# LIFE-2021-SAP-ENV



# LIFE2M – Long Life to Micromobility



Grant Agreement - 101074307

# Deliverable D1.1 Project Management Plan



## **Dissemination Level**

PU	Public	Χ
СО	Confidential, only for members of the consortium (including the Commission Services)	

# **Change History**

Document status						
Revision	Date	Description				
V0.1	20/02/2023	1st draft (UNIFI)				
V0.2	22/02/2023	Revision following suggestions by				
		Roberto Caldarulo (EUABOUT)				
V0.3	28/02/2023	Final version for upload in the EC portal				
Reviewed	YES					

# **Disclaimer/ Acknowledgment**



The content of this report does not reflect the official opinion of the European Union. Responsibility for the information and views expressed in the report lies entirely with the author(s).

# **Executive Summary**

This Project Management Plan presents information for the consortium members of the LIFE2M project to understand the processes, procedures, roles, and obligations of each partner. The processes and procedures described are to ensure and clearly define an effective methodology for ensuring that the Project is delivered as efficiently as possible. This document complements existing project documentation including the Grant Agreement and Consortium Agreement and should be used in conjunction with these two documents.

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# **Abbreviations and acronyms**

Abbreviation / Acronym	Description
WP	Work Package
EC	European Commission
CINEA	Climate, Infrastructure and Environment
	Executive Agency, an agency of the European
	Commission
LIFE	L'instrument financier pour l'environnement
CFS	Certificate of the Financial Statement
VAT	Value Added Tax (a sales tax)
LIFE2M	Long LIFE to Micromobility

Partner short name used in this document	Partner FULL name
UNIFI	UNIVERSITA' DEGLI STUDI DI FIRENZE
EUABOUT	EUROPEAN RESEARCHES AND PROJECTS FOR INNOVATION
USGM	UNIVERSITA' DEGLI STUDI GUGLIELMO MARCONI – TELEMATICA
UNEED	UNEED.IT S.R.L.
SILIDEA S.R.L	SILIDEA S.R.L.
ESCO S.R.L.	ESCO MOBILITY
F&N COMPOSITI	F&N COMPOSITI SRLS
L'AQUILA	COMUNE DELL'AQUILA

## **Deviations**

No deviation from the actions foreseen in the LIFE2M Grant Agreement.

## 1. Introduction

A brief introduction regarding the background and the need to elaborate the present Deliverable in the context of LIFE2M is given in the present report.

This project management plan describes the main project product descriptions, the organizational, governance, and decision-making structure of the LIFE2M project, the project communication strategy, deliverables and document management, reporting as well as financial management and it will also describe the project management processes and documentation that will be created and maintained throughout the LIFE2M project.

The aim of this document is to provide guidelines and procedures which should be followed within LIFE2M to ensure that the project is delivered according to the Description of Action in the Grant Agreement.

This project management plan is intended to be a live document and, although significant changes to this document are expected to affect Section 2 only, the guidance and some sections may be updated based on the decisions of the Project Coordination Committee, through personnel changes or changes to the project Action which will require an update to this document.

This plan is based on several key documents/meetings including:

- The LIFE2M Grant Agreement GA Number 101074307
- LIFE2M project kick-off meeting, December 6<sup>th</sup> 7<sup>th</sup>, 2022 Florence (Italy)

Accompanying this project management plan will be the LIFE2M quality control plan, deliverable D1.2, which will describe in greater detail the quality management process to be implemented for each deliverable and the products from each task.

# 2. Project Product Description

The project products are principally the deliverables as set out in the Grant Agreement Annex 1 Part A, these deliverables will be in the form of reports. However, in many cases the reports will be describing either physical equipment or tools.

Broadly, the project is divided into 6 work packages, listed below.

- WP1: Management and coordination
- WP2: Monitoring and evaluation
- WP3: Demo-design and development
- WP4: Dissemination and communication
- WP5: Demo implementation
- WP6: Sustainability, replication and exploitation of project results

Of these six work packages, WP1 will be management and coordination, aims to perform effective project management, to maintain contact with the EC officers and to engage in day-to-day administration, coordination, and monitoring.

