DATA MANAGEMENT PLAN

GREENH2ATLANTIC PROJECT

Deliverable: D1.2

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Status: **Final version**

[1] PU = Public
CO = Confidential, only for members of the consortium (including Commission Services)

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Executive Summary

The present document constitutes GREENH2ATLANTIC's Data Management Plan (D1.2), developed within the framework of *Work Package 1 – Project Management & Coordination* under the responsibility of EDP. The objective is to develop a reliable and well-managed data management policy that will incentivize knowledge discovery, innovation and sharing.

GREENH2ATLANTIC's Data Management Plan addresses the relevant aspects of making data FAIR - findable, accessible, interoperable and re-usable -, by establishing the guidelines and a set of the best practices for collecting, documenting, managing and preserving the data generated by GREENH2ATLANTIC during project activities. Furthermore, it also tackles how the data will be exploited and/or made accessible for verification and re-use. The Plan will be defined in full compliance with the open access and reuse principles adopted by the European Commission and enforced through the Grant Agreement.

The first version of GREENH2ATLANTIC's Data Management Plan is composed of preliminary information and a framework that will be followed to secure a reliable and effective data policy. Nevertheless, this is a living document and other versions are planned to be issued along with the critical Milestones of the project, i.e. FID – M24, COD – M48 and end of project – M72, to reflect a finer level of granularity, as information is made available and data generated.

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Abbreviations

AHyMS: AI-enhanced Advanced Hydrogen Management System
ALK: Alkaline (electrolyser)
DMP: Data Management Plan
EC: European Commission
FAIR: Findable, Accessible, Interoperable and Re-usable
FGHPP: Flexible Green H2 Production Process
GDPR: General Data Protection Regulation
IPR: Intellectual Property Rights
KPI: Key Performance Indicator
MS: Microsoft
NG: Natural Gas
ORDP: Open Research Data Pilot
TRL: Technology Readiness Level
WP: Work Package

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Introduction

1.1. Framework and Objectives

The Data Management Plan (DMP) herein presented derives from GREENH2ATLANTIC's project activities, specifically *Work Package 1 – Project Management & Coordination*. The DMP aims to provide a set of guidelines and good practices complying to European and national legislation to gather, maintain and preserve the data generated during and beyond the project's end. Moreover, this Plan defines the sharing policies to be implemented in order to comply with the FAIR [1] principles (i.e. findable, accessible, interoperable and re-usable) established by the EC as well as the with the requirements and intentions to preserve Open Access to research data, namely by taking part on the Pilot Action on Open Research Data.

The DMP is a living document and this first version outlines a preliminary data management strategy, which will be further detailed as the project progresses and more data is generated. The following versions will then be updated along with the critical Milestones of the project, i.e. FID – M24, COD – M48 and end of project – M72, or whenever important core changes to the project occur due to external and/or internal (e.g. consortium policies) factors. This version reflects the status based on the information currently available in the project.

1.2. Relation with other activities

The DMP is the cornerstone of GREENH2ATLANTIC's approach to data covering the principles that shall rule the project along all data lifecycle (from Collection to Curation & Preservation). By being a steppingstone innovative project, GREENH2ATLANTIC will be the source of rich data generated throughout its lifetime through studies, laboratory testing and on-field data logging. Consequently, the DMP has a transversal actuation throughout GREENH2ATLANTIC as it describes how the data generated is gathered, maintained and shared. The DMP assumes an especially fundamental role in the Work Packages related with the demonstration (i.e. *WP7 – System Operation & Demonstration of the FGHPP at TRL8 in Sines*, *WP8 – Standardization, Qualification & Certification*, and *WP9 – Techno-economic, societal and environmental assessment*) and replication (i.e. *WP10 – Replication, Exploitation and EU-wide Industrialization*). The DMP will allow that all the consortium is aware of the practices that shall be followed within the conduction of those activities.

1.3. Structure of the deliverable

The DMP is structured as follows:

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Chapter 2 Data Collection, Management, Sharing & Preservation | Chapter 2 presents the overall procedures to handle data generated during GREENH2ATLANTIC, including the templates methodologies to identify & document, manage, and archive & preserve the generated data sets within and beyond the project's lifetime. This chapter also describes the sharing principles and guidelines to be implemented, namely by explaining how the FAIR and Open Research Data principles are applied to the project;

Chapter 3 Ethics, Privacy & Security Considerations | Covers all ethical and privacy principles that GREENH2ATLANTIC partners will enforce, as well as the provisions in place to preserve and promote data security. This chapter is especially relevant to explain how GREENH2ATLANTIC ensures full compliance with the recently published General Data Protection Regulation (GDPR) (Regulation (EU) 2016/679) applied to personal data;

Chapter 4 Description of Collected Data | Although no data was yet collected, this chapter aims to present a preliminary list of foreseen datasets within GREENH2ATLANTIC and characterize them (e.g. purpose, type, formats, security and privacy considerations, origin). This list will be refined in the future versions of the DMP;

Chapter 5 Allocation of Resources | Chapter 5 aims to present the costs associated with data management, namely in terms of cost of long-term storage solution and additional effort for publication;

The DMP will finalize with the main conclusions and the next steps towards updated versions of the document.

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2. Data Lifecycle Management

2.1. Types of GREENH2ATLANTIC data

The DMP covers the entire data life cycle, as will be seen along Chapter 2, and must be consistent with exploitation and IPR requirements. In general, the Data Lifecycle Management comprises 4 different categories of data generated or acquired in GREENH2ATLANTIC:

Research data | all the data necessary to evaluate the quantitative KPIs of the project and data necessary to validate the results presented in public deliverables or scientific publications. The Project Coordinator will be responsible to ensure that provisions on scientific publications and guidelines on Data Management in H2020 are adhered to. According to the principles of open access, scientific research data should be findable, accessible interoperable and reusable (FAIR) to ensure it is soundly managed beyond the original purpose for which it was collected.

Operational and observational data | all the data, raw data generated/acquired as well as curated data during the implementation, testing and operation of the demonstration activities (operational data), and data from qualitative activities including surveys, interviews, fieldwork data or engagement activities (observational data, such as the one that will be collected under WP11 activities on Stakeholder Engagement through Communication, Dissemination and Outreach). Particularly, sensitive data provided by consortium partners for the demonstration scenarios and personal data of individual stakeholders will be kept strictly confidential to protect their competitive advantage and in terms of personal data anonymised and secured to maintain compliance to GDPR.

Monitoring and evaluation data | all the data related to the monitoring of project specific KPIs (WP2 "Electrolyser R&D phase" and WP7 "System Operation & Demonstration of the FGHPP at TRL8 in Sines") to track the performance of the developed electrolyser solutions. This data will be regularly reported and published in relevant repositories with respective access rights set there and even on GREENH2ATLANTIC's website.

