



**Monitoring report for
sustainability mobilities I
(D 4.2)**

Energytran

Research infrastructures cooperation for energy transition between European and Latin American and the Caribbean countries.



Content

1. Introduction.....	3
2. Background.....	3
3. Description of sustainability mobilities.....	4
4. Number of the final sustainability mobilities:.....	6
5. Collaborating destination institutions.....	7
6. Social Mobility Period.....	8
7. Agreed Activities Overview	8
8. Relevance of the Activities Carried Out with Respect to the Final Objective of the Project.....	13
9. Evaluation of the Mobility Process	14
10. Conclusions.....	14

Document Control Information

Settings	Value
Document Title:	Monitoring report for sustainability mobilities I
Project Title:	EULAC Energytran: Research infrastructures cooperation for energy transition between Europe and Latin-American and the Caribbean countries
Project Coordinator:	OEI
Deliverable leader:	OEI
Number and type of deliverable:	D4.2 – R: Document, report
Work Package number:	WP3
Doc. Version:	Draft 1
Description:	Document with the aim of describing the plan for assuring the different quality aspects of the project.
Dissemination level:	Public
Date:	18/11/2024

Document Approver(s) and Reviewer(s):

NOTE: All Approvers are required. Records of each approver must be maintained. All Reviewers in the list are considered required unless explicitly listed as Optional.

Name	Role	Action	Date
OEI	Coordinator	Elaboration	18/11/2024
General Assembly of the project	Decision-making body of the consortium	Review	30/11/2024
Steering Committee	Executive body of the consortium	Approve	19/12/2024

Document history:

The Document Author is authorized to make the following types of changes to the document without requiring that the document be re-approved:

- Editorial, formatting, and spelling
- Clarification

To request a change to this document, contact the Document Author or Owner.

Changes to this document are summarized in the following table in reverse chronological order (latest version first).

Revision	Date	Created by	Short Description of Changes
Draft 1	18/11/2024	OEI	Starting of drafting version 1

Configuration Management: Document Location

The latest version of this controlled document is stored in EULAC Energytran intranet.

As part of the project, a website has been developed at <https://energytran.oei.int/> containing all the relevant information, including this document.

Narrative report of the scientific mobility process with a focus on sustainability dimension within the framework of the Energytran project

1. Introduction

The project Energytran aims to tackle the shared challenge of the energy transition by facilitating the exchange, generation, and transfer of knowledge among EU (Europe) and LAC (Latin-American and the Caribbean Countries) research infrastructures from a multidisciplinary perspective (technological, environmental, social). The project supports the development of public policies and regulatory frameworks that promote climate neutrality and a clean, sustainable, and just energy sector transition to advance toward a resilient society.

Lifewatch ERIC, is one of the European partners involved in the sustainability component of the Energytran project. Lifewatch ERIC, is a European Research Infrastructure Consortium providing e-Science research facilities to scientists investigating biodiversity and ecosystem functions and services in order to support society in addressing key planetary challenges. The vision behind LifeWatch ERIC is to become the Research Infrastructure providing access to the world's biodiversity content, services and communities. LifeWatch ERIC aims to accelerate the research efforts of the scientific community by delivering a European state-of-the-art e-Science Research Infrastructure on biodiversity and ecosystem research. As a provider of e-Science facilities for the European Research Area, LifeWatch ERIC represents a significant step forward, empowering users and stakeholders as they seek to address societal challenges linked to climate change and resource efficiency, food security and agriculture, sustainable development and energy supply, security and health.

As part of the Energytran project, several mobilities will be carried out between Lifewatch ERIC and research infrastructures in Latin America and the Caribbean (LAC). These initiatives aim to foster through a sustainability dimension, the creation of scientific cooperation networks that strengthen ties between the EU and LAC, engaging in discussions with experts on topics related to Open Science, data management, and environmental monitoring and assessment; and learning about initiatives showcasing how different European RIs collaborate to support research communities.

2. Background

Lifewatch ERIC plays a key role within the Energytran project, acting as a bridge between the EU and Latin America and the Caribbean (LAC) to promote scientific cooperation and knowledge exchange in the field of energy transition through a sustainability dimension. This is achieved through the promotion of international cooperation and the establishment of scientific networks between European and LAC institutions, fostering the exchange of experiences, resources, and best practices to address global challenges related to renewable and sustainable energy.

From a sustainability standpoint, within the framework of the Energytran project, Lifewatch ERIC promotes the creation of interdisciplinary knowledge, offering a multidimensional approach to assessing the sustainability of the energy transition.