WP2 will measure, observe, calculate, and estimate the achieved benefits to evaluate the use of LIFE2M innovations from a technology perspective while assessing the environmental impact. The activities will be carried out for each site involved in the project. The objective of WP3 is the development and testing of all elements necessary for the implementation of the demos in the three cities, i.e., the planning and preparation of all equipment, materials, and technologies foreseen in the actions of WP5.

WP4, with the help of the Communication and Dissemination Committee, will conduct oriented Communication and Dissemination activities to bring LIFE2M results to the widest possible audience for the benefit of the project, its targeted market, the scientific community and general public alike. In WP5 the demos will be implemented and the activities will be carried out simultaneously in three different Italian cities: Firenze, L'Aquila, and Palermo. Lastly in WP6, the focus is on sustainability, replication and exploitation of project results.

# 3. Project Organization, Governance and decision making

The LIFE2M project organizational structure follows the guidelines set out in the LIFE2M Consortium Agreement. The key organizations within the consortium and management structure include:

- The Coordinator the legal entity acting as the intermediary between the Parties and the Funding Authority. The Coordinator shall, in addition to its responsibilities as a Party, perform the personally assigned tasks as described in the Grant Agreement and in the Consortium Agreement.
- Project Coordination Committee the supervisory body for the execution of the Project and the ultimate decision-making body of the consortium.
- Project Management Team carries out the day-to-day project management, including technical/scientific issues, financial and administrative issues, project monitoring and organizational and administrative matters and quality management.
- Work Package Leader responsible for the day to operation, quality and planning of the tasks within the work package.
- Task Leader responsible for the planning and delivery of the products within their task

#### 3.1 Project governance structure

LIFE2M is organised into various groups, according to the WPs. All participants are involved in the main project decisions, which are decided through consensus. The Project Management will set up procedures and

processes to properly coordinate tasks and participants and to ensure the fulfilment of time scheduling and planned effort and the consequent achievement of the expected results within the given constraints.

Simultaneously, the project execution must offer efficient control and high flexibility. A sound decision-making structure has been developed to allocate clear responsibilities and roles. As the project addresses ambitious goals, it is obvious that the project execution must offer both enough control and sufficient flexibility. This will be achieved through the following:

- · Clear definitions of contractual issues.
- Dedicated project organisation.
- · Project planning, control and integration.
- · Budget monitoring.
- · Quality assurance.
- Risk management.
- · Contingency planning and dispute settlement.

The management structure (see Figure below) will consist of the following dimensions:

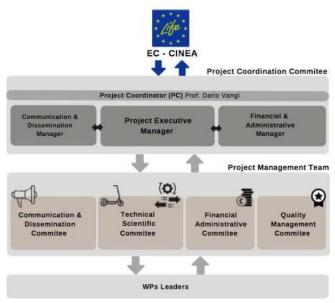


Figure 1 - Management Structure

The reporting structure follows a management by exception reporting methodology, whereby any deviations to the task plans should be reported up to the Task Leader, if this is expected to have an impact on the content or delivery of any deliverables or milestones within that work package or on a task within another work package this should be reported via the Work Package Leader to the Project Management Team who propose methods to manage this and pass the proposal to the Project Coordination Committee for approval. If accepted by the Project Coordination Committee the proposed changes are passed to the EC Project Officer for the next stage of approval.



Figure 2 - Hierarchy from Task team through to Executive Board

#### 3.2 Roles

The roles of the different project governance groups are defined within the LIFE2M Consortium Agreement and below.

#### 3.2.1 Project Coordination Committee

The Project Coordination Committee (PCC), coordinated by the Project Coordinator (UNIFI) with one representative from each partner and the 3 Manager (Communication & Dissemination, Project executive, Financial & Administrative), will be responsible for strategic planning, global supervision of the project and overall progress control (cost management, deliverables, work plan, time schedule control). PCC members will be responsible for the resources and the realisation of WP objectives. The PCC will meet at least two times per year (one general assembly events and many webinars). The Coordinator will represent the Consortium in dealings with the EC.

