CERITA project has received funding from European Unions
I3-2022-CAP2b call under Grant Agreement No 101133105

Circular Economy for Riga and Tartu
Waste Management Facilities

CERITA D1.1_PROJECT MONITORING AND QUALITY PLAN

ID: CERITA_D1.1_Final

CERITA
D1.1. Project monitoring and quality plan

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Project Coordinator:	Latvian Hydrogen Association
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REVISION TABLE

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1.1	15/03/2024	Partners contribution
2.0	30/04/2024	Final version
2.1		
3.0		

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CERITA ABSTRACT

The Circular Economy for Riga and Tartu Waste Management Facilities (CERITA) is an ambitious project that seeks to transform waste management practices through a circular economy approach. The project is led by a consortium of partners from Latvia, Lithuania, Estonia, and the Netherlands, including Hydrogen Architects BV (HYARCH), Getlini EKO SIA (GETLINI), Ekotikslai UAB, Latvijas Ūdeņraža Asociācija (H2LV), SIA ERNST&YOUNG BALTIC (E&Y) and Tartu City.

The CERITA project aims to analyze the waste composition, energy consumption, and renewable energy production potential of the waste management facilities in Riga and Tartu. One of the key innovations of the CERITA project is the use of hydrogen and its derivatives to improve the waste management facility value chain.

The project recognizes that solutions that work for one facility may not work for the other, given the differences in the size of the waste management facilities in Riga and Tartu. Therefore, the CERITA project takes a tailored approach to each facility, analyzing its specific waste composition, energy consumption, and renewable energy production potential to identify the most effective solutions. The CERITA project aims to develop a business model analysis, the economic value of products, and an investment plan for the identified solutions. The project also seeks to promote public awareness and education on circular economy and waste management practices, as well as foster cross-border cooperation between the participating countries.

Overall, the CERITA project represents an innovative and collaborative effort to transform waste management practices, utilizing a circular economy approach and the potential of hydrogen and its derivatives. The project has the potential to significantly impact waste management practices in the region and beyond, and its outcomes will be closely monitored and evaluated for long-term sustainability and impact.

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ABBREVIATIONS AND ACRONIMS

H2LV	Latvian Hydrogen Association
Hyarch	Hydrogen Architects BV
E&Y	ERNST&YOUNG BALTIC
DMP	Data management plan
EU	European Union
WP	Work Package

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EXECUTIVE SUMMARY

WP1 will assure the management, the coordination and the ethics requirements of the overall project. The main objective of this WP is to tackle all the necessary central management functions in order to achieve all the objectives defined in the Grant Agreement and to coordinate by organizing regular networking meetings and annual assemblies. Moreover, WP1 will be responsible to elaborate the data management plan (DMP) ensuring that the EU and national data protection rules are respected. WP1 responsibility is to ensure that all project activities are performed efficiently, in a coordinated and integrated manner, within schedule and budget and in a way that the high research, scientific, technological and stakeholders' expectations are fully met by H2LV, acting as Project Coordinator and will bring in its experience from various previous projects to guarantee a successful communication within the Consortium. H2LV will be the WP1, T1.1, T1.2, T1.3, and T1.4 leader. The rest of the Consortium Partners will participate as contributors in the project management activities.

T1.1 Administrative coordination, internal communication and financial management aim is the actual coordination of the project in terms of day-to-day management (including also administrative and financial management), including among others a strong project management scheme, Consortium Agreement, management of funds and effort, a common direction within the project and promotion of team development, continuous monitoring of the work progress, consideration of dissemination, gender or ethical issues (where applicable), collaboration and reporting channels. Cooperation within the Consortium, and especially the WP leaders responsible for the deliverables and their timely delivery will ensure the consistency and quality of the results. H2LV will inform the Project officer about the project's progress.

T1.2 Technical coordination will be performed by the Steering Committee which is led by the Technical manager in collaboration with the WP leaders. Control of the technical work carried out in the related tasks and suggestions of technical modifications and reallocation of resources where necessary will take place.

T1.3 Quality and Risk Management deals with planning, managing, and controlling the quality of activities and deliverables, while it monitors, manages IPR and makes recommendations for ownership assurance. It will contain quality, risk management and innovation management procedures.

T1.4 Ethics, exchange requirements specifications and data management is highly relevant to address from the beginning of the project how ethics and data management aspects will be dealt. Two aspects are tackled: privacy (to ensure that proprietary or personal data is not externally accessible) and ethics (to make appropriate use of AI technologies where relevant and avoid the identification of individual persons from data streams, further than performing a correct use of data). Moreover, this task will continually assess and improve the requirements of knowledge exchange, ensuring data and outputs are managed in line with the FAIR principles.

This foundational WP, especially through tasks like T1.1 (Administrative Coordination) and T1.2 (Technical Coordination), underpins all other WPs. It ensures smooth management and coordination throughout the project lifecycle, impacting the direction and success of all subsequent work.

The scope of deliverable 1.1 is to set the project's quality standards and management procedures. Its sensitivity arises from containing detailed methodologies and internal procedures that are proprietary to the project. Deliverable is connected with Milestone 1. The document identifies the procedures concerning the project implementation, the project management and communication. The objectives of this handbook are to identify, for each of the operational needs of the project, the roles of the different actors in the project management, the managerial procedures and the most effective steps and practices to develop a proper environment for supporting the partners throughout the project's execution and development.

