D8.3

Data Management Plan

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Summary sheet

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0.3	01/04/2026	Gergana Dimitrova & Aleksandar Zobec (FS6Tech), Ariel Avila (SonoM)	Revision of the document
0.4	21/04/2026	Daniela Magalhães, Ana Rita Nunes, Hugo Morais (INESC ID)	Implementation of suggestions from Reviewers
0.5	23/04/2026	Daniela Magalhães & Hugo Morais (INESC ID)	Final revision and Deliverable template implementation.
1.0	28/04/2026	Daniela Magalhães (INESC ID)	Finalisation and submitted version

Disclaimer

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This deliverable follows the structure used in the Data Management Plans of the following projects, developed under the same Coordination team: Shift2DC[1] and U2Demo[2].

[1] https://shift2dc.eu/

[2] https://u2demo.eu/

List of abbreviations and acronyms

Acronym	Meaning
AI	Artificially Intelligence
CAuthor	Corresponding Author
D	Deliverable
DDC	Data Definition Catalogue
DMP	Data Management Plan
DOI	Digital Object Identifier
EC	European Commission
ePIPVs	Electric Vehicle Compliant Parking Lot Integrated PV
EU	European Union
GA	Grant Agreement
GDPR	General Data Protection Regulation
HE	Horizon Europe
IPR	Intellectual Property Rights
OEMs	Original Equipment Manufacturers
PU	Public
R	Report
SEN	Sensitive
SO	Specific Objective
VIPV	Vehicle-Integrated Photovoltaic
WP	Work Package

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Executive Summary

The Deliverable D8.3 is the initial version of the Data Management Plan (DMP) of the SOLAR-MOVE project, funded by the European Union´s Horizon Europe Innovation Action programme. The SOLAR-MOVE main goal it to accelerate the adoption of electric vehicles while reducing their impact on electricity grids, by developing solutions for diverse Vehicles Integrated Photovoltaic (VIPV) ecosystems and Electric Vehicle Compliant Parking Lot Integrated PV (ePIPV) for diverse applications. The DMP´s main purpose is to identify all data types produced, re-used, gathered and distributed across the SOLAR-MOVE project, ensuring that they remain usable, accessible and secure throughout the entire project lifecycle. The DMP establishes the principles, procedures and responsibilities for managing the SOLAR-MOVE data, providing a structured framework that covers SOLAR-MOVE-related data types, formats, sources, storage options (short- and long-term duration) and conditions for data sharing and reuse, in alignment with Horizon Europe's data management requirements.

This deliverable also ensures that all data created in SOLAR-MOVE complies with the FAIR (Findability, Accessibility, Interoperability, and Reusability) principles and adheres to the European Commission's Open Science policies, which promote open access, data transparency, reproducibility, accessibility, security and reliability of the research outputs.

The DMP is complemented by a Data Definition Catalogue (DDC), which aims to track and manage data from the activities and dissemination that occur during the project. The DDC maintenance is the responsibility of the project manager, with support from the WP and Task leaders.

Updates to the initial DMP are planned at M24 and M42 or whenever alterations are required.

Keywords

Electric vehicles I VIPV I PIPVs I eBus I TOPCon I Vehicle-to-grid I Flexibility I Planning I Regulatory I Use Cases I Interoperability I Replicability I Scalability I Business Models I Exploitation

1. Introduction

1.1 Scope and objectives

The **Deliverable 8.3 (D8.3)** presents the initial version of the **Data Management Plan (DMP)** for the SOLAR-MOVE project. This DMP sets the processes, responsibilities and requirements that govern the handling of SOLAR-MOVE data, ensuring that all data management comply with Horizon Europe guidelines and best practices.

SOLAR-MOVE project aims to enhance electric vehicles (EVs) adoption while minimizing their impact on the power grid by developing solutions for different vehicles Integrated Photovoltaic (VIPV) ecosystems and developing electric charging stations integrated with PVs (ePIPV) for diverse applications. The SOLAR-MOVE solutions, ranging from software, hardware and prototypes, will be demonstrated in six pilots across Denmark, Greece, Turkey, Portugal, Albania, and Slovenia. The project results will contribute to the elaboration of policy recommendations to support the adoption of VIPV and ePIPVs, guidelines for municipalities to simplify the procurement process for VIPVs and ePIPV solutions and regulatory frameworks and incentives to facilitate the mass deployment of these technologies.

To achieve the objectives of the project and ensure the accessibility and replicability of the solutions, the SOLAR-MOVE consortium, composed by 34 partners across 16 countries, adheres to the data management principles defined in this DMP and follows the European Commission (EC) 's Open Research Data Management and the General Data Protection Regulation (GDPR) requirements for the research data generated throughout the project. Nonetheless, SOLAR-MOVE is conducted through a balanced approach which promotes open data access while protecting legitimate interests regarding scientific information, commercial exploitation, intellectual property rights (IPR), privacy, security and data management and preservation. Therefore, the project applies the principle of "as open as possible as closed as necessary" [1]. The consortium partners have unanimously agreed that, whenever feasible, data produced within the SOLAR-MOVE project will be available in trusted and recognised repositories, providing open access under a suitable licensing agreement. Restrictions on data access will be properly justified within the next updates of this DMP.

Furthermore, this DMP guarantees that project research data complies with the **FAIR principles (Findable, Accessible, Interoperable, and Reusable)** [2, 3]. The DMP specifically delineates information on:

- The management of research data during and after the project;
- The types of data to be collected, processed, and/or generated;
- The methodologies, standards, and formats that should be applied;
- The regulations under which data will be shared or made openly accessible; and
- The procedures for data curation, preservation (including after the end of the project), and re-use.

The D8.3 - Project Management plan consists of the first version of the SOLAR-MOVE DMP, comprising not only the guidelines mentioned before but also the data types currently expected to be generated across the project's WPs. As the project progresses and activities develop, the DMP will be updated

twice (D8.4 on M24 and D8.5 on M42) as stated in the Grant Agreement (GA), or whenever relevant. These regular updates are intended to maintain a continuous alignment with project developments, emerging datasets and evolving data management needs.

1.2 Document structure

The DMP is organised in ten distinct sections, namely:

Section 1, **Introduction**, presents the objectives, overall structure of the DMP and relation with other deliverables;

Section 2, **Data Summary**, gives information about the different data that are expected to be generated during the project, and about their characteristics;

Section 3, **Research Outputs**, gives information regarding outputs produced withing the project, including software, algorithms, models, solutions, deliverables and dissemination materials;

Section 4, **FAIR Data**, is dedicated to the measures implemented by the SOLAR-MOVE project to guarantee that data sharing aligns with the FAIR principles;

Section 5, **Allocation of Resources**, discusses the resources allocated to making the data FAIR;

Section 6, **Organisations and roles**, identifies the organisations' roles with direct responsibility in the project Data Management;

Section 7, **Workflow for DMP,** delineates protocols to ensure the quality of data used within the project;

Section 8, **Data Security**, outlines the data security protocols established in the project;

Section 9, **Ethics,** presents the ethical principles applied in the project, including data protection and the use of Artificial Intelligence (AI);

Section 10, **Conclusions,** gives an overview of the document.

Notably, the document is based in the Horizon Europe (HE) DMP template [4] and the FAIR principles [2, 3].

1.3 Relationship with other deliverables

The deliverable D8.3 – Data Management Plan is a key reference document that supports other project tasks and deliverables by defining the procedures and principles of data handling. Developed under **WP8 - Project Management**, led by INESC ID, D8.3 is closely associated to all the deliverables produced in this WP: **Project Management Plan (D8.1)** [5] and update (**D8.2**), by establishing the foundations for compliant data practices across the SOLAR-MOVE consortium, defining procedures and responsibilities for data handling and monitoring FAIR and open science compliance; **DMP updates (D8.4 (M24) and D8.5 (M42);** and **Intermediate Progress reports (D8.6 (M15) and D8.7 (M36)** to ensure that project data remains aligned with Horizon Europe obligations throughout the project lifecycle.

D8.3 is also strongly connected to all tasks and deliverables involving data collection, generation, processing and analysis. This includes:

- SOLAR-MOVE foundations (**WP1**), which generates data related to services, regulatory framework and cybersecurity regulations;

- VIPV and ePIPV development (**WP2 and WP3**), which produce models, datasets, technical reports and solutions related to the development and innovation of VIPVs and numerical and model-based datasets related to the operation of ePIPVs;

- SOLAR-MOVE demonstration (**WP4 and WP5**), which generate operational, monitoring and technical datasets from the pilot implementations and demonstration activities across the six project pilots.

The overall framework illustrating the interconnections between all the SOLAR-MOVE WPs are demonstrated on **Figure 1.**

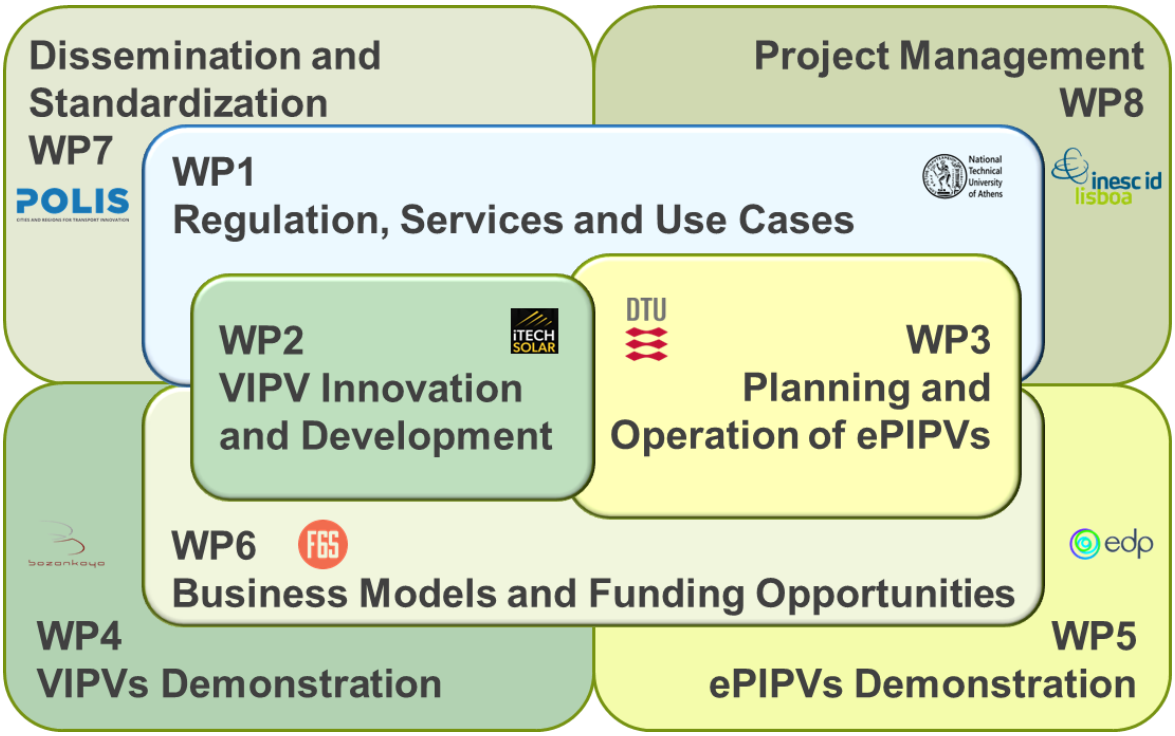

Figure 1 - SOLAR-MOVE organisation and identification (from SOLAR-MOVE Grant Agreement)

2. Data summary

The first part of this DMP (**Section 2**) focuses on the identification of the project data. It outlines the types of data expected to be generated and used, specifies where these data will be stored, describes how they can be accessed and defines their level of dissemination.

