

EERAdata Deliverable D8.2

DISSEMINATION AND COMMUNICATION STRATEGY AND PLAN

Version 2 – Draft 2 (continuously updated according to delivery periods)

The document explains the communication and dissemination strategy of the project (KPI, tasks & responsibilities, and an update of the implementation plan for 2021).

FEB. 2021

TOWARDS A FAIR AND OPEN DATA ECOSYSTEM IN THE LOW CARBON ENERGY RESEARCH COMMUNITY



This project has received funding from the European Union's Horizon 2020 research and innovation programme under **Grant Agreement No 883823**

Document description

D8.2. DISSEMINATION AND COMMUNICATION STRATEGY AND PLAN

Work Package 8, Communication, Dissemination, and Exploitation

Contributing organizations EERA, HVL, IUE, AIT, ENEA, GIG

Preparation date 2021-02-19 (Month 12)

Due date 2021-02-28 (Month 12)

Nature of deliverable report Dissemination level public

Version Final (updated continuously with content)

Dataverse identifier None

Preparation & change log

	Name	Organization	Date
From	Maria Luisa Fernández Vanoni	EERA	19.02.2021
	(coordination)		
Edited by			
Reviewed by	Valeria Jana Schwanitz	HVL	19.02.2021
Approved by	Valeria Jana Schwanitz	HVL	25.02.2021
For delivery	Valeria Jana Schwanitz (incl.	HVL	02.12.2021
	revision of funding statement)		

Suggested citation

Maria Luisa Fernández, (2021). Dissemination and Communicatin Strategy and Plan, 2021 (Deliverable No. D8.2). Retrieved from the EERAdata website:

https://eeradata.eu/about/deliverables.html

Executive summary

The overall objective of EERAdata is to develop, explore, and test a FAIR and open (FAIR/O) data ecosystem. This new data infrastructure is being established through the broad involvement of the energy research community in a series of workshops and applied in four selected use cases, covering essential aspects of data-driven low-carbon energy research. EERAdata also implements an open platform for a unified and seamless access to energy data and establishes a pool of experts and data stewards to facilitate a mental shift in the community towards FAIR and open data practices.

EERAdata has the ambition to engage with the wider low-carbon energy research community in intensive discussions on FAIR/O activities and their prospects. The project aims at achieving a mental shift in support of the grand endeavor of the European Open Science Cloud to lead developments in an emerging scientific field with the potential of literally path-breaking importance.

Therefore, EERAdata is by nature a project that strives to reach out to people, inform them, and engage them. Communication, dissemination, and exploitation activities naturally play an important role in this respect. Their successful implementation is key for achieving the project objectives and increasing the impact of EERAdata.

The present update of the communication, dissemination and exploitation strategy and plan in M12, February 2021, has the goal of defining the roadmap for the following year of the project and is an opportunity to adjust the strategy based on an analysis of the progress achieved, lessons learned from the past period, and specific needs that have arisen during the course of the project.

The deliverable keeps its original structure and is divided into five major parts.

The first explains the **strategy** that is being followed throughout the project. The strategy is aligned with the EERAdata overall objective. It elaborates on the target audiences to be addressed and describes communication, dissemination and exploitation objectives and tools.

Second, a summary of the **key performance indicators** against which the outcomes of this work package are being measured is included. They have allowed to constantly monitor the success of these activities. Several of this KPIs are on track but it is also foreseen that as the project progresses the communication actions will also follow, and the performance will be further enhanced.

Third, this document also indicates the **responsibilities** of all partners contributing to this work package, the distribution of work between the partners, and the obligations to follow.

IPR and data management are addressed in the fourth part.

An update of the **implementation plan** concludes this document (part 5). It lays out which tasks and deliverables were executed during the first year of the project, addresses the status of the KPIs and proposes, wherever necessary, additional communication and dissemination actions to support their accomplishment, and provides an overview of the deliverables foreseen for the second year.

Disclaimer

This document contains description of the EERAdata project findings, work, and products. Certain parts of it might be under partner intellectual property right (IPR) rules, so prior to using its content please contact the project principal investigator for approval: Valeria Jana Schwanitz, valerias@hvl.no.

In case you believe that this document harms in any way IPR, held by you or another person or representative of an entity, please do notify us immediately.

The authors of this document have taken any available measure in order for its content to be accurate, consistent, ant lawful. However, neither the project consortium as a whole nor the individual partners that implicitly or explicitly participated in the creation and publication of this document hold any sort of responsibility that might occur as a result of using its content.

This publication has been produced with the assistance of the European Union. The content of this publication is sole responsibility of the EERAdata consortium and can in no way be taken to reflect the views of the European Union.

Table of Content

List of acronyms	6
1. Strategy of EERAdata	7
1.1 Communication, dissemination, and exploitation strategy	7
1.2 Target audiences	8
1.3 Dissemination	11
1.3.1 Dissemination objectives	11
1.3.2 Dissemination tools	12
1.4 Exploitation and protections	14
1.4.1 Exploitation and protection objectives	14
1.4.2 Exploitation plan	14
1.5 Communication	15
1.5.1 Communication objectives	15
1.5.2. Communication tools	16
2. Evaluation of communication, dissemination, and exploitation results	17
3. Partner responsibilities	19
4. IPR and data management	20
5. Update implementation plan	20
5.1 Status report on the implementation and impact of dissemination and communication activities.	20
5.1.1 Dissemination tools	20
5.1.2 Communication tools	25
5.2 Implementation plan – Year 2 (2021)	33
References	33
Appendix	33
Year 2020[edit]	36
January[edit]	36
March[edit]	36
April[edit]	36
May[edit]	37
June[edit]	38
July[edit]	38
August[edit]	38
September[edit]	39
October[edit]	39
November[edit]	39
December[edit]	40
Year 2021[edit]	40
January[edit]	40
February[edit]	41

List of acronyms

CORDIS Community Research and Development Information Service of the EU

DMP Data Management Plan

EERA European Energy Research Alliance

EERAdata Acronym of the project

EOSC European Open Science Cloud

FAIR/O F-findable, A-accessible, I-interoperable, R-reusable, O-Open

GDPR EU General Data Protection Regulation

IPR Intellectual Property Rights

KPI Key Performance Indicator

WP Work Package

SME Small Medium Size Enterprise

1. Strategy of EERAdata

1.1 Communication, dissemination, and exploitation strategy

The strategy and subsequent activities have been designed to serve the overall project objective of EERAdata:

Develop, explore and test a FAIR and open data ecosystem through broad involvement of energy communities and through its implementation with selected use cases

This overall objective is divided into the following four specific objectives:

- O1 Promote the opening and FAIRification of low-carbon energy research databases.
- O2 Develop a community platform as an entry point for both, providers of energy data and users of energy data.
- O3 Build technical, operational and financial capacities for the management of FAIR and open data in and with the low-carbon energy research community.
- O4 Coordinate the management of data in the energy field in EERA and beyond by fostering initiatives in industrial and scientific communities in the frame of EOSC.

The EERAdata communication, dissemination and exploitation activities contribute to achieving all these objectives. They are transversal components of the whole project and are designed to support the work carried out in the other work packages, make it visible, and guide and increase the outreach of the project. More specifically, the following objectives are pursuit:

- Raise awareness and increase the visibility of the EERAdata project in particular and FAIR/O topics in general.
- Reach out to different groups of stakeholders to inform and engage them, ensuring a wide coverage and increased participation in EERAdata activities.
- Promote the project results, increase their uptake, exploitation and attract contributors.
- Support the activities in other work packages.

In order to ensure a streamlined, impactful approach, communication, dissemination and exploitation activities are being coordinated and to a certain extent implemented in the frame of a dedicated work package (WP8). The outcome of related activities is being monitored and reflected in this update of the present strategy and implementation plan. Another one is to be released in month M24. At the end of the project, a concept for sustaining the community platform and project website with project results will be agreed upon.

The responsibility for leading the efforts in communication, dissemination, and exploitation of EERAdata results lays with EERA. Thanks to its size, its long-term, deep anchorage in the European energy research community and its close connection to European as well as national policymakers, the association will strive to ensure visibility and engagement of essential stakeholders. All consortium partners assist EERA in this endeavour.

In order to make best use of the resources provided and increase the impact that can realistically be achieved in the frame of a 3-year Coordination and Support Action, EERAdata is applying a cascade approach wherever possible, aiming at giving the right impulses at the right places. More concretely this means that the project is making use of multipliers wherever possible and aims at creating synergies with their dissemination and communication activities.

In all communication and dissemination activities, adequate reference is being given to the EU funding received, following the requirements laid down in the Grant Agreement. This means that any dissemination of results and any communication activity related to the action displays the EU emblem and include the following text: "This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 883823."

1.2 Target audiences

Target audiences are the following stakeholder groups:

- The extended consortium
- Researchers (energy domain and beyond)
- Advocates of FAIRification and Opening of data in Europe
- Policymakers (related to energy and data policies)
- Businesses active in the energy data market
- Civil society organisations and the interested public

In the following, targeted ways to approach and engage them are explained in more detail. The tools mentioned under each section are described in detail in the subsequent chapters (1.3.2, 1.5.2).