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INTRODUCTION

The CERITA project aims to analyse the waste composition, energy consumption, and renewable energy production potential of the waste management facilities in Riga and Tartu. One of the key innovations of the CERITA project is the use of hydrogen and its derivatives to improve the waste management facility value chain.

The project recognizes that solutions that work for one facility may not work for the other, given the differences in the size of the waste management facilities in Riga and Tartu. Therefore, the CERITA project takes a tailored approach to each facility, analysing its specific waste composition, energy consumption, and renewable energy production potential to identify the most effective solutions. The CERITA project aims to develop a business model analysis, the economic value of products, and an investment plan for the identified solutions. The project also seeks to promote public awareness and education on circular economy and waste management practices, as well as foster cross-border cooperation between the participating countries.

Figure 1. CERITA scope in picture.

The CERITA is highly relevant to this call for proposals as it aims to reinforce regional innovation ecosystems and the ability to apply for funding under the I3 Instrument or other relevant EU funding schemes. The CERITA's focus on

1. technical research and innovation to produce renewable energy resources from waste,
2. CO2 storage solutions,
3. waste sorting and recycling,
4. energy storage solutions, align with the objectives of the call for proposals.

OBJECTIVES

The CERITA project proposal addresses the call I3-2022-CAP2b submitted for I3-2022-CAP2b / 16 Mar 2023. The following shows how CERITA responds to the specific topic I3-2022-CAP2b - Capacity Building Strand 2b

PROJECT STRUCTURE

The organisational structure of the CERITA project consists of a project coordinator, six partners, and several work packages (WP) responsible for specific tasks.

CONSORTIUM

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The project coordinator is responsible for managing and coordinating the overall project, ensuring its smooth execution and delivery. The six partners involved in the project are H2LV, Get, E&Y, Tart, Eko, Hyarch. CERITA consortium comprises as following (Table 1):

Table 1. CERITA partners

No.1	Latvian Hydrogen Association	Latvia	NGO
No.2	Getlini	Latvia	Public Body
No.3	ERNST&YOUNG BALTIC	Latvia	Private Body
No. 4	Tartu	Estonia	Public Body
No.5	Ekotikslai	Lithuania	Private Body
No.6	Hyarch	Netherland	Private Body

Each partner has a specific role and responsibility in the project, and they are responsible for carrying out the tasks assigned to them under the work packages. The project is divided into nine work packages, each with specific objectives, deliverables, and deadlines. The partners are responsible for contributing to the project's success by providing their expertise, resources, and manpower. They are also responsible for meeting the deadlines and ensuring that the quality of work is of the highest standard. The project management structure includes a project steering committee, which is responsible for overseeing and guiding the overall progress of the project. The committee is composed of representatives from each partner organization, and they meet regularly to discuss the project's progress and make decisions on the project's direction. The project management team is responsible for managing the project's finances, ensuring that the budget is used efficiently and that expenditures are made in line with the project's objectives. They are also responsible for monitoring the project's progress and ensuring that it stays on schedule.

The CERITA project involves six partners with different backgrounds and expertise, including public bodies, private bodies, NGOs, research institutions. The main aim of the project is to develop and demonstrate an innovative CERITA project aims to analyze the waste composition, energy consumption, and renewable energy production potential of the waste management facilities in Riga and Tartu. The lead partner of the project is Latvian Hydrogen Association, NGO based in Latvia. They are responsible for project management and coordination, including administrative, financial, technical, quality, and risk management. Getlini SIA, a Latvian public body , expertise in waste management processes and will lead the analysis of waste composition and energy consumption in waste management processes, as well as public awareness and education for project. Tartu Linn (Tartu City) from Estonia, contributes to the project by will lead the assessment of new energy carriers and vectors introduction potential, and also contribute to the assessment of renewable energy production potential, waste recycling opportunities, and project management and dissemination. Ekotiks, a Lithuania private body, contributes to the project by a business development expert and will contribute to the assessment of waste recycling opportunities and additional activities to reduce environmental impact. E&Y (Ernst & Young) has been contracted to perform the economic and investment assessment in the CERITA project. Hydrogen Architects BV (HYARCH) from the Netherlands has extensive experience in the field of renewable energy, and will lead two work packages focused on reducing the environmental impact of waste management and evaluating the economic viability of identified solutions. Each partner has specific roles and responsibilities that are distributed based on their expertise, resources, and capabilities. Their analysis will provide valuable insights and recommendations on the economic feasibility and investment potential of the developed waste management solutions and technologies. The assessment will cover various aspects, including market demand, funding opportunities, and potential investors. The results of the analysis will contribute to the development of the investment plan and business models for the replication and exploitation of the project's outcomes. Overall, the partners in the CERITA consortium will work together to combine their expertise and experience, complementing each other's strengths and weaknesses, to ensure the successful implementation of the project.

CONTRACTUAL ARRANGEMENTS

The main contractual arrangement for a project is the Grant Agreement between the European Commission and the project consortium, which outlines the terms and conditions of the grant funding,

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including the project objectives, budget, and reporting requirements. The Grant Agreement also establishes the legal framework for the project and defines the roles and responsibilities of the project partners. In addition to the Grant Agreement, the project consortium also has a Consortium Agreement, which outlines the governance structure, decision-making processes, and lines of communication between the project partners. The Consortium Agreement also details the roles and responsibilities of each partner, including intellectual property rights, data management, and dissemination of project results. The governance structure of the project involves a Steering Committee, composed of representatives from each partner organization, which would oversee the implementation of the project and make strategic decisions. The Steering Committee is responsible for approving the annual work plan, budget, and progress reports. Lines of communication between partners are established through regular meetings, both in-person and virtual, as well as through regular progress reports and communication via email and other electronic platforms. Decision-making processes within the project consortium are established through the Consortium Agreement, which defines the decision-making rules and procedures, including voting procedures and quorum requirements.