Several types of data will be produced, collected and analysed throughout the SOLAR-MOVE project (**Section 2.1**). These data types will be stored in the project- dedicated SOLAR-MOVE Teams repository and all public data will also be available in European Union (EU) compliant open repositories. The relation between each data and the project objectives will be detailed in **Section 2.2**. **Section 2.3** will describe the data sources and the conditions for data reuse. Finally, **Section 2.4** will identify the data utility outside the project.

Table APPENDIX A 1 (**APPENDIX A:** Data and Research Outputs) summarises the different types of SOLAR-MOVE data and research outs, including their size, storage, sources, and intended target groups. Some data information will be defined throughout the project and **Table APPENDIX A 1** will be updated accordingly.

As this is the initial version of the Data Management Plan, it is expected that additional data and information will be identified and acquired as the project progresses. These will be incorporated into the updated versions of this DMP (D8.4 and D8.5).

2.1 Data types

The SOLAR-MOVE data types range from research data to management and administration data, which support all the project activities.

2.1.1 Research data

This section includes the research data generated, collected and used in the project and is categorised as primary research data (**Section 2.1.1.1**), secondary research / re-used data (**Section 2.1.1.2**) and derived/ processed data (**Section 2.1.1.3**).

2.1.1.1 Primary research data

Primary research data include datasets generated directly through project activities such as:

Measurement data (WP1- WP5): data resulting from tests/solutions, either in the context of the lab or in real settings (pilots). It includes datasets with numerical (.csv or .xlsx) or text (.docx or .txt) format, and sizes that will depend on the type of tests performed such as the assessment of VIPVs performance. These data typically reflect the operational behaviour of the systems, including power, voltage, current, energy, frequency, consumption profiles and price data as well as charging and discharging schedules.

Assets and other demo data (WP3-WP5): data that delineates the configuration and structure of the systems and components utilised in the SOLAR-MOVE pilots and demonstrators. This comprises data regarding the arrangement of assets such as PV systems, batteries (BEES), charging stations, vehicles

(VIPVs), and grid connection. These datasets may include numerical (.csv or .xls) and their size will depend on the complexity of each pilot.

Configuration data (WP3): data associated with the setup and parametrisation of forecasting, optimisation, and energy management algorithms that are going to be developed in the project. This includes parameters, input settings, constrains and control variables required to run simulations and optimisation processes. The datasets may be stored in structured formats such as csv or jason files.

Stakeholders engagement data (WP1, WP4-6): datasets produced from stakeholder engagement activities, such as surveys, focus groups, workshops and round tables conducted with OEMs, supply chain stakeholders and local and regional authorities. More specifically, the data can include survey responses, collections of images, transcripts, audio recordings and other qualitative data, and will be used to regulatory aspects related to vehicle systems and building-integrated PVs.

2.1.1.2 Secondary research/ re-used data

Secondary data includes external datasets that are reused withing the project to support analysis, modelling and tool development.

Input data: external and internal datasets to train algorithms and support the development of forecasting tools and simulation models that will be generated within the project. In **Section 2.3**, Table 1 information about external datasets are described.

2.1.1.3 Derived/ processed data

In this section, it is outlined the possible datasets resulting from processing and analysing primary or secondary data. The table below (**Table 1**) identifies and describes some expected derived/processed data generated by SOLAR-MOVE consortium. Three main types were identified:

Forecast and simulation data (WP3): datasets generated from forecasting tools and simulation models. For instance, the forecast data of available productions, consumption and flexibility for ePIPV systems from day-ahead to near real-time (15 min ahead).

Validation and pilot data (WP3, WP4, WP5): datasets resulting from the processing and analysis of experimental and pilot data, including performance assessment, comparison between measured and simulated results, and aggregated operational insights (e.g. PV production, charging behaviour, and system performance). These datasets aim to support the validation of the developed solutions and their performance under real-life conditions.

Business model data (WP6): datasets resulting from the analysis of technical and demonstration data. These datasets support the development of business models for VIPV and ePIPV solutions.

Interoperability and standardisation data (WP7): data resulting from participation in several standardisation and regulatory bodies, to support the improvement of existing standards and interoperability of VIPV and ePIPVs.

Table 1 - Expected Derived and Processed data

Expected Data	Related WP	Description
Dataset on existing flexibility service solutions for e-mobility and charging stations	WP1	This dataset will provide insights for the development of tools for the planning and operation of ePIPVs.
Dataset on PV cell and module performance and encapsulation materials	WP2	This data includes efficiency measurements, material properties, and encapsulation performance, supporting the optimisation and validation of PV technologies.
Dataset on VIPV vehicle integration and performance	WP2	This dataset includes data generated from the integration of PV technologies into different vehicle types, supporting the validation and efficiency.
Estimation of PV production data in VIPVs and ePIPVs	WP3	This data will support the operation and planning phases of VIPV and ePIPV deployment.
Forecast data	WP3	Forecast data of available productions, consumption and flexibility for ePIPVs systems from day-ahead to near real-time (15 min ahead)
Pilot datasets on regulatory information	WP4 & WP5	Data to be integrated in new SOLAR-MOVE algorithms, tools, solutions
Pilot datasets on weather data		
Pilot datasets on PV production		
Pilot datasets on VIPV charging		
Pilot datasets on operational information		
Business model data	WP6	Data obtained from technical outcomes and demonstration activities, used to support business models for VIPVs and ePIPV systems
Interoperability and standardisation data	WP7	This dataset includes the specification of interfaces, communication protocols, and data exchange mechanisms to support interoperability between systems. It is derived from the integration and analysis of project results and supports standardisation activities and contributions to relevant initiatives and working groups

2.1.2 Management and administration data

This section describes the data generated and used for the management, coordination and administration of the project. These data support the organisation of project activities and internal communication and are not classified as research data.

The main types of data in this category include:

Contact and mailing lists (WP8): include names and emails of consortium members, only available on project SharePoint to be accessed by partners to organise meetings, discuss activities and outputs. These lists are in the format .xlsx, to be accessed through MS Excel, with sizes around 50 KB.

Project management documents (WP8): includes meeting minutes, agendas and attendance lists and other internal documents that are required for project coordination and reporting. These files are in format .docx or PDF with sizes around 200 KB.

Data Definition Catalogue (WP8): comprises data about the participation of workshops, events and conferences of the partners of the project that participate in those events in the name of the project. It also includes information about social media posts, news in magazines and journals and newsletters. In summary, this file support the project monitoring, reporting and dissemination tracking. This is an Excel file with size around 60 KB.

These data are stored in the project's internal repository (SOLAR-MOVE SharePoint) with restricted access to the project's consortium.

2.2 Data purpose and relation to project objectives

The data generation and reuse within the SOLAR-MOVE project are directly aligned with the achievement of the project's specific objectives (SO) in order to ensure that data management efforts support the scientific, technical and innovation goals of the project.

The data collected and generated throughout the project will support the identification and reduction of regulatory barriers (**SO1 - Reduce the regulatory barriers to the development of VIPV strategies**), by analysing the existing frameworks, identifying barriers and developing policy recommendations and guidelines. This includes data derived from stakeholder engagement activities, as well as regulatory and analytical information (e.g. frameworks and case-based analyses), which will underpin the assessment of barriers and the formulation of recommendations.

For the development of innovative **PV technologies and encapsulation (SO2)**, experimental data, including cell efficiency measurements, as well as design and manufacturing data (e.g. module configurations and encapsulation performance) of solar cells, will be generated to optimise and validate the PV technologies' performance as well as ensure the technical feasibility. From this, VIPV prototypes will be developed.

Data related to **vehicle integration and performance (SO3)**, is going to support the development and validation of VIPV solutions across different vehicle types (e.g. heavy-duty trucks, garbage trucks, buses, motorhomes, and last-mile delivery vehicles), such as the integration of PVs and improvement of the system efficiency. Therefore, it will include technical, operational and performance data to assess efficiency gain and system integration.

Demonstration activities (SO4) will generate real-world data from pilots deployed across multiple countries. These datasets will include real-world performance data, environmental data (e.g. weather conditions), and data demonstrating the impact on the power grid. From this data, a tool will be developed to estimate the production of PV installed in VIPVs

Importantly, the data from the demonstration activities and will be analysed to assess economic and market viability and scalability. Therefore, these analyses will support the development **of business models and financial strategies (SO5)**.

The **design, operation optimisation and the participation of ePIPVs in grid services (SO6, SO7 and SO8)** are key project objectives which will lead to the generation of energy data (generation,

consumption, and storage), grid interaction data (e.g. load profiles and flexibility services), as well as simulation, optimisation and forecasting data. These data will support the development of planning tools, optimisation algorithms, and energy management systems, enabling efficient integration of PV systems, batteries and charging infrastructure, while minimising grid impact.

For the **SO9 - Contribute to the increase of interoperability**, structured technical information related to interfaces, communication protocols and data exchanged mechanisms will be generated to support system integration and standardisation activities.

The **use case repository (SO10)**, will be supported by structured data describing system configurations, stakeholder roles, and operational scenarios, contributing to knowledge sharing and integration within the BRIDGE initiative.