The sustainability mobility initiatives included on WP4 led by Lifewatch ERIC, as a partner institution in the Energytran project, are part of a strategic international collaboration aimed at capacity building to strengthen the capabilities of research communities in LAC. This includes promoting the transfer of knowledge on sustainability aspects by addressing local needs.

In this regard, LifeWatch ERIC contributes to the Energytran project by providing advanced ICT tools and e-Science facilities. Within this project, LifeWatch ERIC aids in creating a network of interconnected and sustainable collaborators' research infrastructures. LifeWatch ERIC helps to ensure that the project achieves its objectives of promoting a clean, sustainable, and socially just energy transition by facilitating access to data, research tools, and collaborative platforms, promoting and enhancing scientific cooperation between EU and LAC infrastructures.

Interest in carrying out the mobility

The interest of LifeWatch ERIC in conducting mobility (as hosting and sending institution) in the field of sustainability and energy transition lies in its commitment to fostering innovation, interdisciplinary research, and capacity building to address global challenges.

By supporting and participating in mobility initiatives, LifeWatch ERIC seeks to:

- **Promote knowledge exchange:** facilitate the sharing of expertise, tools, and methodologies among researchers, institutions, and stakeholders to accelerate advancements in energy transition and sustainable practices.
- **Strengthen collaborative networks:** build partnerships with other research infrastructures, national counterparts and institutions, and industries to create synergies that enhance the effectiveness of sustainability projects.
- **Support training and development:** provide opportunities for researchers and professionals to gain hands-on experience in cutting-edge projects, tools, and practices related to energy transition and ecological sustainability.
- **Advance research impact:** foster the integration of biodiversity, ecosystems, and energy transition studies to deliver innovative solutions that align with the goals of the European Green Deal and global sustainability agendas.
- **Drive evidence-based policy making:** equip experts and researchers with robust scientific data and models to guide decisions that balance ecological preservation and energy needs.

3. Description of sustainability mobilities

During these mobilities, participants will have the opportunity to become familiar with the resources and services provided by LifeWatch ERIC; engage in discussions with experts on topics related to European RIs, Open Science, data management, and environmental monitoring and assessment; and learn about initiatives showcasing how different European RIs collaborate to support research communities. Below are the descriptions of the different types of proposed aims for the mobilities planned on WP4:

- Project 1: Knowledge exchange with a focus on training aspects
- Project 2: Knowledge exchange with a focus on technical aspects
- Project 3: Knowledge exchange with a focus on Open Science
- Project 4: Knowledge exchange with a focus on the social aspect

The WP4 forecast includes the implementation of a total of:

- 10 mobilities from LAC research infrastructures (LAC RI) to Europe research infrastructures (RI) that will be carried out by:
 - TECNIM (Mexico).
 - OEI.
 - Universidad Nacional de San Martín — UNSAM (Argentina)
 - CENAT (Costa Rica):
initially, it was proposed to conduct the mobility in Italy, where the training team is based; however, CeNat preferred it to take place at the Spain office (ICT and Statutory Center). The learning platform selected for the course will now be provided by CeNat, rather than using the LWERIC training platform.
Course instructors will directly upload their content to the platform, leaving no specific tasks to be carried out during this mobility.
Additionally, 14–15 mobilities have already been confirmed (TCNM: 2 candidates; OEI: 6–7 candidates pending confirmation; UNSAM: 6 candidates), exceeding the initially planned 10 mobilities.

- 5 mobilities from EU RI to LAC that will be carried out by LifeWatch ERIC to CENAT (Costa Rica). In a coordination meeting, it was confirmed that not all these mobilities needed to be exclusively from LWERIC to LAC. The proposal was to include, in addition to LWERIC personnel, other European instructors participating in the e-learning course.

Each mobility will last approximately from one day to one week, depending on the nature of the research to be developed and the agreement established with the host institution.

These sustainability mobilities have been identified by LifeWatch ERIC and OEI, together with the institution's partners of the Energytran project in LAC, participating in these mobilities.