Inside the PCC, an Innovation Management Team, made up of selected key persons and chaired by UNEED, will explore and identify all exploitation and replication related activities and IPR-issues and report to the PCC. Innovation Management will efficiently monitor market needs and technical evolutions throughout the project's lifetime. It will also make sure that the project work plan is adjusted as needed to implement the project's results in such a way that they best meet the needs of the market with the technologies available at the time.

PCC is the ultimate decision-making body of the consortium supervising the execution of the project. Decisions will be made via consensus or majority vote. Detailed operational procedures will be defined in the Consortium Agreement. The PCC shall be free to act on its own initiative to take decisions which will have major strategic impact on the project including content, finances, intellectual property rights, and evolution of the consortium.

#### 3.2.2 Project Management Team

The **Project Management Team (PMT)** will be coordinated by the Project Coordinator. The PMT will manage the day-to-day project activities according to the following figures:

- The Technical/scientific Committee, executed by UNIFI, will address the technical/scientific quality
  of the work, the timely execution of the WPs, the distribution of the work, the coordination of the
  technical activities and, generally, all that has to do with the technical/scientific content of the
  work, including eventual corrective actions.
- The Financial/administrative Committee, executed by UNIFI, will deal with all matters of administration and logistics for the project's execution. This includes the collection and dissemination of EU financial contributions and the preparation of project financial statements.
- The Quality Management Committee, coordinated by EUABOUT, will be responsible for the quality assurance of deliverables and the monitoring of all quality procedures carried out in the project. The Quality Management will be responsible to set up and maintain a web site with an area restricted to contributions by all Participants as a communication platform and a public area for the scope of abroad dissemination of the project outcome.
- The Communication & Dissemination Committee, coordinated by EUABOUT and with one representative from each partner, will be responsible for the dissemination and communication activities carried out in WP4.

#### 3.2.3 Coordinator

The role of the Coordinator is to be the intermediary between the Parties and the Funding Authority EC (CINEA) and shall perform all tasks assigned to it as described in the Grant Agreement and the Consortium Agreement, primarily responsible for the administrative and financial elements of the project.

In particular, the Coordinator shall be responsible for:

- Monitoring compliance by the Parties with their obligations;
- Keeping the address list of Members and other contact persons updated and available;
- Collecting, reviewing to verify consistency and submitting reports, other deliverables (including financial statements and related certifications), and specifically requested documents to CINEA;
- Transmitting documents and information connected with the Project to any other Parties concerned;
- Administering the financial contribution of the Funding Authority and fulfilling the financial tasks;
- Providing, upon request, the Parties with official copies or originals of documents that are in the sole
  possession of the Coordinator when such copies or originals are necessary for the Parties to present
  claims;
- If one or more of the Parties is late in the submission of any project deliverable, the Coordinator may
  nevertheless submit the other parties' project deliverables and all other documents required by the
  Grant Agreement to the Funding Authority in time.

#### 3.2.4 Work Package Leaders

The Work Package Leaders will coordinate WP activities by communicating with their task leaders and with the Project Management Team. A Work Package Leader is a senior scientist responsible for the respective

work package. The role is to manage the day-to-day coordination of joint activities between Participants contributing to the same work package.

Each Work Package Leader is responsible for reporting on the progress, administrative matters and unforeseen difficulties to the Coordinator. The tasks of the Work Package Leader also consist of the organisation of intra-work package meetings on a timely basis according to the practical needs of the workflow, the production of the progress reports based on the outcome of the work package as well as highlighting any potential publication or exploitation opportunities.

Each partner will be responsible for the definite management of its own time and resources, thereby ensuring proper support for the Project Coordinator. More specifically, each partner will be in charge of:

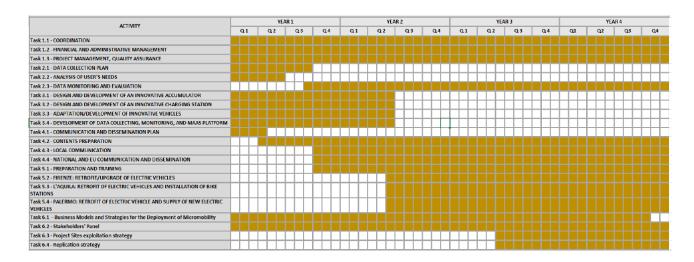
- · Executing the specific tasks they have been assigned.
- · Supporting the Project Coordinator in carrying out the scheduled activities.
- · Submitting accurate financial and administrative data to the Project Coordinator.
- · Participating in meetings and events scheduled by the project.
- · Being responsible for the availability of adequate resources to fulfil project objectives.