Finally, data related to the integration and use of **renewable energy sources and distributed energy resources (SO11)** will be generated, more specifically, energy system data, flexibility and demand response data, and performance indicators associated with renewable integration. These data will support the assessment of increased renewable penetration, improve system efficiency and enhance flexibility services.

Overall, all the data types generated and reused in SOLAR-MOVE project will play a central role in enabling evidence-based developments, validation and deployment of VIPV and ePIVP solutions, guaranteeing that project outcomes are robust, scalable and aligned with the project objectives.

2.3 Data sources and re-usability

To achieve the goals of the project, the SOLAR-MOVE consortium will re-use and build upon existing resources, including:

i) data/solutions/tools developed in previous HE projects in which partners have participated. **Table 2** lists the data sources and details on how the consortium partners intend to reuse them.

Table 2 - SOLAR-MOVE related projects

Data	Data Source	Developments beyond	Format	Work Packages
- Consumer-centred management strategies on P2P trading and energy sharing	U2Demo project	SOLAR-MOVE will build on U2DEMO methods, incorporating VIPVs as energy sources and consumers in Vehicle-to-Everything (V2X) strategies, demonstrating how ePIPVs and VIPVs can function as key assets for energy communities, contributing to urban energy resilience.	Tool	WP3, WP4, WP5

- Methodologies to predict and plan EV charging infrastructure location, supporting grid operators in planning decisions. **- EV use profiles datasets (per season, type of charger and weekday/weekend)**	AHEAD	- SOLAR-MOVE will enhance AHEAD's simulation environment by including scenarios where VIPVs reduce the need for public charging infrastructure, especially in remote or grid-constrained areas. Additionally, the placement and operation of ePIPVs to complement traditional EV charging stations will be simulated, reducing grid dependence. - EV use profiles will be used to evaluate the value of different flexibility services and DR programs	Algorithms, services	WP2, WP3, WP4, WP5
- Interoperable smart charging and V2X solutions across a wide range of applications and business models. **- EV use profiles datasets (per season, type of charger and weekday/weekend)**	FLOW	- SOLAR-MOVE will design DR programmes tailored to the variability of VIPVs, to optimise interactions with the grid and reduce dependence on external charging infrastructures. - EV use profiles will be used to evaluate the value of different flexibility services and DR programmes	Algorithms	WP2, WP3, WP4
- V2X marketplace that leverages the flexible energy potential from advanced smart charging in charging stations at private or public parking lots. **- EV use profiles datasets (per season, type of charger and weekday/weekend**	DRIVE2X	- SOLAR-MOVE will adapt DRIVE2X's approaches to the variability of VIPV vehicles, exploring pricing models that incentivise VIPV vehicles to provide grid support during peak periods or periods of renewable energy scarcity. Moreover, renewable energy will be prioritised for EV charging through the design of ePIPVs that support direct V2X interactions. - EV use profiles will be used to evaluate the value of different flexibility services and DR programmes	Algorithms	WP2, WP3, WP4, WP5

- Federated learning algorithms and uncertainty quantification methods to facilitate the management of power grids with very high penetration of DERs.	ALAMO	- SOLAR-MOVE will modify the federated learning framework to integrate data from VIPVs, ePIPVs, and their interactions with power grids. Uncertainty quantification models that address uncertainties specific to VIPVs and ePIPVs will be developed. - The inclusion of stakeholders from the automotive industry and urban planners will also be extended.	Algorithms	WP3, WP4, WP5
-Bottom-up and user-centric V2X management strategies, creating the conditions for EV mass deployment. **- EV use profiles datasets (per season, type of charger and weekday/weekend)**	EV4EU	- SOLAR-MOVE will develop tailored user interfaces and experiences for managing VIPV energy and optimising charging strategies, adapting the tools, methods, and demonstration outcomes from EV4EU. - EV use profiles will be used to evaluate the value of different flexibility services and DR programmes	Algorithms	WP2, WP3, WP4, WP5
- Smart charging infrastructure advancement and facilitation of EV mass deployment **- EV use profiles datasets (per season, type of charger and weekday/weekend)**	SCALE	SOLAR-MOVE will investigate user preferences for VIPVs and ePIPVs systems to refine business models and enhance adoption, improving the approaches developed in SCALE. - EV use profiles will be used to evaluate the value of different flexibility services and DR programmes	Algorithms	WP1, WP4, WP5, WP6
- DC solutions for industry, buildings, datacentres and Ports.	Shift2DC	SOLAR-MOVE will reuse a prototype that is being developed in Shift2DC project related to DC/DC charging stations. This asset will be used in the Portuguese Pilot.	Prototype	WP3, WP5
- Dataset featuring measurements of net-load and PV production	SMILE	SOLAR-MOVE will use high-resolution prosumer data to improve forecasting, flexibility assessment, and energy	Tools	WP3, WP4, WP5

		management strategies for ePIPVs. and energy communities. The datasets will support optimisation tools and demand response strategies, enabling better integration of distributed energy resource		

ii) publicly available datasets, such as weather, PV production data (e.g. https://open-meteo.com/), regulatory and policy information (https://www.iea.org/), energy market price data (https://www.omie.es/en);

iii) datasets generated inside the SOLAR-MOVE project, mainly those collected at the demonstration sites (WP4 and WP5).

These external and internal datasets will feed into algorithms/forecasting tools/simulations models being developed in the SOLAR-MOVE project.

2.4 Data utility outside the project

The SOLAR-MOVE project data is relevant to a wide range of target groups including *i)* end users, who directly benefit from the project´s solutions and *ii)* stakeholders across a wider ecosystem, who contribute to collaboration and support on the development and adoption of VIPVs and ePIPVs.

In brief, the SOLAR-MOVE data is expected to be accessed and used by:

i) End-users:

TG1 - EV drivers/owners and families and vehicle operators,

TG2 - Garbage trucks, commercial fleet managers

TG3 – Bus fleet managers

TG4 – Post company (transportation), logistics and distribution fleet managers

TG5 – Retailers (e.g. SONAE)

TG6 – Last-Mile delivery fleet managers

TG7 – Motorhome drivers/travellers and fleet managers

End-users will be interested in the results of the SOLAR-MOVE project to increase their understanding of VIPV and ePIPV technologies and the benefits that they can obtain from them. For example, EV drivers can use the SOLAR-MOVE results to understand and test how VIPV and ePIPV solutions can enable cleaner, cheaper and easier charging options, lower energy prices, increase the availability and reliability of public transportation, reduce GHG emissions, and increase overall energy efficiency. Fleet managers can use SOLAR-MOVE data to optimize their energy management strategies, reduce operational costs and improve vehicle availability. Retailers can use SOLAR-MOVE data and test the project solutions to reduce their energy bills and consequently increase clients.

ii) Stakeholders across a wider ecosystem*:*

TG8 – PV cell manufacturers and PV integrators

This target group can benefit from data generated in the SOLAR-MOVE project to improve and reduce costs of their PV cell production methodology and integration, in a more sustainable and environmental way.

TG9 – Vehicle manufacturers, fleet operators, battery manufacturers, OEMs, and electronic equipment manufacturers

This target group can use SOLAR-MOVE data to improve their business models, lower their energy costs, improve performance and make their production methodology and services more sustainable.

TG10 – Energy industry

System operators (Distribution System Operator, Transmission System Operator), energy producers, energy retailers and aggregators, energy service companies, Virtual Power Plant, and Charging Point Operator can benefit from SOLAR-MOVE data to improve grid stability and efficiency.

TG11 – Research and academia

Scientific Community, R&D, Students, Programme projects/joint actions, and European open science cloud may use the data obtained from SOLAR-MOVE for research/academic purposes and to build on new project proposals development.

TG12 - Technology providers

Software companies, hardware device providers, IoT service providers, building operators, weather services providers, and cybersecurity solution providers.

TG13 - Standardisation bodies

Entities such as BRIDGE, IEC, CIRED, ISO, and IEA can use the SOLAR-MOVE results to develop new standards and regulations on PV cells, VIPVs, electric mobility, ePIPVs, and flexibility services provision.

TG14 - Policymakers, public authorities and regulators

EC, European Parliament, city mayors, and members states' authorities may take into account the research data obtained in the SOLAR-MOVE demonstrators, the business models and the technical regulatory recommendations proposed in the project to develop new policies and regulations.

The impact of the SOLAR-MOVE project on these target groups will be further discussed in WP7, in the Communication and Dissemination Plan (D7.1) to be submitted at M6.

3. Research outputs

Alongside datasets, the project will provide research outputs including deliverables and solutions (software, hardware and protypes), algorithms, repositories, scientific publications and communication materials. These outputs are not considered datasets but are associated with the data generated and used in the project.

In case of access restrictions to these research outputs, which are subject to intellectual property protection or exploitation considerations, the descriptive metadata will be made available whenever feasible to guarantee their visibility.

As mentioned in **Section 2**, the **Table APPENDIX A 1** (in **APPENDIX A:** Data and Research Outputs) summarises the different types of SOLAR-MOVE data and research outs.

3.1 Deliverables, Solutions and Repositories

Additionally, to the data that support the project management (**Section 2.1**) the SOLAR-MOVE project will produce a range of outputs to be submitted to the European Commission, including deliverables, solutions and repositories. As mentioned, these are not considered data but rather as results produced based on underlying datasets.

Deliverables (all WPs): correspond to structured documents submitted to the EC, which includes reports, methodologies, technical documentation about a solution produced within the project, and analyses. The deliverables are mainly produced based on processed data and results acquired, such as simulation and modelling results, validation of data, and qualitative information (e.g. survey results, stakeholder inputs and regulatory analysis). SOLAR-MOVE consortium will develop several deliverables identified in **Table APPENDIX B 1** (**APPENDIX B: Deliverables**). Following the open science approach, more than 50% of the project deliverables will be public deliverables shared in the SOLAR-MOVE website, cordis, Zenodo community and institutional repositories. Nine deliverables (D4.1 – D4.3, D5.1-D5.3, D6.5 and D8.6-D8.7) will be submitted as SENSITIVE information because those are related to the demonstrations of the VIPVs and ePIPV solutions (D4.1 – D4.3, D5.1-D5.3), exploitation strategy (D6.5) and intermediate reports of the project to EC (D8.6 and D8.7).