Documentation, instruments and reusable knowledge | all the data and documentation produced by GREENH2ATLANTIC consortium, including specific documentation of the project and demonstration and implementation activities, such as tools, equipment, instruments, software, and underlying source code. In terms of public results, sufficient and consistent documentation and publication will support the project's dissemination activities. All public Deliverables will be published on the project website in Open Access.

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2.2. Data Collection & Logging Methodology

Upon data collection/generation, a tool is being created to log, consolidate and classify its fundamental characteristics into a common and trackable document according to the items defined in Table 1. The tool consists in an excel file that will be stored in GREENH2ATLANTIC's collaborative online cloud in Microsoft SharePoint.

Table 1 - Description of the items for characterization and description of GREENH2ATLANTIC datasets.

Items for characterization and description of GREENH2ATLANTIC datasets	
Items	**Definition**
Dataset ID	Unique identifier of the individual dataset and shall ensure proper logging
Title	Title of the dataset shall be self-explanatory regarding its nature and purpose
Filename	Name of the file under which the data set will be stored/archived/curate
Accountable Partner	Indicates the consortium partner(s) and/or contact person(s) responsible for the data
Data Type	The data type of the dataset is indicated, which may include (not exhaustive): Integers, Booleans, Characters, Floating-point numbers, Alphanumeric strings, and Other (to be specified)
Data Format	The dataset format is indicated, which may include (not exhaustive): text-formatted data (TXT), CAD data (DWG), Comma-separated values (CSV), JavaScript Object Notation (JSON), MS Word (DOC/DOCX), MS Excel (XLS/XLSX), Other (to be specified)
Description	Description of the data is provided in a clear and precise way so that each dataset can be distinguished from the others through the information enclosed
Keywords	Identification of the dataset based on keywords to make search easier as well as use of database tools (e.g. SQL, Azure) to store, organize, maintain and access data
Relation to project objectives	Identification of the GREENH2ATLANTIC's main objectives to which the data contributes to, namely: *# 1 Develop a pressurised 8 MW ALK electrolyser module and a scalable 100 MW platform to allow reaching GW-scale electrolysis until 2030* *# 2 Enhance the operating flexibility of conventional power-to-X processes based on a FGHPP encompassing a complete value chain* *# 3 Develop an AHyMS with the focus on flexibility valorisation and value optimization of the FGHPP* *# 4 Demonstrate the lowest possible green H2 production cost by operating the 100 MW ALK electrolyser smartly and efficiently integrated with solar and wind energy and the surrounding industrial landscape at TRL8* *# 5 Increase transparency and comparability of cost, operational, environmental and societal impacts associated with green H2 production*

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	# 6 Boost demand for and scaling-up green H2 production and use throughout Europe
Related WPs	Specifies the GREENH2ATLANTIC's Work Package(s) from which the data is generated or acquired
Origin	Indicate how the data was collected and if it was subjected to any treatment
Repository	Shall specify the devices and/or tools used where the data is or will be stored, including the path and instructions for the access
Access Level	Specify whether the data is Confidential (CO), Public (PU) or Reserved if it can be shared under certain conditions or with certain external parties (RE). In the latter case, the Accountable Partner shall specify the conditions of access
Personal Data	It is specified whether the dataset includes or not personal data. This item is key to identify sensitive data in terms of GDPR as well as ethical, data privacy and security requirements and considerations

2.3. Data Handling & Management

Data handling and management system

GREENH2ATLANTIC will implement a comprehensive data management system complying to the ethics, privacy and security considerations detailed in Chapter 3, thus facilitating a swift processing between the project participants. Furthermore, GREENH2ATLANTIC will ensure that all data generated/acquired is managed to preserve trackability, transparency and usability among GREENH2ATLANTIC's partners, complying with the H2020 Guidelines on FAIR Data Management (i.e. Findable, Accessible, Interoperable and Re-usable). To implement FAIR Data Management, GREENH2ATLANTIC will facilitate the use of a data handling and management system following the template presented in Table 2.

Table 2 - Description of GREENH2ATLANTIC dataset handling and management system.

GREENH2ATLANTIC dataset handling and management	
Items	**Definition**
Dataset ID	Unique identifier of the individual dataset and shall ensure proper logging
Short Description	Description of the data is provided in a clear and precise way so that each dataset can be distinguished from the others through the information enclosed
Purpose and Relation to project objectives	Identification of the GREENH2ATLANTIC's main objectives to which the data contributes to and specification of the purpose and relevance of the data for the implementation of the project
Methodology	Description of the methodology used to collect the data, how it will be handled and managed

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Accountable Partner and Data Owner(s)	Indicates the consortium partner(s) and/or contact person(s) responsible for the data and also the partners having some type of data ownership/rights
Origin	Indicate how the data was collected and if it was subjected to any treatment
Standards	Specify any relevant standards and privacy considerations associated to the data set
Storage	Indicate how the data is stored, for how long and who will have access to the stored data
Exploitation/ Dissemination	Specify whether and how the data set is related to any partner's Exploitation and/or Dissemination activities
Access Level	Specify whether the data is Confidential (CO), Public (PU) or Reserved if it can be shared under certain conditions or with certain external parties (RE). In the latter case, the Accountable Partner shall specify the conditions of access
Access Details	Details the limitations and approach for the dissemination, open access and/or exploitation of the data
Stakeholders	Identifies the Stakeholders associated to or with interest on the data besides the Accountable Partner and the Data Owner(s)

The aforementioned template will serve as a guideline to detail the description, purpose, and relevance of the data as well as the methodology and collection procedure used to obtain them. Furthermore, this data management system allows to complement the general information enclosed in Table 1, by addressing the question of ownership and stakeholders, which standards are applicable, how the information is stored and accessed, and what data security and privacy considerations shall be considered and/or applied.

For data further used in GREENH2ATLANTIC's publications and/or deliverables, the corresponding dissemination level and the stakeholders involved shall be detailed. In case the assessment changes, of whether a data set will be published as part of a deliverable or not, the responsible consortium partner shall update the status of each data set as soon this can be foreseen. All information and data gathered/acquired and elaborated will be appropriately described in the respective deliverables. All public deliverables will be made available and archived on the project website and through the EU Community Research and Development Information Service (CORDIS) for the project.

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Responsibility Assignment Matrix

To assure the trackability and transparency of responsibilities for each data set, the concept of a Responsibility Assignment Matrix, as seen in Figure 1 is incorporated, in an adapted way towards the data management topic.

