D1.3: Work Plan

WP1 - Project Management, Coordination and Administration

Report No. D1.3 / Date: 31/01/2023

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ENCHANT Report

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ABSTRACT

The main objective of the Work Plan is to operationalize a workflow that emphasises frequent meeting points, good co-operation arenas and clarification of dependencies and interrelations. This is the second and final revision in M28. The main adjustment in this deliverable are the implementation of the amended project schedule which is implemented in parallel to the update of this deliverable.

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2	30.01.2023	Final version sent to the European Commission

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1. Introduction and Overview

1.1 Purpose and scope of this document

This Work Plan aims to describe and operationalize ENCHANT's WPs and task start-ups, to handle dates and responsibilities related to deliverables, to give an overview of the project meetings, and to give an overview of the project documents, along with risk and cost/schedule management. This Work Plan is prepared in compliance with, but in case of conflict superseded by, ENCHANT's Grant Agreement and ENCHANT's Consortium Agreement. This is the second revision of the work plan. The timeline has been adapted to the new 39 months duration of the project as included in the Amendment from January 2023. Some information has been added or updated. In all cases, the changes have been indicated with red text.

A dedicated work package (i.e., WP1) has been foreseen for project management, with Norwegian University of Science and Technology, the project coordinator, being the responsible partner. The basic purpose of the Work Plan is to operationalize the workflow of the project, and to ensure the proper level of coordination and cooperation amongst consortium members.

This document is organized as follows. In Chapter 1 – Section 1.2, a general overview of ENCHANT's work structure is described, followed by ENCHANT's project organization and governance structure. The gender issues regarding ENCHANT's operationalization, which is in accordance with European Council (EC) strategy on gender equality in research and innovation, are presented in Section 1.5 at the end of Chapter 1.

Chapter 2 breaks down ENCHANT's project structure (Section 2.1) and describes work tasks that belong to individual WPs, important dates and deadlines, as well as partners who are involved in the respective work tasks (Section 2.2).

Chapter 3 – Section 3.1 provides a summary overview of all deliverables in ENCHANT in one place. The submission process and quality assurance procedure of the deliverables follow in Section 3.2 and Section 3.3, respectively.

An overview of all conducted and planned project meetings within and outside the consortium, both physical and virtual, is presented in Chapter 4.

Chapter 5 presents guidelines for information and documentation management, i.e., Section 5.1 presenting access and user support to a common project documentation management tool, Section 5.2 and 5.3 describing internal communication standards and channels.

Chapter 6 – Section 6.1 and Section 6.2 addresses risk management issues and conflict resolution pathways. Cost and schedule management of the project, i.e., distribution of budget and person months, and other costs, are dealt in Chapter 6. A set of information about the consortium and other documents that allow for proper control and monitoring

of the execution of tasks and responsibilities of the project is annexed as appendices at the end of this document.

1.2 General overview of the work structure

ENCHANT is a project with WPs that are dependent on sequential input from each other, and so both timing between tasks and, not the least, communication between partners and between WPs is crucial. We have therefore designed a workflow that emphasises frequent meeting points, good co-operation arenas and clarification of dependencies and interrelations. WPs 2-6 are organised in four phases, presented below, while WP 1 and WP 7 run continuously through the project. WP1 monitors the project's progress, manages ethics, data management, risks and conducts legal and financial monitoring. The workflow is illustrated in Figure 1 below.

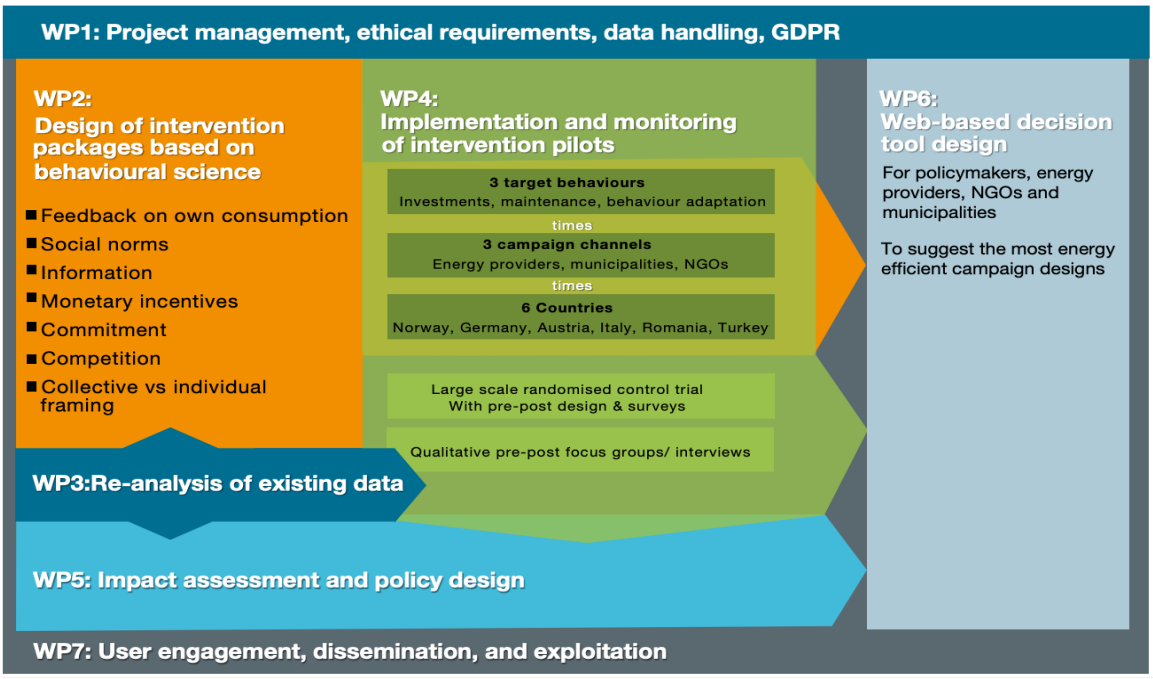

Figure 1 *Workflow in ENCHANT*

The timeline of the project has been adjusted due to a change of the planned survey to a standardized intervention and survey platform. The platform required extensive testing and a detailed check by data protection authorities. This resulted in an extension of the project by 9 months.

Phase I: Developing (M1-32)

This phase is concerned with identifying and developing the interventions. It comprises WP2 and WP3. WP2 identified key factors affecting intervention impact on energy behaviour, design the intervention packages and define the main independent variables. WP2 started in M1 and ended in M10. WP3 informs WP2 by making an inventory of all

relevant datasets and conduct a data review in order to inform the development of the information packages and the pilot implementation. WP3 started in M3 and ends in M32.

Phase II: Testing and implementing (M7-32)
The second phase is concerned with testing and implementing the intervention packages. WP4 is the central component in this part. WP4 will implement the intervention packages developed in WPs 2 and 3. In doing so, the intervention packages will be fine-tuned with the development of operational plans and establishment of monitoring mechanisms for impact assessment.

Phase III: Evaluating (M9-38)
Part three concerns evaluating the interventions implemented in WP4, which is primarily done by WP5. WP5 established KPIs related to the impact categories. It assesses the impact of the tested interventions, as well as their replicability, up-scalability, and limitations. Furthermore, it will identify barriers and success factors for the transfer of best practice and develop a policy instrument matrix.

Phase IV: Utilise and disseminate (M1-39)
The last part of the project concerns utilizing and disseminating its results through a web-based decision tool, and through user engagement. This tool work is concentrated in WP6, which builds on the work from WPs 2-5; the user engagement work is concentrated in WP7. WP6 designs a decision-making tool for policymakers, energy providers, NGOs, and municipalities. It will also implement this tool as a web-based, easy-access interface. WP6 starts in M17 and lasts until M39. WP7 ensures the best possible exploitation, dissemination and capacity building of the ENCHANT activities to the stakeholders. Furthermore, the tool maintenance is also a task in WP7. WP7 runs continuously through the project (M1-39).

1.3 Project organization

ENCHANT features a wide consortium of actors from a variety of countries and regions in Europe. This structure ensures the highest possible quality of knowledge produced and analysed, by maximizing the regional and policy contexts represented in the consortium. ENCHANT operates with 18 core consortium partners, 7 academic and 11 non-academic user-partners in the consortium. The project is organized in 7 work packages with a total of 26 subordinated tasks as given in Figure 2.

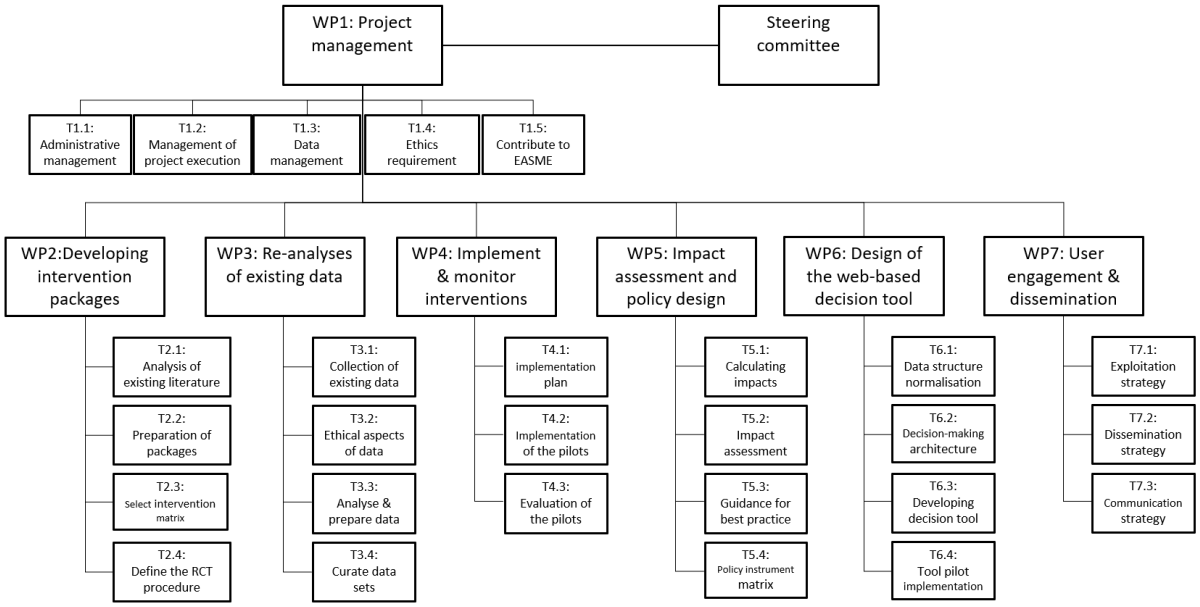

Figure 2 *Structure of ENCHANT with WPs and Tasks*

The hierarchy of the project is relatively flat in the sense that most consortium partners will be involved in most parts of the project. The distribution of work package leadership is both a way of playing up to each partner's strengths and a way to anchor the project properly in the consortium. The core of the project is sequentially organized to most effectively 1) identify and develop, 2) test and 3) evaluate the ENCHANT interventions (WPs 2, 4, and 5). The other work packages are designed to provide the right input at the right time (WP3), to utilise the results at the right time (WP6 and 7) and finally to provide support and to ensure that all activity is carried out effectively in accordance with all relevant legislation in addition to the project's own principles (WP1).

1.4 Governance structure

In order to manage this large interdisciplinary project, a specific management framework has been built, ensuring autonomy, information exchange, governance, and clearly defined responsibilities. The project management is based on the experience from the leadership of earlier performed R&D programmes (including EU FP6, FP7, and H2020), where similar management structures have been adopted successfully. The ENCHANT's formal governance structure, which is established in the Consortium Agreement, is described in the following:

Steering Group: The ENCHANT consortium consists of many partners, which makes it impractical and inefficient to take all decisions relevant for the project in general consortium assemblies. Therefore, a Steering Group, which consists of the Project Coordinator, all Work Package Leaders and two representatives of the User-partners, was established. The Steering Group is the highest authority in the project, and it decides major changes in the project. The Steering Group monitors and harmonizes activities and progress of the project and prepares input for the general assemblies. The Steering Group

meets (virtually when it does not coincide with the General Assembly) every six months to steer ENCHANT's activities and monitor the progress.

The Steering Group is chaired by the Project Coordinator, and has following members:

1. Christian A. Klöckner (project coordinator, chair, leader WP1)
2. Giuseppe Carrus (leader WP2)
3. Anca Sinea (leader WP3)
4. Mehmet Efe Biresselioğlu (leader WP4)
5. Andrea Kollmann (leader WP5)
6. Kalyan Ram Ayyalasomayajula (leader WP6)
7. Berit Nilsen (leader WP7)
8. Kirsten Sink (user partner representative elected at the GA)
9. Guri Bugge (user partner representative elected at the GA)

The Consortium Agreement governs the relationship between the various partners of ENCHANT. It also specifies the legal and administrative responsibilities between the partners. Knowledge management and protection are also part of the Consortium Agreement.

Decisions are delegated as extensively as possible to the lowest level, the work package level. At this level, all necessary decisions on allocation of manpower and other resources to the planned activities may be taken by the WP Leader to execute the work and make sure the deliverables conform to the project plan.

The Consortium: ENCHANT operates with 18 core consortium partners, i.e., 7 academic and 11 non-academic user-partners (see Appendix I). Critical decisions will be made by the Consortium. Critical decisions are those that are deemed crucial to reach the stated overall objectives of ENCHANT, or decisions pertaining to issues that may bring the project in jeopardy. Examples of critical decisions might be the acceptance of a new partner, budget swaps between sub-projects with more than 20 % deviation from the planned level of the sub-project, allowance for publication, and the assigning of marketing rights.

Decisions taken in the consortium are by simple majority in all decisions, where the project coordinator holds a decisive vote should the outcome be split. The Consortium shall meet three times physically and three times virtually during the project and the meeting will be chaired by the project coordinator. The European Commission will be invited to attend all consortium meetings.

The Project Coordinator: The Project Coordinator is directly responsible for the day-to-day administration and management tasks. The Project Coordinator will mainly cooperate

with the Work Package Leaders. The Project Coordinator shall manage the project and be operatively responsible for the organisational and technical performance of the project. The Project Coordinator will always be available for discussions and meetings with the Steering Group and General Assembly: Chairing Steering Group and General Assembly and taking all actions necessary to enable proper decision-making by these bodies and ensuring appropriate information flow and communication among participants. The Project Coordinator reports directly to the consortium and acts as the intermediary between the Consortium and the European Commission in all matters that directly concern the project.