The extended consortium

Project partners and the members of the **EERAdata Advisory Board** are important multipliers. They are very close to the topic, lead the FAIRification and opening of data in their own institutions and contribute to increasing the visibility of EERAdata and sustainable data management in the research community. They contribute to national and European-level activities in the field and build expert competences and capacities in an emerging high-impact research area. We are striving to use this potential to the largest extent possible.

Tools:

Consortium meetings	 Community platform
6 workshops	Website
• Wiki	 Mailing lists
 Policy briefs 	

Researchers

Researchers addressed by EERAdata can be further segmented in the following way:

Holders of data repositories in the energy domain

The data repositories will mostly be special purpose but can also comprise general purpose repositories. Benefits coming out of EERAdata for this segment include the possibility to increase the range for the use of their data repositories (including credibility through certification and FAIR/O assessment), the exchange of technical knowledge, competence-building, inclusion, access to an expert pool and to federated database services.

Data stewards and analysts active in the energy domain

These researchers will be benefiting from FAIR/O advancement targets, from being included in the discussions, and from gaining access to a pool of experts and federated database services (including analytic tools).

Low-carbon energy researchers and interdisciplinary researchers

Beyond the two segments mentioned above, EERAdata addresses researchers in general who work on low-carbon energy topics. A large majority of them are organised within the European Energy Research Alliance but EERAdata will also reach out beyond. Through EERAdata, they will gain improved accessibility to useful data, improved transparency on data quality and metadata information. Interdisciplinary research will be more visible and encouraged, also through increased incentives for exploring research opportunities based on mixed-method approaches.

Tools:

•	Third-party	avante
•	I I III U-Daity	CVCIII

- EERA assemblies
- 6 workshops
- Community platform
- \//iki
- Scientific publications

Website

- Mailing lists
- Newsletters
- Social media

Advocates of FAIRification and Opening of data in Europe

This target group includes for instance people working in the frame of the European Open Science Cloud and other national and European-level networks and initiatives, many of which are listed in <u>Table 1</u>. They benefit from an increased visibility of the usefulness of FAIR/O data through the EERAdata project deliverables and worked use case examples with projects of common interest. They will have the possibility to use blueprints (Data Management Plan, methodological blueprint for approaching other use cases in the future) and compiled project insights (gap analysis and policy and research recommendations).

Tools:

- Advisory Board meetings
- Third-party events
- 6 workshops
- Community platform
- Wiki
- Scientific publications
- Policy briefs

- Website
- Mailing lists
- Newsletters
- Social media
- Press articles

Policymakers

Politicians and administrative staff responsible for research, data, energy, and climate change policies will benefit from an improved data infrastructure allowing them to translate scientific findings into political transition pathways towards a clean energy future. EERAdata will furthermore strive to support the translation of open science policies into practice, educate data producers and users, and thereby help advance the mental shift in the European research community.

Tools:

- Community platform
- Wiki
- Policy briefs
- Website

Mailing lists

- Newsletters
- Social media
- Press articles

Businesses active in the energy data market

The results of EERAdata will be relevant for both large industry and SMEs, but also for architects, energy consultants, etc. The project will improve accessibility to data they use for their businesses. The transparency of data quality and metadata information will be improved. Further benefits for this target group include access to business models, business prospects, and identified future research opportunities as discussed in workshops and made available through deliverables.

Tools:

- Third-party events
- 6 workshops
- Community platform
- Wiki
- Scientific publications
- Website

- Mailing lists
- Newsletters
- Social media
- Press articles

Civil society organisations and the interested public

Civil society comes into play as they constitute potential customers of FAIR and open low-carbon energy data. They will therefore benefit from improved accessibility of useful data and transparency on data quality. While civil society is not a core target audience for EERAdata, many dissemination and communication activities will also be opened to interested citizens, informing them about the benefits of public money spent on EERAdata and open science topics in general.

Tools:

 Third-party events 	 Mailing lists
----------------------------------------	-----------------------------------

Community platform	Newsletters
• Wiki	 Social media
Website	 Press articles

The consortium is utmost aware that it is essential to not only <u>communicate</u> the added value of the project, its progress, and results to stakeholders, but also to actively <u>engage</u> them to contribute with key information and willingness to co-design the scope and pace of the project. Therefore, EERAdata has been establishing a dialogue with stakeholders during the course of the project. Moreover, EERAdata has identified relevant projects, networks, and databases, as well as experts for the workshops (refer to <u>Table 1</u>) that have been invited to take active part in the activities organized during the first year of the project. EERAdata has also been invited to conferences and events organized by this third parties. These activities will be followed up in the coming two years.

Data-driven Projects	Networks	Databases and data hubs*
Dataverse Project, EUCalc, Energy-SHIFTS, FAIRsFAIR, FAO AIMS, INTAROS, fairsharing.org, FIT4RRI, OpenAIRE, OpenENTRANCE , RISIS I and II, SEMANCO, Foods and farms, PerceptiveSentinel, INFINITY, SPRINT-CELL, COOLSKIN, VITALITY, PERMASOL, flex!PV_2.0, smart(D)ER, Scale-UP, BI-FACE, NEXT-FOIL	CESSDA, COPDESS, OECD, Elixir, European Smart Grid Task Force 'My Energy Data', EOSC, Global Partnership for Sustainable Development Data, Research Data Alliance (RDA), Science Europe, CERN inspireHEP, IEEE, DANS, Digital Curation Unit (DCU), Elsevier, figshare, GESIS, Go fair, getdkan.org, IRP wind, ISGAN, ENTSO-E, European Open Science Policy Platform, IEA-ISGAN, ERA-Net Smart Energy Systems,	DataCite, JRC-IDEES, JRC-database hub, Re3data.org, Open Power System Data, ODIN, renewables.ninja, OPENEI, EnergyData, REEEP, Odyssee, EU Merci, EREK, ELIXIR, Copernicus, NREL data, repowermap, PETA4, Biomethanemap, open data reseaux energies, Open Grid Map, SMARD, resourceirena.irena.org, REmap, MAGIC, EMP-E,
Energy specific: COMETS, EnerMaps, open_FRED, The shift project, InPT-Dat, OECD Open Data for Science Project, openmod, enipedia, energy	National activities consortium partners are involved in: NOR - NEIC, Norwegian Research Council, dataverse.no, TUR - Open Data Sharing Portal, Open Access and Open Science in Academia, Turkish Open Science Summit, AUT - Austrian online data platform, Open RTI Data initiatives, data pioneers, NEFI – New	ZENODO, repositoryfinder.datacite.org, NOMAD, Urban Mine Platform, ProQuest, MatWeb, AZOmaterials, COD, ChemSpider, materials genome initiative, MaterialDistrict, BetterGrids – The GRID DATA *Additional databases are identified in upcoming scientific publications

Table 1 List of identified key networks, projects & databases identified by EERAdata

1.3 Dissemination

1.3.1 Dissemination objectives

The dissemination activities in EERAdata aim at transferring the knowledge gained and results achieved to the relevant stakeholder groups as defined above. The goal is to enable them to use and take up this information for further maximising the impact of the EERAdata project.

1.3.2 Dissemination tools

The main channels and platforms used for dissemination in the EERAdata project are:

Meetings and events

• EERAdata consortium and Advisory Board meetings

These meetings aim at disseminating results in the core group who will then act as multipliers as described above. Advisory Board members are the channel towards other research communities and networks beyond the project consortium, including but not limited to IEA, JRC, EOSC, CESSDA, and RDA.

EERA activities

Events of EERA and its 18 Joint Programmes are intended to be used for further dissemination as the project progresses. Consortium members are participants in these and project workshops may be potentially organised back-to-back.

Moreover, a new transversal Joint Programme (tJP), Digitalisation for Energy (DfE), has been launched in EERA. This Programme recognizes the critical role played by information technologies and digitalization in supporting the transition towards climate-neutrality and has been supported, among others, by the leading-edge expertise of researchers involved in the EERAdata project. EERAdata aims not only at contributing to the work done in this tJP but also at incorporating this broader initiative as a platform to further boost the project's visibility.

Participation in third-party events

EERAdata consortium members have started and will continue to disseminate information about the project and recruit potential experts and workshop participants at third-party conferences and workshops and meetings with other projects. An updated overview of the events in which EERAdata took part in the first year of the project is included in Section 5.

Definition, assessment, and training activities

Workshops

EERAdata has been developed along the 'Index to FAIR Action Plan' as recommended by EC Expert Group on FAIR data 2018. More specifically, the testing and discussion of the FAIR/O ecosystem (incl. the community platform) are organised through a series of workshops that take place twice a year with sequential annual foci (refer to Figure 1):

- 1st Year: Define. Concept for FAIR implementation. Skills for FAIR.
- 2nd Year: Implement. FAIR culture. FAIR Ecosystem. Skills for FAIR.
- 3rd Year: Embed & sustain. Incentives, metrics, and investments for FAIR data and services.