In order to properly report on the scheduled activities, Consortium members will provide intermediate and final deliverables and reports, as required by the project Description of Work and referenced by each specific WP. Furthermore, a set of documents concerning work progress will be produced, distributed, and delivered to the EC where required. These documents may include agendas, lists of participants, proceedings and minutes, interim reports, cost statements, working papers and deliverables.

#### 3.2.5 Task Leaders

The task leaders are responsible for the work within their task, ensuring that tasks are delivered on time and to budget, reporting any deviations from the work plan to the work package leader, for further escalation if necessary to the project board.

#### 3.2.6 Gantt chart



# 3.3 Organizational meeting and procedures

The chairperson of a Project Coordination Committee or Project Management Team shall convene meetings.

	Ordinary meeting	Extraordinary meeting
Project Coordination Committee	At least twice a year	At any time upon written request
		of the PMT or 1/3 of the
		Members of the PCC
Project Management Team	At least quarterly	At any time upon written request
		of any Member of the PMT

It is recommended that the work packages also meet at least every 2 months, and between the physical meetings hold teleconference calls or video conference calls to ensure that decisions can be made and progress monitored.

# 4. Project Communication Strategy

#### 4.1 Contact list

A contact list has been created and distributed to all partners. The contact list is available as a shared excel worksheet on the drive of the project in the folder "contatti partner".

#### 4.2 Email

Email is expected to be the primary form of communication within the LIFE2M project.

For ease of identifying LIFE2M relevant emails, we recommend that all email subjects should begin with "LIFE2M" and have the following structure to allow recipients to quickly identify emails which are relevant to them:

Structure: LIFE2M-[WPx]-[Tx.x-][Dx.x]TOPIC

E.g. an email regarding a work package 1 teleconference could have an email subject line:

LIFE2M-WP1-Teleconference 2023-06-20

Or an email about a particular deliverable may have the email subject line:

LEONARDO -WP2-D2.3-Participant input required

Administrative matters should have ADMIN in the subject line, eg

LEONARDO -ADMIN- Financial details required

For broadcast messages to the whole consortium ALL should be included in the subject line, eg:

LEONARDO -ALL-Agenda for Project Coordination Committee.

## 4.3 Teleconferencing

Teleconferencing is recommended as a means of cost-effective communication and an alternative to certain short meetings; they are also environmentally sustainable. The most effective teleconferences are those that are well structured, the group has already met so can recognise the speaker and have clear aims and objectives.

Teleconferences are especially useful for:

- Talking a group through a document or presentation
- Briefly discussing technical or management issues
- Assigning tasks to participants
- To make decisions requiring urgent actions

To ensure that teleconferences are as efficient as possible, it is recommended that:

- The meeting is limited to a small group of participants
- The meeting has a clear aim and objective and, where possible, limits the meeting to individuals
  presenting or reporting back to the group, confirming that they will take future actions or agreeing
  on predefined points.
- Teleconferences should be minuted and organised in the same way as any other meeting, a list of
  participants recorded as well as a list of actions produced. As regards PCC and PMT meetings, it will
  also provide an agenda issued prior to the meeting.
- Recording of the meeting will be possible.

#### 4.4 Meetings

Prior to a meeting or telephone conference, a calling notice should be issued, indicating data and time of the meeting, identifying the attendees who should participate in the meeting, the aims and objectives of the meeting, references to any supporting documentation which should be read prior to the meeting taking place. As regards PCC and PMT meetings, it will also provide an agenda issued prior to the meeting.

## 5. Deliverables

The project deliverables will mainly be in the form of reports which are presented to CINEA as evidence of the work carried out. Although the main product of the task may be something physical equipment, software,

a database, document or publicity material, an event or a website, a report will be produced which demonstrates the work carried out and which can be uploaded to the EC Participant Portal.