4. Number of the final sustainability mobilities:

As we have mentioned above, the number of sustainability mobilities that will be carried out within the framework of the project is 10 mobilities from LAC-RI to EU-RI and 5 mobilities from EU-RI to LAC-RI as shown in the table below:

Sending institutions from Europe	LAC and Europe institutions for receiving mobilities
From LAC to EU: 10 mobilities:	
Centro Nacional de Alta Tecnología (CeNAT) (this mobility will be reassessed)	To Lifewatch ERIC
Tecnológico Nacional de México (TECNM)	
Universidad Nacional de San Martín (UNSAM) Organización de Estados Iberoamericanos para la Educación, la Ciencia y la Cultura (OEI)	
From EU-RI to LAC-RI: 5 mobilities	
LifeWatch ERIC or other EU instructor for the e-learning course	To Centro Nacional de Alta Tecnología (CeNAT), Costa Rica

At this stage, we wish to emphasize LifeWatch ERIC's strong commitment to promoting scientific mobilities with a focus on sustainability towards host institutions in LAC, as well as the significant interest from LAC institutions in welcoming European partners. This underscores the pressing need to foster researcher exchanges within the framework of scientific cooperation between the EU and LAC, while also building strong networks for knowledge sharing and collaboration between institutions in both regions.

5. Collaborating destination institutions

Below we present the institutions with which the different sustainability mobilities will be carried out regarding the duration of each mobility.

Name of the host institution	City and country	Name of the sending institution	Country of origine	Duration of the mobilities (in days)	Specific dates
From LAC to EU: 7-10 mobilities:					
Lifewatch ERIC	Seville, Spain	Centro Nacional de Alta Tecnología (CeNAT): this mobility will be reassessed	Costa Rica	TBC	TBC
		Tecnológico Nacional de México (TECNM)	México	1-2	Between May 19 to 23, 2025
		Universidad Nacional de San Martín (UNSAM)	Argentina	1	Between May 19 to 23, 2025.
		Organización de Estados Iberoamericanos para la Educación, la Ciencia y la Cultura (OEI)	Argentina and Spain	1	Between May 19 to 23, 2025.
From EU-RI to LAC-RI: 5 mobilities					
Centro Nacional de Alta Tecnología (CeNAT)	Costa Rica	Lifewatch ERIC or other EU instructor for the e-learning course	Spain	2-7	September 2025

6. Social Mobility Period

As the table below shows, the sustainability mobility period will take place between May 2025 and September 2025.

7. Agreed Activities Overview

Below we present the description type of the mobilities through a mobility catalogue:

-Type 1: Knowledge exchange with a focus on training aspects.

CeNAT: Training profile

-Type 2: Knowledge exchange with a focus on training aspects.

TeCNM: will carry out a general knowledge exchange (similar to OEI and UNSAM), in addition to an session with a more technical focus.

-Type 3: General knowledge exchange.

OEI and UNSAM

- **Project 1: Knowledge exchange with a focus on training aspects**

Name of the host institution	LifeWatch ERIC
City and country	Seville (Spain) and/or Lecce (Italy)
Website	https://www.lifewatch.eu/
Work theme	This activity focuses on Open Science and data FAIRness to address the environmental challenges of the energy transition. It will take place within the framework of the EU-LAC EnergyTRAN project, which aims to tackle the energy transition by fostering knowledge exchange among EU and LAC Research Infrastructures, covering technological, environmental, and social dimensions. Specifically, this activity focuses on the environmental aspect of Energy Transition.
Department in which the activity will take place	ICT Core (Seville, Spain)
*Duration (in days)	From 1 to 5 days
Objectives of the mobility	<p>Interested candidates will actively engage in designing and developing training materials for an e-learning course within the framework of the EU-LAC EnergyTRAN project. They will closely collaborate with both the scientific-technical and training teams of LifeWatch ERIC.</p> <p>The e-learning course targets researchers and aims to provide participants with a comprehensive understanding of how Open Science and FAIR principles can enhance research practices and contribute to addressing environmental challenges in the context of the energy transition.</p> <p>During their stay, candidates will have the opportunity not only to participate in this specific activity but also to become acquainted with the technological tools developed by LifeWatch ERIC, as well as the projects, training activities, cooperation initiatives, and working methodologies employed by this Research Infrastructure.</p> <p>Candidates should have experience in one or more of the following areas:</p> <ul style="list-style-type: none"> (1) environmental challenges of the ecological transition. (2) didactics and development of educational/training materials. (3) Open Science and FAIR principles.
Research team to be integrated	Scientific- technical and training teams of LifeWatch ERIC
Contributions in kind of host institution (accommodation, maintenance...)	Workspace in the office
Working language	TBD English + Spanish (at the ICT Core) / English + Italian (at the Service Center)