SOLAR-MOVE solutions (WP2/WP3): technical results developed in the project that include hardware solutions, prototypes and software solutions, presented in **Table 3**. Therefore, the solutions aim to resolve specific challenges related to photovoltaic integration in electric mobility systems and will be developed through research and engineering activities and validated in laboratory and real-world pilot environments. Moreover, they are designed to be replicable, scalable, and exploitable beyond the project's duration, contributing to market uptake and real-world impact. Consequently, they generate and rely on wide range of data throughout their lifecycle, including experimental data, simulation results and operational data from demonstration activities. Software solutions and respective technical documentation will be stored in the SOLAR-MOVE GitHub community, under licences that establish a fair balance between Intellectual Property Rights (IPR) and business interests. These solutions are intended to be validated and potentially exploited beyond the project's duration, thereby contributing to real-world applications and impact.

It is noteworthy that, deliverables and solutions are correlated, as deliverables document, analyse and report the results obtained during the project as well information about the solution produced.

Moreover, some data associated with the solutions may be subject to access restrictions due to confidentiality and intellectual property considerations (more details in **Section 4.2**)

Use Case repository (WP1): to be developed under WP1 to be integrated in the BRIDGE use-case repository. The use cases will include a clear definition of the roles of different stakeholders involved in flexibility services using VIPVs and mainly ePIPVs. The Use Case repository following the IEC 62559 standard, will be developed using the commercial software Enterprise Architect with Modsarus plugin, an open licence tool developed by EDF R&D2 for Sparx Enterprise Architecture, that allows to generate and transform the Use Cases into UML models. The repository will be an .eapx file with a size of approximately 200kB. The Use Case repository will be also publicly available on SOLAR-MOVE GitHub and Zenodo public communities.

Table 3 - Overview of SOLAR-MOVE solutions by category and corresponding deliverables

Solution Category	Solution name	Corresponding Deliverable
Hardware	High efficiency PV cells (SOL1)	D2.1 - TOPCon and SHJ Cells Prototypes
	TPO based Modules encapsulation (SOL2)	
	High Efficiency MPPT (SOL3)	D2.3 - MPPT Including New Algorithms
	V2L/V2V/V2G Module (SOL4)	D2.4 - V2L and V2G for VIPV Prototype
	Trailer Connection System (SOL5)	D2.3 - MPPT Including New Algorithms
	On-parking, Standalone Connection for Trailers (SOL19)	D3.5 - ePIPV Hardware Solutions
	DC/DC V2G Stations (SOL20)	
Prototypes	Heavy-Duty VIPV (SOL6)	D2.5 - VIPVs Prototypes
	Garbage VIPV Truck (SOL7)	
	Passenger VIPV Bus (SOL8)	
	Last-Mile Deliverable VIPV (SOL9)	
	Motorhome (SOL10)	
Software	VIPV Production Estimation (SOL11)	D3.1 - PV Production in VIPVs Estimation

	VIPV Optimal Routing (SOL12)	D2.6 - Fleet Management Optimisation
	Flexibility Assessment (SOL13)	D3.2 - Flexibility Assessment
	City Planning for ePIPV (SOL14)	D3.3 - ePIPVs Planning
	ePIPVs Planning and Design (SOL15)	
	ePIPVs Optimal Operation (SOL16)	D3.4 - ePIPVs Management and Operation
	Automatic fault detection in ePIPV systems (SOL17)	D3.1 - PV Production in VIPVs Estimation
	ePIPV P2P V2G Trading (SOL18)	D3.2 - Flexibility Assessment

3.1.1 Algorithms

Algorithms will be integrated in the SOLAR-MOVE solutions. Those will be developed under Python/Matlab (.py, .m) programming languages and stored in the SOLAR-MOVE GitHub community with metadata information. The table below (**Table 4**) identifies some algorithms to be generated by SOLAR-MOVE consortium.

Table 4 - Types of algorithms to be produced

Types of algorithms	Related WP	Description
Forecast algorithms	WP2	These algorithms will consider production, consumption and EVs profiles, and will allow to optimize the ePIPV systems
ePIPV algorithms	WP3	These algorithms will allow to provide flexibility services across different grid voltage levels and integrate into various energy markets.
Battery management system algorithms	WP2	These algorithms will be assessed in VIPV to improve their efficiency

3.2 Publications and Dissemination Outputs

The project will produce scientific publications and dissemination materials to communicate results, promote knowledge sharing and enhance the project impact.

Scientific Publications: (WP1-WP5, WP7): comprise journal articles, conference papers, book chapters, theses and dissertations from MSc and PhD students, patent, preprint, report and technical note

Communications materials (WP7) - elements developed with the visual identity of the project including flyers (.pdf), roll-ups (.pdf), newsletters (.pdf), videos (.avi and .mp4) and images (.jpg, .png and .tiff). Those elements will be stored in SOLAR-MOVE SharePoint for all partners to access and also on the project website.

4. Findable, Accessible, Interoperable and Reusable (FAIR) Data

The SOLAR-MOVE project is conducted in accordance with the Horizon Europe (HE) programme developed by the EC, following the mandatory Open Science approach that promotes transparency, collaboration and accessibility in research. This framework requires the sharing of knowledge, data and tools with the community, with the aim of increasing impact and efficiency. The open science practices for the beneficiaries are also described in Article 17, Annex 5 of the GA [2, 6], which also ensures that the data management follows the FAIR principles (Findable, Accessible, Interoperable and Reusable) [3].

The FAIR principles act as the foundation for research data management within the SOLAR-MOVE project. Both the EC and other funding agencies adopt these FAIR principles for data management and research policy since they were defined in the "Jointly Designing the DATA FAIRPORT" conference in January 2014 [7] and subsequently published in Nature's Journal of Scientific Data in 2016 [3]. Accordingly, this DMP is in accordance with FAIR data [2].

The FAIR principles aim to guarantee an easily discoverable, accessible, citable, integrable and reusable data both by individuals and automated systems. Under these principles, the original data can be easily identified and managed using appropriate licences, mainly to ensure data reuse [3]. Beyond datasets, the principles also apply to related research outputs, such as algorithms, models, software, tools and workflows. Unless restricted by sensitivity, confidentiality or commercial interests, all data and associated components should be made available to promote transparency, reproducibility, and the optimal utilisation of data.

The specific application of these principles within the SOLAR-MOVE project is detailed in the following sections, specifically: how to make open data Findable (**Section 4.1**), Accessible (**Section 4.2**), Interoperable (**Section 4.3**) and Re-usable (**Section 4.4**).

4.1 Making data Findable, including provision for metadata

In the SOLAR-MOVE project, structured procedures will be implemented for data to be easily findable by humans and machines:

- A **persistent identifier** will be used to identify data, using the **Digital Object Identifier (DOI),** ensuring stable citation, traceability and long-term accessibility. For example, project outcomes will mainly be disseminated through scientific publication, each assigned a specific DOI.
- All public datasets and publications will be deposited in recognised **open-access repositories**, such as **Zenodo**, which will be linked to the EC Funded Research (**OpenAIRE**) community to enhance visibility within EU - funded research communities.
- Detailed **Metadata** will be integrated in open-access datasets and software to facilitate the identification, citation and reuse. Data that is internally stored in the private SharePoint project repository will also be associated with metadata records. The Metadata will be comprised of:
    - Grant Agreement (GA) number;
    - Acronym for the project;
    - WP and Task number;

- Task leader;
- File name and brief description;
- Version;
- Date;
- File type;
- DOI;
- Licence and access conditions;
- Associated publications;
- Keywords.

- Keywords for SOLAR-MOVE metadata will be descriptive to optimise the discovery and the potential reuse, which includes:
  - Photovoltaic integration;
  - High-efficiency solar cells;
  - Electric vehicles;
  - Vehicle-to-grid;
  - Flexibility;
  - Use cases;
  - Business models
  - Interoperability
  - TOPCon
  - VIPVs and ePIPVs
- A standard file naming will be followed for all files, to guarantee not only consistency but also easy identification. The general structure will be:

  <ProjectAcronym>_<FileType>_WP<WPID>_T<TaskID>_<ShortDescription>_<YYYYMMDD>_v<version>

  For multiple documents, a numerical prefix (e.g. 01_, 02_) may be added to preserve logical order.

  The **Table 5** below gives a brief explanation and/or example of each field.

Table 5 - Description of each field in the file name

Field	Description
ProjectAcronym	"SOLAR-MOVE", the official project acronym
FileType	DB (Database), DEL (Deliverable), SP (Scientific Publication), SC (Scientific Committee) REP (Report), IMG (Image), MoM (Minutes of Meeting), AL (Attendance List), AG (Agenda), etc.
WPID	WP number
TaskID	Task number
ShortDescription	Concise description without special characters
YYYYMMDD	Date of the last update
Version	Version number (e.g. 0.1, 1.0)

4.2 Making data Accessible

The SOLAR-MOVE consortium will guarantee that all public research outputs, including datasets, deliverables, scientific publications and multimedia material, will be easily accessible by depositing them in recognised open-access repositories in compliance with HE requirements. Zenodo (or an equivalent trusted repository) will serve as the primary public repository for the research outcomes, with the allocation of a persistent identifier. This repository is considered an option as it complies with HE open access requirements and guarantees the long-term preservation of research outputs. Also, a DOI is assigned to each deposited data by the repository, which ensures permanent access. Code that can be openly shared will be made available, together with metadata information, via the SOLAR-MOVE GitHub community. Also, GitHub will be used in private mode for sharing and developing code between project partners.

Semi-private datasets will have curated snapshots made publicly available through Zenodo or similar repositories. If external researchers are interested in these datasets, they will be able to contact the data owner and request additional information under a defined licence.

Scientific publications will be made available through other open-access channels, such as institutional repositories and the project website. The open peer-review process will be preferentially adopted, and publications will also be shared as pre-prints (e.g. arXiv.org) prior to submission to open peer-review journals. Moreover, the scientific publications will be preferentially peer-reviewed and submitted in such as IEEE Transactions on Smart Grids, IEEE Transactions on Power Systems, IEEE Transactions on Sustainable Energy, among others. Regarding the conference articles, they are expected to be

submitted to international conferences such as CIRED, SEST, ISGT). Additionally, the publications will be available in the SOLAR-MOVE website.

Regarding the communications materials, these elements will be stored in SOLAR-MOVE SharePoint for all partners to access and also on the project website.

The project's open-access data and documentation will be managed and administered through complementary platforms, each of which serves a distinct purpose:

- **Project website (WebSite - https://solar-move.eu/)**

  The SOLAR-MOVE website will serve as the principal dissemination interface, offering access to public deliverables, publications and communication material. The website will continue to be accessible for a minimum of five years following the project's conclusion.