The Administrative Support Group in charge of the administrative, financial, ethical and legal tasks associated with the project supports the Project Coordinator. More specifically, the Project Coordinator and the Administrative Support Group will be responsible for:

1. Project work plan;
2. Administrating the financial contribution from the European Commission. The Project Coordinator shall distribute the respective shares among the partners according to the Consortium Agreement and eventual decisions by the General Assembly. The Project Coordinator shall monitor all financial transactions in line with General Assembly and Consortium Agreement;
3. Monitoring the compliance by partners with their obligations under the Grant Agreement;
4. Ensure that the project is conducted in accordance with the ethical standards;
5. Preparing and providing the periodic reports and a final report. The content of these reports will be in agreement with the Grant Agreement and the reporting guidelines for H2020;
6. Reviewing and submitting reports and deliverables to the European Commission.

Work Package Leaders: WP leaders are responsible for the coordination of the work execution within work packages, making decisions concerning the start-up, the execution and the closure of work package activities within the respective WPs. The WP Leaders are in particular responsible for handling the dependencies and the interactions between the various work package activities, and shall therefore assemble and monitor activities on coordination, output, finance and time planning, and report accordingly to the Project Coordinator. This will enable the Project Coordinator to handle dependencies between the sub-projects. Finally, WP Leaders are responsible for presenting the results and other technical information to the Consortium. WP Leaders will be assigned by the partner in charge of the WP upon proposal to Project Coordinator.

The flowing list contains the names of WP Leaders:

1. Christian A. Klöckner (leader WP1)
2. Giuseppe Carrus (leader WP2)
3. Anca Sinea (leader WP3)
4. Mehmet Efe Biresselioğlu (leader WP4)
5. Andrea Kollmann (leader WP5)

6. Kalyan Ram Ayyalasomayajula (leader WP6)
7. Berit Nilsen (leader WP7)

The information flow in the ENCHANT consortium is presented in Figure 3.

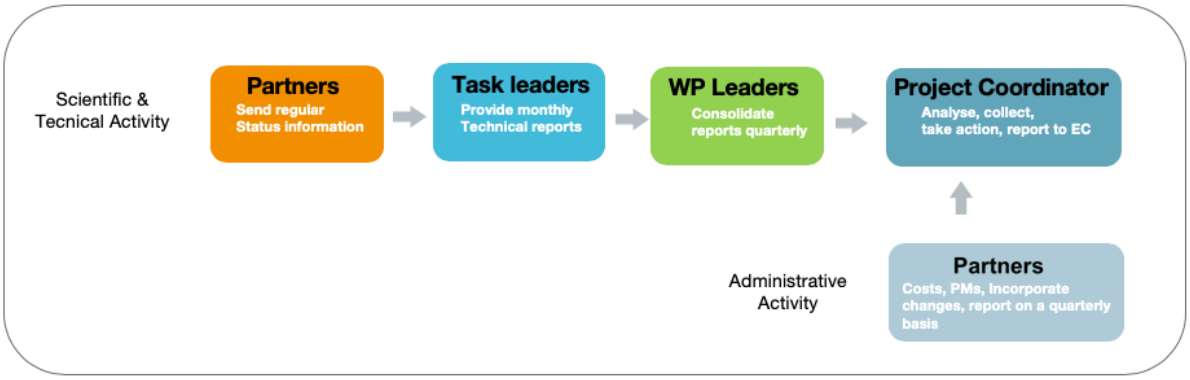

Figure 3 *Information flow in the ENCHANT consortium for project management*

1.5 Gender issues

Gender equality issues will be considered in the project management, implementation and dissemination activities, in accordance with the EC strategy on gender equality in R&I policy.

The project management, in particular the Data Management Plan (DMP), and the project implementation process will assure that the gender dimension and the perspective on vulnerable energy consumers are correctly built into interventions, surveys, and data collection in general. Specific attention will be paid to aspects such as income inequality, time use and preferences/values, which are areas one can expect to find major differences related to gender, in those processes.

The dissemination activities will consider the perspective of gender in several ways. During the visual design of the dissemination material, web page etc., a positive relation between female characters and energy will be established; A gender-neutral language will be sought; Gender-relevant findings of the project will be tagged as such on the project website and in press releases and other communications.

2. Project Structure

2.1. Project structure breakdown

In order to manage the complexity of ENCHANT's project activities, a strong coordination between different tasks and WPs is demanded. These tasks do not only depend directly on each other inside work packages, but the input from many tasks is also required in other WPs. The list of work packages is shown in Table 1. The information flow in the ENCHANT consortium is presented in Figure 4, which gives an overview of all work tasks that are part of the project. On the left side of the Figure, a list of WPs and all tasks included in each WP can be found. The right side of the Figure indicates the duration of each task (colour bars). For example, WP1, as well as Tasks 1.1 and 1.2 started in October 2020 and are completed at the end of December 2023. Figure 4 also includes the deliverables in each task and project milestones at their due dates (indicated with text inside the task bars).

Table 1 *List of work packages*

WP No.	WP Title	Lead Participant No.	Lead Participant Short Name	Person-Months	Start Month	End month
1	Project management, co-ordination and administration	1	NTNU	23	1	39
2	Development of intervention packages based on behavioural science input	2	Roma3	34	1	10
3	Re-analysis of existing data	4	UBB	28	3	32
4	Implementation and monitoring of all intervention pilots	3	IUE	35	7	32
5	Impact assessment and policy design	5	EI-JKU	33	3	38
6	Design of the web-based decision tool	6	SIN	24	17	39
7	User engagement, dissemination, and exploitation	7	NSR	23	1	39
				200		

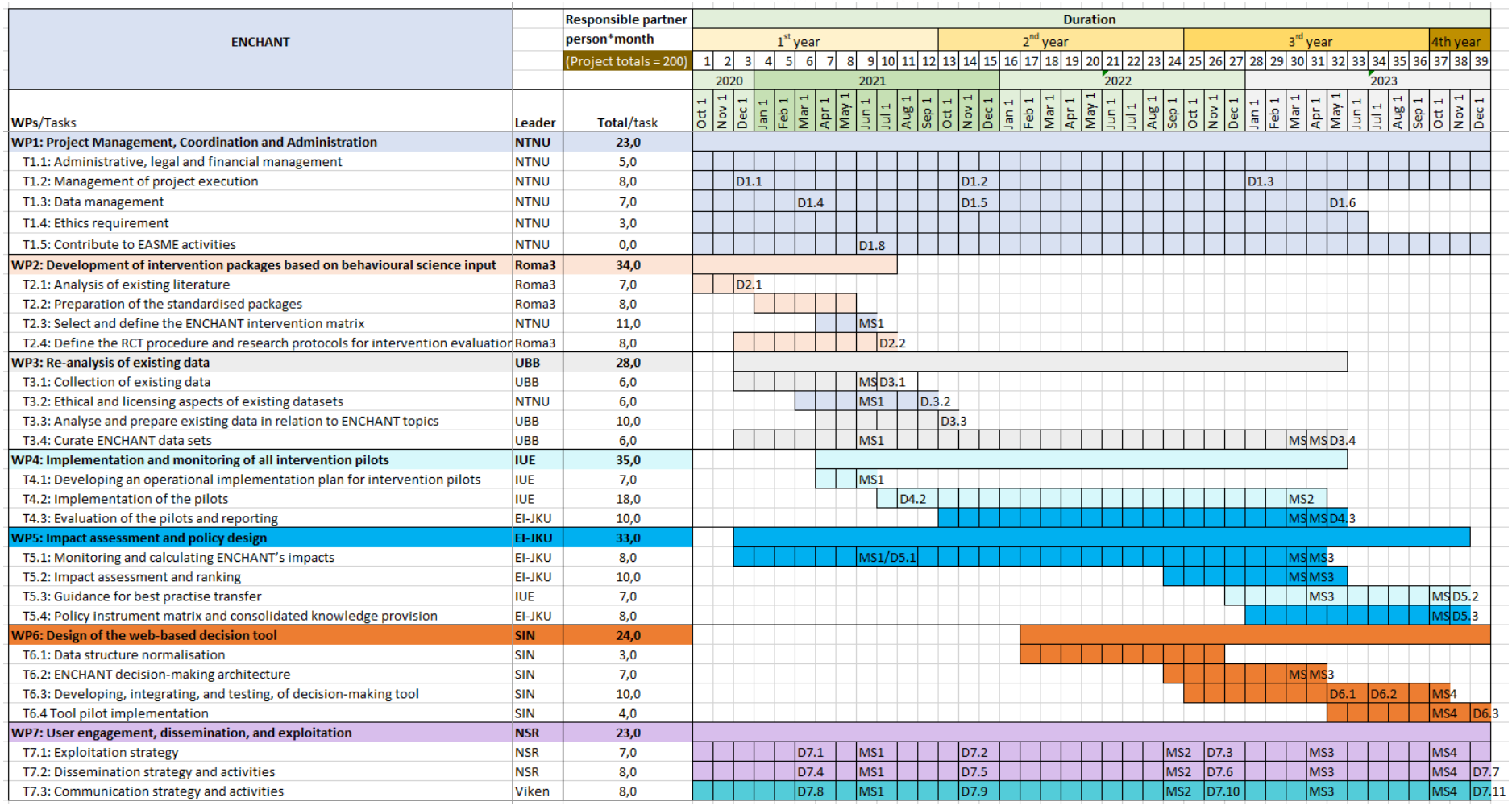

Figure 4 *Chart of ENCHANT's WPs, tasks and leaders of them, duration of tasks, dates for deliverables and milestones (updated to 39 month)*

2.2. Work packages and tasks descriptions

In the following subsections, objectives and description of tasks in each individual work packages are described in detail.

2.2.1 Work package 1: Project management, coordination and administration

WP title:	**Project Management, Coordination and Administration**								
WP No.	1								
Lead beneficiary	NTNU								
Work package leader	Christian Klöckner (NTNU)								
Start month	1								
End month	39								
Participant number:	1	2	3	4	5	6	7	8	9
Short name participant:	NTNU	Roma3	IUE	UBB	EI-JKU	SIN	NSR	IBB	GDZ
PM pr. participant:	10	1	1	1	1	1	1	0.5	0.5
Participant number:	10	11	12	13	14	15	16	17	18
Short name participant:	EKG	NNF	VIKEN	FONDA	ENPOS	EFSA	MCN	ACSD	BDNV
PM pr. participant:	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2

<u>Objectives</u>

The project management will guarantee the targeted and efficient development of the project objectives and covers the overall administration and co-ordination of the project. Furthermore, the project management will ensure the quality of the work and findings by a quality management system based on peer-review.

1. Ensure project progress: in terms of reaching project milestones and doing so in line with the ENCHANT Project Management Plan objectives;
2. Take care of the Data Management Plan (DMP), which will provide an effective framework for ensuring comprehensive collection and handling of the data used in the project. The DMP will comply with the open access strategy of H2020 while also ensuring the protection of the involved households' and individuals' data, information, and privacy rights; thereby contributing with Open Research Data wherever possible;
3. Day to day project management: including preparing and planning for General Assembly (GA) and steering group meetings, the facilitation – and control – of project resources, deliverables, and milestones.

Description of work and role of partners

Everyday management will be handled by NTNU, with contributions from all consortium partners. In addition to the everyday running of the project, including co-ordination of consortium contributions and contact with the European Commission, management will consist of the following elements:

1. GA and Steering group meetings;
2. Management of data, ethics, and gender;
3. Risk management;
4. Consortium follow-up;
5. Project Management Plan compliance control and work meetings;
6. Reporting to the European Commission, review meetings, and communication with EC.

The Project Management Plan requires the production of a large number of diverse deliverables, where one of the main tasks is to follow up the various consortium members in their production of deliverables in all WPs. This also helps to ensure that the project complies with its own Project Management Plan, and that it stays on track.

Throughout the lifetime of the project, a number of meetings within the consortium and workshops, including the Steering group, will be held. WP1 started with a project kick-off meeting and is responsible for bringing the project partners together in a shared understanding of methods and deliverables. Reporting on the progress of the project to funders, partners, and wider networks, is an essential element of ENCHANT – a task that also involves a proper feedback cycle, maintaining a link to external actors throughout the project's lifetime and beyond. This also helps anchor the project, and aids its implementation, and ultimately its impact. It falls on the WP leader to ensure that reporting is frequent and of high quality, and we see thorough documentation of all activities as contributing to the quality of the project both in terms of quality control and replicability and scale-up for future applications. Management of the project will be continuous throughout the project time.

Task 1.1: Administrative, legal, and financial management (M1-M39)

Task leader: NTNU

T1.1 will ensure the efficient legal and financial management of the project. It covers the establishment and maintenance of financial records, the planning and monitoring of expenses, and the co-ordination of cost claim submissions by the project participant organisations. Further, it includes preliminary checks of individual cost claims against known criteria, preparation of consolidated cost statements following the rules and format of the EC programmes, monitoring and follow-up of payments, and preparation of payment summaries to each participant, and global overview. It will prepare periodic

financial reports to support the Project Manager in the preparation of the Management Reports, financial chapters at the project management meetings, and annual reviews. This task will also organize all the necessary work and legal issues for contract management in the project. This covers the tracking of the project contract with the progress in the project to detect inconsistencies or problems, the proposal and preparation of contract amendments when necessary, the monitoring of the application of the Consortium Agreement, and the monitoring and coordination of all the actions related with intellectual property rights.

