Confidential, only for members of the consortium and accessible through deliverables in the project. Data will be public when scientific papers or conference contributions are made.	All data originating from the different partners will be stored at individual partners' servers.  There is no particular time limit for the preservation of data storage.
Simulation tools (POLIMI)	The dataset contains Aspen models, optimization models and other models specifically	Model version	The models will be kept confidential as they contain relevant IP of the partners. Simplified or locked versions will be made available if	Models are archived in local workstations and Sharepoints of Polimi. Organization



	designed for Digital twin development		possible. The approach will be shared through scientific publication.	protection policies will be applied.
Process simulation input / results (POLIMI)	The dataset contains the full set of input and results of technical modelling activities.	Not relevant	Data will be shared internally to the consortium and through scientific publications, where allowed by IP.	Data are archived in local workstations and Sharepoints of Butterfly. Organization protection policies will be applied.
Data for economic analysis (capital cost, operation costs, feedstock prices); (POLIMI)	The dataset contains the full set of input and results of economic analysis.	Not relevant	Data will be shared internally to the consortium and through scientific publications, where allowed by IP.	Data are archived in local workstations and Sharepoints of Butterfly. Organization protection policies will be applied.

*WP5: WP5: Market identification and technology exploitation (WP leader: DIMETA)*

Data set reference & name	Data set description	Metadata and standards (if relevant)	Data sharing	Archiving and preservation (including storage & backup)
Typical end-user information (Task 5.1) (DIMETA)	Information on typical end user characteristics and fuel use profiles to define the value chain identification.		Data is Confidential, only for members of the consortium and accessible through deliverables in the project. Data may be public when scientific papers or conference contributions are made.	Data will be shared on individual partners' sharepoint. Data should be deleted following the end of the project. Backup is not required.
Market size information (Task 5.1) (DIMETA)	Information on the market size for DME in the off-grid energy sector.	Argus publications on behalf of Liquid Gas Europe	Data is Confidential and Commercial. Can be used to inform project deliverables but should	Data will be stored on Dimeta sharepoint only, and shared with

			not be directly replicated in deliverables.	other consortium members only as required for deliverables. Backed up according to normal sharepoint backup procedures.
rDME specifications (task 5.2) (DIMETA)	Standards and specifications for DME use as a fuel	ISO 16861 ASTM D7901 DIN/TS 51698	The information will be based on these publicly available standards, which can be purchased under license.	Standards are stored on company sharepoint.  Backup is not required and there is no time limit to how long these can be stored.
DME quality requirements (Task 5.2) (DIMETA)	Information on the required quality requirements for DME in various off-grid energy uses	Feedback from industry and academic research on quality requirements	Data is Confidential and Commercial. Can be used to inform project deliverables but should not be directly replicated in deliverables.	Data will be stored on Dimeta sharepoint only. Backed up according to normal sharepoint backup procedures.
Requirements for product offtake (task 5.2) (DIMETA)	Information on options for how the offtake of purified DME could be achieved.	May rely on standards and codes of practice used in industry (TBD)	Standards and codes of practice are not confidential but may be commercially protected under license.	Standards are stored on company sharepoint.  Backup is not required and there is no time limit to how long these can be stored.
Technical criteria for DME storage (task 5.2) (DIMETA)	Information on options for DME storage	May rely on standards and codes of practice used in industry (TBD)	Standards and codes of practice are not confidential but may be	Standards are stored on company sharepoint.

		commercially protected under license.	Backup is not required and there is no time limit to how long these can be stored.
Simulation data (RWTH)	-Mesh -Simulation cases -Results	Data is Confidential, only for members of the consortium and accessible through deliverables in the project. Data will be public when scientific papers or conference contributions are made.	Data is saved to Coscine ( <a href="https://coscine.rwth-aachen.de">https://coscine.rwth-aachen.de</a> ) for 10 years.
Burner test rig data (RWTH)	-CAD of the test rig -Experiment schedule -Results	Data is Confidential, only for members of the consortium and accessible through deliverables in the project. Data will be public when scientific papers or conference contributions are made.	Data is saved to Coscine ( <a href="https://coscine.rwth-aachen.de">https://coscine.rwth-aachen.de</a> ) for 10 years.
Endogas test rig data (RWTH)	-CAD of the test rig -Experiment schedule -Results	Data is Confidential, only for members of the consortium and accessible through deliverables in the project. Data will be public when scientific papers or conference contributions are made.	Data is saved to Coscine ( <a href="https://coscine.rwth-aachen.de">https://coscine.rwth-aachen.de</a> ) for 10 years.