- **Project Open Data Repository (DataRep - e.g https://zenodo.org/communities/solar-move/)**

  The final version of accessible datasets, publication, software and other research outputs will be on the Zenodo community (or equivalent repository space).

- **Code Repository (CodeRep - https://github.com/SOLAR-MOVE)**

  The software developed within the project will be available and shared in GitHub.

- **CORDIS Project Page (ECSite - https://cordis.europa.eu/project/id/101235635)**

  The project's dedicated site in the EC's CORDIS platform will provide public information regarding the objectives, partners and results, ensuring integration within the EU research results ecosystem.

Standardised access protocols (e.g., HTTPS) will be implemented by the selected repositories to ensure that data is accessible free of charge.

The metadata associated with the open-access data will be licensed under Creative Commons CCO Public Domain Dedication (see **Section 4.4** for more information about licences). Moreover, it will remain openly accessible thus being aligned with the HE requirements. As mentioned in the previous section (**Section 4.1**), metadata will also contain sufficient information to allow users to identify, cite and request access to datasets when appropriate.

For the internal and private datasets (e.g. real data from the operation of VIPVs), a project's folder in the Microsoft Teams/Share Point was created, and access is restricted to consortium members.

Moreover, open access is not granted for datasets containing sensitive information, confidential business data, or material subject to intellectual property protection (e.g. patenting considerations). In these cases, data will be stored in restricted-access institutional or internal repositories.

In case of intellectual property protection, an embargo period may be implemented for scientific publication and datasets. The period will be limited to the minimum period required and data will be made openly accessible as soon as possible after any embargo is lifted. It is noteworthy that metadata will continue to be publicly accessible for datasets that are restricted.

4.3 Making data interoperable

Interoperability refers to the ability of data and software outputs to be combined, exchanged and reused across various platforms and systems. To achieve this goal, the project will adopt technical and semantic measures that simplify the integration with external infrastructures and tools.

To guarantee compatibility and long-term usability, data will be stored and shared using widely adopted, and non-proprietary file formats whenever possible. Examples of preferred formats include:

- CSV or TSV - for tabular data
- JSON or XML - for structured and machine-readable data
- PDF/A - final documents
- Open image and multimedia formats – whenever relevant

The selection of formats will prioritise accessibility across software and operating systems, thereby reducing the dependencies on proprietary tools.

Data will include qualified references relevant to related research outputs, such as software repositories, publications, and other datasets generated within the project or from previous research.

In the subsequent DMP deliverables, further details on interoperability of data, metadata vocabularies, standards, formats or methodology to follow will be described more precisely.

4.4 Making data Re-usable

The data developed during the project will, where possible, be open-source and made accessible in public repositories since these assure openness, long-term preservation, and adherence to FAIR data principles. The data will be accompanied by adequate documentation, metadata files under the format of readme files, that delineate the methodology applied, data collection procedures, variable definitions, data cleaning, analysis and units of measurement. This will facilitate the validation results and enable effective reuse.

Regarding the provenance of datasets, a clear versioning, metadata records and references to related publications, software or preceding datasets will be used. Therefore, to guarantee transparency and traceability, the data origin, the responsible partner, the date of creation and subsequent updates will be documented.

Data quality assurance will proceed at Task and WP level. Validation checks will be conducted to verify accuracy, consistency and the completeness of datasets as well as alignment with the established metadata and documentation standards.

For the optimisation of the accessibility and reuse of data, certain research outputs may be subject to licences when feasible.

Licences are important not only for the protection of IPR but also for the reuse and exploitation of publications, datasets and other research data by third parties, and indeed HE requires open access to be licensed. Shortly, a licence is a legal agreement that establishes the terms under which an intellectual property output may be accessed, used, shared, modified, or further developed between the creator and the end user.

Different types of licences may apply depending on the type of intellectual property, including scientific publications, datasets, reports, software and other digital outputs. SOLAR-MOVE partners should choose the licence type according to the HE requirements.

Information about the most used recommended licences for the data and publication, as well as software, can be found in the following sections (**Section 4.4.1** and **4.4.2**).

4.4.1 Data and publication licences

The Creative Commons (CC) copyright licences are the most commonly and widely used data and publication licences [8]. Moreover, these licences are recognised and recommended within the HE programme. CC licences offer a standardised and transparent method to define the access, sharing, reuse and adaptation of research outputs, while simultaneously guaranteeing the appropriate acknowledgement to the original authors. Importantly, these licences are irrevocable, meaning that once the data has been released under a specific CC licence, users have the right to use the material according to the licence terms. This promotes the long-term reuse of the research outputs and their legal assurance. In **Table 6**, the common types of data licences are defined according to the CC scheme.

Table 6 - Data and Publication Licences

Licence	Permissions and attributions	Outputs
Attribution 4.0 (CC BY 4.0)	Allows to distribute and adapt, including for commercial use, if appropriate credit is given, and providing the link to the licence and the indication of alterations.	Scientific peer-reviewed publications, book chapters, long text formats, datasets, figures
Attribution-ShareAlike 4.0 (CC BY-SA 4.0	Allows to distribute and adapt, including for commercial use, if appropriate credit is given. The modified material must be licensed under identical terms.	Scientific publications, long text formats, educational resources, datasets, figures
Attribution NoDerivatives 4.0 (CC BY-ND 4.0)	Allows to copy and distribute without any adaption or modification. It can be for commercial use and with appropriate credit given.	Final reports, official documents, published articles
Attribution NonCommercial 4.0 (CC BY-NC 4.0)	Allows the reusers to distribute and adapt but for non-commercial purposes, with appropriate credit given.	Long text formats
Attribution NonCommercial-ShareAlike (CC BY-NC-SA 4.0)	Allows the reusers to distribute and adapt but for non-commercial purposes, with appropriate credit given. The modified material must be licensed under identical terms.	Long text formats, reports, datasets for research use

Attribution NonCommercial-NoDerivatives (CC BY-NC-ND 4.0)	Allows to copy and distribute without any adaption or modification and for only non-commercial use, with appropriate credit given.	Long text formats
Attribution (CC0 1.0):	Allow to copy, distribute, and perform the work, even for commercial purposes, all without asking permission.	Metadata

The Attribution CC BY 4.0 is the most accommodating of licences, recommended for maximum dissemination and use of the licensed materials. Regarding the Attribution-ShareAlike 4.0, it is similar to copyleft licences in the open-source software field. The Attribution CC0 1.0 is a public dedication tool, thus a non-traditional licence, essentially placing the work in the public domain with no restrictions.

In summary, scientific peer-reviewed publications and book chapters are recommended to be published under CC BY 4.0 and long-text formats (e.g. reports and deliverables) may also be published under this licence or, when justified, under more restrictive CC such as CC BY-NC, CC BY-ND, or CC BY-NC-ND, or equivalent licences [9].

4.4.2 Software licences

The software created during the SOLAR-MOVE project will also be disseminated under suitable licensing agreements that explicitly define the conditions for the utilisation, alteration, distribution and reuse. The selection of a licence depends on the characteristics of the software component, the proposed exploitation plan and the intellectual property considerations of the contributing partners.

Software licences can be classified into three main categories [10]:

- **Proprietary licences:**

  Limit access, modification, and redistribution as restricted by the rights holder;

- **Free and Open-Source Software (FOSS) licences:**

  Permit users to access and reutilise the source code under specific conditions;

- **Hybrid models:**

  Integrates aspects of open and closed licensing methodologies.

Regarding the free and open-source licences, these are often organised according to two main categories [11]:

- **Permissive licences:**

  Allow the reuse, alteration and redistribution with minimal restrictions.

- **Copyleft licences:**

Require that derivative work be disseminated under identical or compatible licensing conditions.

The types of free and open-source licences available are listed in **Table 7** [10, 11].

Table 7 - Free and open-source licences for software

Licence	Types of Licences
Permissive licences	- Berkeley Software Distribution (**BSD**) - Massachusetts Institute of Technology (**MIT**) - Apache Software Foundation (**Apache**)
Copyleft licences	- GNU General Public Licence (**GPL**) - GNU Lesser General Public Licence (**LGPL**) - Mozilla Public Licence (**Mozilla**)

Software licensing establishes the legal parameters regulating third-party use, specifying what users are permitted to do, such as copy, modify, distribute, and integrate into other systems. These licences can also impose obligations, including attribution, disclosure of source code or maintaining the same licence in derivative works. Importantly, a software without an explicit license cannot be legally reused or redistributed.

Whenever applicable, the project prioritises open-source approaches in accordance with HE Open Science principles, while ensuring alignment with partners' exploitation strategies and IPRs.

5. Allocation of resources

5.1 Costs for making the data and research outputs FAIR

The SOLAR-MOVE project will predominantly use trusted, free-of-charge research data repositories, including the CORDIS platform, Zenodo and Github. These selected repositories will ensure the long-term availability, even beyond the project duration, and open access of public research outputs. Moreover, these platforms facilitate sustainable preservation without generating additional storage costs for the consortium.

The development and maintenance of the project website have been anticipated within the project budget. The costs for the open-access scientific journals were also foreseen during the proposal phase. Additionally, the coordination team will encourage the partners to utilise the Open Research Europe platform, which is available at no cost.

Internal data management and other data will be long-term stored, free-of-charge, in the project's private repository (SharePoint), which is under the institutional framework of the coordinating organisation.

5.2 Person responsible for the data management in the project

The Project Manager is responsible for centrally coordinating data management, with active involvement of WP and Task leaders. Each of them is also responsible for guaranteeing the quality, documentation and compliance of the data generated within their respective activities in accordance with the procedures outlined in this DMP. During the project, each partner will consider the standards, treaties and laws regarding data protection and privacy in both EU and national level legislation.

6. Organisation and roles

The project comprises a wide range of stakeholders, such as beneficiary partners, affiliated and associated entities, the EC as the funding authority, individuals employed by participating organisations and target groups that are interested in the project's results.

The following roles are considered particularly important for data governance purposes:

- **Project Coordinator (PC):**

  Responsible for the overall compliance with the Grant Agreement, which includes obligations related to open science, data administration and reporting.

- **Project Manager (PM):**

  Assists the PC in operational oversight and supervises the implementation of data management procedures across all project activities.

- **Beneficiaries:**

  The thirty organisations that are directly involved in the undertaking and production of this project's research. Each partner is responsible for the management of the data generated by its activities in alignment with the DMP.

- **Work Package leaders (WP leaders):**

  They guarantee that the data generated within their respective WP is appropriately documented, stored and managed according to the established standards and procedures.