Personnel: Bård Li (NTNU), Sandra Pettersen (NTNU), Christian Klöckner (NTNU), Berit Therese Nilsen (NSR)

Task 1.2: Management of project execution (M1-M39)

Task leader: NTNU

T1.2 will carry out the overall project management and execution of the project. It will closely follow the project progress, co-ordinate the quality assurance functions, provide continuous risk assessment and – in case of problems – initiate the required corrective actions in close co-operation with the concerned partners. The scope of this task can be summarized in the following actions:

1. Monitoring the progress of the work, agreed deadlines, and milestones, of the time planning
2. Co-ordinating and monitoring the Work Package Leaders' work, and lower levels of the management hierarchy, following the defined task responsible
3. Anticipating potential critical situations, and proposing solutions
4. Quality control, and packaging of the deliverables based on the reports that will be provided as result of the actions
5. Preparing periodic reports, and organising project meetings with a periodicity of three months or whenever necessary

Personnel: Christian Klöckner (NTNU), Bård Li (NTNU), Berit Therese Nilsen (NSR)

Task 1.3: Data management (M1-M32)

Task leader: NTNU

A specific DMP will be written in the first six months of the project, detailing precisely the procedure for data collection, consent procedure, storage, protection, retention and destruction of data, and confirmation that they comply with national and EU legislation. The DMP will ensure that the exchange of data in ENCHANT is in full compliance with EU and national legislations, as well as with the participating user partners' internal data protection strategies. The DMP provides an effective framework to ensure comprehensive

collection and handling of the data used in the project and will evolve during the lifetime of ENCHANT. Wherever possible, ENCHANT thoroughly complies with the open access policy of H2020. ENCHANT beneficiaries will also check that the metadata of the publications is adequate for EU-funded projects. The underlying (aggregated) data will be made available as supplemental information, in a thematic repository or Zenodo, and mentioned in the main text of the publication

Personnel: Christian Klöckner (NTNU), Berit Therese Nilsen (NSR), Kirsten Sink (BDNV)

Task 1.4: Ethics requirement (M1-M33)

Task leader: NTNU

T1.4 will describe how the ENCHANT project meets the national legal and ethical requirements of the country or countries where the tasks raising ethical issues are to be carried out. In particular, the necessary tasks to comply with the EU General Data Protection Regulation (GDPR) will be addressed. Data acquired in the research work with human participants will be collected, retained, and processed, in pilot studies. The task will provide:

1. Copies of opinion or confirmation by the competent Institutional Data Protection Officer, and/or authorization or notification by the National Data Protection Authority (whichever applies according to the GDPR, and the national law);
2. Justification in case of collection and/or processing of sensitive personal data;
3. Information on the procedures that will be implemented for data collection, storage, protection, retention and destruction;
4. Confirmation that they comply with national and EU legislations. Norway and Türkiye as non-EU countries are involved, and the task will ensure that the project activities do not raise potential ethics issues. The ethical standards and guidelines of Horizon2020 will be rigorously applied, regardless of the country in which the research is carried out, and details on the material which will be imported to/exported from EU will be provided. There will be explicit description of personal data that will be – or is likely to be – collected in the project.

Personnel: Christian Klöckner (NTNU), Berit Therese Nilsen (NSR), Kirsten Sink (BDNV)

Task 1.5: Contribute to EASME/CINEA activities (M1-M39)

Task leader: NTNU

ENCHANT will participate and contribute, upon invitation by EASME/CINEA, to common information (like reporting on impact indicators) and dissemination activities to increase synergies between, and the visibility of H2020 and European Commission supported actions.

Personnel: Christian Klöckner (NTNU), Berit Therese Nilsen (NSR)

List of Deliverables

D1.1: Work plan version 1 (M3) (NTNU, report, public); delivered on time
D1.2: Work plan version 2 (M14) (NTNU, report, public); delivered on time
D1.3: Work plan version 3 (M28) (NTNU, ORDP: Open Research Data Pilot, public); delivered on time
D1.4: Data management plan version 1 (M6) (NTNU, ORDP: Open Research Data Pilot, public); delivered on time
D1.5: Data management plan version 2 (M14) (NTNU, ORDP: Open Research Data Pilot, public); delivered on time
D1.6: Data management plan version 3 (M32) (NTNU, Report, public)
D1.7: Ethics requirement (M6) (NTNU, ORDP: Open Research Data Pilot, public); delivered on time
D1.8: Progress report to EASME (M9) (NTNU, Report, public); delivered on time

2.2.2 Work package 2: Development of intervention packages based on behavioural science input

WP title:	**Development of intervention packages based on behavioural science input**								
WP No.	2								
Lead beneficiary	Roma3								
Work package leader	Giuseppe Carrus (Roma3)								
Start month	1								
End month	10								
Participant number:	1	2	3	4	5	6	7	8	9
Short name participant:	NTNU	Roma3	IUE	UBB	EI-JKU	SIN	NSR	IBB	GDZ
PM pr. participant:	4	10	2	3	2		1	1	1
Participant number:	10	11	12	13	14	15	16	17	18
Short name participant:	EKG	NNF	VIKEN	FONDA	ENPOS	EFSA	MCN	ACSD	BDNV
PM pr. participant:	1	1	1	1	1	1	1	1	2

Objectives

The objective of WP2 was to identify and define a standardised and replicable procedure for implementing behavioural interventions aimed at promoting the sustainable energy transition among individuals, groups, and communities.

1. Identify key factors affecting intervention impact on energy behaviour;

2. Design the intervention packages and the variables to be tested;
3. Define the protocols for standardised interventions for behavioural change to achieve standardisation, replicability, and comparability.

Description of work and role of partners

It is now widely accepted at the scientific and policy level that behavioural change in the domain of sustainable energy choices and green lifestyles can be promoted and steered through psychological interventions. To do so, however, a relevant knowledge gap still needs to be filled, in order to ascertain which behaviour interventions are the most successful, and under what circumstances these can be more effectively implemented. WP2 thus reviewed and systematised the existing theoretical models, empirical data, and best practices information about the implementation of psychological interventions aiming to steer and change human behaviours in relation to sustainable energy choices. It identified existing knowledge about psychological, social, and contextual drivers of energy choices and sustainable energy lifestyles in the European society, as well as how these factors can be more effectively addressed in practical interventions that may be implemented and scaled up. It did so at the level of European, national, and local institutions. WP2 prepared and set up the activity of the ensuing WPs in defining the protocols to be followed for different kinds of interventions that are to be implemented through a joint effort of academic and user-partners in the consortium (energy providers, municipalities, NGOs). The different interventions and protocol definitions were chosen through a collaborative and participatory co-construction process between the different consortium partners. A variety of methods were be used to reach a shared and mutually consensual protocol and strategy, ranging from archive and literature reviews to key informant interviews with focus groups, and small-scale simulation and piloting.

Task 2.1: Analysis of existing literature (M1-M3)

Task leader: ROMA3

T2.1 conducted a comprehensive review of existing behavioural interventions, drawing on established findings from previous projects where psychological science and behavioural insights have been more or less successfully applied to stimulate behavioural change in the domain of energy choices and sustainable lifestyles in general. T2.1:

- Looked at published studies, reviews and meta-analyses, and provided a synthesis of this literature body;
- Identified good and bad practices affecting interventions and the major contextual boundary conditions for more or less successful practices.

The main partners involved in task 2.1 were the task leader, ROMA 3, and additionally NTNU.

Personnel: Giuseppe Carrus (ROMA3), Lorenza Tiberio (ROMA3), Federica Caffaro (ROMA3), Stefano Mastandrea (ROMA3), Alim Nayum (NTNU), Stepan Vesely (NTNU), Berit Therese Nilsen (NSR), Jens Røyrvik (NSR), Lucia Liste (NSR), Vilde Steiro (NSR), Mehmet Efe Biresselioğlu (IUE), Andrea Kollmann (EI-JKU), Anca Sinea (UBB)

Task 2.2: Preparation of the standardised packages (M4-M8)

Task leader: ROMA3

T2.2 defined a set of standardised procedures and protocols to conduct effective behavioural interventions, to be conducted and assessed in the subsequent phases of the project, referring to one or more of the following typologies of interventions:

- Feedback
- Social norms
- Information
- Monetary
- Commitment
- Competition
- Individual/collective

All academic partners of the ENCHANT consortium were involved in T2.2.

Personnel: Giuseppe Carrus (ROMA3), Lorenza Tiberio (ROMA3), Federica Caffaro (ROMA3), Stefano Mastandrea (ROMA3), Alim Nayum (NTNU), Stepan Vesely (NTNU), Christian Klöckner (NTNU), Anca Sinea (UBB), Andreea Voina (UBB), Maria Popescu (UBB), Mehmet Efe Biresselioğlu (IUE), Muhittin Hakan Demir (IUE), Andrea Kollmann (EI-JKU), Johannes Reichl (EI-JKU), Ryan O'Reilly (EI-JKU), Lucia Liste (NSR), Vilde Steiro (NSR), Jasmin Steininger (BDNV), Kati Titus (BDNV)

Task 2.3: Select and define the ENCHANT intervention matrix (M7-M9)

Task leader: NTNU

T2.3 co-ordinated and involved both the academic and non-academic partners of ENCHANT in a series of participatory co-construction workshops to select and define the specific intervention matrix and the experimental research protocol necessary for their assessment. This was done via:

- Workshops addressing three types of user-partners to discuss the practical implications;
- Identification and evaluation of the main infrastructures and existing or potential policy scheme available for each different type of partner and for each different type of intervention to be implemented in ENCHANT.

All ENCHANT partners were involved in T2.3.

Personnel: Alim Nayum (NTNU), Stepan Vesely (NTNU), Christian Klöckner (NTNU), Giuseppe Carrus (ROMA3), Lorenza Tiberio (ROMA3), Federica Caffaro (ROMA3), Stefano Mastandrea (ROMA3), Anca Sinea (UBB), Andreea Voina (UBB), Maria Popescu (UBB), Mehmet Efe Biresselioğlu (IUE), Muhittin Hakan Demir (IUE), Andrea Kollmann (EI-JKU), Johannes Reichl (EI-JKU), Ryan O'Reilly (EI-JKU), Lucia Liste (NSR), Vilde Steiro (NSR), Ruhisu Can Al (IBB), George Jiglau (ACSD), Melania Lese (ACSD), Jasmin Steininger (BDNV), Kati Titus (BDNV)

Task 2.4: Define the RCT procedure and research protocols for intervention evaluation (M3-10)

Task leader: ROMA3

T2.4 defined and shared the main intervention protocols to be implemented in ENCHANT, as well as the experimental research procedures and RCT approaches to be used for their evaluation. T2.4 thus:

- Defined the main independent variables;
- Defined the implementation strategy and the main communication channels to be used;
- Defined the outcome indicators to be taken for monitoring and assessing the success of the interventions.

All academic partners of the ENCHANT consortium, plus at least three non-academic partners were involved in T2.4

Personnel: Giuseppe Carrus (ROMA3), Lorenza Tiberio (ROMA3), Federica Caffaro (ROMA3), Stefano Mastandrea (ROMA3), Alim Nayum (NTNU), Stepan Vesely (NTNU), Christian Klöckner (NTNU), Anca Sinea (UBB), Andreea Voina (UBB), Maria Popescu (UBB), Mehmet Efe Biresselioğlu (IUE), Muhittin Hakan Demir (IUE), Andrea Kollmann (EI-JKU), Johannes Reichl (EI-JKU), Ryan O'Reilly (EI-JKU), Lucia Liste (NSR), Vilde Steiro (NSR), Jasmin Steininger (BDNV), Kati Titus (BDNV)

List of Deliverables

D2.1: Literature review on energy-related behavioural interventions (M3) (ROMA3, report, public); delivered on time
D2.2: Design of intervention matrix and definition of RCT research protocol and short report on the construction process (M10) (ROMA3, report, public); delivered on time

2.2.3 Work package 3: Re-analysis of existing data

WP title:	**Development of intervention packages based on behavioural science input**								
WP No.	3								
Lead beneficiary	UBB								
Work package leader	Anca Sinea (UBB)								
Start month	3								
End month	32								
Participant number:	1	2	3	4	5	6	7	8	9
Short name participant:	NTNU	Roma3	IUE	UBB	EI-JKU	SIN	NSR	IBB	GDZ
PM pr. participant:	2	2	4	8	2	2	1	0.5	0.5
Participant number:	10	11	12	13	14	15	16	17	18
Short name participant:	EKG	NNF	VIKEN	FONDA	ENPOS	EFSA	MCN	ACSD	BDNV
PM pr. participant:	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2

Objectives

1. Collect all relevant data from user-partners and previous projects;
2. Handle the ethical and licensing aspects of existing datasets;
3. Analyse and prepare existing data in relation to ENCHANT topics;
4. Curate ENCHANT datasets.

Description of work and role of partners

One of the major challenges in developing a structured understanding of energy consumption patterns is the lack of available data. The design of intervention tools furthermore depends on a deeper understanding of the data that has been collected, as well as the challenges faced, so far. The main concern regarding existing data is to which extent it is reliable, accurate, statistically significant, replicable, etc. Methodological concerns are raised by the fact that large scale data collection is usually done by non-academic parties (e.g., energy providers and NGOs), at various levels and for a variety of purposes. The collection methodology is largely informed by the goal of collection, which might make it hard to use large data sets for comparative analytical purposes. Moreover, the data collection level varies greatly; in some countries it is systematically collected at national level, while in other countries it is only collected through local smaller-scale research projects. Finally, behavioural analysis is only conducted in some countries, while such data is unavailable in the majority of member states. This data heterogeneity makes structured comparison difficult, and thus limits our potential for inference, and necessitates the ENCHANT comparative assessment. However, some information is usable and may be scaled for ENCHANT's purposes. A thorough management of the databases and data analysis is necessary subsequent to ENCHANT's own data collection.

WP3 conducted a data review in order to make an inventory of all relevant data sets in order to inform the development of the information packages and pilots. WP3 will enable a triangulation of data, and better use of the ENCHANT data sets. To this end, it has collected and will collect data from both user-partners and previous projects. WP3 will also manage ENCHANT's own dataset by data collection (from partners within the project), data sorting and processing, and data analysis using inferential statistics. WP3 developed and deployed a methodology for data protection and ethical concerns.

Task 3.1: Collection of existing data (M3-M10)

Task leader: UBB

T3.1 collected all relevant data from user-partners and previous projects. T3.1 was performed through a chain referral method, based on enquiries of experts at national and European level. The objective is to establish a database of diverse sets of data, of various survey levels, and originating from a diverse set of stakeholders. Data will be examined with regards to their relevance to ENCHANT and selected accordingly. Data collection was performed in due accordance with European norms for data protection and based on confidentiality agreements with the respective stakeholders. The output of T3.1 consists of a data repository of all the ENCHANT-relevant data. A separate file of methodological overview was assembled in order to inform the methodological approach of the ENCHANT interventions.

All the ENCHANT partners were involved in T3.1.

Personnel: Anca Sinea (UBB), Andreea Voina (UBB), Maria Popescu (UBB), Alim Nayum (NTNU), Giuseppe Carrus (ROMA3), Lorenza Tiberio (ROMA3), Mehmet Efe Biresselioğlu (IUE), Muhittin Hakan Demir (IUE), Andrea Kollmann (EI-JKU), Johannes Reichl (EI-JKU), Ryan O'Reilly (EI-JKU), Lucia Liste (NSR), Vilde Steiro (NSR), Ruhisu Can Al (IBB), Corina Vasile (EFSA), George Jiglau (ACSD), Melania Lese (ACSD), Jasmin Steininger (BDNV), Kati Titus (BDNV)

Task 3.2: Ethical and licensing aspects of existing datasets (M6-M12)

Task leader: NTNU

In order to adhere to the current compliance standards, T3.2 conducted an overall assessment of key regulatory aspects within the European and national legislation in relation to all aspects of external datasets. Subsequently, T3.2 developed a methodology for handling external data and ensure that the ethical requirements defined by T1.4 are followed also for external datasets.