Due to the Covid-19 crisis, the set-up of the first two workshops (1st Year) had to be adapted to suit online collaboration. For more information, please refer to chapter 5.

Moving forward, EERAdata expects to keep in place the original structure proposed at the beginning of the project. Namely, each workshop lasts three days. The first day is dedicated to state of the art for each workshop topic. Experts from the energy and other research communities are invited to present best practices (ensuring the participation

from institutions providing research infrastructure, academia, and industry and private sector persons). Mutual learning and exchange of knowledge are facilitated in moderated discussions following presentations. The first day advances the understanding of cuttingedge concepts and approaches towards FAIR/O data (e.g., the role of metadata, data management plans, metrics, incentive mechanisms, etc.). The second day uses the knowledge and understanding obtained during the first day to translate the concepts and approaches to the domain of low carbon energy research data at the level of selected use cases. The goal is to understand the ways of data discovery and to synthesize metadata from mental models of domain experts. Hence, the work done during the second day takes place in parallel groups structured around use cases. The key participants of workshops are consortium members for each use case and the groups of stewards of FAIR/O data principles recruited from invited experts. The third day synthesizes, integrates and concludes the results achieved during the first two days (e.g., unifying and linking metadata across use cases). It should be noted that the first and the second day are open to participants from outside of the consortium to allow community-wide participation in EERAdata.

However, it is worth highlighting that this is a process under continuous improvement, as the learnings gained in each workshop feed back to the organization of the subsequent ones.

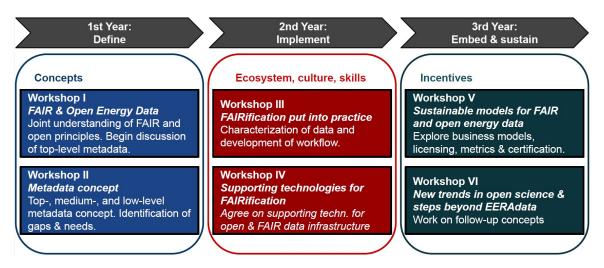


Figure 1 Workshop concept

Wiki

The workshops are complemented by a compilation of materials elaborated for the workshops and video recordings from the workshop in the form of a 'wiki', an open, collaborative online knowledge base. The wiki is currently linked to the EERAdata website but it will also become part of the community platform and contribute by nature to fostering open access principles. The wiki will also provide access to a pool of experts and data stewards in the energy domain. The wiki will be sustained beyond the lifetime of EERAdata and used for further exploitation.

Community platform

The platform developed in WP3 will be an entry point to a wide range of energy databases, provide unified and seamless access, and be open to all. The community platform will be

a primary output of EERAdata and contain a database of standardised metadata with elaborated search and visualisation functionalities as well as training material in wiki format and a video repository with presentations of experts from the workshops. A first pilot (V01) is being put online before the end of February 2021 (M12).

Publications

• E3S Policy Brief

EERAdata is used to establish a regular policy brief in the EERA Joint Programme 'Economic, Environmental and Social Impacts of the Energy Transition' (JP E3S). This policy brief will be directed to policy stakeholders and participants of the European Research Area. The brief will build on the established national model of NTNU Trondheim, Norway.

Scientific publications

Targeted peer-reviewed scientific publications include: Nature Scientific Data, Environmental Modelling & Software, Information Services and Use, PLOS, Data Science Journal. Open access will be granted for all the scientific publications derived from project activities. An update on the scientific publications for the first year of the project can be found in chapter 5.

1.4 Exploitation and protections

1.4.1 Exploitation and protection objectives

The objective of exploitation activities in EERAdata is to effectively use its results, sustain them after the end of the project, and turn them into concrete value for the project partners. This goes hand in hand with adequate measures to protect sensitive data in compliance with legal obligations and protect intellectual property that arises from work within the project for the benefit of the property holders.

1.4.2 Exploitation plan

The EERAdata consortium members have strong interest in exploiting the outcomes of the project to the largest extent possible. EERAdata will develop an exploitation plan for short, medium, and long-term exploitation and sustainability, to be updated continuously (living document) and finalised by the end of the project, following the common structure of

- 1. Purpose of the document,
- 2. Description of main exploitable findings/outputs,
- 3. Main mechanisms for uptake (including funding mechanisms and provisions to ensure operation and maintenance of results),
- 4. Exploitation by consortium partners (general benefits as well as commercial potentials), and
- 5. Handling of IPR and protection of results.

Objective: Facilitating further use, making use of results beyond the project's remit and duration

- Management of foreground is undertaken in accordance with the EC Grant Agreement, agreed on in the Consortium Agreement (DMP specifying access rights, ownership transfer, intellectual property rights in the project, etc.). Work package leaders will identify what is suitable for exploitation and inform WP8.
- **Exploitable results:** EERAdata has a strong pilot character and offers a lot of potential for further exploitation. Among others:
 - Four use cases which serve as test-bed for application in other domains (see WP 4-7).
 - Community platform, including training and information material in wiki format and pool of experts and FAIR data stewards, as described above under <u>1.3.2</u>,
 - o Blueprint for Data Management Plan,
 - o Methodological blueprint for approaching other use cases in the future,
 - Suggested metadata standards,
 - o Business models explored,
 - o Concept for follow-up projects and research & policy recommendations.
- Exploitation routes: The European Energy Research Alliance (EERA) will be used as a
 means to exploit the outcome after the project's completion in different ways. EERAdata
 results will be anchored in EERA through:
 - Board membership in EERA JP E3S,
 - Engagement in the recently launched new EERA transversal Joint Programme "Digitalisation for Energy" (DfE) in which EERAdata project coordinator heads the sub-programme "Data Science & Artificial Intelligence",
 - o Participation in the cross-Joint Programme initiative on 'HPC and big data',
 - o Continuation of the community platform beyond the project duration.

Furthermore, through:

- Membership in other networks (see list of identified stakeholders in <u>Table 1</u>),
- Exploration of opportunities for future projects,
- Active stakeholder engagement through a workshop concept with co-host and arranged back-to-back with other conferences whenever possible.

1.5 Communication

1.5.1 Communication objectives

Communication activities complement and reinforce the endeavours undertaken to disseminate the results. They aim is reaching out to the stakeholders as described above under <u>1.2</u>, providing visibility to EERAdata and showing its impact and benefits. The following tools will be used to inform about the project and promote it.

1.5.2. Communication tools

To maximize impact and ensure a strong branding of the project and the EU funding, EERAdata has developed a project logo and key visual, being used in any publication and material published. The project complies with the EC's requirement regarding a standardised funding acknowledgement. Established channels have been utilized to maximise visibility and impact and are complemented by new channels and press activities.

Project identity

In order to build up a strong brand with a high recognition factor and to ensure consistent visual communication, an EERAdata logo and a matching key visual have been developed. Both are being used for online communication and are expected to be adapted to offline materials once the in-person activities resume.

They are complemented by a range of templates that are available for project partners and ensure a unified communication on the project:

- o PowerPoint template,
- o Word template for posters, policy recommendations, and similar documents.

Furthermore, a project roll-up has been designed.

Website

Since the work towards opening and FAIRifying energy data is in continuous development, online tools play a central role ensuring timely and up to date information, reporting on the development of the project and supporting interaction with key stakeholders. EERAdata has therefore set up a project website, which is continuously updated, improved, and promoted. Information provided there aims at being easy to understand in order to reach a wide audience. The website complements the community platform to be developed in WP3 and hosts general information on the project and its results. As soon as the community platform is ready, it will be linked to this project website.

The website is integrated in the EERA web portal, which gathers, besides the EERA central website, websites of the EERA Joint Programmes and EU-funded projects. This Joomla-based portal allows for cross-sharing and interlinked content thanks to a centralised administration. Thanks to this functionality, it is easy for the EERA Joint Programmes and other EERA projects that are part of the system to display EERAdata content also on their websites, which increases the dissemination of information in relevant communities. It will also allow to keep results and materials available on the EERAdata website after the project completion. This will be further reflected in the exploitation concept to be developed by the end of the project.

Mailing lists

EERAdata has established a mailing list of persons within the EERA community interested in open data topics. The starting point were the 18 EERA Joint Programmes and its Joint Programme coordinators, involving them in the project activities throughout the implementation of EERAdata. The objective is to set up a list of contact persons for FAIR/O data with a member from each JP.

Furthermore, EERAdata has enriched the mailing list with key stakeholders interested in being updated regularly and in participating in the activities of the project. EERAdata has been approaching, and will continue to do so, different energy and/or science-related platforms at target, other open science initiatives and projects, other associations in the energy field, and other research associations. EU General Data Protection Regulation (GDPR) has been properly respected.

Newsletters and social media

EERAdata has drawn on the established channels of EERA and the other project partners to disseminate information about the project. This includes, e.g., newsletters and social media channels of partners. EERA has been the one providing content to the other consortium partners. Additionally, in the second year of the project, EERAdata aims at publishing articles also in third-party newsletters.