- **Task leaders:**

  These collaborators oversee task-level implementation and make sure that the data procedure is managed, documented, and subjected to quality control.

- **General Assembly:**

  An assembly composed by PC, PM and one representative from each beneficiary. It provides strategic guidance and validates critical project decisions when applicable.

- **Scientific Committee**

  This committee includes WP leaders, the coordination team and the Innovation Manager (IM) and together ensures scientific consistency and quality assurance.

- **Project Coordination team:**

  It comprises the PC, PM, communication officer and manager and the financial manager, and altogether they support the operational coordination of the project.

- **Corresponding Author (CAuthor):**

  The designated author responsible for the submission and for assuring the compliance with open access and data-sharing obligations in scientific publication.

These roles are explained and described in more detail in the D8.1 Project Management Plan [5].

This assignment of responsibilities ensures the management of the project data and research outcomes through a consistent approach, accountability and structure.

7. Workflow inside the project

In this section, structured internal workflows (presented in table format) are detailed for the creation, administration and curation of research data and research output to ensure the quality of those. Moreover, these workflows are intended to guarantee adherence to the procedures and standards outlined in this DMP. Furthermore, these workflows will follow the guidelines provided in **Section 4** to ensure that the data complies with the FAIR principles.

For the consortium to monitor the status of newly generated data, evaluate their significance, and confirm their compliance with the established management procedures, partners will be required to submit a table (**Table APPENDIX C 1**) approximately every six months, for which the template can be found in **APPENDIX C:** Data monitoring.

7.1 Mailing lists

The project mailing lists contain the personal data of consortium members and are managed in strict compliance with GDPR and all other applicable legal frameworks for data protection. The integration of a new consortium member leads to the implementation of the following workflow (**Table 8**) to maintain effective communication and updated members' roles and responsibilities.

Table 8 - SOLAR-MOVE mailing lists workflow

Steps	Mailing lists Workflow
Access request	When a new member joins the project, they must get in touch with the coordination team to ask to join the consortium-wide mailing list and access the project's private repository.
Identification of WP participation	In the official Contact List (Excel file), the member must specify the WPs in which they will participate once access is granted.
Mailing List Update	PM will include the member's email address in the corresponding Work Package mailing lists based on the information supplied in the Contact List.
Updates and Modifications	The Contact List file must be explicitly highlighted in yellow to indicate any modifications to contact details or WP involvement. In order to guarantee that the mailing lists are revised in a punctual manner, partners are asked to inform the PM of any updates. Updates will be implemented during the monthly evaluation of the contact list if no notification is received.

7.2 Deliverables

The following guidelines (**Table 9**) are provided to assist in the effective organisation of SOLAR-MOVE deliverables, thereby guaranteeing high-quality content.

Table 9 - SOLAR-MOVE deliverables workflow

Steps	Deliverables workflow
Initial planning and structure development	Task Leader (Deliverable Leader) drafts the preliminary Table of Contents (ToC), which will be discussed during the Task Kick-off meeting and revised by the Partners. The responsibilities of each partner are defined.
Ongoing development and monitoring	The regular WP/Task meetings will serve the goal of tracking deliverable progress. Task leader will report any delays, risks or issues to the WP leader, who then informs the Coordination team. Information on any technical or scheduling deviations is conveyed to the PO by the coordination team.
Contribution and drafting process	Partners shall contribute directly to the document (track changes) or upload content to the designated folder. A complete draft should be ready 2 months (8 weeks) before the deadline.
Deliverable authorship	Authorship separated by “Prepared by”: those who actively contributed to the content and writing, and “Teams involved”: those partners listed in the GA who participated, but with less significant contributions. The first name in the deliverable authorship list should correspond to the main contribution author, followed by the authors from the same beneficiary partner placed in alphabetical order by last name. The following beneficiaries are placed in alphabetical order. If there is more than one author per beneficiary, then the last author's name should be placed in alphabetical order.
Internal review process	WP Leader and Coordination Team will then receive the final draft by email for review. Deliverable reviewers have up to 15 working days to assess the document.
Finalisation and submission	The Task Leader will include all comments, suggestions, and modifications from the reviewers and send the deliverable to the Coordination team at least 3 days before the EC submission deadline. The Coordination team provides a final quality review check and may request the Task leader to make the adjustments. The Coordination Team submit the deliverable in the SYGMA portal, adding a brief comment detailing any technical or temporal deviation, if applicable.

7.3 Scientific articles

The scientific articles developed within the SOLAR-MOVE project will be accessible under open access, by default, in accordance with the guidelines of HE. If open access is not possible, a justification must be provided.

The following workflow (**Table 10**) applies to all peer-reviewed publications and conference papers.

Table 10 - SOLAR-MOVE scientific articles workflow

Steps	Scientific articles workflow
Preparation of the manuscript	The responsible partner will prepare the scientific publication using tools and environments decided by the partners involved (e.g. cloud file system like Google Drive and OneDrive).
Submission	The CAuthor must inform the consortium and share the manuscript with the partners, to allow all the partners to confirm the absence of any potential conflicts of interest and to provide comments and suggestions. The CAuthor will submit the manuscript to a peer-reviewed journal, conference or other organisation. During the proof revision, the CAuthor should incorporate the suggestions provided by the partners.
Acceptance and publication	The CAuthor will oversee the proof revision process if the manuscript is accepted. Open access publication will be ensured, either directly through the publisher or via repository deposit.
Repository deposit	The CAuthor, upon acceptance of the publication, will send the information to PM who will register the reference/ citation in the project website. If the publication is under review or not yet accepted, and where appropriate, a preprint version may be uploaded in a recognised repository (e.g. ArXiv) to facilitate early dissemination.
Registration and dissemination	The PM will be notified by the CAuthor once the publication is accepted or publicly available. Then, the PM will register the reference and citations in the project records, such as the DDC. This information will be shared with the Communication Manager to disseminate the scientific publication in the appropriate channels, such as the website.

7.4 Datasets

The research datasets generated within the SOLAR-MOVE project can be published under different access rights (e.g. Open, Closed, Restricted or Embargoed), depending on intellectual property considerations, confidentiality constraints, and exploitation strategies. The selected access level and licensing schemes aim to support a balance of openness, transparency and reusability principles. These datasets are subject to the workflow outlined below (**Table 11**).

Table 11 - SOLAR-MOVE datasets workflow

Steps	Datasets workflow
Data production	Partners responsible for generating data will create the datasets utilising the tools and computational environments that are most suitable and decided by the partners involved. Datasets should be organised and documented according to the project's data management practices, including preparation of metadata and supporting documentation.
Compliance with data protection requirements	The WP or Task leader is responsible for ensuring that the dataset complies with privacy and data protection regulations, such as the GDPR. Adequate consent procedures must be implemented and documented as necessary. Additional guidance may be provided by the PM if required.
Repository deposit	The Task Leader will deposit the dataset in the project's designated Data Repository, such as Zenodo or another trusted repository. If it is not an open-access dataset, it will be deposited in the project's SharePoint. To complement the dataset, the metadata should be included.
Registration and submission	The PM will be informed by the Task Leader after the dataset's upload into the repository. Afterwards, the PM will register the dataset in the DDC and maintain the internal records of it. If it is an open-access dataset, it will be included on the project website, and the dissemination will occur through the proper communication channels.

7.5 Pilot's datasets

The datasets developed during pilot tasks follow the procedures in **Table 12**, to ensure quality and coordinated dissemination of these datasets.

Table 12 - SOLAR-MOVE pilots' datasets workflow

Steps	Pilots datasets Workflow
Dataset creation and documentation	Partners responsible for the pilot activities will produce datasets that are supported by structured metadata, which contain important descriptive information, access conditions and version details (in accordance with this DMP).
Internal storage	The datasets will be stored in the private repository (SharePoint), which is accessible only to authorised consortium members.
Licence selection	The most suitable licence for the dataset will be decided, taking into account project obligations and intellectual property considerations, and this information will be added to the metadata.
Compliance verification	The dataset will be reviewed by the Task (pilot responsible) and WP leader by verifying the adherence to the GPDR and data protection regulations, and if needed, ask and manage users' consents (it can be supported by PM)
Public repository submission	Once the dataset has been validated, the Task and/or WP leader will submit it to the public repository, ensuring that the selected licence is properly indicated, the access rights are clearly defined, and additional metadata is included.
Registration and dissemination	The task and/or WP leader will inform the PM, who will register the dataset in the DDC and, if the dataset is public, it will also be added to the SOLAR-MOVE website and advertised on social media/project website with the collaboration of the Communication Manager.

7.6 Software code

The software code can be published according to different access rights (e.g. Open, Closed, Restricted or Embargoed) and under a variety of licensing schemes that maintain a reasonable equilibrium between the IPR and business interests with openness, transparency and reusability principles.

The workflow outlined below (**Table 13**) is applicable to all software developed within the SOLAR-MOVE project to guarantee traceability, legal clarity, appropriate documentation, and alignment with FAIR principles.

Table 13 - SOLAR-MOVE software workflow

Steps	Software Workflow
Repository access	Partners will request the coordination team to grant them access to the code repository.
Software development and licensing	Partners will develop the software tool or application, define the most suitable licence and stored it in code repository.
Technical documentation	Partners will prepare adequate technical documentation (to be also added to the code repository) to facilitate the understanding, reproducibility and reuse of the code (if it is intended). The documentation may include: - README files; - Instructions for deployment and installation; - Description of the computational environment and dependencies; - User guidelines.
Linkage with related datasets (if applicable)	Partners need to ensure that the software repository and dataset are properly referenced if the software is linked to a dataset that has been deposited in an open repository.
Registration and dissemination	The Task leader will inform the PM once the software is finalised, so that it can be registered in the DDC. If the software is public, the Task Leader will inform the Communication Manager to add it to SOLAR-MOVE website and advertise on social media/website.

7.7 Other outputs

Aside from the scientific publications, software and datasets, the SOLAR-MOVE project may generate other types of outputs, such as presentations, videos, images or communication materials.

Some of these elements will be produced using the project's templates available in the WP7 SharePoint folder (for more information, consult D.7.1 Dissemination and Communication Plan).

The partners are responsible for the creation and management of these outputs. In general, these materials will be stored in the SharePoint or in the institutional repositories of the respective partners. However, if certain materials are considered particularly relevant for long-term preservation or wider dissemination, they may be deposited in an open data repository and their references registered on the project website, together with appropriate metadata and licensing information.