The Grant Agreement Annex1 Part A - List of deliverables, documents each deliverable, the due date and the dissemination level of that deliverable. Each deliverable will be subjected to a review process which is described within D1.2 Quality Control Plan.

#### 5.1 Structure of deliverables

Each deliverable should follow a set structure as set out in the templates of:

- Executive Summary a brief summary of the key points of the main document
- Table of Contents
- Abbreviations and Acronyms
- Deviations
- Introduction an outline of the aims and objectives of the deliverable and where it fits in the context of the LIFE2M project. The introduction should also explain the interdependences related to this deliverable, whether this work is drawing on earlier tasks and deliverables and what other tasks will use this deliverable as input or for structuring their work.
- Main body of the report this section will explain the task that was carried out and the results generated and illustrate the technical and scientific progress made within the task.
- Conclusions this sections should be a summary of the major outputs of the deliverable and the implications of the results on other parts of the project or the impact on that the results will have for the end-users and the railway community. The conclusions should also highlight the deficiencies in the work carried out and where future improvements or further work should be directed.
- References
- Annexes Annexes of data or further information not suitable for the main body of the report either due to its detailed nature or separated for confidentiality purposes.

#### 5.2 Tracking of deliverables

Deliverables will be tracked by the Project Management Team, identifying deliverables due in the near future, the deadlines for each deliverable, follow-up actions and the names of the persons producing and reviewing.

The Project Management Team will inform the Project Coordination Committee of progress.

#### **5.3 Milestones**

The LIFE2M milestones are not subject to the same review process as the deliverables and are mainly as a project management tool to ensure that progress is being made. Each milestone will be assessed against a quality criterion by the Project Management Team and progress or completion status will be logged by the

Project Management Team and reported to the Project Coordination Committee as an indicator of progress. Project milestones are listed in the Grant Agreement Annex1 Part A - List of milestones.

# 6. Reports and Reviews

The CINEA on behalf of the European Commission monitors progress and controls this project through:

- Periodic reporting
- Evaluation of project deliverables
- Project reviews

These forms of assessment present the evidence that the project is progressing, should continue and that the Consortium has completed its duty as set out in the Grant Agreement and is eligible for the EC payment.

The LIFE2M project has two reporting periods:

Period 1 – from M1 (December 2023) - M24 (November 2024)

Period 2 - from M25 (December 2022) - M48 (December 2026)

To ensure a timely delivery of the reports, the Project Management Team will prepare the templates and notify the partners of their duties and where they should contribute to the report at least 2 calendar months before the end of the reporting period. The Project Management Team will then ask that each participant completes their reporting 30 calendar days after the end of the reporting period, which will provide the Project Management Team further 30 calendar days to compile the report and to ensure that the report is presented with sufficient quality. It is expected that all partners will contribute to the report, reporting on their participation with work package leaders also reporting on the progress made within their work package.

# 7. Financial management

This information on financial management is based on the LIFE2M Grant Agreement No 101074307.

This financial management plan includes the procedures for financial reporting, payment handling, and accounting.

The financial statement of costs should be completed by each partner and is submitted via the Participant Portal at the end of each Reporting Period (M24 and M48 of the project). The financial statements should be according to the partners normal accounting rules.

However, each partner should check that:

The LIFE2M Project costs are correctly identified within their accounts;

- Only eligible costs are claimed for and can be separated from non-eligible costs;
- All records (timesheets, invoices, receipts, etc.) are properly stored and are retrievable in the case of an audit.

#### Actual Costs must be:

- incurred by the beneficiary;
- incurred during the action;
- declared under one of the budget categories set out in Article 6.2 and Annex 2 of the GA;
- incurred in connection with the action as described in Annex 1 and necessary for its implementation;
- identifiable and verifiable recorded in the beneficiary's accounts in accordance with the accounting standards applicable in the country where the beneficiary is established and with the beneficiary's usual cost practices;
- must comply with the applicable national law, labour, and social security;
- reasonable, justified, and must comply with the principle of sound financial management, in particular regarding economy and efficiency.

