

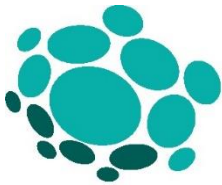


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Renewable Energy Valleys to increase energy security while
accelerating the green transition in Europe
Innovation action (IA)



REFORMERS

RENEWABLE ENERGY VALLEYS

REFORMERS

Regional Ecosystems FOR Multiple-Energy Resilient Systems

Grant Agreement No. 101136211

Duration: 60 months (1st November 2023-31st October 2028)

Deliverable D1.1

Project Management Plan

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Contributors	All Partners

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0.2	7.12.2023	S. Arapoglou (VUB)	Additional content
0.3	11.12.2023	T. Coosemans (VUB)	Internal review
0.4	12.12.2023	Marina CIRCE, Nikos Nikolopoulos (CERTH), Christian Friebe (STOFF2)	Consortium review
1.0	21.12.2023	S. Arapoglou (VUB)	Consolidated, final version

Executive summary

D1.1 *Project Management Plan* is the guide to implementation for REFORMERS; it must be used together with D1.4 *Project Handbook*, which details procedures and tools. These are the main results of Task 1.1 and Task 1.2 and will be updated throughout the project duration.

This report describes the governance, project bodies and responsibilities, interconnections, milestones and risks, and it also gives an overview of the Quality Management and criteria, which will be further analysed in D1.4. The REFORMERS Project Implementation Plan is based on the Work Package breakdown structure: the work is divided into WPs, and each WP leader is in charge of the implementation, monitoring and reporting on the work undertaken.

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List of abbreviations	
CA	Consortium Agreement
WP	Work Package
GA	General Assembly
EB	Executive Board
AB	Advisory Board
PC	Project Coordinator
PMP	Project Management Plan
DSO	Distribution System Operator
REV	Renewable Energy Valley
RE	Renewable Energy

SME	Small Medium-sized Enterprise
PM	Person month
CINEA	European Climate, Infrastructure and Environment Executive Agency



1. Introduction

Deliverable 1.1 *Project Management Plan (PMP)* is the basic tool that guides the REFORMERS Partners through the project implementation and is an output of *Task 1.1: Project coordination, governance and strategic decision making* and WP1 Project management and coordination.

D1.1 is a living document: it will be updated during the project to reflect the changes and to adapt in future conditions, as the overall objective is to support and facilitate project implementation.

The PMP is required to be used together with D1.4 *Project Handbook*; this is the output of Task 1.2 *Operational and financial management* and will also facilitate the project implementation by providing details and instructions on how to implement the administrative and operational side, to ensure all contractual obligations are fully respected and completed. D1.4 will be delivered in April 2024 (M6).

D1.1 will focus on the governance and project coordination:

Section 2 *Project overview* will describe the project scope and objectives, the milestones, the deliverables.

Section 3 *Organization/ governance* will focus on the governance part and will explain the management structure and the roles and responsibilities of partners. Work will be divided on different management levels to avoid work overload and allow for efficient progress monitoring.

Section 4 *Major interconnections* will provide an overview of the resources and Section 5 *Risks* will present the risks that could jeopardise the technical implementation and fulfilment of the objectives. Risk management will be implemented to ensure that materialised risks are adequately followed and mitigated.

Section 6 *Quality Management* shortly presents the quality procedure and criteria of that will be applied in REFORMERS and Section 7 *Conclusions* concludes the document and shortly describes the contents of D1.4 Project Handbook, to make it clear how the two documents need to be used together.

2. Project overview

REFORMERS aims to develop, implement and exploit an energy valley in the Boekelermeer next to the city of Alkmaar in the Netherlands, that serves as a living lab for testing and validating technologies, business models, stakeholder ecosystems, (encompassing industrial partners, DSO, municipality, and residents), and user acceptance in real-life circumstances; this in a peri-urban and industrial environment. Furthermore, the project aims to support the deployment of multiple self-sufficient energy valleys throughout Europe beyond the flagship in the Netherlands. Therefore, it will deliver a blueprint for roll-out and a replication toolbox that encompasses: (i) Energy System Design, (ii) Environmental Impact Assessment, (iii), stakeholder Engagement and Social impact assessment, (iv) Governance and policy assessment, and (v) Business modelling,

This toolbox will allow other additional sites and regions across EC to develop a pathway towards the development of a carbon-neutral and self-sufficient energy valley that can be fed into, e.g., a Sustainable Energy and Climate Action Plan.