Personnel: Alim Nayum (NTNU), Anca Sinea (UBB), Andreea Voina (UBB), Maria Popescu (UBB)

Task 3.3: Analyse and prepare existing data in relation to ENCHANT topics (M7-M13)

Task leader: UBB

T3.3 re-analysed existing data sets, and studies on the topic of energy efficiency and consumer behaviour. This meta-analysis is a good starting point for further assessments of ENCHANT's own data sets. Based on the consolidated data set of previous projects (T 3.1), the re-analysis of existing data will necessitate efforts to integrate and process the disparate empirical sources, and then deploying a descriptive and inferential statistical analysis. There is a twofold output of this task. Firstly, the data repository from T3.1 was catalogued and processed into operational and accessible shape. Secondly, the descriptive and inferential analysis informed a data review of energy consumption behaviour to date, presented as a meta-analysis report.

Personnel: Anca Sinea (UBB), Andreea Voina (UBB), Clara Volintiru (UBB), Alim Nayum (NTNU), Stepan Vesely (NTNU), Christian Klöckner (NTNU), Lucia Liste (NSR), Vilde Steiro (NSR), Jasmin Steininger (BDNV), Kati Titus (BDNV)

Task 3.4: Curate ENCHANT data sets (M3-M32)

Task leader: UBB

In order to achieve a consolidated data set from ENCHANT interventions, T3.4 will deploy three activities: data collection within the consortium, data sorting and processing, and data analysis. Throughout the process, data integrity and security will be of paramount concern. The ethical guidelines developed in T3.2. will be applied.

UBB is the lead on T3.4 but input from all ENCHANT partners is considered.

Personnel: Anca Sinea (UBB), Andreea Voina (UBB), Clara Volintiru (UBB), Lucia Liste (NSR), Vilde Steiro (NSR), Jasmin Steininger (BDNV), Kati Titus (BDNV), Mehmet Efe Biresselioğlu (IUE), Muhittin Hakan Demir (IUE)

List of Deliverables

D3.1: Data repository of relevant data from user-partners and previous projects (M10) (UBB, report, public, database for internal use); delivered on time
D3.2: Ethical and data protection methodology of dataset management (M12) (NTNU, report, public); delivered on time
D3.3: Report on data review of energy behavioural data (M13) (UBB, report, public); delivered with 7 days delay due to sick leave in the writing team, agreed with PO
D3.4: Consolidated dataset from ENCHANT interventions (M32) (UBB, report, public)

2.2.4 Work package 4: Implementation and monitoring of all intervention pilots

WP title:	**Implementation and monitoring of all intervention pilots**								
WP No.	4								
Lead beneficiary	IUE								
Work package leader	Mehmet Efe Biresselioğlu (IUE)								
Start month	7								
End month	32								
Participant number:	1	2	3	4	5	6	7	8	9
Short name participant:	NTNU	Roma3	IUE	UBB	EI-JKU	SIN	NSR	IBB	GDZ
PM pr. participant:	4	2	10	2	2	1	2	1	1
Participant number:	10	11	12	13	14	15	16	17	18
Short name participant:	EKG	NNF	VIKEN	FONDA	ENPOS	EFSA	MCN	ACSD	BDNV
PM pr. participant:	1	1	1	1	1	1	1	1	2

Objectives

1. Test and fine-tune intervention packages;
2. Develop the operational plans for implementation;
3. Implement the intervention packages;
4. Establish monitoring mechanisms for follow-up and impact assessment.

Description of work and role of partners

WP4 concerns the implementation of the pilots for the intervention packages developed in WPs 2 and 3. The results of this work package will be used by WPs 5, 6, and 7.

Task 4.1: Developing an operational implementation plan for intervention pilots (M7-M9)

Task leader: IUE

T4.1 developed the guidelines, application principles, and an operational implementation plan for the pilots. This implementation plan includes identifying the suitable time slots for the user-partners, establishing communication and other relevant preliminary work for the implementations, the actual implementation, and a time-phased planning and execution of monitoring and follow-up mechanisms. The operational plan for implementation is based on a matching of the intervention packages with the user-partners, and the associated communication channels. The development of guidelines considers the technical compatibility, geographical fit, and the likelihood of attaining expected impact. T4.1 also suggested and implemented possible modifications of the

interventions, in order to fine-tune them for smoother implementation and desirable impact. The operational implementation plan also considers adopting and improving the intervention packages in order to ensure sufficient variety, which may enhance the replicability and reproducibility of interventions during the project, and beyond the project lifetime. The monitoring and follow-up mechanisms relies on the KPIs developed for the preparation, pilot, and post-implementation stages of the interventions, along with targets for the developed KPIs.

Personnel: Mehmet Efe Biresselioğlu (IUE), Muhittin Hakan Demir (IUE), Berfu Solak (IUE), Gozde Ceviker Cinar (IUE), Alim Nayum (NTNU), Stepan Vesely (NTNU), Christian Klöckner (NTNU), Giuseppe Carrus (ROMA3), Lorenza Tiberio (ROMA3), Jens Røyrvik (NSR), Berit Therese Nilsen (NSR), Jasmin Steininger (BDNV), Kati Titus (BDNV)

Task 4.2: Implementation of the pilots (M10-M31)

Task leader: IUE

T4.2 co-ordinates and implements the intervention pilots based on the experimental design developed in WP2, and the guidelines and operational plan developed in T4.1. In order to attain a coherent set of pilot implementations, guidelines for pilot implementations are followed and applied throughout all pilot interventions. The processes are also monitored during the preparation, pilot, and post-implementation stages. The monitoring and follow-up plans developed in T4.1 are used for this. Potential setbacks and problems identified during the implementations are handled through co-ordination with project partners. T4.2 also included the implementation of the intervention and survey platform under the lead of NTNU.

Personnel: Mehmet Efe Biresselioğlu (IUE), Muhittin Hakan Demir (IUE), Berfu Solak (IUE), Gozde Ceviker Cinar (IUE), Alim Nayum (NTNU), Stepan Vesely (NTNU), Jens Røyrvik (NSR), Berit Therese Nilsen (NSR), Jasmin Steininger (BDNV), Kati Titus (BDNV)

Task 4.3: Evaluation of the pilots and reporting (M13-M32)

Task leader: EI-JKU

T4.3 extracts the experience, and lessons learned, from the pilot implementations. It integrates information from different channels, and from three main sources: i) the feedback and information collected by the user-partners from the field, ii) the information collected through the established monitoring mechanisms, and iii) the information obtained through the co-ordination of different pilots in different geographical regions. i will reveal the operational aspects of the interventions, as well as pointers concerning their acceptance, replicability, and reproducibility. ii will be in the form of achievements for the KPIs defined for the preparation, pilot, and post-implementation stages. iii will enhance evaluations and cross-implementation comparisons. These will all be

documented through a report that will evaluate the effectiveness, and performance, of the implementation process and interventions. The results will be the foundation of WPs 5, 6, and 7.

Personnel: Andrea Kollmann (EI-JKU), Johannes Reichl (EI-JKU), Mehmet Efe Biresselioğlu (IUE), Muhittin Hakan Demir (IUE), Stepan Vesely (NTNU), Christian Klöckner (NTNU), Giuseppe Carrus (ROMA3), Lorenza Tiberio (ROMA3), Jens Røyrvik (NSR), Berit Therese Nilsen (NSR), Jasmin Steininger (BDNV), Kati Titus (BDNV)

List of Deliverables

D4.1: Guidelines and Operational Intervention Plan (M9) (IUE, report, public); delivered on time and revised after the periodic review
D4.2: Intervention Monitoring Plan (M11) (IUE, report, public); delivered on time and revised after the periodic review
D4.3: Evaluation Report on Pilot Implementations (M32) (EI-JKU, report, public)

2.2.5 Work package 5: Impact assessment and policy design

WP title:	**Impact assessment and policy design**								
WP No.	5								
Lead beneficiary	EI-JKU								
Work package leader	Andrea Kollmann (EI-JKU)								
Start month	3								
End month	38								
Participant number:	1	2	3	4	5	6	7	8	9
Short name participant:	NTNU	Roma3	IUE	UBB	EI-JKU	SIN	NSR	IBB	GDZ
PM pr. participant:	2	3	1	3	11	1	1	1	1
Participant number:	10	11	12	13	14	15	16	17	18
Short name participant:	EKG	NNF	VIKEN	FONDA	ENPOS	EFSA	MCN	ACSD	BDNV
PM pr. participant:	1	1	1	1	1	1	1	1	1

Objectives

WP5 has five main objectives:

1. Establishing KPIs related to the impact categories: WP5 takes care of the continuous measurement of ENCHANT's impacts (see Section 2 for details) and establishes KPIs to monitor and calculate them;
2. Assessing the impact of the interventions tested: WP5 assesses the tested interventions according to their impact on energy consumption and behaviour, environment effects (GHG, air pollutants, etc.), their social aspects (e.g. consumer acceptance, impact on household comfort and wellbeing, potential energy poverty mitigation) and economic effects (individual and societal). This analysis will look at short- as well as long-term effects;
3. Assessing the replicability, upscaling and limitations: WP5 will also assess how, and under which (national, regional, local) frameworks, the interventions can be replicated and/or scaled up. The related task also deals with influences or conditions that may limit the potential for replicability/upscaling and – wherever possible – will provide guidelines to overcome them;
4. Identifying barriers and success factors for the transfer of best practice: as a result of WP4, best practice interventions are identified, conditional on the target subject and the context (e.g. lifestyle changes, or increasing investments in RES, etc.). WP5 will assess these interventions in great detail to i) identify barriers and ways to overcome them, ii) describe success factors and how to tap into their potential and iii) provide guidance for how to transfer them into other situations/business branches/countries/regions;
5. Develop a policy instrument matrix to match the intervention matrix: based on the outcomes of all ENCHANT WPs, a policy instrument matrix will be developed, in which all promising interventions will be matched with policy-ready recommendations about how to implement them.

Description of work and role of partners

In order to achieve the five core objectives described above, WP5 is organized in four tasks.

Task 5.1: Monitoring and calculating ENCHANT's impacts (M3-M31)

Task leader: EI-JKU

For each impact of ENCHANT, T5.1 will establish KPIs. These KPIs are presented in a specific document which provides algorithms for their calculation (if measurable) or the information collection procedure (if not measurable), to be followed when planned, and when conducting the interventions. The KPI-document also provides detailed information

about the type, frequency, and measurement level, of the data that needs to be collected, the actual data collection procedure, as well as guidance on data safety and protection issues. The KPIs are then calculated, discussed, and presented in an updated version of the KPI report (D5.1).

Personnel: Andrea Kollmann (EI-JKU), Johannes Reichl (EI-JKU), Ryan O'Reilly (EI-JKU), Alim Nayum (NTNU), Vilde Steiro (NSR), Berit Therese Nilsen (NSR)

Task 5.2: Impact assessment and ranking (M24-M32)

Task leader: EI-JKU

The aim of T5.2 is two-fold: firstly, the impact of the interventions tested is assessed with regard to their impact on energy consumption and behaviour, environment effects (GHG, air pollutants etc.), their social aspects (e.g., consumer acceptance, impact on household comfort and wellbeing, potential energy poverty mitigation, cultural aspects) and economic effects (individual and societal). This analysis also provides an assessment of their short- as well as long-term effects, and factors influencing their persistence and sustainability. Secondly, T5.2 will assess the replicability, upscalability, and limitations of the interventions. The core goal of this analysis is to better understand how, and under which (national, regional, local) frameworks, the interventions can be replicated and/or scaled up. It also takes a close look at the influences or conditions that may limit the potential for replicability/upscalability and – wherever possible – will provide guidelines to overcome them. The assessments done in T5.2 all strive to provide as many quantitative results as possible, while using a mixed methods approach whenever qualitative assessment are the better tool, or no data is available for calculation. Thereby, T5.2 will also rank the interventions according to defined criteria. All data and information collected here will be directly fed into the web-based decision tool (see WP6).

Personnel: Andrea Kollmann (EI-JKU), Johannes Reichl (EI-JKU), Ryan O'Reilly (EI-JKU), Alim Nayum (NTNU), Stepan Vesely (NTNU), Giuseppe Carrus (ROMA3), Vilde Steiro (NSR), Berit Therese Nilsen (NSR)

Task 5.3: Guidance for best practice transfer (M27-M38)

Task leader: IUE

While T5.1 and T5.2 tackle all interventions tested, T5.3 will take a deeper dive into those interventions that are identified as best-practises. For these BPI (best-practise interventions) barriers and obstacles which prevent their smooth transfer are identified and ways/methods to overcome them are presented. Also, success factors for their transfer are pinpointed. Finally, T5.3 provides guidance for how to transfer the BPI into other situations/business branches/countries/regions.

Personnel: Mehmet Efe Biresselioğlu (IUE), Muhittin Hakan Demir (IUE), Berfu Solak (IUE), Gozde Ceviker Cinar (IUE), Stepan Vesely (NTNU), Giuseppe Carrus (ROMA3), Vilde Steiro (NSR), Berit Therese Nilsen (NSR), Kirsten Sink (BDNV)

Task 5.4: Policy instrument matrix and consolidated knowledge provision (M28-M38)

Task leader: EI-JKU

T5.4 will develop a policy instrument matrix, which will match the intervention matrix. This policy instrument matrix will also filter the intervention matrix according to defined criteria and provided the user with policy instruments adequate for increasing the interventions' positive and sustainable effects. This policy instrument will also show critical factors required for the actual implementations. Finally, and following a workshop held to establish consensus about the priority factors that need to be considered in future policymaking with relation to the interventions tested, T5.4 will also derive how to best exploit the knowledge generation of ENCHANT (including the knowledge on the intervention platform) in light of policymaking. This is done through continuously interacting with stakeholders and considering the political decision-making processes as well. We foresee a pronounced and steady consultation process having two workshops as milestones, while also continuously monitoring the swiftly changing European energy policy situation.