#### Ineligible costs include:

- costs related to return on capital and dividends paid by a beneficiary;
- debt and debt service charges;
- provisions for future losses or debts;
- interest owed;
- currency exchange losses;
- bank costs charged by the beneficiary's bank for transfers from the granting authority;
- excessive or reckless expenditure.

#### 7.1 Financial statements

#### Eligible Personnel Costs are:

- personnel working for the beneficiary under an employment contract (or equivalent appointing act) and assigned to the action;
- limited to salaries, social security contributions, taxes and other costs linked to the remuneration, if they arise from national law or the employment contract (or equivalent appointing act).

#### The methods of calculating personnel costs is:

daily rate for the person multiplied by the number of day-equivalents worked on the action (rounded up or down to the nearest half-day). The daily rate must be calculated as (annual personnel costs for the person divided by 215).

For more details, see the GA.

# 7.2 Payment handling

The EC will pay all the money on behalf of the project to the project Coordinator, in this case UNIFI. The Coordinator is then responsible for distributing the money to the other project partners. The maximum total EC financial contribution for LIFE2M is fixed at 2,618,681.21 €.

N°	Role	Short name	Legal name		PIC	Total eligible costs (BEN and AE)	Max grant amount
1	coo	UNIFI	UNIVERSITA DEGLI STUDI DI FIRENZE	IT	999895789	978 561.41	587 136.85
2	BEN	EUABOUT	EUROPEAN RESEARCHES AND PROJECTS FOR INNOVATION		922334007	396 970.00	238 182.00
3	BEN	USGM	UNIVERSITA DEGLI STUDI GUGLIELMO MARCONI - TELEMATICA		972964418	208 115.00	124 869.00
4	BEN	UNEED	UNEED.IT SRL		894875926	515 312.00	309 187.20
5	BEN	Silidea S.r.1.	SILIDEA S.R.L.		888615740	370 865.31	222 519.19
6	BEN	esco mobility			888786266	792 653.33	475 592.00
7	BEN	F&N compositi	F&N COMPOSITI SRLS		888520001	836 062.93	501 362.65
8	BEN	N L'Aquila COMUNE DELL'AQUILA IT		IT	887466969	266 387.20	159 832.32
			Total		4 364 927.18	2 618 681.21	

Table 1 – Overview of total budget and maximum grant amount

		Рауг	nents			
	Reporting periods			Deadline	Туре	Deadline (time to pay)
RP No	Month from	Month to				
					Initial prefinancing	30 days from entry into force/ financial guarantee (if required) – whichever is the latest
1	1	24	Additional prefinancing report	60 days after end of reporting period	Additional prefinancing	60 days from receiving additional prefinancing report/ financial guarantee (if required) - whichever is the latest
2	25	48	Periodic report	60 days after end of reporting period	Final payment	90 days from receiving periodic report

Table 2 - Reporting and payment schedule

# 8. Project management documentation

A risk management strategy is required to ensure that the impact from any negative deviation from the Description of Action is minimised. The risk management process consists of 5 key steps:

- 1. Identify and assess risk;
- 2. Analyse critical risks;
- 3. Development of contingency plans;
- 4. Implement contingency plans;
- 5. Update risk register and follow up of contingency plans.

A list of risks was identified during the grant preparation stage. This risk register will be maintained and updated throughout the project. Each WP leader is expected to identify any new risk occurring within or affecting their work package; the PCC will be devoted to identification of any global risk which may have an impact across the work packages. The risk register will be updated every three months by EUABOUT.

This document is the basis for the entire risk management process and will be constantly updated with information as the risk management processes are completed. At the beginning, the risk register will include list of risk, potential risk owners, potential risk responses, risks and constraints will be characterized by the degree of likelihood to occur and of their impact on the project and monitored as the project progresses. As the project progresses, the validity and compatibility of this information (impacts of risks/constraints on time, cost, resources, and quality) will be periodically reviewed (e.g., some of them might be missed, new risks/constraints could emerge).

Each risk will be assessed by the Project Management Team for its criticality to the overall plan of work and normal risk assessment techniques, such as a likelihood/severity matrix can be used for assessing the potential risk impact and consequently the requirement for the implementation of a contingency plan.