8. Data security

The SOLAR-MOVE project will maintain protection of personal data and compliance with Data Regulations as per national and European legislation regarding the protection of personal data. The SOLAR-MOVE consortium will implement organisational and technical measures to ensure confidentiality, integrity and availability of project data throughout its lifecycle. Both internal working documents and open-access research outputs are protected to prevent data loss and unauthorised access.

8.1 Measures for data security

The working and confidential documents are shared exclusively through the project's secure collaborative environment, which is Microsoft Teams/ SharePoint. The access is strictly restricted to authorised consortium members and it is granted by the coordination team upon request. These permissions are role-based and reviewed periodically to make sure the access rights are aligned with the roles of partners. When a member leaves the project, access rights are revoked and the associated emails are also removed from the mailing lists.

Each partner is responsible for implementing appropriate security measures at the institutional level for data that is stored in their organisation or on personal computers. The recommended practices include:

- Regular data backups using secure and separate storage for media;
- Utilisation of the most recent antivirus and anti-malware software;
- Activation of firewalls and secure network configurations;
- Restricted access by authorised users only;
- Utilisation of secure cloud-based systems for backup.

Each partner organisation will also take responsibility for the platforms which they contract and/or operate for the project. The project will maintain records on each platform that each organisation carries responsibility for under the project. Each partner will review each of the platforms they use to deliver the project with regards to data security, data encryption, data retention, secure access, secure transfer, and the security of storage.

The repositories which will be utilised by the SOLAR-MOVE consortium, such as Zenodo, Github and the institutional repository, have implemented established security mechanisms, including controlled access settings, authentication procedures and infrastructure-level security protection measures. Unless adequate access restrictions are implemented, sensitive or confidential datasets are not uploaded to those open-access repositories. In alignment with HE requirements and repository policies, restricted-access options are used when necessary.

8.1.1 Dara security measures for developed software and tools

Software and tools are going to be developed in the SOLAR-MOVE project. Therefore, cybersecurity and data protection requirements are going to be taken into account during the design and implementation of that data. In order to mitigate vulnerabilities and the likelihood of unauthorised access, data manipulation or breaches, security-by-design principles will be implemented.

Cybersecurity and information security standards (e.g ISO/ IEC 27000 series, IEC62443 or sector-specific best practices) will be considered when relevant and applicable.

8.2 Long-term preservation and curation

As previously mentioned, the upload of open-access data types in trusted repositories (i.e Zenodo and Github) with established sustainability ensures their long-term availability. Regarding Zenodo, which is managed by CERN, it offers long-term preservation and persistent identifiers. More information can be found in Zenodo's policies (https://about.zenodo.org/policies/). GitHub, as a public repository option, ensures that the software and tools are available unless they are removed by the repository's owner or unless there is a violation of the Community guidelines or Terms of Service or GitHub receives a DMCA takedown Notice. Further information regarding the persistence of public repositories can be found at https://docs.github.com/en/repositories/archiving-a-github-repository/about-archiving-content-and-data-on-github.

Moreover, both public and private datasets will be stored on the project SharePoint and on institutional clouds to assure long-term preservation.

The project website is another platform where open-access research outputs will be shared. To guarantee the ongoing visibility of those elements, the website will remain accessible for a minimum of five years following the project's conclusion.

9. Ethics

The activities that will be carried out in the SOLAR-MOVE project will be implemented in full compliance with applicable ethical principles and relevant European, national and international legislation. The project adheres to the values and principles outlined in the European Convention on Humans Rights [12] and the Charter of Fundamental Rights of the European Union [13].

9.1 Compliance with data protection, privacy and intellectual property

The consortium will always adhere to the GDPR, Regulation (EU) 2026/679 [14], as well as applicable national data protection legislation. The processing of personal data will follow the principle of confidentiality as defined in Article 5 of the GDPR. Personal data collection will be limited to the extent that is strictly necessary to accomplish the project's objectives.

Personal data will be anonymised and no sensitive personal information will be publicly disclosed. The user data will be stored on secure servers located within the EU, always in compliance with GPDR rules on data access, data sovereignty and data protection. Access to personal and sensitive data will be restricted to authorised users. Upon data publication, the data anonymisation and consent must be verified and confirmed by the person who publishes. Data validation procedures will be implemented to ensure the accuracy, consistency, and integrity of the data collected and processed within the project. These procedures will be implemented for datasets generated through pilot activities and stakeholder engagement. In the context of electric mobility and charging infrastructure, certain datasets may include sensitive information, such as location data or energy consumption patterns. All processing of such data will fully comply with GDPR principles.

Participation in pilot demonstrations, surveys, interviews, or stakeholder engagement will always be voluntary and with informed consent. The sampling strategies will always consider inclusiveness and diversity.

Whilst a Data Protection Officer (DPO) has been appointed by the coordinator organization, and such DPO will assist with the oversight of the project's DMP and implementation, data protection is the responsibility of the various partners generating data, and should be monitored by each institution's DPO or designated person responsible for compliance. The designated person responsible for compliance representing each institution involved in this project will have the following tasks and responsibilities:

- Cooperate in the establishment of common rules and requirements for the consortium data protection policy;
- Advise on the coordination of data protection processes and information among the partners involved, representing their own institution;
- As applicable to their institution, provide coordinated answers to third parties when addressed to the project as a whole;
- Provide their own institution with guidance on how to implement the privacy principles;
- Monitor compliance of their own institution with national data protection laws;

- Provide advice to their own institution regarding data protection impact assessments and monitoring;
- Cooperate with the supervisory authority for prior consultation when required by law pertaining to their own institution.

Although each beneficiary is responsible for ensuring that the activities developed in the project under its responsibility comply with ethical procedures and national legislation, the project coordinator, with the support of the PM, will monitor the ethical compliance throughout the project.

9.2 Artificial Intelligence-based tools

The SOLAR-MOVE project solutions will implement several Artificial Intelligence (AI)-based tools, including SOL11-SOL18, while optimising them. These AI-based tools will support data-driven optimisation of photovoltaic integration, flexible services and operational management within the demonstrators.

The design, development, validation and deployment of AI-based tools will adhere to the EU Artificial Intelligence Act [15] and the Ethics Guidelines for Trustworthy AI defined by the High-Level Expert Group on AI [16].

The AI-based tools created within the project will follow trustworthy measurements, such as:

- **Technical robustness**

  AI outputs will systematically incorporate uncertainty into their estimations through unbiased methods and the demonstrators assessment procedure will integrate the evaluation of AI-generated results.

  Datasets used for training and validation will be carefully curated to represent diverse building operating conditions, including:

  - Seasonal variations;
  - Usage patterns;
  - Occupancy files.

  In order to guarantee the reliability and accuracy of the results, the algorithm's performance will be assessed using multiple error metrics, including MAE, MAPE, RMSE and CV(RMSE).

- **Social robustness:**

  The AI-based solutions will be designed to adapt to user requirements, rather than imposing changes on users. To improve privacy protection, federated learning approaches will be investigated where they are applicable, reducing the necessity for centralised data processing.

- **Reliability:**

  The potential impact of AI will be analysed through a structured risk assessment. This comprises the identification of vulnerabilities and potential adversaries. Continuous testing procedures will be implemented to guarantee that AI models operate at a high performance level and remain resilient to vulnerabilities.

- **Explainability of AI decision-making:**

  Mechanisms to explain the relevance of input features and the operational state of flexible assets will be incorporated into control algorithms based on machine learning at each decision stage. Transparency and explainability will be continuously validated to ensure compliance with required standards. In cases where AI-generated decisions cannot be reliably or securely explained, human supervision and decision-making will constitute the default operational mode.

Moreover, the use of AI will comply with the SOLAR-MOVE coordinator INESC ID's Code of Conduct. The generic good practices concerning the use of AI are as follows:

- Ensue that AI is human-centered, that is, developed, applied and used with respect for humans' fundamental rights and ethical principles of beneficence (doing good), non-maleficence (do not harm anyone), preservation of their autonomy and justice.
- Based on the same values and principles, seek to prospectively assess the possible effects of AI on human beings, their interactions and the common good.
- Incorporate the requirements for a trustworthy AI already in the first design stage: accountability, good data management and control, design for the common good, non-discrimination, respect for human autonomy, respect for privacy, technical soundness, security and transparency.
- Consider technical and non-technical methods to ensure the application of these requirements in AI systems.
- Take into account the same requirements when building the system itself, the test environment and potential applications of the system.
- Strive to create conditions for the traceability and auditability of AI systems, particularly in critical contexts or situations. As far as possible, design the system so as to allow the tracking of all its constituent elements, namely data, pre-trained models, etc. Also, define the AI system explanation methods.
- Ensure the participation and inclusion of interested parties in the design and development of the AI system, always and clearly informing them about the capabilities and limitations of the system.
- Integrate the development of credible AI into the organization's culture and provide information to stakeholders on how that concern should be translated into the design and use of AI systems.
- Promote opportunities for reflection and discussion on ethical issues and emerging challenges arising from AI systems, including by anticipating future scenarios arising from the evolution of the configuration of AI systems, ensuring the adequate training of all agents involved in their creation and development.
- Ensure the assessment of the reliability of the developed AI systems, namely through: adoption of a set of procedures to ensure reliability in the development, dissemination and use phases, adaptable to the specific case in which it is being used; conducting of a dynamic and permanent process of identifying requirements, evaluating solutions and ensuring better results throughout the lifecycle of the AI system.

10. Conclusions

The SOLAR-MOVE project solutions will implement several Artificial Intelligence (AI)-based tools, including SOL11-SOL18, while optimising them. These AI-based tools will support data-driven optimisation of photovoltaic integration, flexible services and operational management within the demonstrators.

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  - Usage patterns;
  - Occupancy files.

  In order to guarantee the reliability and accuracy of the results, the algorithm's performance will be assessed using multiple error metrics, including MAE, MAPE, RMSE and CV(RMSE).

- **Social robustness:**

  The AI-based solutions will be designed to adapt to user requirements, rather than imposing changes on users. To improve privacy protection, federated learning approaches will be investigated where they are applicable, reducing the necessity for centralised data processing.

- **Reliability:**

  The potential impact of AI will be analysed through a structured risk assessment. This comprises the identification of vulnerabilities and potential adversaries. Continuous testing procedures will be implemented to guarantee that AI models operate at a high performance level and remain resilient to vulnerabilities.