Personnel: Andrea Kollmann (EI-JKU), Johannes Reichl (EI-JKU), Mehmet Efe Biresselioğlu (IUE), Muhittin Hakan Demir (IUE), Alim Nayum (NTNU), Giuseppe Carrus (ROMA3), Vilde Steiro (NSR), Berit Therese Nilsen (NSR)

List of Deliverables

D5.1: KPI report (M9) (EI-JKU, report, public); delivered on time and revised after the periodic review;
D5.2: The report "How to transfer BPIs?" (M38) (EI-JKU, report, public)
D5.3: Policy instrument matrix and policy-ready recommendations (M38) (EI-JKU, report, xlsx-file, public)

2.2.6 Work package 6: Design of the web-based decision tool

WP title:	**Design of the web-based decision tool**								
WP No.	6								
Lead beneficiary	SIN								
Work package leader	Kalyan Ram Ayyalasomayajula (SIN)								
Start month	17								
End month	39								
Participant number:	1	2	3	4	5	6	7	8	9
Short name participant:	NTNU	Roma3	IUE	UBB	EI-JKU	SIN	NSR	IBB	GDZ
PM pr. participant:	2	1	1	1	1	10	1	0.5	0.5
Participant number:	10	11	12	13	14	15	16	17	18
Short name participant:	EKG	NNF	VIKEN	FONDA	ENPOS	EFSA	MCN	ACSD	BDNV
PM pr. participant:	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2

Objectives

The main purpose of WP6 is to design a decision-making tool for policymakers, energy providers, NGOs, and municipalities and to implement this tool as a web-based, easy-access interface. Three detailed objectives are specified:

1. Design the high-level architecture of the decision-making tool: Transferring the data from WP2- WP5 and supplement the quantitative analyses in WP3 and WP5 for the purpose of designing the recommender system (identifying user types, intervention types, and relations between the two);
2. Develop and train the recommender system algorithm. The algorithm needs to make a trial based on an initial sample first to learn and will then be tested based on the implementation intervention results after the trial experiences;
3. Validating the decision-making tool in the pilots. With strong involvement from user-partners, the tool will be adjusted to meet the needs of the specific user groups and tested in the pilot environments. A strategy for maintaining the tool after the project outline will be developed and fed into the exploitation strategies developed in WP7.

Description of work and role of partners

Task 6.1: Data structure normalisation (M17-M26)

Task leader: SIN

After obtaining the relevant data sources from WP2, WP3, WP4, and WP5, the first work within this task is to conduct an analysis of the data structure with a specific focus on the

needs of building the recommender system. Data will be transferred from the other WPs and transformed to be suitable for the recommender building process. This includes a normalization process and checking data quality to be able to better utilise and exploit the data for the resulting AI algorithm. The different data received in these tasks are user profiles, intervention profiles in the intervention matrix, intervention implementation results, and the KPIs per user group and intervention type. As part of the normalization and structuring process, one of the steps in this task is to transfer these data sources into the right quantitative data format that suits the structure of the following decision-making tool. The second step after data formatting is to identify the relationships among the interventions and users. Five similarity criteria will be used in this step: item or interventions similarities, user similarities, cosine similarities, Pearson correlation coefficients, and Spearman correlation coefficients. The key factors implemented in the decision tool will be decided based on these results. Data security and appropriate data management routines for this step will be defined in WP1 with contribution from WP6.

Personnel: Kalyan Ram Ayyalasomayajula (SIN), Lucia Liste (NSR), Jens Røyrvik (NSR)

Task 6.2: ENCHANT decision-making architecture (M24-M31)

Task leader: SIN

Based on the results from Task 6.1, this task aims to design the high-level architecture of the decision-making tool, which has the main purpose to provide the top-N decision suggestions to policymakers, energy providers, NGOs, and municipalities. The methodology of recommender systems will be applied here as outlined in the method section. This will make predictions about user responses based on the historical data sources (data from the pilots provided by WP5 and data from secondary sources provided by WP3) and provide recommendations to the target users. The two most popular approaches within the recommender system community (Content-based and Collaborative Filtering) will be used to build the recommender system. Based on the five similarity criteria outlined in Task 6.1, suggestions will be provided. In addition, the advantages and disadvantages of the decision-making tool will be also analysed in this task, identifying under which boundary conditions the decision tool is applicable.

Personnel: Kalyan Ram Ayyalasomayajula (SIN), Christian Klöckner (NTNU), Lucia Liste (NSR), Jens Røyrvik (NSR), Jasmin Steininger (BDNV), Kati Titus (BDNV)

Task 6.3: Developing, integrating, and testing of decision-making tool (M25-M37)

Task leader: SIN

Two main sub-tasks will be addressed within this task:

1. Developing and testing of algorithms
   When the higher-level architecture is defined in Task 6.2, the algorithm of the decision-making tool will be developed and trained. Sample datasets will be used to train the initial algorithm. Enabling intervention factors, disabling intervention factors, and KPIs will be treated separately for pilots connected to energy providers, NGOs, and municipalities. Since the data sources are collected from six countries that have different policy and regulation requirements, the algorithms will be tested for these six countries and provide the relevant recommendations. Then the algorithms will be validated on new datasets.
2. Systems Integration
   The decision-making tool will be tested within the existing frameworks at the pilot locations. Where possible, data sharing mechanism and APIs will be implemented to enable integrations with real-world systems for increased exploitation. These integrating mechanisms and interfaces will be provided in the overall architecture of the tool and will be an essential part of the exploitation strategy developed in WP7.

Personnel: Kalyan Ram Ayyalasomayajula (SIN), Christian Klöckner (NTNU), Lucia Liste (NSR), Jens Røyrvik (NSR)

Task 6.4: Tool pilot implementation (M32-M39)

Task leader: SIN

The decision-making tool will be implemented into the pilot and the results will be further analysed. Three main sub-tasks need to be specified:

1. Ensuring data privacy and security through actions identified in WP1
   This work will implement the relevant data privacy and security measures as developed in WP1 in the ENCHANT decision-making tool architecture. This will require strong involvement from the user-partners, for example where data privacy regulations regard historical data. The security requirements will be defined during the design of the high-level architecture and decision-making tool implementation in close collaboration with WP1.

2. Validation of decision-making tool
   This work aims to implement the decision-making tool with a web-based interface. Validation results from Task 6.3 will be used to adjust the design of the tool. User-partners will be strongly engaged in this design step. A strategy for maintenance of the tool after the project lifetime will be also developed as part of the business and exploitation plans sketched in WP7.

Personnel: Kalyan Ram Ayyalasomayajula (SIN), Lucia Liste (NSR), Jens Røyrvik (NSR), Jasmin Steininger (BDNV), Kati Titus (BDNV), Mehmet Efe Biresselioğlu (IUE), Muhittin Hakan Demir (IUE)

List of Deliverables

D6.1: A demo of the tool, demonstrating the tool functions based on data samples (M32) (SIN, algorithm, documentation report, public)
D6.2: Report about the design of decision-making tool (M34) (SIN, report, public)
D6.3: Documentation of the final implementation of the web-tool (M39) (SIN, report, web-tool, public)

2.2.7 Work package 7: User engagement, dissemination, and exploitation

WP title:	**User engagement, dissemination, and exploitation**								
WP No.	7								
Lead beneficiary	NSR								
Work package leader	Berit Nilsen (NSR)								
Start month	1								
End month	39								
Participant number:	1	2	3	4	5	6	7	8	9
Short name participant:	NTNU	Roma3	IUE	UBB	EI-JKU	SIN	NSR	IBB	GDZ
PM pr. participant:	1	0.5	0.5	0.5	0.5	0.5	8	0.5	0.5
Participant number:	10	11	12	13	14	15	16	17	18
Short name participant:	EKG	NNF	VIKEN	FONDA	ENPOS	EFSA	MCN	ACSD	BDNV
PM pr. participant:	0.5	0.5	5	0.5	0.5	0.5	0.5	0.5	2

Objectives

This WP's objectives are to facilitate a rapid, efficient and widespread uptake of ENCHANT's results, as well as facilitate for the stakeholders' involvement in knowledge production and dissemination.

1. To derive a multimedia platform for presentation of ENCHANT throughout the project's period and beyond;
2. To derive a strategy for effective communication, dissemination and exploitation of the ENCHANT results to all relevant stakeholder groups;
3. To monitor the impact of ENCHANT, initiate, and steer dissemination and activities.

Description of work and role of partners

Work in this WP involves all partners and careful strategies running through the project, to make sure the process of dissemination, communication and exploitation are taken seriously and in order to capitalize on the fact that we have a large and integrated participation of user-partners.

Task 7.1: Exploitation strategy (M1-M39)

Task leader: NSR

A specific exploitation strategy for the full project's lifetime has been designed in the first 6 months including yearly operational plans detailing precisely the procedure for using ENCHANT's results. The strategy was updated in M14 and in M26. A final update will be included in the updates at the end of the project. The strategy includes: a refined stakeholder and market analysis for the project's outcomes; key messages towards stakeholders, audiences, and target groups; selection of tools, channels, and measures; communication and dissemination strategies and activities; management of exploitation; and standard operating procedures for publications, participation in conferences and exploitation. The strategy for the exploitation of results supports the consortium's joint efforts to maximize the project's impact, but also business plans for individual partners. Additionally, to the conclusions in forms of policy recommendations and proposals for actions, which are the direct outputs of the ENCHANT, the following are some of potential pathways for exploiting the project's results:

1. Scientific publications under the green or golden open access scheme;
2. Continued management and exploitation of the project's data;
3. Action plans for municipalities and regions involved in energy efficiency strategies;
4. Data on user preferences and energy efficiency strategies for utilities and other commercial agents in the energy field;
5. Methodologies for citizen participation in the planning and implementation of energy efficiency measures.

The exploitation strategy will only consider foreground derived from the project, background is protected by the Consortium Agreement and cannot be included in the business plans, unless the partner, who owns the background, specifically agrees to this in written.

In the final update of the deliverable, a detailed exploitation strategy for the intervention and survey platform will be developed together with the company programming and maintaining the platform. This will include commercial and non-commercial plans for using the platform for scientific projects and by user partners such as municipalities, electricity providers, and NGOs to run energy saving campaigns.

Personnel: Berit Nilsen (NSR), Christian Klöckner (NTNU), Kai Titus (BDNV), Mehmet Efe Biresselioğlu (IUE), Muhittin Hakan Demir (IUE)

Task 7.2: Dissemination strategy and activities (M1-M39)

Task leader: SNR

The consortium has established a high-level strategy to disseminate the project's findings and to engage stakeholders. This task aims to further elaborate that strategy and then proceed with its implementation. The dissemination strategy will be carried out by the following subtasks: Dissemination Plan. This activity will be devoted to the design of a communication strategy to maximize the impact of the dissemination efforts. This development will be based on the four basic pillars of the communication strategy:

1. Definition of the dissemination objectives;
2. Identification of the target audiences;
3. Description of the dissemination activities to be carried out;
4. Identification and selection of the specific tools and activities supporting effective communication with all the relevant stakeholders

Once the dissemination strategy had been completed it was possible to move to a second phase where the identified communication and dissemination tools will be developed (social media, newsletters, brochures, leaflets, interactive videos, demonstrative presentations, attending relevant seminars and organising local workshops, etc.). These tools and contents will be developed considering the different audiences, objectives, and actions to which they provide supporting materials. The dissemination strategy was drafted in M6 and then updated in M14 and M26. A final update will be conducted in M39.

Personnel: Berit Therese Nilsen (NSR), Martin Solberg Norderhaug (VIKEN), Christian Klöckner (NTNU), Jasmin Steininger (BDNV), Mehmet Efe Biresselioğlu (IUE), Muhittin Hakan Demir (IUE)

Task 7.3: Communication strategy and activities (M1-M39)

Task leader: Viken

The communication and dissemination strategy set out how the results, stories and lessons learned in ENCHANT are communicated to relevant audiences and stakeholders most efficiently and effectively. The development of the communication strategy follows three steps:

1. Stocktaking
- the stakeholder and communication landscape relevant to ENCHANT is screened;
- relevant actors, communication platforms and stakeholders are mapped;
- a network analysis of existing social media channels is conducted.
2. Assessment
   The assessment identifies pathways and opportunities for ENCHANT to place its own messages by taking into account the communication capacity of the project partners, existing access to relevant communities, the rhythm of the project output and planned project deliverables.
3. Planning
   Planning sketches out the concrete steps to be taken to achieve the ENCHANT communication targets, e.g., which social media channels are to be set up, activities for how to collaborate with other projects.

The communication strategy is responsive and adaptive. A first draft was presented in M6 with an update in M14 and M26. A final update will be provided in M29. The updates are based on evaluations of completed communication tasks and activities. To facilitate the evaluations, the communication strategy specifies its own key performance indicators such as number of visitors on the website, number of downloads of key publications, number of newsletter subscribers, number of connections on LinkedIn, or number of retweets on Twitter. The communication and dissemination in ENCHANT will take place in English. However, as it is a project which closely engages with local populations and stakeholders, there is also a need for communication in national languages. The communication strategy takes this into account and identifies key communication products that are translated into the languages of the reference cases. One example might be the project flyer. NSR and VIKEN create an English template that is then translated and distributed by the local research and practice partners.

Personnel: Guri Bugge (VIKEN), Martin Solberg Norderhaug (VIKEN), Jens Røyrvik (NSR), Berit Therese Nilsen (NSR), Christian Klöckner (NTNU), Kirsten Sink (BDNV), Jasmin Steininger (BDNV), Kati Titus (BDNV), Mehmet Efe Biresselioğlu (IUE), Muhittin Hakan Demir (IUE)

List of Deliverables

D7.1: Exploitation strategy version 1 (M6) (NSR, report, public); delivered on time
D7.2: Exploitation strategy version 2 (M14) (NSR, report, public); delivered on time
D7.3: Exploitation strategy version 3 (M26) (NSR, report, public); delivered on time
D7.4: Dissemination strategy and activities version 1 (M6) (NSR, report, public); delivered on time
D7.5: Dissemination strategy and activities version 2 (M14) (NSR, report, public); delivered on time
D7.6: Dissemination strategy and activities version 3 (M26) (NSR, report, public); delivered on time
D7.7: Dissemination strategy and activities version 4 (M39) (NSR, report, public)
D7.8: Communication strategy and activities version 1 (M6) (VIKEN, report, public); delivered on time
D7.9: Communication strategy and activities version 2 (M14) (VIKEN, report, public); delivered on time
D7.10: Communication strategy and activities version 3 (M26) (VIKEN, report, public); delivered on time
D7.11: Communication strategy and activities version 4 (M39) (VIKEN, report, public)

3. Deliverables and Standards

3.1 General overview of the deliverables

All document deliverables from the ENCHANT's project will be given a dedicated document number. All updates of documents shall be posted to the project Microsoft Teams site and old versions shall be stored in a dedicated folder called "Archive". Table 2 summarizes the information on all deliverables that are part of ENCHANT. The lead participant, document type (either report or Open Research Data Pilot [ORDP]), dissemination level and due date of each deliverable are indicated in the table. Table 3 instead shows the deliverables ordered by date of due submission.