REFORMERS is working towards locally produced clean energy in combination with saving and diversifying energy supplies (in line with REPowerEurope goals) and will achieve this target by:

- a highly integrated design of a multiple energy system (electricity, heat, cold, gas, H₂, and mobility) and its respective generating sources, buffers, and consumers,
- considering the local characteristics of the energy system (geography and consumer behaviours and needs, legislation),
- operating a smart hybrid energy platform in which the stochastic flexibility-availability of multi-energy vectors are cascaded by data-driven artificial intelligence.

The objectives of REFORMERS are formulated around the:

1. Deployment and operation of a renewable energy valley (REV): a local energy system meeting its energy needs on an annual basis, through local sourcing, thereby eliminating dependence on fossil fuels for the security of supply
2. Understanding and defining ways to value cumulative impacts of the socio-economic and environmental impact of the Energy Valley on the long-term by assessing impacts on the local communities and other sectors and addressing issues concerning governance, regulations, and health.
3. Understanding and co-developing sustainable quadruple helix ecosystems for the creation of a REV
4. Fostering and creation of RE supply chains across Europe by involving >50 SMEs in the design and build phases, allowing for value delivery across all disciplines



5. Understanding user behaviour in a changing energy system for reaching 90% user acceptance and integration of RE solutions by the development of a social network and technical design platform integrating multi-stakeholder engagement and informed decision-making tools
6. Development of versatile, scalable, and interchangeable digital twins for energy systems, allowing rapid implementation in multiple sites for continuous optimal operation
7. Provide and validate the necessary tools and methods to support regions and local communities in understanding and setting the necessary structures, encompassing societal and technical aspects, to transform themselves into an Energy Valley.

REFORMERS will showcase numerous results that will be exploited during the project duration and after the end of it. The Key Exploitable results that are planned to be developed are listed in Table 1:

#	REFORMERS Key Exploitable Results	Type of KER	Starting TRL/SRL	Final TRL/SRL	KER owners
1	EV Toolbox: Tool #1 - Stakeholder engagement and social impact assessment	Methodology	4	8	VUB, DBL, NEC, RISE,
2	EV Toolbox: Tool #2 - Energy system designer	Algorithm, Software	4	7	VUB, AIT, CERTH, CIRCE
3	EV Toolbox: Tool #3 - Environmental impact assessment	Algorithm, Software, Sensors	5	7	CERTH
4	EV Toolbox: Tool #4 - Business models, Governance and Policy & legal assessment	Methodology	4	7-8	TNO, AIT, EUREC, NEC, RISE,
5	Digital Twin, with a modular data-driven, model-supported and service-oriented architecture (services: forecasting service, scenario analysis service, operational policy evaluation service)	Algorithm, software, Model	4	7	TU Delft, EMPA, CIRCE, CERTH, VUB, TNO, AIT
6	Development of grid services based on digital twins	Algorithm, software, service Mode	5	7	CIRCE
7	Holistic Approach Decision Making	Methodology	4	7-8	TNO, AIT, EUREC, NEC, RISE
8	Training material for the toolbox.	Services	4	7-8	DBL, VUB, CERTH,

					TNO, NEC, AIT. EUREC
9	Technologies in the Flagship (Hardware Components. Management Systems, Integrated systems) REVT#1	Biological Carbon Capturing and Usage (B-CCU)	7	8	Sustenso
10		Hydrogen NO Carbon	7	8	HYNOCA
11		Thermochemical energy production	6	7	InVesta
12	Technologies in the Flagship (Hardware Components. Management Systems, Integrated systems) REVT#2	Flow battery	6	7	Repowered
13		Residential and neighbourhood battery	7	8	Duurzaam Heiloo
14		Batteries as part of VLES	7	8	Municipality of Alkmaar
15		Remote controlled MV switchgear	7	8	Alliander
16		Hydrogen infrastructure	7	8	Alliander
17		Hybrid battery electrolyser	6	7	Stoff2
18		Energy conversion and integration technologies	6-7	7-8	InVesta
19		Large-scale heat buffer	7	8	HVC
20		PCM heat buffers	7	8	Duurzaam Heiloo
21	Technologies in the Flagship (Hardware Components. Management Systems, Integrated systems) REVT#3	District heating connection	7	8	HVC
22		Peer-to-peer (P2P) energy exchange	6	7	Municipality of Alkmaar
23		Battery-integrated smart chargers	7	8	NXT Mobility
24		BEV and FCEV integration	7	8	NXT Mobility
25	Technologies in the Flagship (Hardware Components. Management Systems, Integrated systems) REVT#4	Teleport Pro & Home	7	8	Withthegrid
26		Joint Optimized Energy Production	7	8	Repowered

		(JOEP) Platform			
27		ENTRNCE-platform	7	8	Alliander
28	Flagship demo assessment, An online publicly accessible platform that summarizes progress and lessons learned in FV	New knowledge	4	8	RISE
29	List of Energy Valleys tools, Solutions for replication and tools with high replication potential	Methodology, New knowledge	4	8	RISE

Table 1 Key Exploitable Results of HE REFORMERS

All project results and outputs will be produced within the contractual limits set in the Grant Agreement. The time constraints are visible in Figure 1, while the available personnel resources are presented in Table 2.