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- Promote opportunities for reflection and discussion on ethical issues and emerging challenges arising from AI systems, including by anticipating future scenarios arising from the evolution of the configuration of AI systems, ensuring the adequate training of all agents involved in their creation and development.
- Ensure the assessment of the reliability of the developed AI systems, namely through: adoption of a set of procedures to ensure reliability in the development, dissemination and use phases, adaptable to the specific case in which it is being used; conducting of a dynamic and permanent process of identifying requirements, evaluating solutions and ensuring better results throughout the lifecycle of the AI system.

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Project Summary

The SOLAR-MOVE project aims to contribute to the massive adoption of electric vehicles (EVs), minimising their impact in the power grid by proposing solutions for different Vehicles Integrated Photovoltaic (VIPV) ecosystems: i) VIPV in cities, ii) VIPV in residential and service buildings, iii) VIPV in passenger transportation and iv) VIPV in highways. The SOLAR-MOVE will follow three main targets: i) increase the range of the VIPV in 5 to 10 km/day compared to normal EVs; ii) reduce the dependency on the grid (energy provided by the grid) from 20 to 50 %, depending on the eco-system; and iii) create solutions with positive Net Present Value. To achieve these goals the consortium - comprised by 34 partners across 16 countries - will develop innovative VIPV solutions, including tools to be integrated in VIPV; VIPV prototypes (Heavy-duty vehicles with PV in the trailer, garbage trucks, passenger buses, last-mile delivery and motorhome); VIPV Use Optimisation solutions to maximise the range of the VIPVs; and ePIPV (charging stations with PVs) for diverse applications (in highways, opportunity charging for eBus, ePIPVs at municipality level, public ePIPV in commercial areas and private ePIPVs). The solutions will be demonstrated in six pilots across Denmark (VIPV: heavy-duty vehicles, ePIPV parking lot for trucks in highways), Greece (VIPV: Garbage Truck, ePIPV: Management of ePIPV at municipality level), Turkey (VIPV: Passenger Bus, ePIPV: Management of ePIPV Opportunity charging), Portugal (VIPV: Last mile delivery, ePIPV: Management of public ePIPV), Albania (ePIPV; Management of private ePIPV) and Slovenia (VIPV: Motorhome). The findings will contribute to the elaboration of policy recommendations to support the adoption of VIPV and ePIPV, guidelines for municipalities to simplify the procurement process for VIPS and ePIPVs solutions and regulatory frameworks and incentives to facilitate the mass deployment of these technologies.

Keywords

Electric vehicles I VIPV I PIPVs I eBus I TOPCon I vehicle-to-grid I flexibility I planning I regulatory I Use Cases I Interoperability I Replicability I Scalability I Business Models I Exploitation

Social Links:

http://www.linkedin.com/company/solar-move

www.solar-move.eu

APPENDIX A: Data and Research Outputs

Table APPENDIX A 1 summarises the expected SOLAR-MOVE data types described in **Section 2.1** and **Section 3**.

Table APPENDIX A 1 - Data and Research Outputs

		Description	Data source	Data format	Data size	Data storage	Data Utility
Data	**Research data**	**Measurement data**	*tbd*	.csv; .xlsx; .docx; .txt	*tbd*	*tbd*	Consortium
		Assest and other demo data	INESC ID, ELERG	*tbd*	*tbd*	*tbd*	Consortium
		Configuration data	*tbd*	*tbd*	*tbd*	*tbd*	Consortium
		Stakeholders engagement data	*tbd*	*tbd*	*tbd*	*tbd*	Consortium
		Input data	*tbd*	*tbd*	*tbd*	*tbd*	Consortium
		Forecast and simulation data	*tbd*	*tbd*	*tbd*	*tbd*	*tbd*
		Pilot Datasets	*tbd*	*tbd*	*tbd*	*tbd*	Consortium

		Business model data	*tbd*	*tbd*	*tbd*	*tbd*	Consortium
		Interoperability and standardisation data	*tbd*	*tbd*	*tbd*	*tbd*	*tbd*
	Management and administration Data	**Contact and Mailing lists**	Consortium	.xlsx	Approx.. 50MB	Project's Teams	Partners
		Project management documents	Consortium	.docx or .pdf	Approx. 200MB	Project's Teams	Partners
		Data Definition Catalogue	Consortium	.xlsx	Approx. 60KB	Project's Teams	Partners
Research Outputs	**Deliverables**		*tbd*	.pdf	Approx..10MB	Project's Teams repo/project website/ CORDIS/Zenodo	PU- Public SEN- Consortium
	Solutions		*tbd*	*tbd*	*tbd*	Project's Teams repo/ tbd	Consortium / Research Community
	Use case repositories		*tbd*	*tbd*	*tbd*	BRIDGE use-case repository/ GitHub/ Zenodo	Research community
	Algorithms		*tbd*	*tbd*	*tbd*	Project's Teams repo/ GitHub	*tbd*

	Scientific publications	**Journal articles**	*tbd*	.pdf	Approx.. 1MB	Project's Teams repo/project website/ Zenodo/ Institutional repositories	Public /research community
		Conference articles	*tbd*	.pdf	Approx.. 500KB	Project's Teams repo/project website/ Zenodo/ Institutional repositories	Public /research community
		MSc and PhD thesis	*tbd*	.pdf	Approx.. 15KB	Project's Teams repo/project website/ Zenodo/ Institutional repositories	Public /research community
	Communication materials	**Posters**	Partners	.pdf	Approx. 1MB	Project's Teams repo/project website	Consortium members
		Roll-ups	Partners	.pdf	Approx. 5MB	Project's Teams repo/project website	Consortium members
		Flyers	Partners	.pdf	Approx. 2MB	Project's Teams repo/project website	Consortium members
		Videos	Partners	.avi, .mp4	Approx. 100MB	Project's Teams repo/project website	Consortium members

		Images	Partners	.jpg, .png. .tiff	Approx. 100KB	Project's Teams repo/project website	Consortium members

TBD: to be defined throughout the project

APPENDIX B: Deliverables

Table APPENDIX B 1 summarises important information regarding the deliverables to be produced in the project, organised by Work Packages (WP), Lead, format types (ranging from reports (R), to other formats (OTHER), including information about repositories, hardware, prototypes and software generated during the project), and dissemination level (public (PU) or sensitive (SEN) dissemination).

Table APPENDIX B 1 - SOLAR-MOVE list of deliverables

Deliverable	Deliverable Name	WP	Lead	Type	Dissemi-nation level	Due Date
D1.1	Regulatory Framework Mapping	1	POLIS	R	PU	M09
D1.2	Flexibility Services Mapping	1	DTU	R	PU	M11
D1.3	Use Case Repository	1	NTUA	OTHER	PU	M12
D1.4	Cybersecurity and Interoperability	1	ComS	R	PU	M12
D2.1	TOPCon and SHJ Cells Prototypes	2	iTech	OTHER	PU	M20
D2.2	PV Modules adapted to VIPVs	2	iTech	OTHER	PU	M21
D2.3	MPPT Including New Algorithms	2	SonoM	OTHER	PU	M22
D2.4	V2L and V2G for VIPV Prototype	2	ComS	OTHER	PU	M22
D2.5	VIPVs Prototypes	2	Bozankaya	OTHER	PU	M24
D2.6	Fleet Management Optimisation	2	NTUA	R	PU	M24
D2.7	PV Devices Performance Certification	2	iTech	R	PU	M26
D3.1	PV Production in VIPVs Estimation	3	LIST	R	PU	M18
D3.2	Flexibility Assessment	3	INESC TEC	R	PU	M19
D3.3	ePIPVs Planning	3	INESC ID	R	PU	M20
D3.4	ePIPVs Management and Operation	3	DTU	R	PU	M21
D3.5	ePIPV Hardware Solutions	3	INESC ID	R	PU	M24

D3.6	Impact of ePIPV in Energy and Power Systems	3	DTU	R	PU	M26
D4.1	VIPVs Detailed Specification of VIPVs pilots	4	Bozankaya	R	SEN	M18
D4.2	VIPVs Pilots Installation and Commissioning	4	AA	R	SEN	M24
D4.3	VIPVs Pilots Monitoring and Assessment	4	Kaoussis	R	SEN	M33
D4.4	VIPVs Lessons Learned in Pilots	4	Bozankaya	R	PU	M39
D5.1	ePIPVs Detailed Specification of Pilots	5	EDP NEW	R	SEN	M18
D5.2	ePIPVs Pilots Installation and Commissioning	5	SUSALB	R	SEN	M24
D5.3	ePIPVs Pilots Monitoring and Assessment	5	NTUA	R	SEN	M33
D5.4	ePIPVs Lessons Learned in the Pilots	5	EDP NEW	R	PU	M39
D6.1	LCA of VIPV Technologies	6	IREC	R	PU	M39
D6.2	CBA of VIPV Technologies	6	LIST	R	PU	M40
D6.3	Business Strategies and Funding Opportunities	6	F6STech	R	PU	M30
D6.4	Business Strategies and Funding Opportunities Update M42	6	F6STech	R	PU	M42
D6.5	Exploitation Methodology	6	F6STech	R	SEN	M19
D7.1	Dissemination and Communication Plan	7	POLIS	R	PU	M06
D7.2	Dissemination and Communication Plan Update M24	7	POLIS	R	PU	M24

D7.3	Strategy for Standardization	7	SonoM	R	PU	M15
D7.4	Policies and Recommendations for Procurement	7	POLIS	R	PU	M36
D7.5	Regulations and Incentives Policies	7	POLIS	R	PU	M39
D7.6	Guidelines for VIPV and ePIPV Development	7	INESC ID	R	PU	M42
D8.1	Project Management Plan	8	INESC ID	R	PU	M02
D8.2	Project Management Plan Update	8	INESC ID	R	PU	M18
D8.3	Data Management Plan	8	INESC ID	R	PU	M06
D8.4	Data Management Plan Update M24	8	INESC ID	R	PU	M24
D8.5	Data Management Plan Update M42	8	INESC ID	R	PU	M42
D8.6	Intermediate progress report M15	8	INESC ID	R	SEN	M15
D8.7	Intermediate progress report M36	8	INESC ID	R	SEN	M36

APPENDIX C: Data monitoring

Table APPENDIX C 1 will be used for monitoring if data comply with FAIR principles.

Table APPENDIX C 1 – Data monitoring

Data information	Details
Type of data (e.g. dataset, software, publication, questionnaire)	
Consistent name	
Data utility	
Purpose and relevance of data in relation to objectives	
Methodology to produce the data	
Source and ownership	
GDPR compliance	
Data formats, vocabularies	
Storage	
Security and privacy considerations	
Dissemination level, limitations	
Licences	
Metadata	