Press activities

To achieve a greater dissemination for open data topics in general and EERAdata in particular, the consortium intends to establish contact with relevant media outlets. The originally planned three press releases have been increased to four, taking into account the current situation around Covid-19, which leads to an unfavourable setting for any kind of communication. While press releases #2-4 will, as far as possible, be translated into the national languages of the consortium partners to increase uptake in national media and be disseminated in the respective countries, the first release has only been published in English and disseminated among specialised media in order not to increase the workload of partners for an insecure outcome. The releases will be written with the specific audiences in mind, breaking highly scientific content down to an understandable level, which relates to the interests of the audience.

A first database with relevant media outlets in the different countries, including mainly daily press and trade magazines, has been established and will be updated for each following press release. At the European level, EERAdata will be targeting the European press, for instance Science|Business, Euractiv, Politico, and the research*eu results magazine. Moreover, building on the EERA available resources, the most recent EERAdata workshop was disseminated further through Dods, a platform for policy intelligence and monitoring.

2. Evaluation of communication, dissemination, and exploitation results

The results of communication, dissemination and exploitation activities are evaluated against a set of KPIs as described in <u>Table 2</u>. These KPIs are matched with the defined specific objectives as described under <u>1.1</u>. In order to reflect the experiences from the past period, these indicators have been slightly updated. Additional details about the activities performed during the first year,

their impact in the KPIs, and the steering mechanisms foreseen for the upcoming period to support meeting the indicators set, are covered in chapter 5 of this report.

Summary of dissemination, communication and exploitation activities			
Action	Key objectives	KPI	Target
Workshops	Inform and engage the community; present key findings; gather	# workshops	6 workshops
	intelligence and feedback from experts & community platform customers	# participants	300 in total
Participation in external events	Ensure good visibility in the relevant community	# contributions to third party events	15 events
Community platform	Demonstrate a useful interface for FAIR/O data	# of energy data customers	400 in total
	in the energy domain	# of experts in pool	60
Website	Be the hub for communication activities; present the key findings; support project visibility	# unique page views	36,000 in total
Social media	Inform and engage the community; attract new	# of project-related posts	200 in total
	Community Platform customers; support the visibility of EERAdata	# of interactions (shares, likes, retweets, comments)	1,000 in total
Mailing lists	Provide an interested audience from all target groups with the latest news	# number of subscribers	200
Publications	Policy brief	# of issues	2
	Peer-reviewed scientific publications	# of publications	6-10
	Published articles (on EERAdata website, in the press, and in other project partners' publications)	# of articles	40
Wiki		# of contributors from outside the consortium to Wiki	30
	of low carbon energy data	# number of downloads to training materials	100
Use cases	Identify and explore business models	# number of business models elaborated (about 3	12

		per use case)	
Recommendations	Provide policymakers with key insights from EERAdata	# number of policymakers reached	50
Perspectives	Collect material for drafting follow- up projects	# number of ideas on follow-up projects	10

Table 2 KPIs for dissemination, communication and exploitation

In addition, qualitative values (such as number of visited pages per visit of the website, most viewed posts, etc.) will also be monitored.

3. Partner responsibilities

All consortium members will contribute to disseminating and communicating information about EERAdata under the leadership of EERA and with efforts according to <u>Table 3</u>.

Partner number and short name	WP8 effort
1 - HVL	1.00
2 - IUE	0.50
3 - AIT	0.50
4 - ENEA	0.50
5 - GIG	0.50
6 - EERA	9.00
Total	12.00

Table 3 WP8 efforts of partners

EERA leads the corresponding work package and oversees the implementation of all tasks as described in the Grant Agreement. EERA provides the project partners with appropriate dissemination and communication materials and informs them about important aspects related to this work package. Spending under Other Direct Costs planned in the scope of this work package is centralised to a large extent at EERA. Costs that are about to occur at project partners must be signalled in advance to EERA. Services must be commissioned respecting the rules laid out in the Grant Agreement and invoices addressed to EERA. Project partners are responsible for informing EERA about dissemination and communication activities at their end as well as the outcome of these activities. Their contribution is especially required but not limited to outreach at national level and for social media and newsletter activities. An active contribution is furthermore expected with regard to the continuous provision of content for dissemination and communication activities — progress achieved within EERAdata, milestones, deliverables intended for public dissemination, etc.

All project partners commit to disseminating foreground as swiftly as possible and to giving notice to the other partners concerned. All will be using the project logo and the EU emblem with the

appropriate acknowledgement of EU funding as described above in all their dissemination and communication activities.

4. IPR and data management

All public reports and results developed during the project will be made freely available on the website.

The EERAdata consortium acknowledges that foreground intellectual property generated by a participant and background intellectual property brought into the project by a participant belong to the participant(s) having generated or provided such intellectual properties. It is acknowledged that to allow possible commercial exploitation, the protection of the intellectual property must be duly handled.

Dissemination and use of knowledge generated by EERAdata is governed by the terms of the Grant Agreement and the Cooperation Agreements summarised as follows:

- Ownership. Parties that own a result or knowledge will provide adequate and effective protection of the results or knowledge before its dissemination, publication and exploitation. Access rights to background information and results defined in the Cooperation Agreements include provisions concerning access rights to background and results both for a successful execution of the project and to ensure a wide exploitation of the results.
- Publication and communication. Parties will be allowed to publish information on knowledge developed in the project according to the provisions of the Grant Agreement and Cooperation Agreement and provided this does not affect the protection of that knowledge. Any public knowledge dissemination, publication or communication will be communicated in advance within the consortium for approval according to the procedures defined in the Cooperation Agreement.

The activities of EERAdata will involve collecting and handling sensitive data. This includes for instance personal data. EERAdata will apply strict rules for dealing with this information, respecting the EU's General Data Protection Regulation. A detailed description of data and IPR relevant issues is also contained in the Data Management Plan.

5. Update implementation plan

5.1 Status report on the implementation and impact of dissemination and communication activities

5.1.1 Dissemination tools

Meetings and events

EERA activities

EERAdata has been actively involved in the conceptualization and launching of the new transversal Joint Programme Digitalisation for Energy (DfE) and will continue to contribute to its activities. The project leader of EERAdata (Valeria Jana Schwanitz) has been confirmed as the leader of the subprogram on "AI & data science", which will support to connect EERAdata activities with EERA activities, thereby reaching many more stakeholders.

Moreover, EERAdata consortium will continue to look for synergies with the 18 EERA Joint Programmes as platforms for further dissemination of the project progress. A particular strong contact has been established with JP Wind who is also working on an initiative for the FAIRification of data and JP E3S to which the institution coordinating the project (HVL) belongs. The FAIRification of energy data has been addressed in recent JP E3S meetings and workshops. It is expected that as in-person activities resume the concerted efforts, specially in terms of events, could be boosted further.

Participation in third-party events

EERAdata was also presented at third-party events, either held by researchers involved in the EERAdata project or by other European projects and initiatives related to open science and FAIR/O data.

Before its launch, the EERAdata project was presented during the Open Science Conference 2020, which took place in Berlin on March 11 and 12 and saw the participation of HVL, AIT, and ENEA. The event discussed the role of open science research, outlining practices and future possible directions of open, data-driven energy system research. August Wierling (HVL) gave a plenary talk. The collaboration with the Open Science Conference continued as well in 2021 (see below).

Furthermore, EERAdata was invited to the EERA JP Wind and SET Wind cross-cutting workshop on Open & FAIR data, which was held on May 29, 2020 with the aim of mapping the existing and future data of the mentioned Joint Programme. The workshop also had the ambition of creating a network of so-called data "stewards", people dealing with data management aspects and take an active part in the development of the internal data infrastructures and data workflows.

EERAdata was also presented during the "PiAI Seminar Series: Physics informed AI in Plasma Science" organized by Prof. Satoshi Hamaguchi of the Osaka University on June 29, 2020, and during two seminars organized by the Research Data Alliance (RDA), namely the "Exploring annotation and metadata initiatives for engineering data" seminar held on September 15, 2020, and the "Building metadata standards within engineering disciplines and communities", held on October 9, 2020. The consortium also took part in the International Open Access Week (October 19 to 25, 2020) with the session "Towards FAIR and open energy data for the low carbon transition".

EERAdata was also invited to the EOSC Project EXPO organized as part of the "Realizing the European Open Science Cloud Conference: Towards a FAIR research data landscape for the social sciences, humanities and beyond" joint event by the EOSC-hub, FREYA, and SSHOC projects. The EOSC Project EXPO was the first virtual exhibition showcasing initiatives and projects of the European Open Science Cloud. The exhibition served as a platform gathering all

EOSC players for four days of knowledge exchange, creation of potential synergies, and networking.

Finally, in the framework of the second workshop of EERAdata, the consortium was invited to the International FAIR Convergence Symposium 2020 and to jointly organize the session "M4M Workshop: Making domain-relevant machine-actionable metadata at scale".