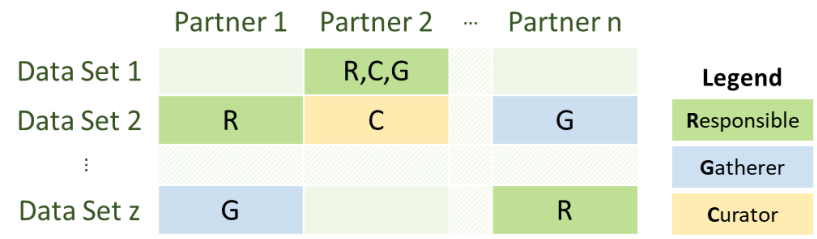

Figure 1 - GREENH2ATLANTIC Responsibility Assignment Matrix.

(R) Responsible (G) Gatherer, (C) Curator.

In the rows of the Responsibility Assignment Matrix, all the data sets generated/acquired are listed (making link with the "Data ID" item of Table 1 and Table 2), whilst the columns are assigned to individual project partners. The matrix itself abstracts three different forms of data responsibility: the Responsible (R), the Gatherer (G) and the Curator (C). One partner could potentially cover all the responsibility layers vertically, as seen in the first Data Set of Figure 1.

The specific tasks corresponding to each responsibility level include but are not limited to:
I. Responsible | responsible to track the data set through its entire life cycle during and beyond GREENH2ATLANTIC project. The data set Responsible shall further liaise with the Gatherer and Curator to ensure transparency and compliance of tall activities concerning the data set;
II. Gatherer | including all the tasks related to the collection or generation/acquisition of the data set. The Gatherer shall assure that the data is collected in an appropriate way and complying to the general procedures stated in the DMP.
III. Curator | responsible to archive and, if applicable, preserve the data set during the project and 2 years after the project's completion. The Curator is further responsible to ensure that the guidelines on data curation and preservation detailed in Chapter 2.4 are implemented (e.g., appropriate storage of data set in repository, costs in relation to data curation, etc.).

Both guidelines, the Data Handling and Management System and the Responsibility Assignment Matrix, will ensure that the data sets are clearly documented, and responsibilities are well defined within the life cycle of GREENH2ATLANTIC project.

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Document Management

All GREENH2ATLANTIC's documents and files are handled in a project specific cloud platform (Microsoft SharePoint) to ease the collaboration and increase transparency among the various consortium partners to locate and access the project documentation. The SharePoint platform is set up, managed and monitored by the Project Coordinator. The partners are responsible for ensuring the documents and files uploaded are complying with the overall guidelines laid-out in this DMP and in the Project Management Handbook.

The naming and terminology of the documents and files follow a rigid structure agreed on by all consortium partners, addressed in the Project Management Handbook.

2.4. Sharing & Open Access

Open access can be defined as the practice of providing for any user on-line free of charge access to research data related to the outcomes of the project. Open access to data generated by European-funded projects is the key to creating new and better knowledge and ensuring the widespread exploitation of new technologies, by lowering the barriers to accessing R&D+I data and the outcomes of the projects' activities.

GREENH2ATLANTIC partners are committed to open access generated and/or acquired by the project, but still ensuring the fulfilment of confidentiality, security and protection of personal data obligations, and ensuring GREENH2ATLANTIC's objectives and future exploitability of results are not jeopardized.

Open Access in Model Grant Agreement

The consortium strongly believes in and intends to apply the concepts of open science, and benefits arising from the European innovation ecosystem and economy by facilitating the reuse of data at a larger scale. The principles of open access are clearly outlined in GREENH2ATLANTIC's Grant Agreement (see Text Boxes below) signed by all the partners [3].

> Each beneficiary must ensure open access (free of charge online access for any user) to all peer-reviewed scientific publications relating to its results. In particular, it must:
> (a) as soon as possible and at the latest on publication, deposit a machine-readable electronic copy of the published version or final peer-reviewed manuscript accepted for publication in a repository for scientific publications; Moreover, the beneficiary must aim to deposit at the same time the research data needed to validate the results presented in the deposited scientific publications.
> (b) ensure open access to the deposited publication — via the repository — at the latest:
> (i) on publication, if an electronic version is available for free via the publisher, or (ii) within six months of publication (twelve months for publications in the social sciences and humanities) in any other case.
> (c) ensure open access — via the repository — to the bibliographic metadata that identify the deposited publication. (...)

Text Box 1 - Article 29.2. Open access to scientific publications from GREENH2ATLANTIC's Grant Agreement.

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Regarding the digital research data generated in the action ('data'), the beneficiaries must:
(a) deposit in a research data repository and take measures to make it possible for third parties to access, mine, exploit, reproduce and disseminate — free of charge for any user — the following:
(i) the data, including associated metadata, needed to validate the results presented in scientific publications, as soon as possible;
(ii) not applicable;
(iii) other data, including associated metadata, as specified and within the deadlines laid down in the 'data management plan' (see Annex 1);
(b) provide information — via the repository — about tools and instruments at the disposal of the beneficiaries and necessary for validating the results (and — where possible — provide the tools and instruments themselves).
This does not change the obligation to protect results in Article 27, the confidentiality obligations in Article 36, the security obligations in Article 37 or the obligations to protect personal data in Article 39, all of which still apply. (...)

Text Box 2 - Article 29.3. Open access to research data from GREENH2ATLANTIC's Grant Agreement.

Compliance with Open Research Data Pilot

Horizon2020 has launched the Open Research Data Pilot (ORDP) aiming at improving and maximising access to and re-use of research data generated by European-funded actions. The pilot aims to promote the value of data sharing and open knowledge ecosystems by connecting researchers with data owners, promoting access to data that is typically spread across repositories throughout Europe and offering a common ground for future R&D+I and commercial developments.

Along with GREENH2ATLANTIC candidature, and after a careful assessment of the types of data that will be collected or become available within the project, the consortium has agreed to participate on the ORDP, thus pursuing the following the implementation steps (which may or not occur simultaneously, depending on the selected open access route) [4]:

I. Depositing publications in repositories | "Beneficiaries are required to deposit an electronic copy of the publication in a suitable repository. Publications must be "machine-readable", that is in a format that can be used. (...) Depositing is mandatory regardless of the open access mode selected. It must be done as soon as possible and at the latest upon publication. The beneficiary must also aim to deposit at the same time as the publication the research data needed to validate the results presented in the deposited scientific publications ('underlying

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data'), ideally in a data repository. (...) ERC strongly encourages ERC funded researchers to use discipline-specific repositories for their publications." (such as ZENODO[2] or LIBER[3]).