WP	Effort in PMs
WP1	115
WP2	119
WP3	83
WP4	451
WP5	251
WP6	190
WP7	134,5
WP8	153,5
TOTAL	1497

Table 2 Effort per WP

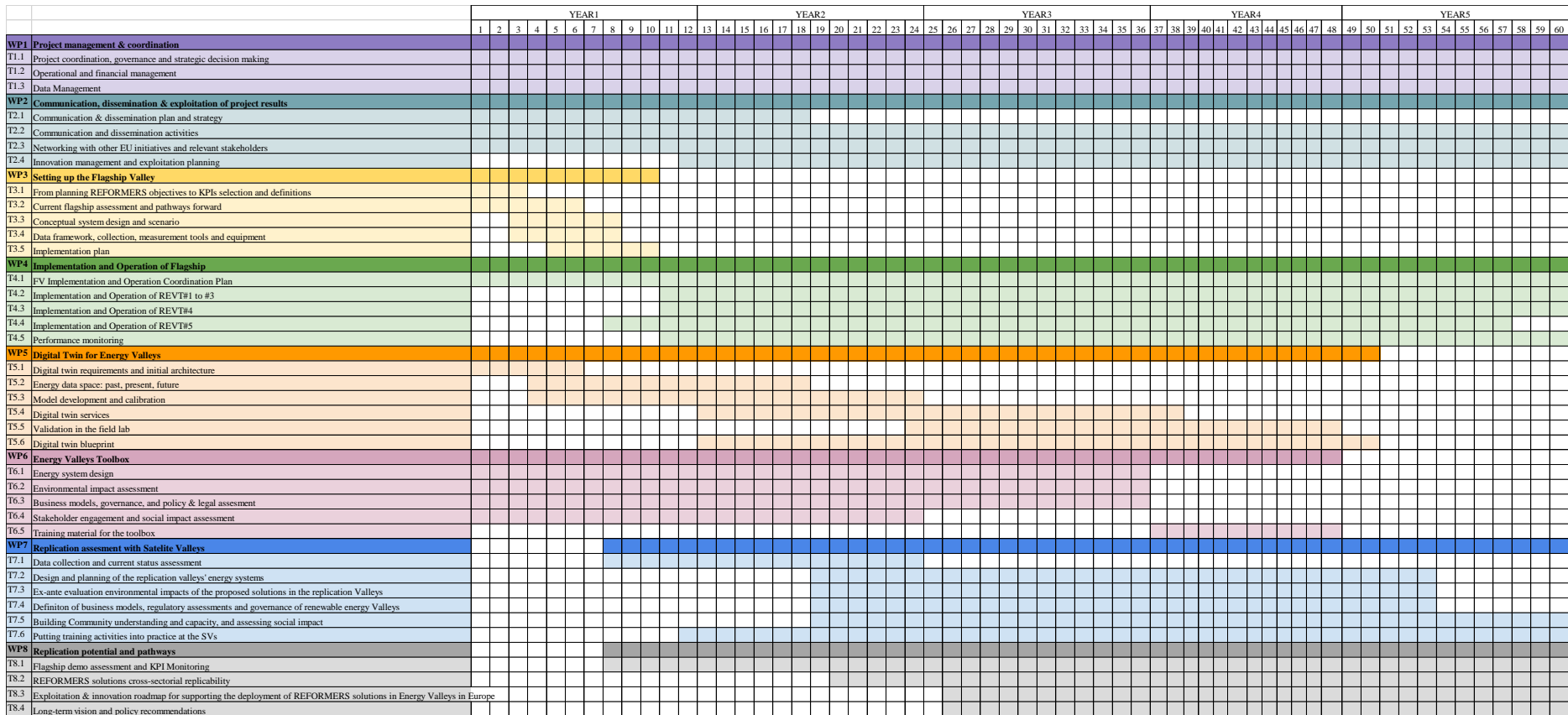


Figure 1 Gantt chart of REFORMERS



3. Organization/ governance

REFORMERS governance structure, Figure 2, is presented and described in detail in the Consortium Agreement. The main decision-making body is the General Assembly, made up by representatives of all Partners. Then the executing body is the Executive Boards: WP leaders apply the strategic decision of the General Assembly and implement them into action. The Project Coordinator is chairing both bodies and is assigned with the communication with the funding authority, CINEA. WP leaders divide and monitor implementation progress with the support of task leaders.