PROJECT WORK PLAN AND IMPLEMENTATION

Given the magnitude and complexity of envisaged tasks, CERITA run along an overall duration of 12 months, encompassing 9 Work Packages (WP) which are closely related and collectively work to meet the objectives, reach the ambition goals, and maximise the impact of the project.

Work Package 1 (WP1) is focused on the coordination and management activities of the project, ensuring compliance with the grant agreement and consortium agreement. The objective is to oversee all activities to ensure effective communication and coordination between the consortium, management bodies, and the European Commission. This work package manages the planning, monitoring, and control of the project to achieve objectives, deliverables, reporting, data management, dissemination, administration, financial management, and audit, with a duration from Month 1 to Month 12. **Work Package 2 (WP2)** is responsible for conduct a baseline assessment of the actual and potential waste composition in the Riga and Tartu waste management facilities, facilitate networking and learning exchanges between the Netherlands, Estonia, and Latvia, and create an interregional roadmap for transforming waste management practices through a circular economy approach. **Work Package 3 (WP3)** is focused the Analysis of energy consumption in waste management processes, aims to improve the energy efficiency of waste management practices. Its objectives include conducting a baseline assessment of the actual energy consumption in waste management processes, facilitating networking and learning exchanges between project partners, analyzing the energy consumption across waste management processes, and evaluating the potential of using renewable energy sources such as solar, wind, and biomass. The work package also aims to assess the feasibility of using renewable energy resources such as biogas produced from waste, to generate electricity, heat, and hydrogen. **Work Package 4 (WP4)** contribute to the development of more sustainable and energy-efficient waste management practices, reducing the environmental impact of waste management and promoting the circular economy. **Work Package 5 (WP5)** contributes assessment of waste recycling (processing) opportunities aims to evaluate various opportunities for waste processing in the Riga and Tartu waste management sites. The work package has several objectives, including analysing the waste streams generated by the two waste management facilities, such as municipal solid waste, construction and demolition waste, and biodegradable waste. Work Package 6 (WP6) aims to assess the potential for introducing new energy carriers and vectors, specifically hydrogen and hydrogen derivatives, in the waste management facilities in Riga and Tartu. CERITA project assess the market potential for new products that could be produced from hydrogen and hydrogen derivatives. Work Package 7 (WP7) is focused on improving the energy efficiency and reducing the environmental impact of waste management processes. CERITA project aims to evaluate the technical and economic feasibility of implementing measures to achieve these objectives. To achieve the objective of improving energy efficiency, the project will assess the current energy consumption of waste management processes and identify opportunities to improve efficiency through various measures, such as the use of energy-efficient equipment and the recovery of waste heat. Work Package 8 (WP8) is focused on the economic evaluation of the solutions identified in the other work packages. This includes evaluating

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the market potential for renewable energy carriers such as biomethane, hydrogen, and other derivatives, and assessing the economic value of the products that will be generated from the waste management processes. And CERITA project will provide valuable insights into the economic benefits and feasibility of implementing more sustainable and environmentally friendly waste management practices. Finally, **Work Package 9 (WP9)** is responsible for disseminating the results of the project to relevant stakeholders and exploiting the project results to support further innovation and development in the field of emergency services. This work package ensures the project's results are shared with relevant stakeholders and helps promote the project's outcomes to support further innovation and development in emergency services (Figure 2).

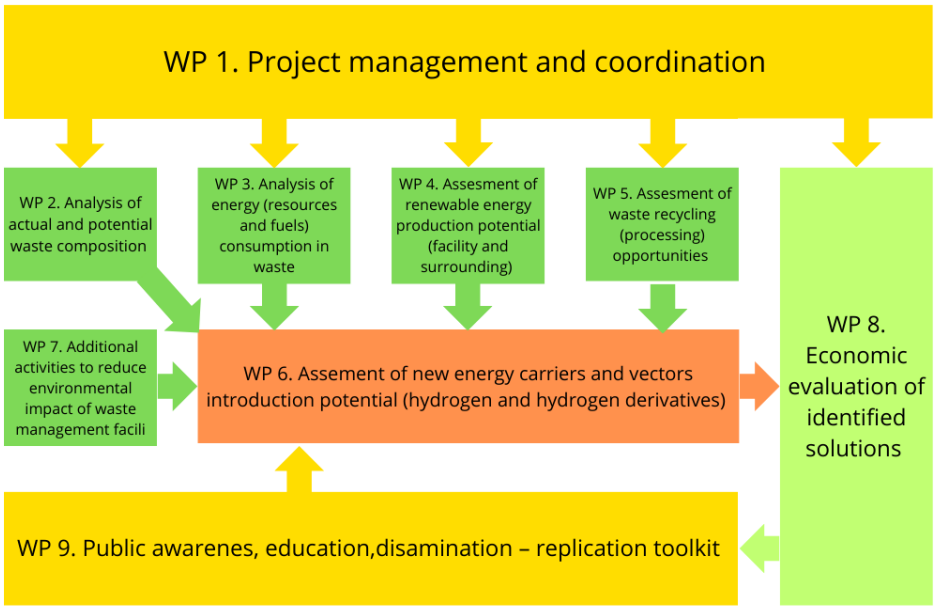

Figure 2. Pert Diagram

A full description of work plan, including Work Package tasks, deliverables and associated milestones is contain in the Grant Agreement Annex 1. This will be used as the main reference point for the project.