II. Selecting the open access route | "Beneficiaries select one of the two main routes towards open access to publications, both equally valid: 1. Green open access (self-archiving): The published work or the final peer-reviewed manuscript that has been accepted for publication is made freely and openly accessible by the author, or a representative, in an online repository. Some publishers request that open access be granted only after an embargo period has elapsed. 2. Gold open access (open access publishing): The published work is made available in open access mode by the publisher immediately upon publication. The most common business model is based on one-off payments by authors (...). The costs of gold open access publications are eligible costs that can be charged against ERC grants, provided the costs are incurred during the duration of the project."

III. Providing open access to publications | " Beneficiaries must ensure open access to the deposited version of their publications via the chosen repository. Open access should be provided as soon as possible and in any case no later than six months after the official publication date. (...) To be able to easily find the deposited publication, beneficiaries must also ensure open access – via the repository – to the bibliographic metadata that identify the deposited publication. This metadata must include a persistent identifier (such as the Digital Object Identifier, DOI) in order to allow easy and persistent referencing. The European Commission encourages authors to retain their copyright and grant adequate licences to publishers. (...)"

Key Principles for Sharing & Open Access

GREENH2ATLANTIC will contemplate several public deliverables as well as scientific and other publications (specially deriving from WP6 and WP9 to WP11). The consortium will provide timely open access to research data in project-independent repositories and provide the link to the respective publications, to allow the scientific community to examine and validate the results based on the underlying data.

The policy for open access to research data and publications follows the H2020 Guidelines to Open Access, as illustrated in Figure 2. It is the will and commitment of the partners to share

[2] ZENODO (http://www.zenodo.org/) is the open access repository of OpenAIRE (the Open Access Infrastructure for Research in Europe, https://www.openaire.eu/).

[3] LIBER (www.libereurope.eu) supports libraries in the development of institutional research data management policies and services. It also enables the exchange of experiences and good practices across Europe.

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non-commercially sensitive knowledge and experience to ensure learning is transferred and errors are not repeated. The consortium members have committed to encourage the academic partners to publish research results as Gold Open Access. In case Gold Open Access in peer-reviewed repositories cannot be achieved, the consortium will resort to Green Open Access strategy. The concepts of Gold and Green Open Access are described in the "Compliance with Open Research Data Pilot" Chapter below.

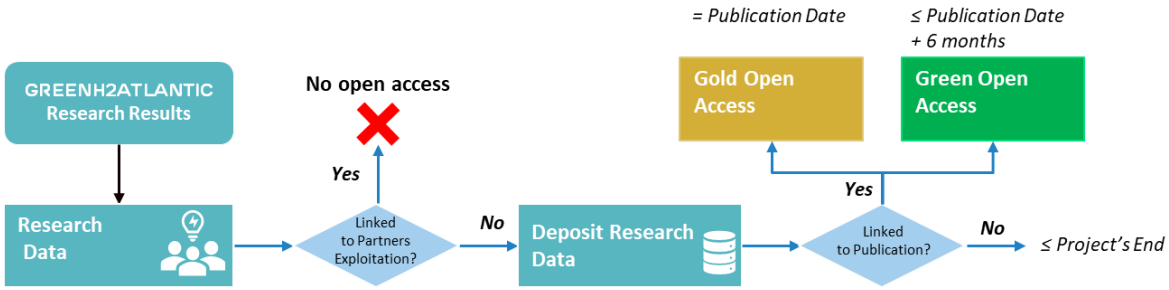

Figure 2 – GREENH2ATLANTIC Research Data Sharing Process.

Potential Exceptions to Open Access

Research data linked to exploitable results will not be put into the open domain if they compromise its commercialization prospects or have inadequate protection, which is also a H2020 obligation. Particularly, sensitive data provided by GREENH2ATLANTIC partners before and during demonstration scenarios will be kept strictly confidential to protect their competitive advantage. It is foreseen that some data may be kept confidential and/or subject to restriction in the diffusion, such as the one linked with AHyMS code and algorithms, McPhy's electrolyser development or even additional data coming from Sines Coal-Fired Power Plant. This list of potential exceptions to open access must be considered provisional, as it will be refined in later versions of the DMP.

In order to assess the sensitivity of the documents and research data, the partners are advised to coordinate the sharing and open access policies to apply with the Managing Directors, Legal and Document Control and GREENH2ATLANTIC Advisor on EU Data Protection Law.

2.5. Data Curation & Preservation

This Chapter describes the procedures for the long-term data curation and preservation. The procedures implemented in GREENH2ATLANTIC indicate how long the data shall be stored, where it will be stored and what cost are associated with it. The classification system

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presented in Table 3 (for a detailed description of the items used in the tool, please refer to Table 4) shall facilitate appropriate measure for the data curation and preservation procedures. The curation and preservation system consist in an excel file that stored in GREENH2ATLANTIC's collaborative online cloud in Microsoft SharePoint.

Table 3 - GREENH2ATLANTIC's tool template to characterise data curation and preservation.

Dataset ID	Title	Repository		Long-term preservation plan			
		Storage location	Type of repository	Period	Estimated size	Storage repository	Costs for preservation
…	…	…	…	…	…	…	…

Table 4 - Description of the items for characterization and description of GREENH2ATLANTIC data curation and preservation.

Items for characterization of GREENH2ATLANTIC data curation and preservation	
Items	**Definition**
Data ID	Unique identifier of the individual data and shall ensure proper logging
Title	Title of the data shall be self-explanatory regarding its nature and purpose
Storage location	Indicates the storage location where the data set is stored during the project, including, if applicable, the Microsoft SharePoint path
Type of repository	Specifies where the data set will be stored/archived/curated is specified. GREENH2ATLANTIC's Microsoft SharePoint is set as default location
Period	Specifies the time period agreed to preserve the data after the project's end. A minimum of 2 years is set as default
Estimated size	Estimated volume of the data set (indicated in multiples of Byte unit). This information is key to foreseen the reasonable size and associated costs of the preservation repository
Storage repository	Indicates the storage location repository where the data set will be preserved after the project's end
Costs for preservation	Estimates the costs underlying data preservation according to the approximated storage/repository volume (i.e. "Estimated size")

Public deliverables will be published and curated on the project website while internal data sets will be backed up to allow recovery for re-use and/or verification. Primary data will be archived for a minimum of 2 years by the data accountable partner(s) or the data owner(s).

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3. Ethics, Privacy & Security Considerations

GREENH2ATLANTIC involves carrying out data collection and a set of laboratorial validation tests and large-scale industrial demonstration to assess the technology and effectiveness of the proposed framework in real life conditions. Hereby, the DMP specifies ethics, privacy and security considerations to comply with all European and national legislation and directives relevant to the country where the data collections are taking place and, moreover, where the data is curated and preserved. Furthermore, GREENH2ATLANTIC's partners are to comply with the ethical and processing of personal data principles as set out in Article 34 "Ethics and research integrity" and Article 39 "Processing of personal data" of the Grant Agreement, respectively.