Table 2 *Deliverables by WP responsible for delivery*

ID	Title	WP No.	Lead Participant	Type	Level	Delivery date	
D1.1	Work Plan version 1	1	NTNU	Report	Public	31.12.2020	✓
D1.2	Work Plan version 2	1	NTNU	Report	Public	30.11.2021	✓
D1.3	Work Plan version 3	1	NTNU	ORDP	Public	31.01.2023	✓
D1.4	Data Management Plan version 1	1	NTNU	ORDP	Public	31.03.2021	✓
D1.5	Data Management Plan version 2	1	NTNU	ORDP	Public	30.11.2021	✓
D1.6	Data Management Plan version 3	1	NTNU	Report	Public	31.05.2023	
D1.7	Ethics requirement	1	NTNU	ORDP	Public	31.03.2021	✓
D1.8	Progress report to EASME	1	NTNU	Report	Public	30.06.2021	✓
D2.1	Literature review on energy-related behavioural interventions	2	ROMA3	Report	Public	31.12.2020	✓
D2.2	Design of intervention matrix and definition of RCT research protocol and short report on the construction process	2	ROMA3	Report	Public	31.07.2021	✓
D3.1	Data repository of relevant data from user-partners and previous projects	3	UBB	Report	Public	31.07.2021	✓

D3.2	Ethical and data protection methodology of dataset management	3	NTNU	Report	Public	30.09.2021	✓
D3.3	Report on data review of energy behavioural data	3	UBB	Report	Public	07.11.2021	✓
D3.4	Consolidated dataset from ENCHANT interventions	3	UBB	Report	Public	31.05.2023	
D4.1	Guidelines and Operational Intervention Plan	4	IUE	Report	Public	30.06.2021	✓
D4.2	Intervention Monitoring Plan	4	IUE	Report	Public	31.08.2021	✓
D4.3	Evaluation Report on Pilot Implementations	4	EI-JKU	Report	Public	31.05.2023	
D5.1	KPI report	5	EI-JKU	Report	Public	30.06.2021	✓
D5.2	Report: "How to transfer BPIs?"	5	IUE	Report	Public	30.11.2023	
D5.3	Policy instrument matrix and policy-ready recommendations	5	EI-JKU	Report, xls file	Public	30.11.2023	
D6.1	A demo of the tool, demonstrating the tool functions based on data samples	6	SIN	Report	Public	31.05.2023	
D6.2	Report about the design of decision-making tool	6	SIN	Report	Public	30.07.2023	
D6.3	Documentation of the final implementation of the web-tool	6	SIN	Report, web-tool	Public	31.12.2023	
D7.1	Exploitation strategy version 1	7	NSR	Report	Public	31.03.2021	✓
D7.2	Exploitation strategy version 2	7	NSR	Report	Public	30.11.2021	✓
D7.3	Exploitation strategy version 3	7	NSR	Report	Public	30.11.2022	✓

D7.4	Dissemination strategy and activities version 1	7	NSR	Report	Public	31.03.2021	✓
D7.5	Dissemination strategy and activities version 2	7	NSR	Report	Public	30.11.2021	✓
D7.6	Dissemination strategy and activities version 3	7	NSR	Report	Public	30.11.2022	✓
D7.7	Dissemination strategy and activities version 4	7	NSR	Report	Public	31.12.2023	
D7.8	Communication strategy and activities version 1	7	VIKEN	Report	Public	31.03.2021	✓
D7.9	Communication strategy and activities version 2	7	VIKEN	Report	Public	30.11.2021	✓
D7.10	Communication strategy and activities version 3	7	VIKEN	Report	Public	30.11.2022	✓
D7.11	Communication strategy and activities version 4	7	VIKEN	Report	Public	31.12.2023	

Table 3 *Deliverables by date of due submission*

ID	Title	WP No.	Lead Participant	Type	Level	Delivery date	
D1.1	Work Plan version 1	1	NTNU	Report	Public	31.12.2020	✓
D2.1	Literature review on energy-related behavioural interventions	2	ROMA3	Report	Public	31.12.2020	✓
D1.4	Data Management Plan version 1	1	NTNU	ORDP	Public	31.03.2021	✓
D1.7	Ethics requirement	1	NTNU	ORDP	Public	31.03.2021	✓
D7.1	Exploitation strategy version 1	7	NSR	Report	Public	31.03.2021	✓
D7.4	Dissemination strategy and activities version 1	7	NSR	Report	Public	31.03.2021	✓
D7.8	Communication strategy and activities version 1	7	VIKEN	Report	Public	31.03.2021	✓

D1.8	Progress report to EASME	1	NTNU	Report	Public	30.06.2021	✓
D4.1	Guidelines and Operational Intervention Plan	4	IUE	Report	Public	30.06.2021	✓
D5.1	KPI report	5	EI-JKU	Report	Public	30.06.2021	✓
D2.2	Design of intervention matrix and definition of RCT research protocol and short report on the construction process	2	ROMA3	Report	Public	31.07.2021	✓
D3.1	Data repository of relevant data from user-partners and previous projects	3	UBB	Report	Public	31.07.2021	✓
D4.2	Intervention Monitoring Plan	4	IUE	Report	Public	31.08.2021	✓
D3.2	Ethical and data protection methodology of dataset management	3	NTNU	Report	Public	30.09.2021	✓
D3.3	Report on data review of energy behavioural data	3	UBB	Report	Public	07.11.2021	✓
D1.2	Work Plan version 2	1	NTNU	Report	Public	30.11.2021	✓
D1.5	Data Management Plan version 2	1	NTNU	ORDP	Public	30.11.2021	✓
D7.2	Exploitation strategy version 2	7	NSR	Report	Public	30.11.2021	✓
D7.5	Dissemination strategy and activities version 2	7	NSR	Report	Public	30.11.2021	✓
D7.9	Communication strategy and activities version 2	7	VIKEN	Report	Public	30.11.2021	✓
D7.3	Exploitation strategy version 3	7	NSR	Report	Public	30.11.2022	✓
D7.6	Dissemination strategy and activities version 3	7	NSR	Report	Public	30.11.2022	✓

D7.10	Communication strategy and activities version 3	7	VIKEN	Report	Public	30.11.2022	✓
D1.3	Work Plan version 3	1	NTNU	ORDP	Public	31.01.2023	✓
D1.6	Data Management Plan version 3	1	NTNU	Report	Public	31.05.2023	
D3.4	Consolidated dataset from ENCHANT interventions	3	UBB	Report	Public	31.05.2023	
D4.3	Evaluation Report on Pilot Implementations	4	EI-JKU	Report	Public	31.05.2023	
D6.1	A demo of the tool, demonstrating the tool functions based on data samples	6	SIN	Report	Public	31.05.2023	
D6.2	Report about the design of decision-making tool	6	SIN	Report	Public	30.07.2023	
D5.2	Report: "How to transfer BPIs?"	5	IUE	Report	Public	30.11.2023	
D5.3	Policy instrument matrix and policy-ready recommendations	5	EI-JKU	Report, xls file	Public	30.11.2023	
D6.3	Documentation of the final implementation of the web-tool	6	SIN	Report, web-tool	Public	31.12.2023	
D7.7	Dissemination strategy and activities version 4	7	NSR	Report	Public	31.12.2023	
D7.11	Communication strategy and activities version 4	7	VIKEN	Report	Public	31.12.2023	

3.2 Deliverable submission process

An executive summary should be included as part of each deliverable. Deliverables must use the template for reports available on the ENCHANT's Microsoft Teams space. Scientific citations in Deliverables must follow the Harvard citation standard (see here: https://www.mendeley.com/guides/harvard-citation-guide). Deliverables must be uploaded to the Participant Portal at their expected dates (see Table 2). Please inform the Project Coordinator of any delay in advance with good time to take action. The Project Coordinator will in turn inform the Project Officer. The status of the deliverable in the Participant Portal is "Pending" when a deliverable has not been uploaded yet. When the status is displayed with a red background it means that the estimated delivery date has passed.

(i) The progress and due dates of the deliverables will be closely monitored in the monthly WP leader meetings. The partner in charge of the Deliverable will work closely with the respective WP Leader. 30 days before the deadline they will receive a notification; WP Leader will have maximum 10 days to share a draft of the Deliverable with the Project Coordinator and all the Consortium Members through the project communication platform, i.e., ENCHANT's Microsoft Teams.

(ii) Consortium Members will have also 7 days to make their contributions. In addition, two internal reviewers will be identified for every deliverable to provide feedback. The Project Coordinator will also comment on the deliverable draft at this stage. The Project Coordinator will pay special attention to the opinion of the related contributors.

(iii) The partner in charge of the Deliverable and the WP Leader will have maximum 10 days to integrate the contributions and upload the final version of Deliverable to the project communication platform, i.e., ENCHANT's Microsoft Teams to be accepted by the Project Coordinator.

(iv) In case of agreement, the Project Coordinator will upload the final version of Deliverable to the Participant Portal and submit; in case of disagreement, the Project Coordinator will first ask the WP leader to revise the deliverable and/or seek a second opinion from the General Assembly.

What happens after a deliverable has been submitted?
Upon submission, each deliverable will be reviewed by CINEA (The European Climate, Infrastructure and Environment Executive Agency), and can be either accepted, rejected, or reopened.

3.3 Quality assurance

The purpose of the quality assurance procedure is to safeguard the quality of the deliverables, in terms of scientific standards and consistency. The authoring party of each deliverable should use their own process of quality assurance of the documents (e.g., internal reviews by other project partners, see 3.2). Task 1.2 (Management of project execution) will closely follow the process and coordinate quality assurance functions and packaging of the deliverables based on the reports that will be provided as result of the actions. The quality assurance process, i.e., issues related to format and style, coherence and content review, will be carried out rigorously. Templates available on ENCHANT's Microsoft Teams space must be followed.

Task 7.2 (Dissemination strategy and activities) lead by NSR, with collaboration of all partners, will define the format and style for ENCHANT's documents. Procedures for information and documentation management will be further specified and elaborated in D7.2 (Dissemination strategy and activities). However, task 7.2 has defined a template for the ENCHANT reports already in M3, which is mandatory for all reports published in ENCHANT to create a uniform corporate identity of the project.

In terms of correct language use and readability, the tasks and the deliverables will pay attention to coherence, i.e., generating coherent documents. In this regard, special attention will be given to the coherent and consistent use of key terms. Further, each deliverable will be assigned a designated editor and member of the partner responsible of the deliverable to make sure coherence of the document.

In order to ensure the quality of the content of each deliverable, an internal peer-review scheme will be applied, i.e., content review. With close collaboration of WP Leader, the Project Coordinator will also be involved in the content review process.

All reports use Harvard citation style.

4. Meeting Schedule

4.1 About ENCHANT meetings

The steering group meets virtually, when it does not coincide with the General Assembly, every six months to steer ENCHANT's activities and monitor the progress. The consortium has scheduled three physical and three virtual General Assemblies in total, including a final conference, which will be led by the Project Coordinator institution and another academic partner in the consortium, in the course of the project. Monthly WP leader meetings are held virtually to update status of the work tasks as well. Both steering group meetings and monthly WP leader meetings will be organized by the Project Coordinator. Other scheduled meetings include two EU review meetings, workshops within the consortium as well outside the consortium, where researchers, industry stakeholders, local authorities, citizens associations and environmental activists, will be invited to develop and provide inputs for the practical recommendations for the project.

The host partner is responsible for establishing the agenda of the meeting (with the approval of the Project Coordinator and the contribution of the other members), conduct the meeting and take minutes and/or video recordings that will be taken for every meeting. These minutes will be considered the main reference document for deadlines, agreed action points, etc.

Minimising travel emissions

The members of this consortium know each other well, which enables us to communicate efficiently using channels that do not rely on us physically meeting each other. It also ensures that the project administration runs smoothly. ENCHANT will prioritise forms of communication that do not necessitate travel wherever this is possible – i.e., where it will not compromise the quality of communication. Because of the geographical diversity, the project will strive to minimise emissions where possible, and pursue alternative communication channels with creativity and innovation.

4.2 Meeting schedule within the consortium

Table 4 lists the scheduled meetings within the consortium, with the lead organizer (second column), participants (third column), date (fourth column) and place where the meeting will be held (last column).

Table 4 *Consortium meetings*

Meetings	Lead organizer	Participants	Date	Place
General Assemblies:				
1st General Assembly	NTNU	All partners	21-23 Oct 2020	virtual
2nd General Assembly	NTNU/EI-JKU	All partners	22-24 Feb 2022	virtual
3rd General Assembly	NTNU/EI-JKU	All partners	19-20 May 2022	Linz, Austria
4th General Assembly	NTNU	All partners	12-13 Dec 2022	virtual
5th General Assembly	NTNU/ FONDA	All partners	1-2 Mar 2023	Ninfa Gardens, Italy
Final conference and 6th General Assembly	NTNU	All partners	Nov 2023	Trondheim, Norway
Steering group meetings:				
Virtual half year meeting	NTNU	Steering Committee	23 Oct 2020	virtual
Virtual half year meeting	NTNU	Steering Committee	21 Apr 2021	virtual
Virtual half year meeting	NTNU	Steering Committee	26 Nov 2021	virtual
Virtual half year meeting	NTNU	Steering Committee	24 Feb 2022	virtual
Half year meeting	NTNU	Steering Committee	20 May 2022	Linz, Austria
Virtual half year meeting	NTNU	Steering Committee	13 Dec 2022	virtual
Half year meeting	NTNU	Steering Committee	02 Mar 2023	Ninfa Gardens, Italy
Half year meeting	NTNU	Steering Committee	Nov 2023	Trondheim, Norway
Work meetings:				
Monthly WP Leader meetings (virtual)	NTNU	WP leader group	every second Wednesday in a month	virtual
EU review meeting 1/2	NTNU	WP leaders & EC	23/24 Jun 2022	virtual
EU review meeting 2/2	NTNU	WP leaders & EC	tba	Brussels/virtual

internal workshops:				
WP1 workshops	NTNU	All partners	21-23 Oct 2020	Virtual
WP2 workshops	ROMA3	Academic partners	8 Mar 2021	Virtual
WP3 workshops	UBB	Academic partners	30 Mar 2021	Virtual
WP7 workshops	NSR	All partners	11 Dec 2020	Virtual
WP5 workshops	EI-JKU	All partners	18 Oct 2021	virtual
WP6 workshops	SIN	Academic partners	March 2022	Halden, Norway
WP1 workshops	NTNU	Academic and industry	May 2022	Virtual
WP4 workshops	IUE	Academic and industry	February 2022	virtual
WP4 workshops	IUE	Academic and industry	January 2022	Virtual

4.3 Meeting schedule outside the consortium

Table 5 lists the scheduled meetings with partners outside the consortium, with the lead organizer, participants, date, and place where the meeting will be held. In addition, in the last column we state the aim of the meetings briefly.