- **Project 2: Knowledge exchange with a focus on technical aspects**

Name of the host institution	LifeWatch ERIC
City and country	Seville (Spain)
Website	https://www.lifewatch.eu/
Work theme	This activity focuses on Open Science tools to address the environmental challenges of the energy transition. It will take place within the framework of the EU-LAC EnergyTRAN project, which aims to tackle the energy transition by fostering knowledge exchange among EU and LAC Research Infrastructures, covering technological, environmental, and social dimensions. Specifically, this activity focuses on the environmental aspect of Energy Transition.
Department in which the activity will take place	ICT Core (Seville, Spain)
*Duration (in days)	From 1 to 5 days
Objectives of the mobility	<p>The interested candidates will learn how to use some of the LifeWatch ERIC tools including the Workflow Studio, an online platform that allows researchers to perform complex analyses in the form of "workflows"- a set of tools and dataset actions that are executed sequentially as a batch operation. They will actively contribute to designing and/or developing a new workflow tailored to the EnergyTRAN project, in close collaboration with the scientific and technical teams of LifeWatch ERIC.</p> <p>During their stay, candidates will have the opportunity not only to participate in this specific activity but also to familiarize themselves with other technological tools developed by LifeWatch ERIC, as well as the projects, training activities, cooperation initiatives, and working methodologies employed by this Research Infrastructure. They will also learn about the role of Open Science and FAIR principles in addressing major environmental challenges.</p> <p>Candidates should have experience in one or more of the following areas:</p> <ul style="list-style-type: none"> (1) programming skills. (2) data management expertise. (3) development of indicators related to the environmental component of the energy transition.
Research team to be integrated	Scientific and technical teams of LifeWatch ERIC
Contributions in kind of host institution (accommodation, maintenance...)	Workspace in the office
Working language	English and Spanish

- **Project 3: Knowledge exchange with a focus on Open Science**

Name of the host institution	LifeWatch ERIC
City and country	Seville (Spain)
Website	https://www.lifewatch.eu/
Work theme	This activity is focused on fostering knowledge exchange among Research Infrastructures.
Department in which the activity will take place	ICT Core (Seville, Spain)
*Duration (in days)	From 1 to 5 days
Objectives of the mobility	<p>Interested candidates will have the opportunity to become familiar with the diverse technological tools developed by LifeWatch ERIC, as well as the projects, training activities, collaborative initiatives, and working methodologies utilized within this Research Infrastructure. They will also gain insight into LifeWatch ERIC's role in promoting Open Science and ensuring data FAIRness to enhance environmental research. Depending on their background, candidates may integrate into either the scientific or technological teams at LifeWatch ERIC.</p> <p>Candidates should have experience in one or more of the following areas:</p> <ul style="list-style-type: none"> (1) Open Science and FAIR principles; (2) Environmental Monitoring; (3) Open Science technological tools.
Research team to be integrated	Scientific and/or technical teams of LifeWatch ERIC
Contributions in kind of host institution (accommodation, maintenance...)	Workspace in the office
Working language	English and Spanish

- **Project 4: Knowledge exchange with a focus on the social aspect**

Name of the host institution	LifeWatch ERIC
City and country	Seville (Spain)
Website	https://www.lifewatch.eu/
Work theme	This activity is focused on fostering knowledge exchange among Research Infrastructures.
Department in which the activity will take place	ICT Core (Seville, Spain)
*Duration (in days)	From 1 to 5 days
Objectives of the mobility	<p>Interested candidates will have the opportunity to become familiar with the diverse technological tools developed by LifeWatch ERIC, as well as the projects, training activities, collaborative initiatives, and working methodologies utilized within this Research Infrastructure. They will also gain insight into LifeWatch ERIC's role in promoting Open Science and ensuring data FAIRness to enhance environmental research. Depending on their background, candidates may integrate into either the scientific or technological teams at LifeWatch ERIC.</p> <p>Candidates should have experience in one or more of the following areas:</p> <ul style="list-style-type: none"> (1) Green innovation, (2) employment and higher education in the field of environmental sustainability, (3) the Sustainable Development Goals (SDGs) and energy transition.
Research team to be integrated	Scientific and/or technical teams of LifeWatch ERIC
Contributions in kind of host institution (accommodation, maintenance...)	Workspace in the office
Working language	English and Spanish

8. Relevance of the Activities Carried Out with Respect to the Final Objective of the Project

The **sustainability mobilities** implemented under the Energytran project are important to advancing the project's goals by fostering a holistic approach to addressing the challenges of transitioning to sustainable energy systems. These mobilities not only focus on technical innovations but also on broader systemic changes, aligning with the commitments to Open Science, collaboration, and interdisciplinary knowledge exchange.