3.1. Ethics Requirements

The internal ethical agenda of GREENH2ATLANTIC follows the guidelines of various expert communities in the field of data ethics (e.g. the European group on ethics in science and new technologies to the European Commission) as well as the requirements exposed in (i) "Horizon 2020 Programme Guidance - How to complete your ethics self-assessment-". Version 6.0 23rd July 2018 and (ii) Ethics and Data Protection Guidance. 14th November 2018.

The ethical agenda includes a code of conduct to specify correct behaviour and corresponding principles in relation to data collection and processing. The following six principles are contemplated and addressed within GREENH2ATLANTIC's ethical code of conduct:

i. **Ownership** | Who is the owner of the data?;
ii. **Transaction transparency** | What access is given to the owner and how transparent is the access? A transparent access for the use of the individual's personal data will be established and the individuals shall have full and transparent access to the algorithms used to and generate and aggregate the data sets;
iii. **Consent** | Which individuals or other entities need to give consent to use the data? Individuals or other entities shall be explicitly informed of what personal data moves to whom, when and for what purpose from the owner of the data (consult more information in Deliverable 12.1 "H – Requirement No.1" and 12.2 "POPD – Requirement No.1");
iv. **Privacy** | What efforts and measures are in place to ensure data privacy? In terms of data processing, the project partners are obliged to invest all reasonable effort to preserve the privacy of the individual;
v. **Currency** | If applicable, what is the financial value of the personal data and how is that communicated with the owner of the data? Although not anticipated within

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GREENH2ATLANTIC's scope, individuals shall be explicitly informed of any financial transactions resulting from their data;

vi. **Openness** | How much of the aggregate data sets are freely available? If applicable, under adherence to point 1. – 5., aggregate data should be freely available for the owner of the data.

Implementation and compliance with these principles will ensure the responsible and sustainable use of the data generated and processed in GREENH2ATLANTIC. The ethical code of conduct shall further serve as a complement to the mere compliance with data protection laws and current regulations (specified in the next section). In fact, the code of conduct of GREENH2ATLANTIC shall reflect a principle that promotes honesty and genuine transparency in data management.

Given the specific nature of activities carried out in GREENH2ATLANTIC, the project does not intend to carry out any research that involves human subjects and, thus, any collection or processing treatment of personal data only envisages internal management and specific dissemination and communication activities of the project that, at least, will require the processing of personal data related to stakeholders that will be involved in the project, as explained in Deliverable 12.1 "H – Requirement No.1". Furthermore, it should be noted that the development of GREENH2ATLANTIC does not envisage activities involving:

i. processing of "special categories" of personal data;
ii. processing of personal data relating to children, vulnerable individuals or other subjects who have not consented to participate in the project;
iii. complex processing operations and/or the processing of personal data on a large scale and/or the systematic surveillance of a publicly accessible area on a large scale;
iv. data processing techniques which are intrusive and are considered to pose a high risk to the rights and freedoms of the research participants freedoms of research participants, or techniques that are vulnerable to misuse; and
v. the collection of data outside the EU or the transfer of personal data collected in the EU to entities in non-EU countries.

Therefore, regarding the processing of personal data for dissemination, communication, and networking purposes, any data generation/acquiring activity entails the following practical actions each project partner shall obey interacting with volunteers/individual stakeholders:

i. Explicitly inform all participants about the first 6 principles of GREENH2ATLANTIC's ethical code of conduct and give them the opportunity to provide their consent to the data management process (Why the data is being collected? How it is going to be

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used? How long it will be stored? How it can be amended by the individual concerned?);

ii. Ensure volunteers that no personal or sensitive data will be centrally stored without appropriate anonymization and encryption mechanisms. In addition, the volunteers shall be informed about the data security measures in place (debriefed in the next chapter) to avoid potential identification of individuals.

The briefing and information provided shall be conducted in the volunteers/individual stakeholders' native language. Additional information provided shall include a (i) written description of the GREENH2ATLANTIC's scope and objectives, (ii) the project's progress (respecting the project's confidential information), (iii) objectives of processing of the volunteers/individual stakeholders' personal data to manage their participation and (iv) information on unrestricted disclaimer rights on their agreement.

Finally, from a legal and ethical point of view, the principles set out in the GDPR will be complied with throughout the entire lifecycle of data collection and use, where necessary. In addition, the legal principles set out in the GDPR will be considered, from time to time, for the implementation of safeguards and information security measures.

3.2. Data Privacy & Compliance with GDPR

From a general standpoint, the development of GREENH2ATLANTIC does not entail the processing of data that identifies or allows the identification of any natural person as, as previously mentioned, GREENH2ATLANTIC only envisions the collection and processing of personal data, if necessary, for the following activities:

i) Internal management | From an internal point of view, personal data processing is essential to carry out basic and instrumental activities to bring the project forward. Notwithstanding the fact that no personal data belonging to test subjects is envisaged, personal data legislation is still applicable with reference to the following purposes:

- **Human resources**: It is necessary to process the personal data of the project's staff, trainees, researchers, contact persons at the consortium partners and, in general, the personal data concerning the relevant individuals who are involved in the execution of the project;
- **Relevant third parties**: The management of the project may require the identification and processing of personal data of natural persons outside the project but linked to the sector or scope, such as individuals linked to universities, industry, companies, public administrations, among others;

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- **Relationship with the European Commission**: From a privacy point of view, personal data processing activities involve communications of data to the European Commission when necessary for the administrative and financial management of the project.

ii) Dissemination, communication, and networking activities | Regarding the project's dissemination and communication activities, the following initiatives are planned:

(i) Development and Administration of the web site: The website will count with contact forms and subscription forms for the submission of newsletters to enable interaction with users and provide them with relevant information;

(ii) Social Media Channels Management: Social network will be fundamentally used to publish information about events, workshops, etc;

(iii) Submission of Newsletters about the scope of the project development to those individuals who request to receive them;

(iv) Organization of webinars for the dissemination of the project and presentation of topics related to the field of research;

(v) Organization of Conferences and events for the dissemination of the project and presentation of topics related to the field of research, as well as the management of invited participants and speakers;

(vi) Organization of Hackathons in the context of the development of the H2-based energy management system. Specific challenges will be designed around a novel forecasting mechanism, a rule-based control logic and the application of AI. Data will be processed for the organization of the event and the management of participants and attendees.