Table 5 *Meetings outside the consortium*

Partner	Event	Date	Where	Audiences
NTNU	Behavioural insights to inform energy policy / network meeting	11.02.2021	Virtual	Policy makers (national, EU), Science
NTNU, NSR, ROMA3,	ICEP conference (http://icep2021.com/)	5-8.10. 2021	Siracusa, Italy	Science
UBB	City council meetings	2020 – 2021	Cluj-Napoca	Policy makers (local)
BDNV	Testing Communication Channels-Pontos	12.03.2021	Virtual	Industry, public
BDNV	Cooperation ENCHANT - Green Renovation	8.3.2021	Virtual	Industry, public
BDNV	Participation in Street Festival in Klimaquartier Waldsee	2.10.2021	Freiburg im Breisgau	Public, industry, policy makers (national, local)
UBB	National Research Conference	5.11.2021	Bucharest, Romania	Science

NTNU	LIFE platform meeting on New European Bauhaus	15-17.11.2021	Brussels/online	Science
NTNU	Policy and Knowledge sharing event for Climate Neutrality projects (CINEA)	08.12.2021	Online	Policy makers (EU), science
NTNU	ECEEE summer study 2022	6-11.06.2022	Hyères, France	Science, policy makers (local, national, EU), industry, NGO
UBB	Subiecte Capitale	03.03.2022	Online	Science
Viken	Emission-free days 2021	22.09.2022	Sarpsborg	Policy makers (local, national), science, public
VIKEN	Youth Climate Day	19.05.2022	Buskerud County	Policy makers (local, national), science, public
IUE	SKGA Meeting	22.02.2021	Izmir	Science, policy makers (national, local)
IUE	SKGA Meeting	March 2021	Izmir	Science, policy makers (national, local)
IUE	SKGA Meeting	September 2021	Izmir	Science, policy makers (national, local)
BDNV	TestCommunity Event: Energy efficiency in private households	21.07.2022	Online	Industry, public
BDNV	TestCommunity Event: E-mobility for private households	25.08.2022	Online	Industry, public
BDNV	TestCommunity - Mini-PV	15.09.2022	Breisach	Industry, public
BDNV	Sustainability in SME	23.08.2022	Online	Industry
BDNV	Energy efficiency in SME	22.09.2022	Online	Industry
CSD	Several ORSE meetings	Early 2022	Online and phsyical	Academic

UBB	Kick-off meeting for DO IT SMARTER project	26.05.2022	Hybrid	Policy makers (local), Industry, academic, NGO
UBB	Workshop for the ENGAGER research network	09-12.09.22	Helsinki	Policy-makers (Local, EU), Energy experts,
UBB	Conference within ENGAGER research network	11-13.04.2022	Budapest	Policy makers, Experts, public
Viken	Tech demonstration	29.10.2020	Fredrikstad	Policy makers (Local)
Viken	Klima Østfold committee meeting	01.12.2020		Policy makers (Local)
Viken	Klimarådsmøtet – Climate advisory meeting	09.03.2021		Policy makers (local)
Viken	Klimarådsmøtet – Climate advisory meeting	06.04.2022		Policy makers (local)
Viken	Mayors in Østfold meeting	20.10.2021		Policy makers (local)
Viken	Klima Viken Kick-off event	November 2021		Policy makers (local)
Viken	Information meeting with Klimapartnere Viken	31.05.22		Industry
Viken	Markens Grøde agricultural fair	12.07.22	Rakkestad, indre Østfold	Policy makers (Local, national), industry, Organizations, Public
Viken	Webinar on climate communication	15.01.21	Online	Policy makers, organizations, public
Viken	County meeting with Romanian Counties	19.09.22	Drammen	Policy makers (local)
Viken, BDNV	Panel debate on EU sustainable energy week 2022	29.09.22	Brussels	Public, policy makers
IUE, Gediz energy company	Intervention strategy meeting	March 2021	Izmir	Industry
IUE, Gediz energy company	Intervention strategy meeting	September 2021	Izmir	Industry

IUE	Meeting in Sustainable Urban Development Network	February, 2021	Izmir	Public
IUE	Policy maker launch event	15.03.21	Izmir	Policy makers, Public
UBB, EFSA, CSD, C-Nm	20 project meetings	Oct 2020 – September 2022	Izmir	Policy makers, Industry, science
CSD	Meeting on data protection and free speech - Ceelli institute	28-30.03.2022	Prague	NGOs, Experts, Science,
UBB	ENTREC days event	25-27.05.22	Berlin	Energy experts, NGOs
Viken	Webinar on How to save energy in agriculture	08.12.2020	Online	Public
Viken	Meeting with municipalities in former county Østfold	04.05.2021		Industry, public
Viken	Project presentation	17.06.2021	Hybrid	Industry, public

5. Information and Documentation Management

5.1 Documentation management tool

The Project Coordinator provides to all project participants access and user support to a common project management tool through the Microsoft Teams application for control of project documents and information, including project procedures.

All document deliverables from the ENCHANT project will be given a dedicated document number as appointed by the Project Coordinator. All updates of documents shall be posted to the project site and old versions shall be stored in a dedicated folder called "Archive". The authoring party of each document must use their own process of quality assurance of the documents (e.g., internal reviews by other project partners). Deliverable 7.2 (Dissemination strategy and activities) further specifies and elaborates on procedures for information and documentation management.

Intellectual property rights (IPR)

All scientific outputs (reports, papers, conference presentations, etc.) as well as the tool developed in the project are intellectual property of the involved partners. They will be made available for open access at the end of the project given proper reference to the IPR holders. Rules for intellectual property management will be defined in the Consortium Agreement, e.g., with respect to author rights in publications. The IPR of the intervention and survey platform lie at NTNU and at the programmers of the platform (NRGsurf). At the end of the project, a detailed exploitation plan, including a business plan will be developed for how to make the platform available for further use.

5.2 Information exchange

A transparent flow of information across WP's will be ensured by adopting the following measures:

- Use of a website restricted to the Consortium members (organised through the knowledge sharing platform interface Microsoft Teams);
- A platform for virtual meetings (Microsoft Teams) and webinars (zoom webinar) will be provided for the partners by the Coordinator and the Administrative Support Group, to ensure day-to-day collaboration between the partners on all hierarchical levels;
- All deliverables from the project are available to project participants;

- All WP and WP leader meetings will be open to all Consortium members. Minutes from all project meetings will be available to the Consortium;
- Establishment of a discussion forum between the WP Leaders where information flows are discussed.

5.3 Internal communication

Internal communication will primarily take place via email. Separate mailing lists have been generated for the Steering Group, the General Assembly and all partners involved in ENCHANT. Through the respective mailing list, the Steering Group and the General Assembly will maintain the necessary communication and coordination in order to prepare the necessary inputs for the General consortium Assemblies. The general mailing list, composed of email addresses of all researchers involved in ENCHANT, enables users to share and discuss project work and processes, to facilitate project activities, to disseminate project results, and to be involved in issues that affect the consortium. These mailing lists are available on ENCHANT's Microsoft Teams platform for all involved partners in ENCHANT.

6. Risk Management and Conflict Resolution

6.1 ENCHANT milestones and critical risks

A number of risks are relevant to the project, which might cause delay in achieving milestones (see Table 6) and, in the worst case, partially jeopardize the project. At MS1 "Interventions defined", the project has reached the point where the intervention matrix is defined, all external data has been collected and handled ethically, the plan for the operationalization of the pilots has been completed and monitoring has started. At MS2 "Interventions implemented", the intervention packages have been successfully implemented, ethical and practical issues with data gathering is handled, and the process of defining the architecture of the tool has been started. At MS3 "Data Secured", the data gathering has been successfully completed and we are finished with the beta version of the tools decision-making architecture. At MS4 "Tool and Policies Complete", the analysis is finished, and we have arrived at the ENCHANT policy instrument matrix. The tool is also finished and operable on the project website.

Table 6 *List of ENCHANT milestones*

Milestone number	Milestone name	Related tasks	Due date (in month)	Means of verification
MS1	Interventions defined	2.3, 3.1, 3.2, 3.4, 4.1, 5.1, 7.1-3	9 (reached as planned)	An internal document of the intervention design has been circulated
MS2	Interventions implemented	3.4, 4.2, 4.3, 5.1, 5.2, 6.2, 7.1-3	30	All user-partners have rolled out their intervention packages
MS3	Data secured	3.4, 4.3, 5.1-3, 6.1, 6.2, 7.1-3	31	All evaluation data from the cases has been received and curated
MS4	Tool and policies complete	5.3, 5.4, 6.3, 6.4, 7.1-3	37	The web-tool is operative on the project website

Also, in a project that involves different organizations, it is likely that problems occur with respect to the collaboration and joint execution of work packages. It is important that potential risks are clearly identified and assessed, and that recoverable actions and procedures are defined that can be instantiated, if needed. Since risks may occur at any time in the project development, a constant risk monitoring activity is implemented by the coordinator and updated monthly in the WP leader meetings. During the initial project phase, a detailed list of risks and associated project impacts, as well as potential activities to manage these risks, has been prepared as part of this work plan (see Table 7). Risks will be classified with respect to their probability of turning into a real problem (low, medium, high), the possible impact (low, medium, high) and a strategy to eliminate or reduce the

Table 7 *Critical risks for implementation risk related to WPs*

Description of risk *(indicate level of likelihood: Low/Medium/High)*	**WP**(s)	**Proposed risk-mitigation measures**
Delays in respect of the established timetable in order to achieve the results and deliverables scheduled *(likelihood: medium)*	WP1	An experienced project manager has been assigned the role of Project Coordinator. An internal monitoring of the project will be established, with a periodic exchange of information among the partners and the co-ordinator. It will allow to timely act to ensure the respect of the timetable or to solve technical and methodological problems that might arise as the activities progress. Frequent virtual and physical meetings will also support intense communication among partners and the co-ordinator will support the partners in solving possible problems.
Dependencies between tasks lead to unexpected delays in the project progression (*likelihood: medium)*	WPs 1-7	The dependencies of tasks have been carefully considered when the project structure has been defined. Nevertheless, it will be closely monitored and revised, if necessary, in due time before problems arise to avoid those problems in one task jeopardize progression of the whole project.
Consensus about the intervention packages not reached. (*likelihood: low)*	WP2	The interventions are identified from the beginning of the project, and the work of tailor-making the packages and setting up the experiments will be handled in close collaboration between scientific experts and the user-partners that are to implement them.
Ethical issues with existing data causing delays in gathering and analysing them. (*likelihood: low)*	WP3	Experienced researchers and experts on ethical issues are included in the consortium to focus on this issue as early as possible – and throughout the project.
Delays in implementing the interventions (*likelihood: medium)*	WP 4	The user-partners responsible for the actual implementation are integrated in all aspects of the project (including writing the proposal, discussing interventions and relevance of the different interventions). In addition to this, the cases in each country will be attributed to a native speaking scientific partner responsible for the preparation, follow-up and completion of all implementation activities.
Low response rates and/or	WPs 4,5	We have prepared a variety of methods and strategies for collecting data. These will be elaborated on and adapted

response bias in empirical data collections *(likelihood: medium)*		to the different cases in order to get the most and best possible data. All involved partners will utilise their extensive experience to select the recruitment methods that result in the best possible response.
Translation of data collection materials to local languages introduces a bias to the data *(likelihood: low)*	WPs 3-5	All data collection materials will be constructed in English and translated to the local languages by professional translators. Back-translation procedures will be implemented to guarantee the best possible congruence between the different language versions.
Bureaucratic problems that may slow down the data collection *(likelihood: medium)*	WPs 3-5	Utilise the business network to speed the process, and include more resources (manhours) into the data collection
Not sufficiently active participation of relevant stakeholders, i.e. high-level policymakers *(likelihood: medium)*	WPs 2,5,7	Informal contacts of the ENCHANT partners have already investigated the interest in such foresight activities among the related stakeholders, and therefore we are confident to establish an exceptional stakeholder group for the respective consultation process.
Sufficient communication between the project and external core actors not established *(likelihood: low)*	WP7	Establish direct, personal communication with the external core actors as early as possible.
Since the monitoring approach will be developed in WP5 and is not defined yet, it might happen that no comparable monitoring can be established. *(likelihood: low)*	WP5	The project starts early with developing the KPIs for the monitoring process, harmonizes them across the different cases and proposes a first framework in month 9 before the implementation of the interventions in the cases.

project's top risks. In case a risk related to research and technological development cannot be eliminated or reduced, a fall-back strategy will be defined. Both technical and organizational risks will be covered. Table 7 displays a list of potentially critical issues identified by the consortium.

6.2 Conflict resolution

The Consortium Agreement (CA) will govern the settlement of internal disputes. As a general principle, any conflicts that cannot be resolved at one level or below may be resolved at a higher level in the project organisation. This means that conflicts within work packages should be resolved by the WP Leader or if needed by the Project Coordinator or ultimately by the Consortium in a General Assembly (if need, it will be an extraordinary GA).

The Project Coordinator will aim to resolve the conflict between all parties involved so that the issue need not progress any further. If it is not possible for the Project Coordinator to reach an amicable agreement between the parties and the situation does not affect the contractual arrangements between partners, the issues will be discussed and resolved by the Steering Committee taking into account the contents established not only in the DoA but also in the Consortium Agreement.

Where resolution of conflicts may affect the contractual arrangements within the project, proposed solutions as identified by the SC will be sent to the European Commission for approval, prior to notifying the consortium of the likely outcome.

The Consortium Agreement governs the relationship between the various partners of ENCHANT. It also specifies the legal and administrative responsibilities between the partners. Knowledge management and protection are also part of the Consortium Agreement.

7. Cost and Schedule Management

The objectives of cost and schedule management include planning the expenses and resources for the project, as well as the identification of possible deviations from planned costs and the time plan, and the proposal of corrective actions that will ensure that the project is completed within the given time and financial constraints.

Timely and accurate reporting is a key part of the cost and schedule management. The Project Coordinator is responsible for reporting to the European Commission at each reporting period. In addition, all partners must submit their own financial and cost reports to the European Commission through the Participant Portal.