Below we present an analysis of the relevance of these activities, linked to the different types of proposed projects:

1. Promoting knowledge exchange and training (Project 1)

Activities emphasizing training equip participants with skills to understand and implement sustainable mobility solutions that align with the energy transition. These efforts contribute to:

- **Capacity building:** empowering stakeholders to adapt and apply innovative solutions in diverse contexts.
- **Widespread impact:** expanding awareness and adoption of sustainability practices through well-trained professionals. This ensures the dissemination of actionable knowledge crucial for, for example, decarbonizing transport and reducing energy demand.

2. Advancing technical innovations (Project 2)

Sustainability mobilities focusing on technical aspects provide opportunities for participants to engage with state-of-the-art tools and methodologies developed to meet the needs of the scientific community. Key contributions include for example:

- Tools that enable the quantification of CO₂ emissions or to assess the impact of an energy installation on an ecosystem, etc

3. Strengthening Open Science principles (Project 3)

Mobilities focused on Open Science promote transparency, inclusivity, and collaboration in developing sustainable mobility solutions. Their relevance lies in:

- **Collaborative problem-solving:** participants learn to apply open-data platforms, collaborative tools, and shared methodologies to enhance mobility systems.
- **Cross-Disciplinary integration:** engaging with Open Science strengthens the connection between mobility, energy, and environmental sciences, driving systemic innovation.

4. Enhancing social dimensions (Project 4)

Socially focused sustainability mobilities prioritize the engagement of communities and address the societal impact of sustainable mobility initiatives. Their relevance is highlighted by:

- **Behavioral shifts:** encouraging community-driven transitions to sustainable practices, such as public transport adoption or active mobility.
- **Equitable access:** ensuring sustainable mobility solutions are accessible to all social groups, fostering inclusive energy transitions.

Broader Impacts

Through these diverse activities, participants in sustainability mobilities gain:

1. **Holistic perspectives:** insights into the interplay between science, technology, and society in achieving sustainable mobility.
2. **Enhanced collaboration:** opportunities to work with scientific communities and learn from projects across thematic areas, amplifying the global impact of the Energytran project.
3. **Practical implementation:** the skills and knowledge needed to translate sustainability principles into actionable projects at local and global levels.

Through interdisciplinary collaboration, training, and social engagement, activities directly support the goals of the Energy transition project, enabling sustainable solutions to thrive within the broader context of Open Science.

9. Evaluation of the Mobility Process

Each research participant involved in the sustainability mobilities carried out within the framework of the Energytran project will be responsible for preparing a final report. This report will serve to evaluate the mobility process.

10. Conclusions

The sustainability mobilities led by LifeWatch ERIC under the Energytran Project framework play an important role in driving the project's success. These initiatives align closely with Energytran's overarching goals of advancing a low-carbon, energy-efficient society by fostering innovation, collaboration, and capacity-building across diverse disciplines. Below we present some keyways in which these mobilities contribute to Energytran's final objectives:

1. Facilitating knowledge exchange

Through tailored knowledge-sharing initiatives, sustainability mobilities empower participants to adopt cutting-edge tools, practices, and methodologies.

2. Strengthening interdisciplinary collaboration

Sustainability mobilities bring together diverse scientific communities and stakeholders, creating a collaborative environment to address energy challenges. By integrating perspectives from technical, social, and Open Science domains, these mobilities ensure comprehensive solutions that meet societal needs.

3. Advancing Open Science and data transparency

By embedding Open Science principles, sustainability mobilities enhance the accessibility and transparency of research. This fosters cross-sector collaboration, drives innovation, and promotes the replication of successful models across regions, amplifying Energytran's impact.

4. Enabling community and stakeholder engagement

Socially focused mobilities emphasize inclusivity, behavioral change, and equitable access to sustainable solutions. This ensures the societal acceptability and long-term viability of mobility and energy transition initiatives, which are vital to Energytran's success.

The sustainability mobilities led by LifeWatch ERIC provide a foundation for achieving the Energytran Project's final objectives. By promoting technical innovation, fostering societal engagement, and advancing Open Science principles, these initiatives directly contribute to creating a sustainable, resilient, and energy-efficient future.



Energytran

www.energytran.oei.int
energytran@oei.int



**Funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union. Neither the European Union nor the granting authority can be held responsible for them.