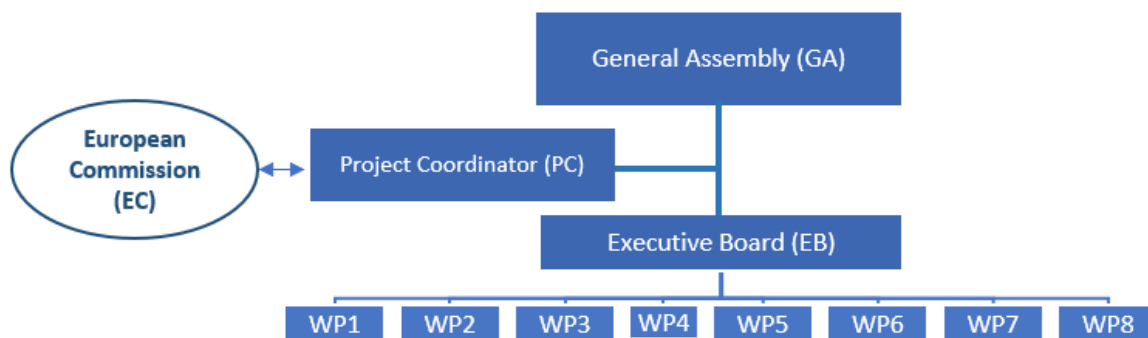


Figure 2 REFORMERS management Structure

3.1 Project Bodies

The project will be governed and managed primarily by the General Assembly (GA); this is the highest decision-making body of the project, and their decisions are to be executed by the Executive Board (EB).

The EB is mainly in charge of monitoring day-to-day implementation, advising the GA on project execution and gathering data for the reporting procedures. The EB can formulate proposals, but they must be approved by the GA before they are adopted and applied. The decisions of the GA are binding, but veto rights are granted, as described in the Consortium Agreement (CA).

The roles and responsibilities of the two bodies are described in detail in the CA, but Table 3 also presents the primary function and operation clarifications.

	General Assembly	Executive Board
Who	One representative of each party/Beneficiary	WP Leaders
When	Twice a year	Monthly

	At any time upon request of the Executive Board or 1/3 of the Members of the General Assembly	At any time upon request of any Member of the Executive Board
Where?	At least once onsite, always hybrid	Online
Chair	Coordinator	Coordinator
Agenda	21 days in advance (add items 14 days before)	7 days in advance (add items 2 days before)
Minutes	Draft minutes within 10 calendar days	Draft minutes within 10 calendar days
	Accepted if no objection within 15 calendar days from receipt	Accepted if no objection within 15 calendar days from receipt

Table 3 Project Bodies operation

Quality assurance committee (tentative title)

A committee will be established that will support scientific publications on two levels:

- Will ensure the quality of publications (internal review)
- Will deter and IPR issues

The composition, title and specific responsibilities of this committee will be described in detail in D1.4 Project Handbook.

3.2 Project roles and responsibilities

Project Coordinator (PC)

The role and responsibilities of the PC are described in detail in the CA and can be summarized as:

- Main contact point with the EC
- Monitoring compliance with Grant Agreement and CA
- Updating mailing and address lists
- Prepare, review, verify and submit reports and deliverables and other requested documents
- Administering financial contributions, according to the CA and the Grant Agreement
- Keep the project repository accessible and updated
- Chair project bodies

Communication Manager



The Project CM is the Leader of WP2 Communication, dissemination & exploitation of project results. In cooperation with all Parties, they develop, implement and report on the communication strategy of the project.

WP Leader

To facilitate the project implementation in such a large project, WP leaders will hold special management rights: they will oversee the technical and operational management on WP level, and they will decide on the distribution of work within a WP, together with the participating partners.

They will support internal and official reporting by gathering and verifying contributions from partners and will monitor the overall WP implementation while they ensure on time submission of high-quality deliverables, according to the Quality strategy that will be adopted.

The WP leaders will be supported by the Executive Board, the Project Coordinator and all partners that participate in the respective WPs.

