



100 MW GREEN HYDROGEN PRODUCTION IN A REPLICABLE AND SCALABLE INDUSTRIAL HOSTING ENVIRONMENT

Deliverable D10. 1 Data Management Plan



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101036935 (GreenHyScale).

This output reflects only the author's view and the European Union cannot be held responsible for any use that may be made of the information contained therein.



Deliverable Report

Start date of project:	01/10/2021
Duration of project:	60 months
Deliverable n° & name:	10.1 Data Management Plan
Version	1.0
Work Package n°	10
Due date of D:	M6, 31/03/2022
Actual date of D:	31/03/2002
Participant responsible:	GreenLab A/S
Main authors:	Jonas Valhøj Kleffel Nielsen
Website:	https://www.greenhyscale.eu/

Nature of the Deliverable		
R	Document, report (excluding the periodic and final reports)	X
DEM	Demonstrator, pilot, prototype, plan designs	
DEC	Websites, patents filing, press & media actions, videos, etc.	
OTHER	Software, technical diagram, etc.	

Dissemination Level		
PU	Public, fully open, e.g. web	X
CO	Confidential, only for members of the consortium (including the Commission Services)	

Quality procedure			
Date	Version	Reviewers	Comments
07/03/2022	1		
30/03/2022	2	GLABS/jvkn	

PROJECT SUMMARY

This report is part of the deliverables from the project "GreenHyScale" which has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101036935.

Hydrogen is crucial for overcoming anthropogenic CO₂ emissions and to transit to a renewable energy system, and that is why hydrogen is included in the European long term decarbonisation strategy. However, the technology today is only available at multi-MW scale. In addition, the EU offshore renewable energy strategy stresses the need for offshore hydrogen production.

The overall objective of GreenHyScale is thus to pave the way for large scale deployment of electrolysis both on-shore and off-shore in line with both EU strategies. GreenHyScale will demonstrate minimum 100 MW of green electrolysis based on a novel multi-MW electrolyser platform operated in a unique hosting environment at GreenLab Skive (GLABS), and capable of replication across Europe with the associated economic growth and job creation. The project will show the benefits of green electrolysis, in a replicable business model, accelerating the new green economy throughout Europe and worldwide.

Moreover, as the link between offshore wind and electrolysis is unavoidable due to electrical transmission grid limitations, and offshore electrolysis is necessary to achieve the EU offshore renewable energy strategy, as it is impossible to build large enough wind and solar farms on land due to social acceptance and other issues. Thus, an upgraded high-pressure 7.5 MW electrolysis module for offshore use will be developed and tested at GLABS. The GreenHyScale project will form new complete European green value chains that support the transition to a renewable energy system by overcoming both technical upscaling and commercialization barriers, paving the way towards GW-scale electrolyser plants.

More information on the project can be found at <https://www.greenhyscale.eu>.

OBJECTIVE AND EXECUTIVE SUMMARY

This note specifies the guidelines for data management during the project in order to

- comply with requirements in the grant agreement between the parties and the European Commission,
- secure publication of the project's results and
- comply with requirements in the GDPR.

LIST OF PARTNERS

N°	Name	Short name	Country
1	GREENLAB SKIVE	GLABS	Denmark
2	GREEN HYDROGEN SYSTEMS	GHS	Denmark
3	ENERGY CLUSTER DENMARK	ECD	Denmark
4	LHYFE	LHYFE	France
5	SIEMENS GAMESA RENEWABLE ENERGY	SGRE	Denmark
6	EQUINOR ENERGY	EQUINOR	Norway
7	TECHNICAL UNIVERSITY OF DENMARK	DTU	Denmark
8	IMPERIAL COLLEGE LONDON	ICL	United Kingdom
9	EVERFUEL	EFUEL	Denmark
10	QUANTAFUEL	QUANT	Norway
11	EUROQUALITY	EQY	France

TABLE OF CONTENTS

100 MW green hydrogen production in a replicable and scalable industrial hosting environment	1
Project summary	2
Objective and Executive summary	2
List of partners	3
1. Data Management Plan.....	5
2. Data Collection	5
3. Data Storage	5
4. Legal requirements.....	6
5. Use and accessibility.....	6
6. Exceptions	7

1. DATA MANAGEMENT PLAN

The Data Management Plan details the project's data management policy and concerns the type of data to be generated by the project, how it will be exploited or made accessible, and how it will be curated.