For these activities that require the processing of personal data, regulations dedicated to the protection of personal data, such as (i) the recently published GDPR (Regulation (EU) 2016/679)90, (ii) the Universal Declaration of Human Rights and the Convention 108 for the Protection of Individuals with regard to Automatic Processing of Personal Data, and (iii) the national laws applying their provisions, will be fully applicable. Consequently, the development of the internal administrative management of the project and the dissemination, communication and networking activities requires prior adaptation to data protection regulations and, in particular, the implementation of the following actions:

i. Identify the role of the parties involved in the processing of personal data;
ii. Identify the lawfulness of processing;
iii. Comply with the duty to inform data subjects as per Articles 13 and 14 GDPR;
iv. Comply with the data protection principles set out in Article 5 GDPR;
v. Comply with the principle of privacy by design and by default;
vi. Analyse the risks of the relevant processing activities;

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vii. Set up a Record of Processing Activities;
viii. Address the rights of data subjects with respect to the processing of their personal data;
ix. Regularise the relationship with third party collaborators and/or suppliers who access data or in any way participate in the processing.

3.2.1. Role of the parties involved in the processing of personal data

Article 4 of the GDPR defines the different roles that parties may assume in relation to the processing of personal data, as highlighted in the next Text Box. On the other hand, Article 26 of the GDPR provides that where two or more controllers jointly determine the purposes and means of the processing, they shall be considered jointly responsible for the processing.

Controller | The natural or legal person, public authority, agency or other body which alone or jointly with others determines the purposes and means of the processing of personal data; where the purposes and means of such processing are determined by Union or Member State law, the controller or the specific criteria for its designation may be provided for by Union or Member State law;
Processor | Shall mean a natural or legal person, public authority, agency or other body processing personal data on behalf of the controller.

Text Box 3 - Article 4 of GDPR: Definition of roles for personal data processing.

Within the framework of the Project, the Consortium partners will define their respective responsibilities in order to identify the role assumed by each of them in the relevant processing activity.

In this respect, for internal administrative management activities, each partner of the consortium will act as a data controller with respect to the data collected for its own management, as well as for the management of the contractual relationship with its participants and collaborators (researchers, trainees, staff, interested persons, etc.).

As previously elaborated, processing activities involving the joint determination of purposes and means by more than one consortium partner shall imply a joint controllership. This has been foreseen for the processing of data for dissemination, communication and networking purposes as defined by the WP11 leader in Deliverable 11.1.

Finally, the performance of processing activities often involves the provision of services by third parties relating to (i) cloud services, (ii) project management and videoconferencing tools, (iii) messaging applications for internal communication of participants, etc. These third-party providers shall act as data processors on behalf of the Data Controller where the

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provision of their services involves the processing of personal data under the responsibility of the consortium partners.

3.2.2. Lawfulness of processing

The existence of personal data processing requires the determination of a legal basis in order to consider a processing activity as lawful. Article 6 of the GDPR contains the following alternative grounds for the lawfulness of the processing of personal data exposed in the next Text Box.

a) the data subject has given consent to the processing of his or her personal data for one or more specific purposes;
(b) processing is necessary for the performance of a contract to which the data subject is party or in order to take steps at the request of the data subject prior to entering into a contract;
(c) processing is necessary for compliance with a legal obligation to which the controller is subject;
(d) processing is necessary in order to protect the vital interests of the data subject or of another natural person;
(e) processing is necessary for the performance of a task carried out in the public interest or in the exercise of official authority vested in the controller;
(f) processing is necessary for the purposes of the legitimate interests pursued by the controller or by a third party, except where such interests are overridden by the interests or fundamental rights and freedoms of the data subject which require protection of personal data, in particular where the data subject is a child.

Text Box 4 - Article 6 of GDPR: Lawfulness of the processing of personal data.

As mentioned above, the project envisages the processing of personal data exclusively for internal management purposes as well as dissemination, communication, and networking activities. In this respect, the following grounds for the lawfulness of data processing have been identified in Table 5.

Table 5 - Lawfulness of data processing from GREENH2ATLANTIC project.

Purpose	Lawfulness
Internal management	
Human resources	Processing is necessary for the performance of a contract to which the data subject is party
Relevant third parties	Processing is necessary for: - the performance of a contract to which the data subject is party; and - the purposes of the legitimate interests pursued by the controller or by a third party (Processing of professional contact data)
Relationship with the European Commission	Processing is necessary for:

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	- the performance of a task carried out in the public interest or in the exercise of official authority vested in the controller; and - compliance with a legal obligation to which the controller is subject
Dissemination, communication, and networking	
Dissemination, communication, and networking activities	The prior, specific, and informed consent of the data subject shall be obtained

3.2.3. Duty to inform data subjects

Pursuant to the provisions of Article 13 of the GDPR, the Data Controller shall properly inform the data subject of the scope of the processing of his or her personal data, ensuring all the required elements are provided.

(a) the identity and the contact details of the controller and, where applicable, of the controller's representative;
(b) the contact details of the data protection officer, where applicable;
(c) the purposes of the processing for which the personal data are intended as well as the legal basis for the processing;
(d) where the processing is based on point (f) of Article 6(1), the legitimate interests pursued by the controller or by a third party;
(e) the recipients or categories of recipients of the personal data, if any;
(f) where applicable, the fact that the controller intends to transfer personal data to a third country or international organisation and the existence or absence of an adequacy decision by the Commission, or in the case of transfers referred to in Article 46 or 47, or the second subparagraph of Article 49(1), reference to the appropriate or suitable safeguards and the means by which to obtain a copy of them or where they have been made available.
(g) the period for which the personal data will be stored, or if that is not possible, the criteria used to determine that period;
(h) the existence of the right to request from the controller access to and rectification or erasure of personal data or restriction of processing concerning the data subject or to object to processing as well as the right to data portability;
(i) where the processing is based on point (a) of Article 6(1) or point (a) of Article 9(2), the existence of the right to withdraw consent at any time, without affecting the lawfulness of processing based on consent before its withdrawal;
(j) the right to lodge a complaint with a supervisory authority;
(k) whether the provision of personal data is a statutory or contractual requirement, or a requirement necessary to enter into a contract, as well as whether the data subject is obliged to provide the personal data and of the possible consequences of failure to provide such data;
(l) the existence of automated decision-making, including profiling, referred to in Article 22(1) and (4) and, at least in those cases, meaningful information about the logic involved, as well as the significance and the envisaged consequences of such processing for the data subject.

Text Box 5 - Article 13 of GDPR: Elements to be provided to data subjects.

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In order to comply with the duty to provide information, the consortium partners undertake to inform the data subjects at the time of collecting their data, in accordance with the terms of the applicable data protection regulations. Furthermore, information provided to data subjects should be concise, transparent, intelligible, and easily accessible. It should also use clear and simple language, especially when is targeted to children. To this end, information clauses shall be made available to the data subjects concerning:

i. *GREENH2ATLANTIC Information Sheet General Template* (prepared in the framework of Deliverable 12.1 of WP12 concerning "Ethical requirements"). The document contains information on the processing of data subjects necessary for the performance of internal administrative management activities.
ii. *PRIVACY POLICY* (prepared in the framework of Deliverable 11.1 "D11.1 GDPR COMPLIANCE REPORT"). The document contains information on the processing of personal data foreseen for participation in dissemination, communication and networking activities, such as receiving newsletters, participating in events and using the website.