		Main contacts	Email
WP1	VUB	T. Coosemans	Thierry.coosemans@vub.be
		S. Arapoglou	Stella.arapoglou@vub.be
WP2	DEEP BLUE	R. Hueting, M. Messineo	rebecca.hueting@dblue.it ; manuele.messineo@dblue.it
WP3	VUB	T. Coosemans, A. Felice	Thierry.coosemans@vub.be ; alex.felice@vub.be
WP4	NEC	J. Sanderink, Mark de la Vieter	j.sanderink@newenergycoalition.org ; m.delavieter@newenergycoalition.org
WP5	TU DELFT	M. Cvetkovic, Aihui Fu	M.Cvetkovic@tudelft.nl ; A.Fu@tudelft.nl
WP6	AIT	N. Pardo-Garcia, Branislav Iglar	nicolas.pardo-garcia@ait.ac.at ; Branislav.Iglar@ait.ac.at
WP7	CERTH	N. Nikolopoulos, V. Giourka, P. Iliadis	n.nikolopoulos@certh.gr ; giourka@certh.gr ; iliadis@certh.gr
WP8	RISE	F. Sacco, Johan O Sandstrom	francesco.sacco@ri.se ; johan.o.sandstrom@ri.se

Table 4 WP Leader contact points

Task Leader

Task leaders are assigned with the same responsibilities as the WP Leaders, but on task level, which allows for a flexible and an efficient day to day management.

Advisory Board (AB)

Within WP2 an Advisory Board will be appointed that will support:

- the co-creation and validation of the project results
- the promotion of the project objectives and results

The AB may include, but not be limited to:

- Organizations that signed a Letter of Intent during proposal stage
- Representatives of local industry
- Stakeholders of the value chains of renewable energy technologies
- Citizens, active consumers, Energy Communities and the Energy Communities Repository
- Representatives of projects funded under the same call or topic, aka “sister” projects

The operation and role of the AB will be further analysed in D2.1 Dissemination and Communication Plan, and confidentiality measures are described in the CA.



4. Major interconnections

As shown in Figure 3, REFORMERS structure is complex, where all WPs depend on each other but simultaneously work independently. The needs for data cause the central interdependencies: all technical WPs require a vast number of data and data requirements. WP3, WP5 and WP6 will need to work together in defining specific requirements, deciding upon data management strategy (storage, security, personal data, format) and ensuring access to data. WP3 and WP4 are complimentary: WP3 results set the foundation for the work in WP4. WP5, Wp6 and WP7 heavily depend on the results of WP4 and WP8 on the results of WP7.

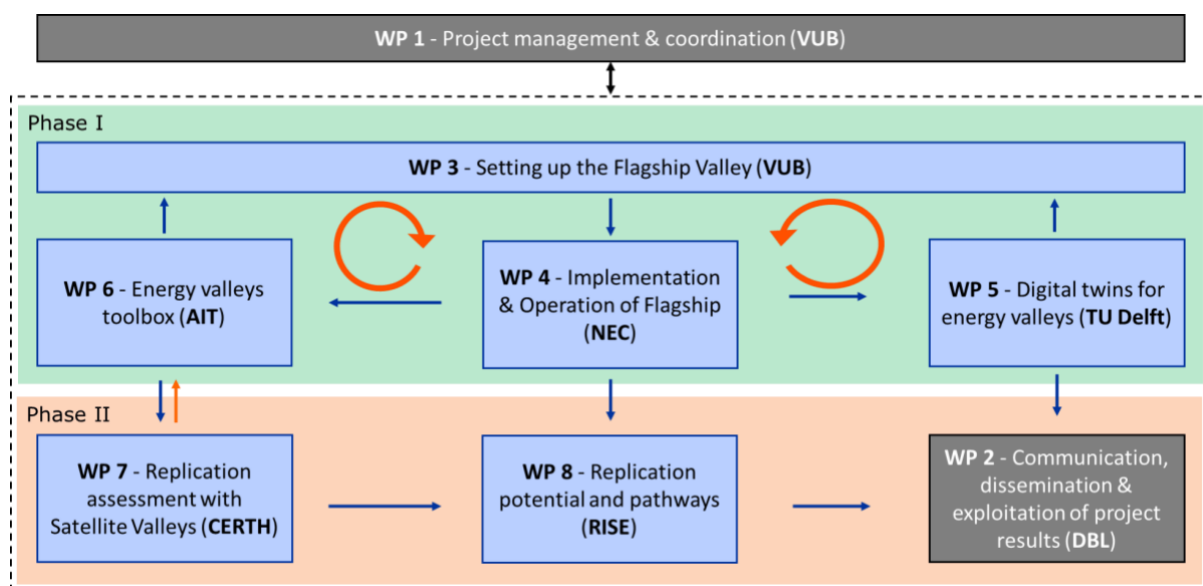


Figure 3 Pert chart of WP coordination

The Executive Board will monitor interdependencies of the WPs, and WP leaders will monitor interdependencies on task level. In parallel, the milestones in Table 5 will guide the work through the critical path to completing final objectives and overall goals. They will be monitored on the WP level and reported on during reporting periods.