2. DATA COLLECTION

The Data collected during the project will concern A) Project administration B) technical information and C) surveys containing personal data.

A) The partners participating in the GreenHyScale project meet on a regular basis. The parties often produce agendas, notes, summaries etc. in relation to the meetings.

B) The partners use and produce data related to products and technology such as operation data during the demonstration, data on energy demand for grid services study, energy supply from the wind farm connected to the GLABS site, heat, water and oxygen flows during the demonstration, diverse documents and deliverables (e.g. comparison to other technologies; materials and energy balance for the LCA inventory; website and publication data).

C) The partners will carry out societal studies comprising interviews and surveys. This entails the collection of personal data such as name and contact details of participants, recordings and transcripts.

3. DATA STORAGE

Each partner stores its collected data locally and in accordance with legal and technical requirements to such storage and uploads project deliveries and management documents to a SharePoint server made available to the partners by EQY.

Data on the SharePoint server is structured in folders. The folder structure is revised on a regular basis, so it consistently reflects the data collected by the partners.

The overall structure is initially as follows:

01. Reference documents
02. Meetings and teleconferences
03. WP's and deliverables
04. Communication material
05. Reporting
06. General

The parties make sure that locally stored data is backed up regularly and EQY ensures that the agreement with Microsoft concerning the SharePoint server includes an obligation to standard backup (on a regular basis).

All partners will comply with GDPR requirements when storing data. The partners will only store sensitive technical, financial, or personal data on servers situated within the EU, the UK or Norway.

4. LEGAL REQUIREMENTS

When collecting the data, the party doing the data collection will ensure that local and EU legal requirements are met.

The parties are legally, but also contractually, obliged to comply with the General Data Protection Regulation (GDPR) and national law on data protection when handling personal data, cf. article 39.2 in the grant agreement between the parties and the European Commission.

GreenLab has appointed a Data Protection Officer, Finance Director at GLABS, Annette Vestergaard Christensen, who supervises that GDPR requirements are followed when data is stored on the SharePoint server. In her absence GDPR is supervised by legal counsel at GLABS Jonas Valhøj Kleffel Nielsen.

5. USE AND ACCESSIBILITY

Each partner is responsible for the publication of its results in accordance with the grant agreement, article 29. This implies that

- Each partner must disclose its results to the public by appropriate means, including in scientific publications (in any medium) – and 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 on the SharePoint server. Each public deliverable will start with a graphically edited abstract highlighting key outputs in an easy-to-access way.
- Results also will be published in partners' and project's newsletters
- Each partner must – at the same time as disclosure of the result – deposit the research data at the SharePoint site, including associated metadata, needed to validate the results presented in the deposited scientific publications.
- Each partner must provide information about tools and instruments at the disposal of the partner and necessary for validating the results (and – where possible – provide the tools and instruments itself).

EQY will via the website greenhyscale.eu ensure open access to deposited publications

- on publication, if an electronic version is available for free via the publisher, or
- within six months of publication (twelve months for publications in the social sciences and humanities) in any other case.

EQY will ensure open access – also via the website greenhyscale.eu – to the bibliographic metadata that identify the deposited publication, cf. article 29.2 in the grant agreement.

EQY will ensure that it is possible for third parties to access, mine, exploit, reproduce and disseminate – free of charge for any user – the data, including associated metadata, needed to validate the results presented in scientific publications.

The data will be stored on the SharePoint server and the website for the period required by the project.

6. EXCEPTIONS

The obligation to publish and deposit does not apply if such publication or deposit conflicts with the following obligations in the grant agreement:

- 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.

Furthermore, a partner – and EQY – do not have to ensure open access to specific parts of the partners research data if the achievement of the action's main objective would be jeopardised by making those specific parts of the research data openly accessible. In such case, the partner must specify the reasons for not giving access.