Thus far in 2021, EERAdata has been invited to the 8th Open Science Conference 2021 organized by the Leibniz Research Alliance Open Science. One of the project partners was part of the organizing committee and the consortium also presented a poster.

Additional third-party events have been registered in the EERAdata Wiki at the following link (access restricted to Wiki contributors). Therefore, we have also included the list below in the Appendix.

Participation in external events related KPIs

The numbers reached so far indicate that the project is well on track to achieve the set KPIs for this initiative. EERAdata will continue working on expanding its network and monitoring the FAIR/O landscape which will bring new opportunities for participation in third-party events. For 2021, EERAdata is already in conversations with its sister project EnerMaps to participate together at the EU Sustainable Energy Week 2021, while the project has also been already invited by the GO FAIR community to the FAIR Festival 2021 and by the FAIR Convergence Symposium Organisers to the International Data Week's SciDataCon 2021.

Definition, assessment, and training activities

Workshops

EERAdata Workshop No. 1: FAIR and open principles and METADATA for low carbon energy

Date and time: 2 June - 4 June 2020, 10:00 - 17:00 CET

Format: Online

Aim & outcomes

The three-day long workshop, organised in the form of a hackathon, aimed at discussing and learning about FAIR and open data practices in the energy and other research communities, as well as at analysing and evaluating the state of FAIR/O principles for the metadata of selected databases. During the workshop, keynote speakers presented the context of the fair and open data environment, mapping the current state of the field. Parallel rooms were then created in order to host different discussions on the specific use cases envisioned by the project. The results of the latter were presented on the third day of the workshop, alongside an introduction to the Data Management Plans and best practices identified by the EERAdata consortium.

An article with the main takeaways of the event is available <u>here</u>.

Post-workshop materials

Materials and useful links

Participants: ~69

Preparatory workshop: FAIR and Open metadata for low carbon energy research

Date and time: 5 November 2020, 10:00 – 12:00 CET

Format: Online

Aim & outcomes

The EERAdata Preparatory Workshop presented and discussed metadata approaches for the energy domain and aimed at preparing and briefing attendees on how to co-author the planned community paper that has been written during the one week-long EERAdata workshop (30 November – 7 December 2020).

During the workshop, each of the three speakers held a presentation on different topics, such as metadata standards for low carbon energy research, metadata collaboration platforms, and automated material design. The workshop was concluded with a brief session in which Valeria Jana Schwanitz, EERAdata Coordinator, explained how to participate in the writing process of the EERAdata community paper.

An article with the main takeaways of the event is available here.

Post-workshop materials

Presentations

Participants: > 40

EERAdata Workshop No. 2: FAIR and Open metadata for low carbon energy research (paper writing workshop)

Date and time: 30 November - 7 December, 10:00 - 16:00 CET

Format: Online

Aim & outcomes

The "FAIR and open metadata for low carbon energy research" workshop took place from November 30 until December 7. Its main goal was to collaborate on the "Advancing Metadata for Low Carbon Energy Research" community paper. To this end, the workshop was structured in two Framing Sessions, aiming at discussing and drafting the community paper, and 4 Topical Sessions. The latter took place throughout the week and mainly aimed at enriching the framing discussions.

During the four different topical sessions, EERAdata use cases leaders held presentations on different topics, such as EU policies and energy research taxonomies, buildings efficiency, and metadata user stories. During the last topical session, "Online art project – FAIR data and SDGs",

attendees started the joint creation of a piece of art with which energy researchers and stakeholders could communicate their perspective on the need for high quality, FAIR, and open data to reach the Sustainable Development Goals (SDGs).

An article with the main takeaways of the event is available here.

Post-workshop materials

• Presentations & Recordings

Participants: > 50, ~27 participants as co-authors of the community paper

Workshops related KPIs

The workshops planned for the first year were organized successfully and the number of participants targeted was also achieved.

Wiki

As stated above, an open and collaborative online knowledge base has been launched. It is currently linked to the EERAdata website and it has supported the organization of the workshops, not only by bringing together the agenda and preparatory materials, but also by acting as a repository of the resources elaborated during the workshops and the links to the video recordings. It is also a repository of the timeline of the project compiling in chronological order all the activities executed.

Wiki related KPIs

The Wiki KPI, number of contributors from outside the consortium, is well on track.

Publications

Scientific publications

EERAdata work has included scientific publications derived from the project's activities.

1) Consortium paper on the state of the art of FAIR and open energy (meta)data

Targeted journal: Nature Scientific Data

Abstract

With the continued digitization of the energy sector, the problem of sunk scholarly data investments and forgone opportunities of harvesting existing data is exacerbating. It adds to the problem that the reproduction of knowledge is incomplete, impeding the transparency of science-based evidence for the choices made in the energy transition. We comprehensively test FAIR data practices in the energy domain with the help of automated and manual tests. We document the state-of-the-art and provide insights on bottlenecks from the human and machine perspectives. We propose action items for overcoming the problem with FAIR and open energy data and suggest how to prioritize activities.

Planned submission date: By the end of February 2021

2) Community paper "Advancing FAIR metadata standards for low carbon energy research"

Targeted journal: Energy Strategies Review

Abstract

The potential of FAIR and shared data for industrial and social innovation is vast. Specifically, FAIR and shared data enables practices to choose, monitor, and implement sustainable energy transition pathways. However, domain specific metadata standards are prerequisites for sectoral revolutions driven by opportunities originating from large-scale data utilization. Therefore, this report provides a collaborative response from the low carbon energy research community for addressing the necessity of advancing FAIR metadata standards. We review and test existing metadata practices in the domain based on a series of community workshops. We reflect the perspectives of energy data stakeholders. The outcome is reported in terms of challenges and elicit recommendations for advancing FAIR metadata standards in the energy domain for a broad spectrum of stakeholders.

Planned submission date: By the end of February 2021

Peer-reviewed scientific publications related KPIs

In the first year of project, EERAdata has worked on two papers. Therefore, the performance of this activity has achieved the objectives set for the period reported in this deliverable.

5.1.2 Communication tools

Project identity

EERAdata developed in May 2020 its final logo and visual identity, together with its main key visual. The EERAdata logo builds on and reflects the core content of the project. It is based on the name and gives relevance to graphical elements that correspond to the field concerned by the project, create a FAIR and open data ecosystem, and the importance of doing this in a collaborative way.





Figure 3 EERAdata key visual

The above identity elements have been the blueprint for several communication tools and platforms, from the documents' templates to the standard EERAdata presentation and the project's website. Regarding printed materials, EERAdata has produced a project roll-up in sight

of the in-person events that will be held as soon as in-person activities resume. A general flyer containing key information on the scope and objectives of the project and a template for posters were also designed.



Figure 4 EERAdata website

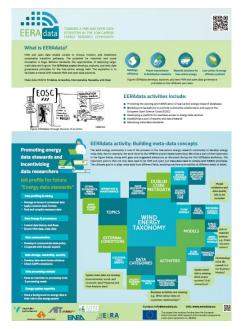


Figure 5 EERAdata poster

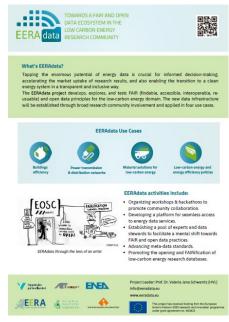


Figure 6 EERAdata flyer

Website

The EERAdata website, https://www.eeradata.eu/, was launched on 3 June 2020.

It presents core information on the project, providing news and updates on its progress. Furthermore, the website serves as a mean for promoting the online events organised within the framework of the project.

The website is integrated in the EERA web portal which gathers, besides the EERA central website, websites of EERA Joint Programmes and EU-funded projects that are of strategic relevance to EERA. This Joomla-based portal allows for cross-sharing and interlinked content due to a centralized administration. Thanks to this functionality, it is easy for the EERA Joint Programmes and other EERA aisbl projects that are part of the system to display EERAdata content also on their websites, increasing the dissemination of information in relevant communities. This also allows to keep results and materials available on the EERAdata public website after the project completion.

Website related KPIs

The measurement of the website's performance can be tracked only starting from August 2020, due to a delay in the registration on Google Analytics. Based on the average number of new users per month and unique page views per month, an estimated projection of total unique page views can be made:

Users	Unique page views	Average session duration
644	2,348	2'16"

Table 4 Projected website users, sessions, and average session duration for the period 9 June 2020 – 17 February 2021



Figure 7 Example of an Event and a News items on the EERAdata website

The news item "Second EERAdata workshop successfully gathered external stakeholders and consortium members to collaborate on a community paper to be published in 2021" and the event item "EERAdata Workshop No. 2: FAIR and open metadata for low carbon energy research (paper writing workshop)" were the most viewed items in their category.