No.	Milestone name	WP(s)	Due month	Due Date	Means of verification
1	Project Handbook	1	M6	30-Apr-24	Consortium validated Report
2	Dissemination & Communication Plan	2	M4	29-Feb-24	Consortium validated Report
3	Implementation Plan	3	M10	31-Aug-24	Validated report by FV stakeholders

4	Coordination of planned implementation activities for the REV Alkmaar	4	M12	31-Oct-24	Timely delivery of REV Alkmaar Implementation and Operation Coordination plan (D4.1)
5	Definition of energy data space for digital twins encompassing energy data space, its ontology and characteristics	5	M18	30-Apr-25	Timely delivered and validated Report (D5.2)
6	Large-scale deployment and monitoring of demonstration across REVTs 1,2 and 3 in REV Alkmaar	4	M24	31-Oct-25	Timely completion of demonstration of integrated solutions within REVTs 1, 2 and 3 (D4.2) (M24) and start of monitoring (M24)
7	RV Trainings on using the WP6 tools and starting implementation	7	M32	30-Jun-26	All RV have started to implement the planning and design of their valleys using the REFORMERS tools (dev in WP6)
8	FV Performance Monitoring	5	M36	31-Oct-26	Validated First Performance Report of Flagship
9	Validated tools 6.1, 6.2, 6.3	6	M36	31-Oct-26	Validated tools by RTO;'s and Users
10	Validated Digital twin	5	M48	31-Oct-27	D5.5: Validated report of twin validation in field lab
11	Flagship demo assessed	8	M54	30-Apr-28	Deliverable on vision-based recommendations handbook (D8.4)

Table 5 REFORMERS milestones

5. Risks

Critical risks that could interrupt project implementation have been identified in the proposal stage Table 6. Risks not identified already will be managed based on the risk strategy described in D1.4 Project Handbook. The Executive Board will bear the risk management responsibility (identification, assignment, monitoring, mitigation).

	Description of risk	WPs	Proposed risk-mitigation measures
1	The assigned tasks/outcomes/budget were not completed to the desired standard, timeframe, and within the estimated resources	1	A robust implementation plan (known as the Project Handbook) will be created at the project's outset. It will incorporate specific quality assurance and monitoring strategies to minimize any deviations from the plan. Monthly meetings will provide opportunities to develop contingency advance plans of potential risks. The extensive experience of the Coordinator and Consortium in project implementation ensures a smooth and high-quality delivery.
2	Essential data and IP sharing by the partners	1	IP Agreement needs to be signed before the project starts
3	Poor dissemination and exploitation of the results	2, 8	Development of the Communication, Dissemination and Exploitation Plan approved by all the partners with specific activities assigned to each. Dissemination activities are continuously monitored using KPIs and consequently adjusted if problems arise.
4	Poor interest and low involvement of relevant stakeholders at the local and EU level	2, 8	Involving from the very beginning of the project the largest and most comprehensive possible array of stakeholders locally (in the Flagship and the Replication Valleys thanks to the synergies with the dedicated WPs) and at the EU level through networking and exploitation activities and Letter of Support already collected at the proposal level.
5	Permit delays due to environmental issues during construction (NOx-emissions, carbon emissions)	4	Early involvement of local and regional government, Zero-emission construction.
6	No timely electricity grid connection is available since REFORMERS takes place in a grid-congested area	4	Early application for grid connection, a strategic session with grid operator and project partner Alliander, proving that the grid connections of REFORMERS will alleviate congestion.