3.2.4. Data Protection Principles

Article 5 of the GDPR contains the principles that must be complied with in all personal data processing activities:

i. **Principle of "lawfulness, fairness and transparency"** | Personal data shall be processed lawfully, fairly and in a transparent manner in relation to the data subject. This principle is closely related to the information obligations under Article 13 GDPR which have already been discussed in the previous section;
ii. **Principle of "Purpose limitation"** | Data shall be collected for specified, explicit and legitimate purposes and not further processed in a way incompatible with those purposes;
iii. **Principle of "Data minimisation"** | Data shall be adequate, relevant and limited to what is necessary in relation to the purposes for which they are processed;
iv. **Principle of "Accuracy"** | Data shall be accurate and, where necessary, kept up to date. The application of the principle of accuracy requires that all reasonable steps be taken to ensure that data are erased or rectified without delay if they are inaccurate;
v. **Principle of "Storage limitation"** | Data shall be kept in a form which permits identification of data subjects for no longer than is necessary to fulfil the purposes of the processing. Data retention should be limited to the purposes for which the data have been collected. Once these purposes have been fulfilled, the data must be erased or, at least, stripped of any element allowing the data subjects to be identified;

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vi. **Principle of 'integrity and confidentiality** | Data shall be processed in a manner that ensures appropriate security of the personal data, including protection against unauthorised or unlawful processing and against accidental loss, destruction or damage, using appropriate technical or organisational measures.

For the identification of compliance requirements in personal data protection, the principles set out above are considered, as well as the application of appropriate safeguards for the best protection of data subjects' rights.

In this respect, the compliance tasks include the preparation of informative documents, the definition of the purposes pursued with the processing, the limitation of the data collected to those strictly necessary for the defined purposes and the determination of the storage period. As far as the accuracy of the data is concerned, the data will be collected directly from the data subjects.

3.2.5. Principle of privacy by design and by default

In addition, Article 25 of the GDPR sets out the Privacy by Design and by Default Principle. The application of the Privacy by Design and by Default Principle requires that data protection compliance requirements and adequate safeguards for the rights of data subjects are foreseen from the outset and maintained throughout the lifecycle of the processing.

3.2.6. Risk analysis

The GDPR requires data controllers to manage the risk to the rights and freedoms of individuals posed by a processing operation and implement appropriate technical and organisational measures accordingly, taking into account the nature, scope, context and purposes of processing as well as the risks of varying likelihood and severity for the rights and freedoms of natural persons.

Concerning the assessment of the risk of processing, Recital 76 of the GDPR specifies: "The likelihood and severity of the risk to the rights and freedoms of the data subject should be determined by reference to the nature, scope, context and purposes of the processing. Risk should be evaluated based on an objective assessment, by which it is established whether data processing operations involve a risk or a high risk".

This task is of particular relevance when the nature of the processing activity involves a high risk since, in such cases, it will be necessary to carry out a privacy impact assessment pursuant to Article 35 of the GDPR.

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The processing activities carried out within the framework of the project are routine management activities, which involve the processing of basic personal data and do not foresee a high risk to the rights and freedoms of data subjects.

3.2.7. Record of Processing Activities

Article 30 GDPR establishes the obligation for data controllers and processors to keep a record of the processing activities they carry out involving personal data.

This obligation does not apply to organisations employing less than 250 people, where the processing does not entail a risk to the rights and freedoms of data subjects, is occasional and does not involve special categories of personal data within the meaning of Article 9 GDPR.

3.2.8. Rights of data subjects

Chapter III of the GDPR sets out the rights that the data subject has in relation to the processing of his or her personal data:

i. Right of access
ii. Right of rectification
iii. Right to restriction of processing
iv. Right of erasure
v. Right to object
vi. Right to data portability

With regard to the management of data subjects' rights, it is relevant to highlight that Article 19 GDPR establishes the obligation of the data controller to notify the recipients to whom the data have been communicated of any rectification, erasure or restriction of processing carried out pursuant to Articles 16, 17.1 and 18 of the GDPR. This precept requires the data controller to have procedures in place to coordinate the exercise of the data subjects' rights so that they become effective in its systems as well as in those of third parties to whom the data have been disclosed.

To this end, the consortium partners will collaborate to enforce the rights of the data subjects, communicating the requests they receive to the other partners who have access to or process the data collected.

With respect to the processing carried out by joint controllers in the context of dissemination, communication and networking activities, the joint controllers have identified their contact points for this purpose, informing in the Privacy Policy that data subjects may exercise the

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rights concerning the processing of his or her personal data against any of the joint controllers.

3.2.9. Relationship with third parties.

The participation of third-party providers in the project may imply that for the provision of the service they need to process personal data under the responsibility of the consortium partners. In such cases, according to the GDPR, the provider acts as a data processor and it shall be necessary to regulate the relationship between the data processor and the data controller by signing the mandatory Data Processing Agreement under the terms of Article 28 GDPR.

More specifically, the consortium partners, as data controllers, shall use only suppliers that provide adequate safeguards to protect the personal data processed for the provision of the service and shall sign with all suppliers the data processing agreement required by the data protection regulations.

3.3. Data Security

One of the key principles of the GREENH2ATLANTIC's DMP is to provide the necessary tools and guidelines to manage the data in a secure way. Besides using data anonymisation techniques (such as data masking, pseudonymisation or data swapping), GREENH2ATLANTIC will promote data encryption and backup distribution dealing with sensitive data of individual stakeholders. Moreover, the goal of these measures will be to ensure that data remains consistent over the lifetime of the project and there exist alternatives to the main files, in case they disappear or get corrupted. The encryption component adds an extra layer of security to the data files and information.

For each data set gathered or produced, the partners will state the provisions and measures to be implemented to ensure data security, privacy and ethical requirements.

The secure management of information will adhere to the guidelines of relevant standards (e.g. ISO/IEC 27001 and 27002; Code of practice for information security management) to ensure the triad of cyber security:

i. **Confidentiality** | Preventing unauthorised disclosure of information;
ii. **Integrity** | Assuring that data cannot be modified in an unauthorised manner;
iii. **Availability** | Making information available for authorised users.