Measures taken to improve outreach:

In the upcoming months, it is expected that the advancement of the project will have a significant positive impact on the EERAdata website indicators. However, for the sake of completeness, further actions are proposed to increasingly promote the site and increase the visits:

- 1) The website will be given further visibility through EERA aisbl and EERAdata consortium members' social media channels (see Social Media updated hereafter).
- The promotion of the EERAdata project and specifically of its web portal will be reinforced through further linkages and references to eeradata.eu from the institutional portals of the consortium members.

 Additional synergies in terms of communications will be sought with third parties such as energy and/or science-related platforms at target, other open science initiatives and projects.

Moreover, the consortium proposes to monitor the users and page views of the Wiki and, in the future, of the Community Platform, as they also contribute to boost the visibility of the project and play a crucial role for information and dissemination purposes. In light of this, the performance of these indicators should also be taken into account and will be added to the overall figure proposed in Table 2.

Mailing lists

EERAdata has established a mailing list of persons within the EERA community interested in open data topics. Furthermore, the list has been enriched with key stakeholders interested in being updated regularly and in participating in the activities of the project, such as energy and/or science-related platforms at target, other open science initiatives and projects, other associations in the energy field, and other research associations.

Mailing lists related KPIs

The indicator for the performance of this activity is on the right track. The subscribers for the EERAdata mailing list have already surpassed the indicator set and the consortium will continue to work on identifying additional interested stakeholders to be informed about the project progress.

Newsletters and social media

Newsletters



EERA Newsletter Special Edition April 2020

EU projects



EERAdata project launched

We are pleased to announce that at the beginning of the month, a consortium led by the Western Norway University of Applied Sciences (HVL) and of which EERA is part, kicked off the EERAdata project. Together, the project partners from Norway, Turkey, Austria, Italy, Belgium, and Poland strive to advance efforts on opening databases and making low-carbon energy data findable, accessible, interoperable, and re-usable – in short: FAIR. Learn more here.

Figure 8 The April 2020 EERA newsletter mentioning EERAdata

News on the EERAdata project have been included in the EERA newsletters. Overall, six newsletters were sent out by the EERA Secretariat in 2020, reaching more than 3,000 people per occasion. Each newsletter included an article on EERAdata, for a total of six featured pieces over the course of 2020. Furthermore, an article on EERAdata was also included in the first EERA newsletter of 2021, sent out in February.

As the project progresses, the EERA newsletter will continue to feature the EERAdata project by disseminating news to an always increasing audience, as people are able to subscribe to the newsletter directly from the EERAdata and the EERA website.

Social media

Content related to the project and its activities has been shared on social media via the channels belonging to EERA aisbl, which enjoy wider visibility in comparison to newly created channels. Two channels have been used for dissemination purposes: LinkedIn and Twitter. The EERA aisbl Twitter account currently has 1.318 followers, while LinkedIn counts 3.162 followers.

To follow, key information points per post published on each social media channel (Twitter and LinkedIn) are compiled in Table 5 and 6 respectively.

Twitter

Post #	Impressions	Engagements	Media views	Likes	Retweets	Replies	Date
Post 1	1932	37	4	5	3		3 April 2020
Post 2	611	3		2			9 June 2020
Post 3	627	5		2			25 September 2020
Post 4	538	5	1				2 October 2020
Post 5	848	27	9	1	2		27 October 2020
Post 6	719	7	3	1	1		4 November 2020
Post 7	465	7	1	2			9 November 2020
Post 8	423	5	1	3	1		16 November 2020
Post 9	793	8	2	3	1		20 November 2020
Post 10	1025	7		1	3		26 November 2020
Post 11	571	2		2			10 December 2020
Post 12	471	9		3	2		26 January 2021
Post 13	582	11	1	5	4		4 February 2021
TOTAL	9605	133	22	28	17		I

Table 5 Performance of EERAdata posts on EERA's Twitter channel

LinkedIn

Post #	Views	Reactions	Comments	Sharing	Clicks	Date
Post 1	923	16		1	37	4 March 2020
Post 2	1003	19			24	9 June 2020
Post 3	425	8			16	25 September 2020
Post 4	281	1		1	3	2 October 2020
Post 5	596	13	2	2	24	27 October 2020
Post 6	331	5			7	4 November 2020
Post 7	406	10		1	10	9 November 2020
Post 8	440	5			10	16 November 2020
Post 9	627	13		2	23	20 November 2020
Post 10	425	5			14	26 November 2020
Post 11	618	16	2	3	9	10 December 2020
Post 12	310	3			7	26 January 2021
Post 13	473	6		1	10	4 February 2021
TOTAL	6858	120	4	11	194	111111111111111111111111111111111111111

Table 6 Performance of EERAdata posts on EERA's LinkedIn channel

In total, 26 social media posts shared on the two platforms gathered 16463 views, showing the potential of the project to reach a broad audience. Users interacted 253 times, with an average of 10 interactions per post across both platforms. This translates in 10 engagements in average for Twitter and in 9 reactions in average for LinkedIn.

The post that created the highest engagement was the one announcing the launch of the events, shared on the 3rd of April 2020.

The other social media posts focused on disseminating information on the workshops organized in the context of the project, with additional reminders before the events, and a link to post-webinar materials once the event was over.

Social Media related KPIs

The numbers reached so far constitute an important basis given the limited number of posts analysed. On another note, not only the number of reactions per post is in line with the content published on the main EERA social media channels, but it also fares better compared to most of the posts published by the organisation.

Measures taken to improve outreach:

EERAdata will strive for increasing the number of social media publications by becoming part of a monthly social media plan developed by EERA in which at least one post every fortnight will be dedicated to the project. In case news about the progress of the project are not available, relevant available content will be scanned, identified, and curated under the perspective of EERAdata, citing and giving credit to the corresponding sources, which is a common tactic in digital communication strategy. It is expected that a stronger social media communication will consequently impact the website performance as well.



Figure 9 Example of a Twitter post announcing the launch of the EERAdata project



Figure 10 Example of a LinkedIn post announcing the launch of the EERAdata website

Press activities

The first press release has been published and disseminated on 3 April 2020. At European level, it was sent to 29 journalists. The press release e-mail had an opening rate of 35,5%, which is above the average for this type of mailing.



Figure 11 The EERAdata kick-off press release

Moreover, an additional press release mentioning the project was sent to 24 journalists on 13 January 2021. This press release addressed the launching of the new EERA transversal Joint Programme, Digitalization for Energy, but highlighted the pioneering efforts of EERAdata in topics related to information technologies and digital challenges in the clean energy field within the EERA community.

This latest press release was replicated by the monitoring service Dods, which is a relevant EU platform for policy intelligence and monitoring that reaches audiences of interest for the project.



Figure 12 Press release new EERA tJP Digitalization for Energy

Press related KPIs

Although there have been press articles reported, especially at a national level, this indicator needs to improve. Given the highly technical nature of the topic, its uptake by the press proves to be challenging. The consortium expects that as more concrete results are derived from the project, additional interest could be sparked within the journalists community. In the light of this

EERAdata has decided to extend this KPI to include other publications such as news items published on the EERAdata website and articles published in institutional magazines and journals of the partners of the consortium.

Measures taken to improve outreach:

A supporting element is furthermore the collaboration with an artist who helps to translate the project activities and results into art. The collaboration with the artist during the first two workshops prooved to be very fruitful and will hence be continued. In particular, we will continue to 'translate' scientific insights into messages targeting lay persons. The results from this collaboration are available on the documentation about the workshops in the project Wiki.

5.2 Implementation plan – Year 2 (2021)

The second year of EERAdata stretches from March 2021 to February 2022 included. For this second year, the following deliverables are foreseen. Their implementation and impact will be evaluated and reflected in the update of the present strategy (M24).

 D8.2, D8.3 Communication, dissemination and exploitation strategy and plan (update M12, second update in M24)

With the present document, D8.2 is completed. It will be updated in M24.

References

N/A

Appendix

To follow up comprehensively, project partners' dissemination and communication activities have been:

Newsletters and social media

Social media

- Publication of the first EERAdata press release on social media by the project partners:
 - GIG Facebook: https://www.facebook.com/GIGinstytutbadawczy/posts/2812234245520551 (Polish version)
 - GIG LinkedIn: https://www.linkedin.com/posts/g%C5%82%C3%B3wny-instytut-g%C3%B3rnictwa_eeeradata-activity-6653590565902393344-tfuV
 - AIT Facebook:
 https://www.facebook.com/AITtomorrow2day/photos/a.1355144987899059/3029

<u>040680509473/?type=3¬if_id=1589459747372533¬if_t=page_post_reaction</u>

- AIT LinkedIn:
 - https://www.linkedin.com/feed/update/urn:li:activity:6666681931788296192
- AIT Twitter: https://twitter.com/AITtomorrow2day/status/1260915030347984898?s=20
- Publication of the second EERAdata workshop on social media by the project partners:
 - GIG Linkedin: https://www.linkedin.com/posts/g%C5%82%C3%B3wny-instytut-g%C3%B3rnictwa_second-eeradata-workshop-successfully-gathered-activity-6746705045422710784-NawJ
 - GIG Facebook: https://www.facebook.com/GIGinstytutbadawczy/posts/3499367203473915
 (Polish version)

Newsletters

• Regular updates on project activities are provided in the monthly newsletter of the Environmental Department of the Norwegian University of Applied Sciences. This newsletter reaches out to all employees and students at HVL (~ 16,000 students and 1,400 staff, 50 selected external stakeholders in Norway).