MANAGEMENT OF THE CERITA PROJECT

Project management is the strategic control of each Work Package (WP) and project management bodies by implementing efficient quality control mechanisms with appropriate standards. This section highlights the CERITA management approach that has been adopted by the consortium to ensure the successful and on-time implementation of all project objectives.

The main purpose of project management is to provide a focused, lean but effective structure to support the partnership for the accomplishment of the goals of the project and reporting. Within this framework, effectiveness in the decision-making process as well as immediate response and reaction in encountering possible changing conditions are necessary. The project management is crucial for the smooth implementation of CERITA.

MANAGEMENT STRUCTURE

The following structure is created to ensure transparent and efficient management: The Project Implementation Team --> reporting to --> The Project Steering Group -> reporting to -> The Project Supervisory Board (Figure 3).

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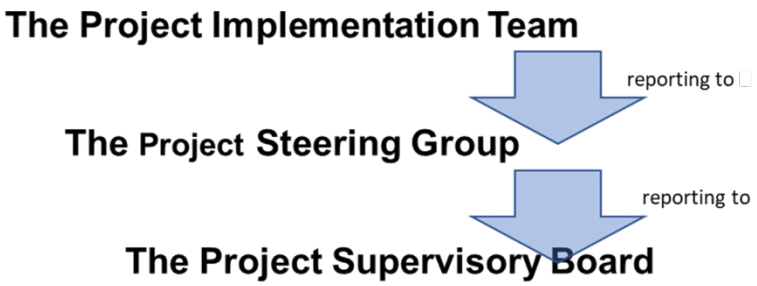

Figure 3. Management structure.

The project management and monitoring structure includes the **Project Supervisory Board,** the **Project steering Group**. Project is implemented by the **Project Implementation Team.**

The Project Supervisory Board is an inter-institutional management structure. This Board consists of high-top-management-level representatives of all partners (legally signatory):

- H2LV: Aivars Starikovs
- Getlini: Imants Stirāns
- Tartu: Jaanus Tamm
- Ekotikslai: Virginijus Stiormer
- E&Y: Liene Cakare
- Hyarch: Patrick Cnubben

Representatives of other institutions, experts or consultants may be invited to participate in the Project Supervisory Board as necessary. The task of the Project Supervisory Board is to evaluate and resolve issues related to the Project implementation. The Supervisory Board will deal with topics and make decisions, which cannot be resolved or made at the Project Steering Group level. The Supervisory Board oversees the work of the project management team. The Supervisory Board meets once a quarter or as needed. The work of the Supervisory Board is organised by the administration team.

Project Steering Group is a Project Management Structure, which ensures coordination of the activities of the Project. It solves issues of cooperation between the parties involved in the Project, ensures the adoption and implementation of decisions related to the implementation of the Project. The Project Steering Group oversees the work of the Project Implementation Team. Meetings of the Project Steering Group monitor, evaluate and analyse the progress of the Project implementation (including the Project progress reports). It decides on the necessary changes in the implementation of the Project activities and addresses open issues related to the implementation of the Project. The Steering Group reports to the Project Supervisory Board. The task of the project Steering Group is also to ensure the adoption and execution of decisions related to the implementation of the project and the conclusion in the model grant agreement with the European Commission, it identifies and prepares decisions on the necessary project changes, coordinates project activities, manages suppliers and performs other responsibilities. The Project Steering Group consists of:

- H2LV: Aivars Starikovs, Andris Backurs, Laila Zemīte
- Getlini: Imants Stirāns
- Tartu: Jaanus Tamm
- Ekotiks: Virgius
- E&Y: Liene Cakare
- Hyarch: Patrick Cnubben

Other experts will be invited to attend the meetings of the Steering Group as necessary. Invited experts may express their views and recommendations, but do not have the right to participate in decision-making during the Project Steering Group meetings.

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Project managers – Work package leaders – are responsible for the implementation of the project through the project application, Model Grant Agreement with the European Commission and internal and external regulatory enactments regulating the implementation of the project. The responsibilities of the project managers are to ensure the implementation of the project, to organise tasks and daily operational work as well as to supervise the overall implementation. Managing the project scope, time, budget, and planning of procurement procedures, including the development of needed technical specifications as well as coordination of the execution of procurement contracts, and monitoring cooperation with all parties involved in the project. Planning of procurement procedures, including the development of needed technical specifications as well as the coordination of the execution of procurement contracts. Monitor cooperation with all parties involved in the project. Plan information and publicity activities and prepare the information necessary for communication activities, as well as prepare other information related to project management for institutions administering and controlling EU funding as well as other legal and natural persons upon their request. Project managers are follows:

- WP1: Latvian Hydrogen Association Andris Bačkurs (administrative), Aivars Starikovs (financial)
- WP2: E&Y, Sergejs Batjuskovs (administrative)
- WP3: Getlini Inese Upmale (Administrative)
- WP4: Latvian Hydrogen Association Andris Bačkurs (administrative), Aivars Starikovs (financial)
- WP5: Ekotikslai, Virginijus Stiormer(administrative),
- WP6: Ekotikslai, Virginijus Stiormer(administrative),
- WP7: Hyarch Patric Chubenn (Administrative)
- WP8: E&Y Sergejs Batjuskovs (administrative)
- WP9: Getlini Inese Upmale (Administrative)

Project Implementation Team ensures the implementation of daily activities. The team includes project management staff, project implementation staff, process unit representatives and service provider representatives. The composition of the team will change according to the progress of the project. If necessary, together with the representatives of the Steering Group, meetings will be organized where solutions of requirements and other issues related to the project implementation activities (incl. Intermediate results, results) will be presented and discussed. Project Implementation Team will consist of employees of partners who will dedicate part or whole of their time to the Project. Where needed additional staff will be hired.