The information security management will further contain the Directive on security of network and information systems ('Cybersecurity directive', NIS-Directive 2016/1148) on the

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security of critical infrastructures and the ePrivacy Directive 2002/58, as well as European Union Agency for Network and Information Security (ENISA) guidance. Storage of information will fully comply with the national and EU legal and regulatory requirements.

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4. Description of Collected Data

As GREENH2ATLANTIC is still in an early stage of implementation, it is not possible to list all the data that will be generated during the project, since relevant activities are still being carried out towards identification. Nevertheless, in this version of the DMP, the consortium tried to foresee a non-exhaustive list of the data expected to be generated and collected within GREENH2ATLANTIC, as shown in Table 6.

Table 6 - Non exhaustive list of GREENH2ATLANTIC's foreseen datasets and underlying main characteristics.

Dataset 1 # Email address from stakeholders - Communication & dissemination activities	
Title	GREENH2ATLANTIC stakeholder contacts for Communication & dissemination
Accountable Partner	AXELERA
Data Type	Characters
Data Format	Text-formatted data (TXT)
Description	AXELERA will collect Email address from different stakeholders to ensure the promotion of the WP11 Communication and dissemination activities. The stakeholders will receive invitation to workshops and to subscribe to the newsletter.
Relation to project objectives	#4, #5, #6
Related WPs	WP10, WP11
Repository	The data will be stored on AXELERA network and may also be stored on the common GREENH2ATLANTIC SharePoint
Access Level	Confidential (CO)
Personal Data	Yes
Standards	RGPD
Exploitation/ Dissemination	Completely linked to WP11
Stakeholders	All partners from GREENH2ATLANTIC involved
Dataset 2 # Electrolyser KPIs and performance test results	
Title	Electrolyser KPIs and performance test results
Accountable Partner	MCPHY/DLR
Data Type	Floating-point numbers
Data Format	To be determined

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Description	WP2 results for use in D2.2: Results of electrolyser tests performed in McPhy test bench, evaluating the electrolyser technology KPIs and durability including strategy for durability increase.
Relation to project objectives	#1, #3
Related WPs	WP2
Repository	To be determined
Access Level	Confidential (CO)
Personal Data	No
Standards	Test procedure based on JRC's EU harmonized testing protocols and project results of QualyGridS project respectively ISO-TC197 working group 32
Exploitation/ Dissemination	Will help to support the electrolyser standard development in ISO TC197 working groups 32 and 34. Publishable part of data will be included in a public deliverable or scientific paper or conference presentation
Stakeholders	All project partners and customers of McPhy
Dataset 3 # AHYMS software test results	
Title	AHYMS software test results
Accountable Partner	ENGIE
Data Type	Integer, Floating-point numbers
Data Format	CSV or XLS
Description	AHYMS simulation results: Dump of selected signals (e.g. power consumption of each electrolyser, H2 production flow) of interest for each simulation time step (a simulation couples the performance model and the VOS/OCS)
Relation to project objectives	#3
Related WPs	WP2, WP6
Repository	Final dumps of simulations performed within WP2 in support of the WP3 activities will be stored by ENGIE on its premises, at least until end of Grant Agreement
Access Level	Confidential (CO)
Personal Data	No
Standards	Confidential and propriety of ENGIE
Exploitation/ Dissemination	ENGIE may use dumps produced to support dissemination activities (e.g. presentation of typical results and main findings in conferences)
Stakeholders	ENGIE only, as accountable partner and data owner
Dataset 4 # VOS and OCS execution results	
Title	VOS and OCS execution results and related KPIs

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Accountable Partner	ENGIE
Data Type	Floating-point numbers, Integer, Booleans, Alphanumeric strings, Characters
Data Format	JSON at least (VOS results) + other format possible for OCS results and KPIs
Description	AHYMS VOS and OCS software's execution results
Relation to project objectives	#3
Related WPs	WP2, WP6, WP7
Repository	Stored in OLAF Engie owned Cloud database for a minimum to be defined in licensing agreement
Access Level	Confidential (CO)
Personal Data	No
Standards	Confidential and propriety of ENGIE
Exploitation/ Dissemination	ENGIE may use the dataset to support dissemination activities (e.g. main findings presentation in conference)
Stakeholders	GREENH2ATLANTIC SPV, once a license agreement is signed, will be able to receive the OCS running results (exchanged with H2 plant DCS) and AHyMS related KPIs for the purpose prescribed in the Grant, Consortium and licensing agreements. ENGIE is accountable partner and sole Owner of the data.

In future versions of the DMP, the collected data deriving from the project activities will be better described and characterized here. Specifically, each dataset generated will be detailed in terms of purpose, relation with GREENH2ATLANTIC's objectives, typology, format and size of the data generated/collected, security and privacy considerations, origin, and access policies considered.

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5. Allocation of Resources

The costs associated to the underlying guides of the DMP, namely to ensure data is compliant with FAIR principles, depend on the amount of data to be handled and stored, due to the cost of long-term storage solutions and additional effort for publication. An estimation cannot be delivered to date, as there are many influencing factors unknown at the moment.

The management of the data is shared amongst the project partners who take part in contributing details about the datasets in the DMP deliverables, those that take care of the deposition of research data in open research data repositories, and overall, through the Documentation Control entity who integrates the Project Management Support Team.

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6. Conclusions

The present deliverable sets up the first version of GREENH2ATLANTIC's DMP. This document presents overlying guidelines and best practices used concerning all activities related to the management of data throughout the project. This first version of the DMP presents an innovative way to deal with the Data Handling and Management (i.e. adapted Responsibility Assignment Matrix), details the procedures for data sharing, curation and preservation, and specifies ethics, privacy, and security considerations to comply with all European and national legislation and directives relevant to the country where the data collections are taking place.

The GREENH2ATLANTIC's DMP is a living document and other versions will be issued along with the critical Milestones of the project, i.e. FID – M24, COD – M48 and end of project – M72, as information is made available and data generated. These updates will detail the defined data management procedures and contain more detailed data set descriptions as they become available through the ongoing work in the respective WPs whilst existing templates will be verified, complemented and maintained. Leaded by the Managing Directors, GREENH2ATLANTIC's Project Management Support will regularly reflect with the consortium members to refine and update the DMP.

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7. References

[1] European Commission; H2020 Programme Guidelines on FAIR Data Management in Horizon 2020 (V3.0); 26 July 2016

[2] European Parliament and the Council of the European Union; REGULATION (EU) 2016/679 General Data Protection Regulation; 27 April 2016

[3] Grant Agreement number 101036908 — GREENH2ATLANTIC — H2020-LC-GD-2020 / H2020-LC-GD-2020-1

[4] European Research Council; Guidelines on Implementation of Open Access to Scientific Publications and Research Data in projects supported by the European Research Council under Horizon 2020 (V1.1); 21 April 2017

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