Press activities

- Publication of the first EERAdata press release on the GIG's website (English and Polish versions: https://www.gig.eu/pl/newsy/rozpoczela-sie-realizacja-projektu-eeradata.
- Moreover, the Polish version of the first EERAdata press release was published on the following portals:
 - Nettg: http://nettg.pl/news/165901/rozwoj-niskoemisyjnej-energetyki-moze-byc-szybszy-i-bardziej-skuteczny.
 - Wnp: https://www.wnp.pl/finanse/naukowcy-ulepsza-bazy-danych-by-przyspieszyc-rozwoj-niskoemisyjnej-energetyki,385697.html
 - Nauka w Polsce (The Science in Poland): http://naukawpolsce.pap.pl/aktualnosci/news%2C81648%2Cnaukowcy-ulepszabazy-danych-przyspieszyc-rozwoj-niskoemisyjnej-energetyki.
- The information about EERAdata project has been published also in a company newsletter of the Polish Mining Group (pages 52-53).
- The press release was sent out in Norway and taken up by the regional newspaper "Sogn Avis" (screen print). https://www.sognavis.no/valeria-og-andre-forskarar-i-sogndal-i-spissen-for-nytt-eu-prosjekt/s/5-115-404532
- First Information about EERAdata was also covered through an interview on the website of the Western Norway University of Applied Sciences. https://www.hvl.no/Vestibylen/nyhende/ny-professor/.
- Publication about EERAdata project by EU Office Stavanger, Norway: https://stavangerregion.no/2020/05/21/hvl-utvikler-okosystem-for-deling-avforskningdata-innenfor-fornybar-energi/. Also posted on their Facebook-page.

- AIT Intranet News
- AIT Webnews (English) https://www.ait.ac.at/en/news-events/single-view/detail/translate-to-english https://www.ait.ac.at/en/news-events/single-view/detail/translate-to-english https://www.ait.ac.at/en/news-events/single-view/detail/tra
- AIT Webnews (German) <a href="https://www.ait.ac.at/news-events/single-view/detail/eeradata-faire-daire-date-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date-n-fuer-date
- Austria Presse Agentur (German):
 https://www.ots.at/presseaussendung/OTS_20200514_OTS0118/eeradata-faire-daten-fuer-die-energiewende
- AIT Media Coverage May:
 - May 14th: Umweltjournal "EERAdata: Faire Datenbank für die Energiewende": https://www.umwelt-journal.at/eeradata-faire-datenbank-fuer-die-energiewende/?customize_changeset_uuid=62ef075c-5c2a-4ddb-a023-1d51a0784bf5&customize_autosaved=on
 - May 15th: ots.at "EERAdata: Faire Daten für die Energiewende" https://www.ots.at/presseaussendung/OTS_20200514_OTS0118/eeradata-fairedaten-fuer-die-energiewende
 - May 15th: science.apa.at "EERAdata: Faire Daten für die Energiewende" https://pressespiegel.metacommunication.com/v3/clippings/pool/2020/05/15/AIT_XOnA 20200514 Online 00115894571811779704.pdf
 - May 15th: boerse-express.com "EERAdata: Faire Daten für die Energiewende" https://pressespiegel.metacommunication.com/v3/clippings/pool/2020/05/15/AIT_ XOnA_20200514_Online_2981589477383352107552.pdf
 - May 16th: science.apa.at "EU-Projekt sucht 'harmonischen' Zugang zu Energiedaten"
 https://pressespiegel.metacommunication.com/v3/clippings/pool/2020/05/16/AIT_ XOnA 20200514 Online 4431589528742242130928.pdf
 - May 22nd: oekonews.at "EERAdata: Faire Daten für die Energiewende" https://pressespiegel.metacommunication.com/v3/clippings/pool/2020/05/22/AIT_ XOnA_20200521_Online_272159006702242693272.pdf

Other publications

- EERAdata fact sheet (page 56) in the special issue n.2/2020 of the journal "Energia, Ambiente e Innovazione": <a href="https://www.eai.enea.it/component/jdownloads/send/6-energia-e-green-new-deal/182-speciale-eai-02-2020-progetti-tecnologie-e-soluzioni-enea-per-la-transizione-e-la-sostenibilita-energetica.html (Italian version)
- Paper in which EERAdata is shortly described (page 118): https://www.eai.enea.it/archivio/energia-e-green-new-deal-sommario/hpc-e-bigdata-una-nuova-digitalizzazione-per-il-new-green-deal.html (Italian version)
- Website of lab "Data-driven energy system analysis" (HVL): https://www.hvl.no/en/research/group/data-driven-energy-system-analysis/
- Personal website of the EERAdata project coordinator: https://www.hvl.no/person/?user=Valeria.Jana.Schwanitz
- HVL website:

https://www.hvl.no/en/project/?filters=Horizon2020

- Publication about EERAdata WS1 with CESSDA: https://www.cessda.eu/News-Events/EERAdata-online-workshop-hackathon-FAIR-and-open-principles-and-METADATA-for-low-carbon-energy
- Publication about WS2 in the news on the GIG website (both in the Polish and English version of the website)
 - o In Polish: https://www.gig.eu/pl/newsy/drugie-miedzynarodowe-warsztaty-projektu-eeradata
 - o In English: https://www.gig.eu/en/news/eeradata-second-international-workshop
- Publication about EERAdata role in agreement on data collection protocols and <u>metadata</u> on Openmod forum: <u>https://forum.openmod.org/t/ithaka-questionnaire-on-community-data-useage/2503/3</u>

Project Wiki - documentation of timeline

Note that links may be restricted for access to internal project members.

Timeline of the implementation of the projected

Overview of steps undertaken in EERAdata to implement the project. The focus is on steps forward and backward. It will help us later to come up with realistic suggestions in the recommendations and lessons learned to help others who are interested in FAIRifying and opening their data. For example, how long does the preparation take? How difficult is the organizational effort? Furthermore, it will support the reporting to EC.

Year 2020[edit]

January[edit]

- **7 January 2020**, Meeting with CESSDA in Bergen, to discuss involvement in EERAdata and prepare WS 1. Co-hosting institution. Ron Dekkar Member of Advisory Board.
- **7 January 2020**, Presentation of EERAdata at HVL annual meeting of the Faculty of Engineering and Natural Sciences to reach out beyond the EERAdata consortium.
- **15 January 2020**, Establishing contact with Philipp Conzett, Univ. of Tromso and DATAVERSE. Linking EERAdata to DATAVERSE.

March[edit]

- 11-12 March 2020, Open Science Conference 2020 and Barcamp, Berlin,
 Germany: Presentation of August Wierling (HVL), incl.
 abstract: https://zenodo.org/record/3776858#.XrP-w3Yza90. Establishing personal contact with Ludwig Hülk, Rainer-Lemoine-Institute (Open Mode Initiative).
- 18 March 2020, Executive Board Meeting No. 1, Preparing online kick off
- Establishing contacts with CESSDA, NEIC, EOSC WG FAIR data,
- 25 March 2020, Online meeting with Trond Kvamme, Norwegian Center for Research Data (NSD, discussing collaboration on DMP and workshop participation).

April[edit]

- 3 April 2020, <u>Kickoff workshop of EERAdata</u>, online, Starting the project introduction to organization, objectives, collaboration infrastructure
- 3 April 2020, Training on using Only Office online collaboration platform
- 24 April 2020, Executive Board Meeting No. 2, Follow up of kick of, Deliverables D1.1 and D8.1a, website and CI discussion
- 27 April 2020, Participation in PiAI seminar, Toyohiro Chikyow, National Institute for Materials Science (NIMS), Japan: How we can increase the data for Materials Informatics?
- 28 April 2020, <u>UC 1 Kickoff</u>, discussing FAIR/O and metadata approach, databases to select. The meeting successfully held. August also participated to deliver the approach of WP2. We clarified a number of questions with the contribution of August and other team members. Road ahead was set. The first task was assigned via only office to the partners that are involved in WP4.