DECISION-MAKING PROCEDURE

The decision-making process involves all partners, with each partner having an equal voice in the decision-making process. Decision-making processes refer to how decisions are made within an organization or project. In the context of the CERITA project, decision-making processes are clearly defined and documented in the grant agreement and consortium agreement. The decision-making process covers the following aspects:

- Decision-making bodies: Supervisory board, steering group, implementation team
- Decision-making procedures: internal partners procedures
- Decision-making criteria: based on management structure
- Communication and reporting: based on management structure
- Conflict resolution: Conflicts can arise in any project. The decision-making process includes procedures for resolving conflicts between partners and for escalating conflicts to higher decision-making bodies if necessary.

QUALITY MANAGEMENT IN THE PROJECT

Quality control focuses on the operational techniques and activities used by those involved in the project to fulfil the requirements for quality and to identify ways of eliminating causes of unsatisfactory performance. Our approach to quality focused on ensuring that all deliverables have substantial and specific contribution to the CERITA action's objectives and impact. The pre-final version of each deliverable is assessed

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by quality indicators (both objective and subjective) judging the completeness and the fitness-for-purpose of the deliverable. Assessment is carried out by testing for objective, quantifiable indicators and by inspection for subjective indicators. Development of a plan, including regular review and updates is the core responsibility of the quality manager (Laila Zemite) who is part of the Project Steering group. Internal reviewing procedure is that 2 weeks before the deadline, deliverables should be sent to H2LV. A pre-final draft is given for internal review 2 weeks before the foreseen date of delivery to the EC. The review period is one week. The internal reviewers assess the completeness and of the deliverable with respect to the table of contents established before as well as its technical quality. The Project Coordinator prepares the final deliverable and makes the submission to the EC. The PC ensures that deliverables have a consistent "look and feel" and comply with the CERITA templates and editing guidelines.

The assignment of reviewing duty to participants will comply to following rules:

- Assign deliverables to partners that have in their roster personnel capable of carrying out the review.
- Assign deliverables to partners that do not contribute towards the deliverable under review or, if that is not feasible due to the previous constraint, have as a minor a role as possible.
- Distribute reviewing duty roughly proportional to the distribution of effort.
- Distribute reviewing duty for each partner roughly evenly throughout the action's duration.

DATA MANAGEMENT AND ETHICS

The Data Management Plan (DMP) for the project is an essential deliverable that will encompass both ethical and legal monitoring aspects, in addition to providing a framework for handling data throughout the project's lifecycle. The DMP is a public document, ensuring transparency and adherence to data protection regulations, which is vital for maintaining trust and integrity within the project, especially considering the sensitive nature of the data being handled. The plan will be subject to approval by European Innovation Council and SMEs Executive Agency (EISMEA) and will be in alignment with a process agreed upon by project partners and the coordinator.

From an ethical perspective, the plan addresses privacy by ensuring that proprietary or personal data is not externally accessible, which is crucial for complying with data protection laws and maintaining the confidentiality of the data subjects. Furthermore, the project will make appropriate use of AI technologies, being careful to avoid the identification of individual persons from data streams beyond what is necessary for the project's purposes. This is particularly important to prevent any misuse of personal data and to align with ethical standards regarding privacy and autonomy.

Due to the implementation and the enhanced interaction with the end -users, a complete ethics self-assessment has been carried out in order to ensure that the proposal is compliant with applicable international, EU and national law. Only one area of concern for ethical issues has been identified: "Personal data" (research involving personal data collection and/or processing). Starting from this consideration, a set of procedures will be adopted to ensure the participants rights and the data protection of the involved end-users. Information managed by the project consortium during its activities may be of a private or confidential nature, thus access to sensitive information will be carefully controlled with restriction policies where appropriate. The specific role of LEP (Legal and Policy Officer) has been identified in the project management structure to supervise and ensure the wise data processing and deal with ethical issues throughout the project.

This section defines how research will be executed in CERITA regarding the collection, storing and processing of personal data. In particular, it is described: 1) Relevant sources of Law and Ethical principles. 2) Procedures to inform and engage end-users and active stakeholders and guarantee their rights. 3) How data is collected, stored, processed and protected. 4) The consortium agreed procedures and structures to ensure privacy.

To identify applicable legislation, policies, and ethical guidelines, all relevant national and international sources of law and ethical principles will be analysed. Every involved person will comply with ethical standards and guidelines. On the European scale, this includes, but is not limited to: i) Regulation 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC

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(General Data Protection Regulation); ii) Art. 3, 7, 8 of the Charter of Fundamental Rights of the European Union; iii) Art. 8 of the Convention of the Council No. 5 for the protection of human rights and fundamental freedoms; iiii) Convention No. 108 of the Council of Europe for the protection of individuals with regard to automatic processing of personal data. Any additional regulations at national level, that do not fall under the aforementioned sources and apply to data protection or any other sensitive information, are also considered.