The risk register will be reviewed by the Project Management Team at each board meeting, any new identified risk updated and assessed, contingency plans created if necessary.

Risk number	Description	Work Package No(s)	Proposed Mitigation Measures
1	LIFE2M will exhibit little to non improvement over existing micromobility solutions, Likelihood that the risk will materialise (high, medium, low), even after taking into account the mitigating measures. very low	WP2, WP1, WP5	Prior knowledge and deep analysis on existing micromobility solutions suggest this will not be the case. New-generation supercapacitors are at the moment unexploited in any declination of micromobility solutions. The project will focus on these novel technologic elements to provide users with pleasant riding experiences and suitable responses to their needs, promoting the spread of micromobility.

Risk number	Description	Work Package No(s)	Proposed Mitigation Measures
2	Delays in delivery of electronic components, Likelihood that the risk will materialise (high, medium, low), even after taking into account the mitigating measures. medium	WP3	The Consortium already considered the current difficulties in acquiring the electronic components from the market. A precautionary project duration of 48 months has been consequently selected. In addition, the procedures for the acquisition of the required instrumentation will begin in the period between the receival of the "admission to funding" notice and the actual starting date of the project.
3	Problems with the development of the innovative electronic components, Likelihood that the risk will materialise (high, medium, low), even after taking into account the mitigating measures. low		The risk is minimized by the presence of UNIFI and SILIDEA as project partners, which have a long experience in innovative technologies applied to the mobility sector. Additionally, UNIFI has contributed and continues to contribute to such research field by in-depth studies regarding the novel technology of hybrid supercapacitors; to increase the proposal robustness and preliminarily demonstrate feasibility of solutions, UNIFI already performed some riding tests on micromobility vehicles equipped with a supercapacitor-based accumulator.
4	Problems with the permitting of the accumulator charging stations, Likelihood that the risk will materialise (high, medium, low), even after taking into account the mitigating measures. low	WP5	The involvement as partner of the Municipality of L'aquila, that oversees permitting, minimizes this risk in the city of L'Aquila. No authorisations linked to the installation of the recharging stations in the University of Palermo and in the University of Florence would be required from the municipalities as the stations would be installed on private properties.
5	Few users, cargo bikes operators or sharing operators willing to test the project products Likelihood that the risk will materialise (high, medium, low), even after taking into account the mitigating measures low	WP5	First of all, both L'Aquila and UNIFI and ESCO have a large network of private users to contact in order to involve them in the retrofit of vehicles with accumulators. Moreover, the service will be offered free of charge and will allow the use of vehicles whose batteries no longer work. The same applies to vehicles that will be given to private users on a free loan basis.  As far as sharing operators are concerned, they will have every advantage in having the batteries of vehicles that are now exhausted recharged. This will save on their maintenance. Finally, operators of cargo bikes, also receiving a vehicle for free, will hardly refuse. The risk that there are few users/companies willing to test the project products is further reduced by the considerable dissemination and networking activities of the project (WP4 and WP6).
6	Few members of SP and scarce commitment, Likelihood that the risk will materialise (high, medium, low), even after taking into account the mitigating measures. low	WP6	The SP is crucial; if few members enter, this would weaken the project and also a scarce commitment of the SP members would weaken the project. This risk is prevented thanks to the wide set of the network inactives foreseen in the project and thanks to the possibility of replicating the project in other sites, having the full business plan for free should reduce

Risk number	Description	Work Package No(s)	Proposed Mitigation Measures
			or minimize this risk. Moreover all the project partners have a wide network with many stakeholders willing to be involved. The relevant number of LoS collected in proposal drafting phase should further reduce this risk
7	Problem in finding new site for the project replications, Likelihood that the risk will materialise (high, medium, low), even after taking into account the mitigating measures. low		There could be some problems in finding sites willing to replicate the project activities. This risk is low since micromobility is now very popular and adequate communication and networking activities are foreseen in the project

Table 3 – Risk register first draft

# 9. Green management plan

LIFE2M has an intrinsic message related to sustainability and green management, as crucial and urgent actions to foster a circular bio-economy and sustainable micro-mobility.