7	FID for the investments is not possible due to increased labor and material prices and increased interest rate	4	Regular budget updates with all investing partners and escalation to project officer if issues arise to find proper mitigation that keeps project impact in place.
8	Technology is not matured enough for rollout in the flagship	4	Detailed plan per tech provider to reach technology maturity before the proposed installation date, Monthly progress meetings with all technology providers.
9	Unavailable or Limited data/information/engagement	3, 4, 5, 6, 7, 8	The available information will be utilised to generate synthetic data using expertise in the relevant domain.
10	Requirements and needs from the energy valleys for the digital twins/toolboxes are not clear enough	4, 5, 6	Requirements identification will be done in collaboration with the developers to ensure a common understanding of the user needs.
11	Lack of computing power to run the toolbox to assess the use cases	6	Energy and environmental modelling framework for the toolbox will be built with a high focus on performance and a high computation efficiency for a large model with limited computational resources. If the lack of computation power persists, proper simplifications of the model can be done.
12	Model improvements become too complex	6	Consortium partners have extensive experience in modelling and minimizing major risks. Allocation of the resources allows flexibility to shift the effort between partners.
13	The toolbox functionalities are too focused mainly on the needs of the Energy Valley pilot, losing the generalisation to be applied in other energy valleys.	6, 7	High interaction with the Replication Valley to also include their needs and requirements in the functionalities of the toolbox.
14	Individual digital twin technologies cannot be integrated into a holistic solution	5	Through tasks 5.1 and 5.6, we establish a flexible digital twin architecture (i.e. digital twin blueprint) based on the so-called “soft-linking” of software modules. This design methodology increases the likelihood for successful integration and, hence was intentionally built into the project to mitigate integration risks.
15	Access to individual digital twin technologies is not possible for Energy Valley stakeholders (due to cost, licensing restrictions, etc.)	5	The digital twin blueprint should be compatible with at least one open-source software stack, mitigating the accessibility risk. Particular attention will be paid to WP5 tasks to pinpoint open-source

			software modules which fit with the digital twin blueprint.
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Table 6 REFORMERS Critical Risks



6. Quality Management

The quality management will be described in detail in the D1.4 Project Handbook. Until the handbook is drafted, all partners will follow the instructions in this section, to ensure that all deliverables that are developed and submitted are of high quality and within the assigned resources.

The review procedure, as it was presented and approved at the kickoff meeting, includes the following steps:

Step 1: The deliverable is sent to reviewers four weeks before the contractual submission date.

Step 2: reviewers have eight working days to complete the review and send it back.

Step 3: The responsible partner integrates comments and prepares the final version (5 working days); the final version is sent to the Coordinator.

Step 4: last review of document from the Coordinator (5 working days) and submission.



Figure 4 Deliverables' Review procedure

Criteria and main points to review

- Contribute to the project objectives.
- Reflect on the work undertaken.
- Be written in a simple, clear and explicit language, following the suggested templates and structures.
- State the interlinks with other deliverables and documents.
- Mention any previous or future versions.
- Describe and justify any deviations.
- Ensure proper formatting (working links, language check, cross-references)
- Correct logos and document contractual information

7. Conclusions

All available tools and strategies will be recruited to ensure proper implementation, innovative results, and risk aversion. REFORMERS is a large and complicated project requiring very high levels of cooperation and coordination among multiple partners and stakeholders. The good will, vision, and expertise of partners, together with the Grant Agreement and the Consortium Agreement, the Project Management Plan, the Project Handbook and the project resources, ensure that the overall goals can be achieved.

D1.4 Project Handbook will elaborate on the management and coordination of the project, building on the following topics:

- Governance and conflict resolution
- Internal communication
- Reporting
- Change management
- Quality management
- Risk management



8. References

REFORMERS Grant Agreement No. 101136211

REFORMERS Consortium Agreement

AGA–Annotated Model Grant Agreement EU Funding Programmes 2021-2027 https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/common/guidance/aga_en.pdf



ANNEX I: Project Deliverables

D	Title	Lead	Work Package No	Type	Dissemination Level	Due month	Due Date
D1.1	Project Management Plan v1.0	VUB	WP1	R	PU	2	31 Dec 2023
D1.2	Project Management Plan v2.0	VUB	WP1	R	PU	14	31 Dec 2024
D1.3	Project Management Plan v3.0	VUB	WP1	R	PU	29	31 Mar 2026
D1.4	Project Handbook v1.0	VUB	WP1	R	PU	6	30 Apr 2024
D1.5	Project Handbook v2.0	VUB	WP1	R	PU	20	30 Jun 2025
D1.6	Data management plan	VUB	WP1	R	PU	6	30 Apr 2024
D2.1	Dissemination and Communication Plan	DEEP BLUE	WP2	R	PU	4	29 Feb 2024
D2.2	REFORMERS Communication Package	DEEP BLUE	WP2	OTHER	PU	4	29 Feb 2024
D2.3	Exploitation Plan	DEEP BLUE	WP2	R	PU	18	30 Apr 2025
D2.4	Updated Dissemination and Communication Plan	DEEP BLUE	WP2	R	PU	18	30 Apr 2025
D2.5	Updated Exploitation Plan	DEEP BLUE	WP2	R	PU	42	30 Apr 2027
D2.6	Final Dissemination, Communication and Exploitation Report	NEC	WP2	R	PU	60	31 Oct 2028