During the lifetime of this project, Directive 95/46/EC (also known as General Data Protection Regulation, "GDPR") on Data Protection and Privacy will be in force. The applicants will take this into account to ensure compliance. In order to succeed in this, participants in the demonstration sites and active stakeholders will be provided with relevant information and familiarize themselves, as described below, to ensure that their decision will be taken in full knowledge of what will happen to their data and be properly informed before giving consent: Events will be held in the demonstration sites to inform all the stakeholders and active participants about the activities, goals and purpose of the project. Additionally, overview of the project and the procedures to be followed will be distributed written in the local language and in a way that will be easily understandable. Moreover, emphasis will be placed on the fact that it is persons choice to actively participate and up to what extent and make known the mechanisms that the consortium has put in place to protect their privacy and rights (anonymity, security, data storage etc). Also, contact information to the project's working group will be provided and a complaint procedure will be available. Regarding images or recordings to be made publicly available, the participants will be asked for their permission to be used in workshops, conferences, presentations, website or any other public mean. Hence the project will establish a mechanism to own and use a person's or an entity's image or voice in specified, public ways, always with respect to GDPR. The Consortium guarantees that the storage of personal data sets will comply with the requirements of all relevant regulations and guidelines and that all necessary measures will be taken to protect the data from potential unauthorized access, such as cyber-security attacks. It will not keep personal data longer than necessary for the project's purposes and will destroy or delete the data afterwards.

In order to ensure that the benefits of this project are equally distributed among all members of society, the gender dimension has been taken into consideration in its design and implementation. Women are an important part of the communities in which the project will be deployed, and it is important to ensure their needs and perspectives are taken into account. One aspect of the gender dimension in the CERITA project is the representation of women in the research and testing of the technology. Women are often underrepresented in the STEM fields, including engineering and technology. Therefore, efforts have been made to encourage the participation of women in the project, both in the research and testing stages. This includes outreach to women in STEM fields, as well as partnerships with organizations focused on promoting women in technology. Another aspect of the gender dimension in the project is the potential impact on women in emergency situations. Women may have different needs and concerns than men during an emergency, and it is important to consider these factors in the development of the drone technology. For example, women may require different types of medical assistance, such as gynaecological care, during an emergency. Therefore, the project will consider the needs of all individuals, regardless of gender, and ensure that the technology is capable of meeting these needs.

Additionally, the project will consider the potential impact on women as end-users of the technology. Women may have different levels of access to technology or may be more hesitant to use it than men, particularly in cultures where gender norms dictate certain roles and behaviours. Therefore, efforts will be made to ensure that the technology is accessible to all individuals, regardless of gender, and that it is user-friendly and easy to operate. Overall, the gender dimension is an important consideration in the CERITA project. By taking into account the needs and perspectives of women, the project will be better equipped to address the unique challenges of emergency situations and improve the safety and security of all citizens, regardless of gender.

The DMP and ethics task will also focus on continually assessing and improving the requirements for knowledge exchange, ensuring that data and outputs are managed in accordance with the FAIR principles, which stand for Findability, Accessibility, Interoperability, and Reusability. This means that the data should be easy to find, accessible under clear conditions, interoperable with other datasets, and usable for future

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research and applications. These principles are fundamental for advancing scientific discovery and maximizing the value of research data.

From a project management view, having a robust DMP and ethical framework is vital to:

- Ensure all data collected and generated is handled legally and ethically.
- Provide clear guidelines to project participants on data handling, protection, and sharing.
- Establish a process for regular review and updates of data management practices.
- Align project activities with broader data governance standards and expectations.

COMMUNICATION

Communication in the project and day-to-day procedures: the communication and cooperation in the project are mainly based on email, audio- and videoconferencing, instant messaging and shared repositories (Teams). Regular project status and planning meetings will take place. It is planned, that the majority of these will be held online, however, physical meetings will be organized upon need. Communication in the project and day-to-day procedures: the communication and cooperation in the project will be mainly based on email, audio- and videoconferencing, instant messaging and shared repositories (e.g. Teams).

CERITA utilizes popular open-source project management and collaboration tools that automate the monitoring of the project's progress and facilitate collaboration between the project's partners. The adopted collaboration tools are self-hosted deployments installed in H2LV premises supported by cloud web services. Special care has been given to handling the users' data that the tools handle. Therefore, all the appropriate mechanisms that comply with the latest guidelines of security and privacy along with GDPR have been adopted, such as:

- The websites for all the tools to be presented are securely served over HTTPS to support encrypted communication.
- Databases and user files used by the tools are stored in an encrypted filesystem.
- Passwords are stored in databases encrypted.
- • Users are not allowed to use weak passwords.
- • All the required personal data are handled by the tools with users' consent.
- The internal communication platform is made in Teams, where all relevant information is available for all consortium. The structure is showed in Figure 4.