The consortium will adopt several measures to reduce its own environmental impact, starting from ensuring that all back-office tasks are pursuing sustainable objectives as well as the field and technical/scientific activities.

## 9.1 Green management in the offices

Printing or photocopying documents will be avoided unless a hard copy will be absolutely necessary;
 recycled papers or from sustainably managed forests and vegetable inks will be used for office operations;

- Multifunction printers will be used rather than separate machines for different functions for printing, copying, scanning, and faxing. Printers will, of course, foresee duplexing (i.e., printing on both sides of a piece of paper) and energy-saving features;
- Sourcing and purchasing the least environmentally damaging goods: used equipment will meet the
  latest Energy Star standards for energy performance, such as Computers free of lead, mercury, PVC,
  and halogenated flame retardants. They will also comply with the RoHS Directive 2002/95/EC
  ("Restriction of hazardous substances in electrical and electronic equipment") and will be purchased
  following the Green Public Procurement Code (see below);
- All other Green tips for Green Management in the offices such as placing a recycling center in a
  prominent location in the offices, encouraging staff to use mugs, glasses, dishes, and cutlery rather
  than disposables, using products that are made from post-consumer content (materials have been
  collected back from previous products and remade into new ones) such as paper and plastic
  products, etc.

## 9.2 Green management in the field and in the lab

The team will ensure that all instruments and equipment will meet the latest Energy Star standards and that they will be purchased following the Green Public Procurement Code (see below). The team will opt for glassware and washing when possible, source alternative plastics, ask companies to provide take-back programs for their products, and ask questions about how their institutions manage this waste. The research community, including lab leaders, will seek to use plastics responsibly or find alternatives to reduce (and eventually eliminate) the environmental and social justice burdens of plastic.

#### 9.3 Green management in the events

All the events will be organized according to ISO 20121 standards (Event Sustainability Management System). This covers the economic, social, and environmental dimensions of events, including optimal management of waste and installations/structures; compensation for less environmentally friendly actions.

#### 9.4 Green management while travelling

In order to limit the environmental impact of travel, the use of environmentally friendly vehicles (trains, electric vehicles, etc.) will be preferred to air travel whenever possible.

#### 9.5 Green Procurement (Public and Private)

Public beneficiaries are subjected to the rules of the competition and public procurement in their respective countries where sustainability criteria will be taken into consideration, ensuring compliance with national and EU legislation. Public Procurement Code will serve as a reference for all purchases envisaged also for

Private partners. The implementation of LIFE2M will ensure the application of the Green Public Procurement (GPP) to reduce the impact of the project activities on environmental systems. In the actual performance plan that allows to evaluate and adjust the efficiency of UNIFI, relevant importance is given to the implementation and management of procedures for GPP, a high index of sustainability, and ecofriendliness. The Coordinator is required to procure goods and services through agreements and conventions disposed of by Electronic Market for Public Administrations, a subsidiary company of the Italian Ministry for Economy and Finance, which is committed to promoting the Green Public Procurement programme (https://www.acquistinretepa.it/opencms/opencms/programma acquistiverdi.html).

## 9.6 Monitoring and Evaluation of the Green Performance

In the actual performance plan that allows to evaluate and adjust the efficiency of the university, relevant importance is given to the implementation and management of procedures for Green Public Procurement (GPP).

LIFE2M team will use the UNIFI Green Office (<a href="https://www.ateneosostenibile.unifi.it/vp-138-green-office.html">https://www.ateneosostenibile.unifi.it/vp-138-green-office.html</a>) recognised methods for the calculation of the project environmental footprint (e.g. PEF/OEF methods, PEFCRs- OEFSRs) as well as environmental management systems (EMAS).

## 10. Conclusion

The presented Project Management Plan provides a guide to be used by the Project Management Team and the consortium partners to ensure an understanding of the roles and responsibilities of each consortium member in piloting the LIFE2M project through efficiently tuned and well managed processes. The document should be used by the partners as a complementary item to the Grant Agreement and the Consortium Agreement.

If any instance in this document is ambiguous or further assistance/advise is required, please refer to the Project Management Team:

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