Major changes to the project schedule and project manpower plan must be confirmed by all affected parties, including the Project Coordinator. Minutes of meetings shall be provided for all meetings where cost and schedule management are on the agenda. Failure to comply with the agreed project schedule and the respective consequences are regulated by the grant agreement and consortium agreement.

7.1 Distribution of budget and person months (PMs)

The underlying structure of the ENCHANT project is that the main activities are centred around developing (WP2, 17% of total PMs, and WP3, 14% of total PMs), implementing (WP4, 18% of total) and evaluating (WP5, 17% of total) the interventions. ENCHANT has such a strong focus on exploiting the results that the tool (WP6, 12% of total PMs) and dissemination, communication and exploitation (WP7, 12% of total PMs) also have a proportionate share of resources allocated. Finally, the management of a project (WP1, 12% of total PMs) has been given enough resources to deal with challenges and to facilitate the work to be done. The consortium consists of partners and individuals who know each other well from previous related H2020 projects, and who will therefore be able to effectively support all administrative and formal matters of the project.

All partners are provided with appropriate PMs according to their role and competences. WP leaders are provided with additional PMs for their respective WPs, relative to the overall size of their WP. All non-academic partners are provided with PMs (5 PMs per user partner) to participate throughout the project. Badenova has been allocated additional PMs as they are responsible for managing the implementation administration of broader engagement meetings in Germany in addition to their own implementations. Viken County has been allocated extra PM as they manage task 7.3 (Communication strategy and activities).

The summary of the project effort in person-months is presented in the following Table 8.

Table 8 *Summary of staff effort in person-months (PMs)*

	WP1	WP2	WP3	WP4	WP5	WP6	WP7	**Total PMs**
NTNU	10	4	2	4	2	2	1	**25**
ROMA3	1	10	2	2	3	1	0.5	**19.5**
IUE	1	2	4	10	1	1	0.5	**19.5**
UBB	1	3	8	2	3	1	0.5	**18.5**
EI-JKU	1	2	2	2	11	1	0.5	**19.5**
SIN	1	0	2	1	1	10	0.5	**15.5**
NSR	1	1	1	2	1	1	8	**15**
IBB	0.5	1	0.5	1	1	0.5	0.5	**5**
GDZ	0.5	1	0.5	1	1	0.5	0.5	**5**
EKG	0.5	1	0.5	1	1	0.5	0.5	**5**
NNF	0.5	1	0.5	1	1	0.5	0.5	**5**
VIKEN	0.5	1	0.5	1	1	0.5	5	**9.5**
FONDA	0.5	1	0.5	1	1	0.5	0.5	**5**
ENPOS	0.5	1	0.5	1	1	0.5	0.5	**5**
EFSA	0.5	1	0.5	1	1	0.5	0.5	**5**
MCN	0.5	1	0.5	1	1	0.5	0.5	**5**
ACSD	0.5	1	0.5	1	1	0.5	0.5	**5**
BDNV	2	2	2	4	1	2	3	**16**
Total PMs	**23**	**34**	**28**	**37**	**33**	**24**	**24**	**203**

7.2 Major non-personnel cost items

The ENCHANT survey and standardized intervention platform effort is coordinated and administrated in WP5, while the scientific design of the questionnaires and the ancillary choice experiments are defined in WPs 2 and 4. The data from the survey and intervention platform will feed into tasks in several of ENCHANT WPs. The subcontracting is requested exclusively to cover the costs of technical development of the platform and the field work for carrying out the ENCHANT survey and intervention effort. This effort comprises a household-level pre-post survey, meant to provide insights into how people make their energy-related decisions and to identify how interventions can increase social acceptance of the energy transition. This survey simultaneously takes place in 6 countries with 5 different languages. The budgeted cost for the survey service is 100,000 euro, representing around 5% of the ENCHANT total and approximately 34 % of non-personnel costs for project as a whole. Emphasis is put on hiring a company that specialize in the above-mentioned tasks and that has a proven track record of multi-national efforts to ensure the highest quality statistics. We will collect at least three quotes for the field work and apply a rigorous best-value-for-money selection procedure for ensuring effective and

efficient subcontracting. In relation to including the standardized intervention provision in the survey platform and moving the translation of text and recruitment of participants over to the project beneficiaries, the partners agreed on the following roles:

Country	**Selection of target behaviour**	**Selection of tips**	**Translation**	**Recruitment**
Austria	Energy institute, energie kompass	Energy institute, energie kompass	Energy institute, energie kompass	energie kompass
Germany	Badenova / NTNU	Badenova / NTNU	NTNU/ Badenova	Badenova
Italy	Roma3 / Fonda, energia positiva	Roma3 / Fonda, energia positiva	Roma3 / Fonda, energia positiva	Fonda, energia positiva, Roma 3
Norway	VIKEN, NNF/NTNU	VIKEN, NNF/NTNU	VIKEN, NNF/NSR	VIKEN, NNF
Romania	UBB, Cluj-Napoca, electrica, ACSD	UBB, Cluj-Napoca, electrica, ACSD	UBB, Cluj-Napoca, electrica, ACSD	Cluj-Napoca, electrica, UBB, ACSD
Türkiye	IUE, Gediz, Izmir municipality	IUE, Gediz, Izmir municipality	IUE, Gediz, Izmir municipality	Gediz, Izmir municipality
English version	*NTNU, all*	*NTNU, all*	*n/a*	*n/a*

The total costs of 100,000€ are estimated from previous experiences made in H2020 project ECHOES (GA# 727470, completed in Oct 2019). There, costs of the subcontract for receiving completed questionnaires from 18,000 households were 143,000€, while ENCHANT aims to collect answers from at least 10,000 households. Incorporating scale effects for collecting answers from higher number of households, considering the fix costs involved, costs of 100,000€ are expected in course of the ENCHANT survey. Any additional budget available will be put towards improving the quality and size of the survey samples.

Badenova is assigned 22.400 Euro other costs for organizing and promoting workshops, as well as promoting the intervention and survey platform to members of KPO and the City of Freiburg. This includes costs for rent of a meeting room, catering, design and print of communication material, and costs for online and analogue advertisements.

The coordinator retains the budget for hosting costs domestic travels for implementing interventions and facilitating workshops and travel budget for external speakers to first and final General Assembly explaining the relative high share of other direct costs for NTNU. The hosting and travel budget will be allocated to the beneficiaries that assume the responsibility of hosting the General Assemblies, facilitate workshops and interventions.

The partner NSR is the leader of WP7. In this WP, costs connected to the following dissemination actions are placed with the WP leader: Printing of brochures, leaflets, role-ups – 1500 Euro; production of (interactive) videos – 6000 Euro; production of

demonstrative presentation material – 2000 Euro; attending relevant seminars – 3000 Euro (2 seminars x 1person x 1500 Euro). The summary of other direct cost items is presented in the following Table 9.

Table 9 *Other direct cost items*

Partner: NTNU	Costs	Justification
Travel	26,150	Conference attendance, 5 trips, 1 person, 1,250 EUR/person, 5*1*1,250=6,250 EUR Intervention implementation, 6 countries, 3 trips per country, 1 person, 300 EUR/person, 6*3*1*300 = 5400 EUR Project meetings, 4 trips, 1 person, 1250 EUR/person: 4*1*1250 = 5000 EUR Kick-off meeting, General Assembly, and final meeting – 3 trips – 2 persons travelling, 1250 EUR/person: 3*2*1250 = 7500 Review meeting 2 trips, 1 person, 1000 EUR/person: 2*1*1000=2000 EUR
Equipment		
Other goods and services	13,910	5 conference fees, each 250EUR. 5*250=1,250EUR Catering for review meetings, 2 meetings, 11 persons, 30 EUR / person: 2*11*30 = 660 EUR Catering / hosting costs for co-construction workshops: 60 personal total, 200 EUR per person: 60*200 EUR = 12000 EUR
Total	40,060	
Partner: IBB	**Costs**	**Justification**
Travel	3,750	Kick-off meeting, General Assembly, and final meeting – 3 trips – 1 person travelling, 1250 EUR/person: 3*1*1250 = 3750
Equipment		
Other goods and services		
Total	3,750	
Partner: GDZ	**Costs**	**Justification**
Travel	3,750	Kick-off meeting, General Assembly, and final meeting – 3 trips – 1 person travelling, 1250 EUR/person: 3*1*1250 = 3750
Equipment		
Other goods and services		
Total	3,750	
Partner: FONDA	**Costs**	**Justification**
Travel	3,000	Kick-off meeting, General Assembly, and final meeting – 3 trips – 1 person travelling, 1000 EUR/person: 3*1*1000 = 3000
Equipment		

Other goods and services		
Total	3,000	
Partner: ENPOS	**Costs**	**Justification**
Travel	3,000	Kick-off meeting, General Assembly, and final meeting – 3 trips – 1 person travelling, 1000 EUR/person: 3*1*1000 = 3000
Equipment		
Other goods and services		
Total	3,000	
Partner: EFSA	**Costs**	**Justification**
Travel	3,000	Kick-off meeting, General Assembly, and final meeting – 3 trips – 1 person travelling, 1000 EUR/person: 3*1*1000 = 3000
Equipment		
Other goods and services		
Total	3,000	
Partner: MCN	**Costs**	**Justification**
Travel	3,000	Kick-off meeting, General Assembly, and final meeting – 3 trips – 1 person travelling, 1000 EUR/person: 3*1*1000 = 3000
Equipment		
Other goods and services		
Total	3,000	
Partner: ACSD	**Costs**	**Justification**
Travel	3,000	Kick-off meeting, General Assembly, and final meeting – 3 trips – 1 person travelling, 1000 EUR/person: 3*1*1000 = 3000
Equipment		
Other goods and services		
Total	3,000	
Partner: BDNV	**Costs**	**Justification**
Travel	3,000	Kick-off meeting, General Assembly, and final meeting – 3 trips – 1 person travelling, 1000 EUR/person: 3*1*1000 = 3000
Equipment		
Other goods and services	22,400	Organization of five workshops (3 digital and 2 physical): - Room rent & catering for the two physical workshops (5.300 Euro) - Communication materials (1.300 Euro) - Online advertisement costs (1.600 Euro) - Analog advertisement costs (2.500 Euro) Promotion of the intervention platform to members of KPO and citizens of the City of Freiburg:

		- Communication materials (700 Euro) - Online advertisement costs (5.000 Euro) Analog advertisement costs (6.000 Euro)
Total	25,400	

Appendices

Appendix I: About the consortium

The consortium consists of eighteen partners, seven of which are academic partners, and 11 of which are user-partners. To cover a broad range of contexts relevant for European energy choices we have chosen to include partners from across Europe, from Northern Europe (Norway), via Central Europe (Austria, Germany), to Eastern (Romania) and Southern Europe (Italy and Türkiye). This geographical diversity allows us to tap into the different dynamics of people's various energy behaviour that can be expected across the continent.

In this respect, ENCHANT's academic and user-partners have been chosen with the intention of establishing a group that has the collective academic and practical capacity to meet ENCHANT objectives. The project is coordinated (WP1) by NTNU (Norway), who brings a team into ENCHANT which is highly competent in the disciplinary field of behavioural psychology, on which both the theory and methodology of the project rests.

ENCHANT further consists of leading research institutions in their respective disciplines, all with a strong history of energy-related studies. The University of Rome (ROMA3, Italy), which leads WP2, has a solid reputation within environmental and social psychology. Together with NTNU, they constitute the core competence within the field of behavioural psychology in the project.

Izmir University of Economics (Türkiye) has a strong position in the field of sustainable energy from an interdisciplinary perspective, covering environmental, social, political, legal, technical, and economic aspects, combined with broad methodological experience, rendering them well suited to perform the implementation and monitoring leading WP4 requires. The Energy Institute Linz (Austria) has a cross-disciplinary profile in energy studies, policy analysis as well as extensive European project experience, making them particularly suitable for leading WP5. NSR (Norway) has a team highly qualified in the topic of energy efficiency and with previous experience from H2020 projects. In addition, they provide local communication infrastructure (staff and equipment), and a well-established international network making them well equipped to lead ENCHANT ambitious dissemination and communication activities in WP7.

Smart Innovation Norway (Norway) is centred on developing smart and sustainable solutions through research-based innovation and business development. In addition to hosting the NCE "Smart Energy Markets", their core competence is on developing various techno-economic models and analysis and machine learning, making them especially suited for leading WP6, developing ENCHANT's web-based tool.

The Babeș-Bolyai University (Romania), which is leading WP3, has experience from research projects dealing with policymaking, employing a comparative perspective with a solid practical component, and with a core competence on energy poverty, energy efficiency and consumer protection in the era of transition to clean economies. In addition, Babeș-Bolyai has a relevant institutional network at European, national, and local level.

Combined, the ENCHANT academic partners provide an excellent methodological approach with a multi-disciplinary theoretical foundation. Highly relevant is the extensive competence in behavioural psychology and particularly so the area of scientifically substantiated interventions. ENCHANT's consortium is also competent in applying a variety of methodological approaches, including that of RCT alongside numerous additional methods ensuring feedback. The research groups forming the academic part of ENCHANT are centrally positioned in relevant research and policy networks, which will allow us to have impact both on the scholarly state-of-the-art and in the relevant practice fields.

One of the major contributions of ENCHANT's composition of the Consortium, however, lies is the participation of 11 non-academic user-partners with direct access to and knowledge of European citizens, members of NGOs and customers of energy companies. This allows the project to investigate people's energy behaviour across Europe to an unprecedented scope, and in realistic settings, using standard communication channels for distributing the interventions. The user-partners with access to citizens are Izmir Metropolitan Municipality, Viken County, Cluj-Napoca Municipality and Energie Kompass. User-partners we have labelled NGOs (including foundations) are Norges Naturvernforbund, Fondazione Roffredo Caetani, and Asociatia Centrul pentru Studiul Democratiei. Energy providers in the Consortium are Gediz Elektrik Perakende Satis AS, Energia Positiva S.C.p.A, Electrica Furnizare S.A., and Badenova. In addition, Badenova also brings into the Consortium relations to two further actors, Freiburg City and Climate Partners Upper Rhine Valley.

The user-partners are fully integrated partners with a dedicated budget in the work packages, and they are vital both to refine the ENCHANT consortiums understanding of our research findings, and for reaching our ambitious goal of developing a user-friendly web-based tool for actors in the energy field. Both through their very large impact fields as well as through their real-life experience and knowledge, these user-partners will complement the consortium's academic credentials on a number of areas.