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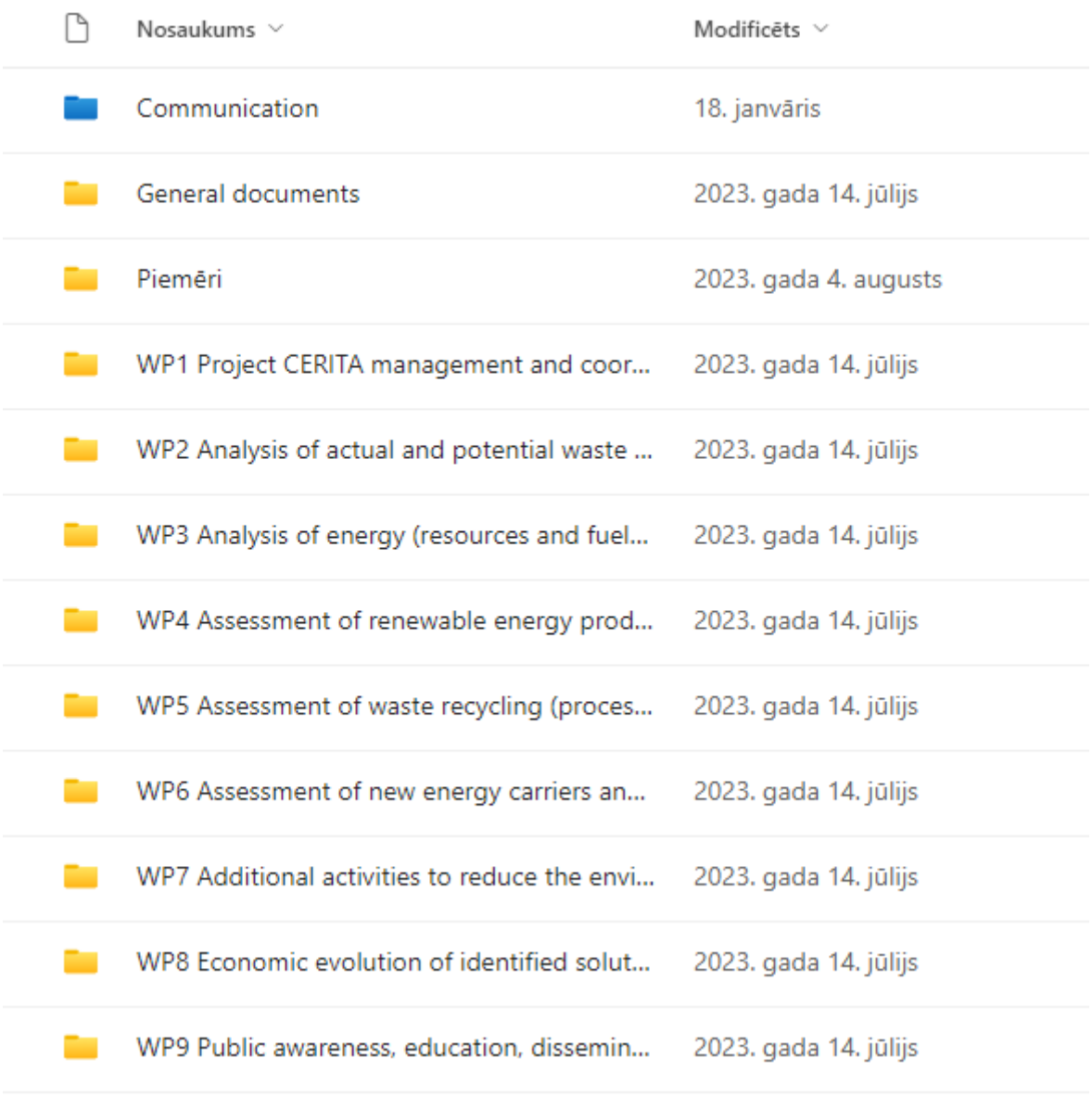

Figure 4. Teams' platform structure.

Communication tool aims to facilitate the needs of the consortium for setting up calls and meeting remotely through the web. The H2LV team holds an account on the popular Teams platform and schedules meetings. The meeting events and details (URL, password, etc.) are shared through email to the participating members of the meeting. Communication over the Teams platform is encrypted and can be further protected through a password to protect against un-invited entities. Teams offer significant functionalities such as voice and video chatting, sharing the screen of the user, and sharing presentations. The platform has been used several times and has proven its capability to serve high-demanding web conferences with many participants. Partners can use different reliable platforms for meetings like WebEx, Zoom etc.

The project's official logo is created for official communication, showed in Figure 5.

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Figure 5. CERITA logo

In all communication internal and external activities funding statement in long funding statement (Figure 6) and short funding statement (Figure 7).

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Figure 6. Long funding statement.

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Figure 7. Short funding statement.

MEETINGS

From a project management perspective, the scheduled meetings for the CERITA project are integral to maintaining the momentum of the project, ensuring alignment among the partners, and achieving the project's goals. Here is a breakdown of the planned meetings:

- Monthly Online Meetings:

Organized by the Latvian Hydrogen Association these are regular touchpoints for project tracking and operational coordination. They are essential for discussing progress, addressing issues, and planning subsequent activities.

- Biannual Internal Assessments:

Every three months, an internal assessment with the project adviser from the Health and Latvian Hydrogen Association takes place. This is an opportunity to evaluate the project's progress against its objectives and make strategic adjustments as necessary.

- Annual General Assemblies:

The assemblies are significant milestones in the project timeline. The first one, scheduled for Janvary 2024 in Getlini(planned), includes a webinar and a workshop, likely aimed at knowledge sharing and capacity building. The second one, in May 2024 hosted by Getlini (planned), follows a similar format and serves as a critical point for reviewing progress, June 2024 hosted by Tartu city (planned)), follows a similar format and serves as a critical point for reviewing progress, in September/October 2024 hosted by Hyarch (planned) and in November 2024 hosted by Getlini (planned) before the final month of implementation.

- Midterm Meeting:

Slated for May/September 2024, this meeting is organized by Getlini (planned) and includes training for end-users. Midterm meetings are crucial for assessing the project's mid-course achievements and challenges.