May[edit]

- **5 May 2020**, <u>EERA General Assembly</u>: Presentation of EERAdata project by Secretary-General of EERA, Adel al Gamal
- 6 May 2020, Online meeting with JP Wind, coordinator Flaminia Riccioni Capelli, to discuss postponed EERA workshop on FAIR and open energy data: when to re-organize and how to best link with EERAdata
- 6 May 2020, Gap analysis Online discussion of how to approach and connect with use cases
- 6 May 2020, Discussion with Holger Ihssen (KIT, member of the advisory board),
 Involvement in EERAdata and WS1, linking EERAdata with EERA and JP Digitalization
- 12 May 2020, UC 4 kickoff
- 13 May 2020, UC 2 kickoff
- 14 May 2020, <u>EB meeting No. 3</u> to prepare WS1
- 14 May 2020, Online meeting with Ilaria Fava, OpenAIRE project to discuss linking projects, involvement in WS1 and advisory board. EERAdata considers applying for their fund.
- 15 May 2020, UC 3 kickoff
- **15 May 2020**, Online meeting with Andreas Jaunsen, Nordforsk & EOSC-Nordic to invite to the workshop as presenter and discussant. Candidate for the EERAdata advisory board.
- **18 May 2020**, Online meeting with Anna Maria Sempreviva, DTU, and IRP wind to invite to the workshop as presenter and discussant.
- **18 May 2020**, Online interview about EERAdata with Stavanger Region European Office. Linking to Triangulum project and EU initiative "e-translation"
- 18 May 2020, Online discussion with transversal EERA JP on digitalization (tJP Digitalization). EERAdata (Valeria) to lead the planned subprogram on FAIR and Open energy data.
- 20 May 2020, Discussion with Tomasz Miksa (TU Wien, an expert on machine-actionable DMPs), Involvement in EERAdata and WS1

- 21 May 2020, Discussion with Elena Giulia (UNITO, member of the advisory board),
 Involvement in EERAdata and WS1
- 25 May 2020, <u>EERAdata project wiki</u> established at webfactional
- 27 May, 2020. Online meeting with Diane van Gunten and Jakob Rager to connect with H2020 EnergMap. Projects presented to each other, discussing synergies and collaboration possibilities (incl. joint special issue). Collaboration on platforms useful.
- 28 May, 2020. Online meeting UC 3 (preparation of workshop)
- **29 May, 2020**, Online meeting UC 2 (preparation of workshop)
- 29 May, 2020, Online workshop "EERA JP Wind & SETWind Cross-cutting workshop on Open and Fair Data" <u>Invitation and registration</u>
- 29 May, 2020, Participation in online hackathon for machine-actionable DMPs
- Establishing contacts with advisory board members: KIT, UNITO, Open AIRE, Nordic EOSC, DLR.

June[edit]

- 2-4 June 2020, EERAdata Workshop No. 1 as an online hackathon, "Define. Concept for FAIR implementation. Skills for FAIR.": <u>Agenda</u>. Includes EERAdata storyboard and metadata game.
- **3-5 June, 2020**, <u>Conference on FAIR data infrastructure for genomics</u>. EERAdata participated.
- **5 June 2020,** Online meeting with Sebastian Duprez from https://www.eccsel.org/, European Carbon Dioxide Capture and Storage Laboratory Infrastructure.
- 8 June, 2020, EB meeting No. 4.
- 10 June 2020, Online meeting with Sarah Barber on FAIR and open data, wind technology.
 Follow-up from JP Wind workshop. Leader of network https://www.wedowind.ch/.
- 11 June, 2020, Online meeting with Michael Belsnes, SINTIF and OpenENTRANCE project, https://www.sintef.no/en/projects/open-entrance/,
- 11 June 2020, Drafting of work plan for SP on FAIR and open energy data for tJP Digitalization.
- 18 June, 2020, EERAdata workshop at annual EERA e3s meeting,
- 29 June 2020, PiAl Seminar Series "Physics informed Al in Plasma Science" (organized by Prof. <u>Satoshi Hamaguchi</u>, Osaka University), Presentation by Valeria Jana Schwanitz (HVL), "Towards metadata standards in low carbon energy research - insights from the EERAdata project"

July[edit]

 20 July 2020, 14:00 hrs CEST and it will be about "Scientific Annotation - Engineering Applications, Discovery and Preservation". If you are interested in participate you can find more information and the registration link here: https://rd-alliance.org/group/metadata-ig-working-and-interest-group-chairs-preservation-tools-techniques-and-policies

August[edit]

• 5 August 2020, Discussion with Holger Ihssen, KIT, on WS2 strategy

September[edit]

- 1 September 2020, EB meeting No. 5 to prepare WS2, metadata work & platform
- 1 September 2020, Kickoff WP3 Platform meeting
- 11 September 2020, Discussion with Holger Ihssen (KIT) to prepare WS2
- 14-18 September 2020, Participation in <u>EERA JP Wind & SETWind Online Annual Event</u> 2020, EERAdata poster contribution
- **15 September 2020**, Participation in online workshop <u>Building metadata standards within</u> <u>Engineering disciplines and communities</u>
- 21 September 2020, UC 4 meeting to discuss state of the art paper
- **25 September 2020**, Participation in RDA workshop "Building metadata standards within Engineering disciplines and communities".

October[edit]

- 2 October 2020, EB meeting No. 6, all WP progress
- **9 October 2020**, Participation in RDA seminar, 15.30-17.00, Invitation to follow, EERAdata participates with a presentation
- **16 October 2020**, Online paper writing workshop "Towards FAIR and open data for low carbon energy current state and call for action"
- 16 October 2020, Online meeting to prepare WS2
- 19 October 2020, Presentation of EERAdata at the International Open Access Week
- 26-30 October 2020, Week dedicated to work on the state of the art on FAIR/O energy data
- October-November 2020, Participation in the NEIC workshop on FAIRification (biweekly, half day)

November[edit]

- **3-4 November 2020**, Annual assembly of sister project ENERMAPS, invited to present EERAdata
- 5 November, Preparatory/Briefing workshop to EERAdata Workshop No. 2
- **6 November**, <u>EB meeting No. 7</u>, all WP progress
- 9-10 November, RDA 16th Plenary Meeting Costa Rica (Virtual), participation
- 11 November, Participation in ontology developer meeting of open energy ontology
- 11 November 2020, Discussion with Holger Ihssen (KIT) to prepare WS2
- 11 November 2020, Discussion with Erik Schultes (GOFAIR) to prepare WS2 and have a
 joined session to prepare EERAdata M4Mworkshops within the Convergence Symposium
 2020
- 13 November 2020, Discussion with Peter McQuilton, FAIRSHARING.org and Oxford University about possible contributions of EERAdata to the FAIRSHARing database
- 16-19 November, <u>REALISING THE EUROPEAN OPEN SCIENCE CLOUD</u>, Towards a
 FAIR research data landscape for the social sciences, humanities and beyond Participation
 with a booth

- **20 November**, EB meeting No. 8, all WP progress and WS preparation
- **20 November**, EERAdata participates in SUPEERA project on policy indicators to connect with the project and co-host of WS2 KIT
- 30 November 7 December 2020, EERAdata Workshop No. 2 "FAIR AND OPEN METADATA FOR LOW CARBON ENERGY RESEARCH" (7 workshops)
- 30 November 2020, planned submission of state of the art paper

December[edit]

• 2020, EERAdata Workshop No. 2 as an online hackathon to write a community paper, "FAIR and open metadata for low carbon energy research": [1].

Topical workshops:

- 1st of December EU Policy and Energy Research Taxonomies (lead by GIG), 10am-2pm
- 2nd of December Buildings efficiency & metadata (led by IUE), 10-12 pm
- 3rd of December Metadata user stories (led by AIT), 10-12 pm
- 4th of December Online art project FAIR data & SDGs, 10-3pm
- 4th of December Joint session with the <u>International FAIR Convergence Symposium</u> "Making domain-relevant machine-actionable metadata at scale".
- 7th of December Framing session 10am-4pm
- 11th of December, EB meeting No. 9 to debrief WS2 and the state of EERAdata for 2020

Year 2021 [edit]

January[edit]

- January Kick-off of new EERA Joint Program Digitalization of Energy, Valeria to lead the Subprogramme on "Data Science & AI"
- 6th of January Meeting with general secretary of EERA, Adel El Gamal, to discuss linking EERAdata and EERA with new tjP Digitalization
- **11 th of January** Coordinator meeting of tJP Digitalization of Energy, presentation of EERAdata and invitation to community paper
- 13 th of January 2-3pm, Discussion with AIT on gap analysis deliverable
- 15 th of January sending out of 1st draft of community paper on advancing energy FAIR metadata practices
- 22 th of January discussion of draft for paper on state-of-the-art of FAIR and open energy data
- 22 th of January EB meeting No. 10, upcoming deliverables, planning of WS3
- 27 th of January Workshop on FAIR and open metadata for the COMETS inventory (use case 'electricity market actors', EERAdata WP5). Collaboration between COMETS and EERAdata consortium 10-3pm.

• 31 st of January - Deadline, first round of review of community paper

February[edit]

- 2 nd February Discussion with Philipp Conzett, Univ. of Tromso and DATAVERSE on preparing the upload of a use case to dataverse.no (incl. PID)
- 3 rd February Participation in NORDIC EOSC Workshop "FAIRification STEP 2 FAIR principle F3"
- 4 th Februrary sending out of 2nd draft of community paper on advancing energy FAIR metadata practices
- 11 th February Meeting with sister project ENERMAPS (postponed as new information on the EU Sustainable Development week was not yet available)