D3.1	KPI List	VUB	WP3	R	PU	3	31 Jan 2024
D3.2	Implementation Plan	VUB	WP3	R	PU	10	31 Aug 2024
D4.1	FV Implementation and Operation Coordination Plan	NEC	WP4	R	SEN	6	30 Apr 2024
D4.2	Implementation and Operation Plan of REVT1, 2 and 3	NEC	WP4	R	SEN	12	31 Oct 2024
D4.3	Implementation and Operation Plan of REVT 4	REPOWERED	WP4	R	SEN	24	31 Oct 2025
D4.4	Implementation and Operation Plan of REVT 5	TNO	WP4	R	SEN	24	31 Oct 2025
D4.5	FV Performance Monitoring Report v1.0	WTG	WP4	R	SEN	36	31 Oct 2026
D4.6	FV Performance Monitoring Report V2.0	WTG	WP4	R	SEN	48	31 Oct 2027
D4.7	FV Performance Monitoring Report 3.0	WTG	WP4	R	SEN	60	31 Oct 2028
D5.1	Digital twin design requirements and initial architecture	TU Delft	WP5	R	PU	6	30 Apr 2024
D5.2	Energy data space for digital twins	EMPA	WP5	R	PU	18	30 Apr 2025
D5.3	The model lifecycle for digital twins	AIT	WP5	R	PU	24	31 Oct 2025
D5.4	Digital twin services	CIRCE	WP5	R	PU	38	31 Dec 2026
D5.5	Digital twin technology validation	TU Delft	WP5	R	PU	48	31 Oct 2027



D5.6	Digital twin blueprint	TU Delft	WP5	R	PU	50	31 Dec 2027
D6.1	Energy planning tool	VUB	WP6	R	PU	36	31 Oct 2026
D6.2	Environmental Assessment tool	CERTH	WP6	R	PU	36	31 Oct 2026
D6.3	Holistic approach decision making	TNO	WP6	R	PU	36	31 Oct 2026
D6.4	Stakeholder engagement and social assessment	VUB	WP6	R	PU	24	31 Oct 2025
D6.5	Training materials for the toolbox	DEEP BLUE	WP6	R	PU	48	31 Oct 2027
D7.1	RVs Baseline Report	VUB	WP7	R	PU	24	31 Oct 2025
D7.2	RVs' Energy assessment Master Plan	VUB	WP7	R	PU	53	31 Mar 2028
D7.3	Ex-ante evaluation of the environmental impacts of Replication Valleys solutions	CERTH	WP7	R	PU	53	31 Mar 2028
D7.4	Business models, Policy & Legal and Governance assessment	AIT	WP7	R	PU	53	31 Mar 2028
D7.5	Stakeholder engagement and social impact assessment	NEC	WP7	R	PU	60	31 Oct 2028
D7.6	Training activities report	EUREC	WP7	R	PU	32	30 Jun 2026
D8.1	Flagship demo assessment	RISE	WP8	R	PU	60	31 Oct 2028
D8.2	List of Energy Valley tools	RISE	WP8	R	PU	60	31 Oct 2028



D8.3	Exploitation roadmap for supporting the deployment of Energy Valleys in Europe	NEC	WP8	R	SEN	60	31 Oct 2028
D8.4	Energy Valleys Policy Handbook	VUB	WP8	R	PU	60	31 Oct 2028



ANNEX II: Reviewers of Deliverables

D	Due Date	Lead	VUB	NEC	AIT	Duurzaam Heiloo	CEARTH	CI REE	KONIN	DD S	EU RE C	N A PE	RI SE	T NO	DB L	AND ORR A	T U D el ft	KO ZA NI	M ur au	ALLI AND ER NV	G. ALK MAAR	N V H V C	Hy no ca	INV EST A	SUS TEN SO	REPO WERE D	With TheG rid	NX T Mo bili ty bv	ST OF F2 Gm bH	E M PA	
D1.1	2	VUB		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
D1.2	14	VUB		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
D1.3	29	VUB		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
D1.4	6	VUB		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
D1.5	20	VUB		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
D1.6	6	VUB		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
D2.1	4	DEEP BLUE	1	1	1	1	1	1	1	1	1	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
D2.2	4	DEEP BLUE	1	1	1	1	1	1	1	1	1	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
D2.3	18	DEEP BLUE	1	1	1	1	1	1	1	1	1	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
D2.4	18	DEEP BLUE	1	1	1	1	1	1	1	1	1	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
D2.5	42	DEEP BLUE	1	1	1	1	1	1	1	1	1	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
D2.6	60	NEC	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1