- Final Meeting:

Planned for December 2024, this meeting will coincide with the General Assembly and is hosted by Latvian Hydrogen Association. It will serve as the project's culmination, focusing on the final assessment, dissemination of results, and discussion of future sustainability or follow-up activities.

- WP Meetings:

Work Package (WP) meetings are organized by the respective WP leaders. These are more technical and focused sessions where specific aspects of the project are discussed in detail. These meetings are essential for the technical coordination and detailed oversight of the project components.

Each of these meetings serves a specific purpose within the project management lifecycle, from operational coordination to strategic planning and stakeholder engagement. Regular and structured meetings are vital for communication, risk management, and the successful delivery of the project. The training sessions incorporated into the timeline ensure that the project outcomes are sustainable and that end-users can continue to benefit from the project's deliverables beyond its formal conclusion.

PROJECT PROGRESS MONITORING

Each partner undertakes to take part in the efficient implementation of the Project, and to cooperate, perform and fulfil, promptly and on time, all of its obligations under the Grant Agreement and Consortium Agreement as may be reasonably required from it and in a manner of good faith. Each partner undertakes to notify promptly, any significant information, fact, problem or delay likely to affect the Project systematically.

Each partner should provide all necessary input and reports of the progress within the reporting period using the templates created by H2LV and by describing in detail all needed, in the form of a review, details. Each progress report should both include implemented tasks and the consumed budget. The H2LV is responsible for validating the implemented tasks and allocation of resources by the total Action implementation. Is entitled to ask for corrections, justification and further reporting in case of lucking reports or inconsistent records. An Excel template is created in terms of reporting the allocation of resources per work package and Partner (Person months and Costs) (in the Teams platform). A review of the data recorded per partner will be made by the Financial Manager (Aivars Starikovs) of the Project Consortium on behalf of the H2LV. The H2LV is responsible for finalizing and unifying the report of resources' allocation for the whole Consortium and submitting it to the Project steering group. The group has the assent of each member by email before processing the next actions about the report (interim payments if applicable). In the context of sound management, the Consortium have agreed upon the first periodic report (internally) by submitting the above-mentioned Excel file to the Coordinating partner with all effort allocated and resources committed. During the rest project lifetime, progress reports (along with the Excel template) should be made along with the reporting periods of the Action, covering the corresponding periods and no later than 20 days after the end of the relevant period. The list of progress reports is in Figure 8.

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Project time sheet

			Work package									
Month	Name, Surname, Position	Description	WP1 (M1-M12)	WP2 (M1-M4)	WP3 (M1-M4)	WP4 (M2-M7)	WP5 (M3-M8)	WP6 (M4-M9)	WP7 (M5-M9)	WP8 (M7-M11)	WP9 (M1-M12)	Total, Days
January, 2024	**Laila Zemite**	WP1 kick of meeting, internal meetings (T1.1) WP2 Consultations on data colection (T2.1), knowledge exhange (T2.2) WP3 Consumption data analysis (T3.1), biogass production analysis (T3.2)	**1.0**	**1.2**	**0.8**							**3.00**
February, 2024												**0.00**
March, 2024												**0.00**
April, 2024												**0.00**
May, 2024												**0.00**
June, 2024												**0.00**
July, 2024												**0.00**
August, 2024												**0.00**
September, 2024												**0.00**
October, 2024												**0.00**
November, 2024												**0.00**
December, 2024												**0.00**

Figure 2. Timetable of progress reports.

A periodic report of the project giving the:

- general progress
- status of the work performed and the main achievements
- results achieved in the project and the impact these results have had,
- state of play concerning risk and mitigations,
- status of the communication and dissemination
- follow up on EU recommendations, if any
- financial report.
- Updated project plan
- updated communication plan
- updated risk management plan

Project expenditures and reports on the distribution of payments will be validated by the accountant or financial manager. The periodic project report will be approved by the steering committee before submission to H2LV. The approval will be documented in the minutes of the meeting, where the progress report is presented for approval. The report will be a technical report (part A and B) and a Financial Report, where Part A will be generated through the portal, while part B and the financial report will be uploaded as documents (submitted to the project coordinator).

CONCLUSIONS

The comprehensive management and oversight structure established for the CERITA project, as described in the document, reflects a robust approach to achieving its ambitious goals. With the successful achievement of Milestone 1, it's evident that the project is well on essential for achieving the project's goals of transforming waste management practices in Riga and Tartu through a circular economy approach.. The detailed project management framework, encompassing aspects such as administrative coordination, technical coordination, quality and risk management, and data management and ethics, ensures a thorough and ethically compliant approach to implementing cutting-edge technology solutions.

The detailed planning and coordination across all work packages, led by H2LV and supported by the consortium partners, underline the project's commitment to achieving high standards of research, innovation, and stakeholder engagement. The emphasis on ethical considerations and data management, especially in relation to personal data protection and the utilization of AI technologies, highlights the project's dedication to respecting privacy and ethical standards in its implementations.

Moreover, the establishment of a clear governance structure, including the Project Supervisory Board, Project Steering Group, and Project Implementation Team, ensures that strategic decisions are made effectively and that the project remains on track towards its objectives. The inclusion of gender considerations and the focus on ensuring inclusivity in the benefits of the project further demonstrate a comprehensive approach to addressing the needs of the community.

The regular and structured meeting schedule, alongside the mechanisms for project progress monitoring and reporting, facilitates continuous assessment and adjustment of the project's trajectory. This adaptability is crucial for managing risks and leveraging opportunities as they arise during the project lifecycle.

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