



AFURADA
LIVING LAB



Introduction

A **Living Lab** is a territory selected due to its specific characteristics, for testing innovative urban solutions that involve a diverse range of entities. These entities collaborate with each other in the **development, prototyping, validation and testing of new technologies, services and respective applications in a real life context.**

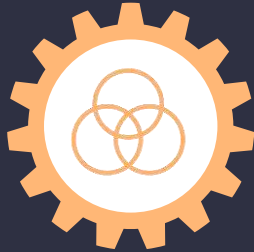
Through the integration of research and innovation processes, these territories encourage the co-creation and **experimentation of new solutions** to concrete urban problems.

A Living Lab is an **open ecosystem** that involves and encourages citizen **participation and collaboration of citizens. Promotes and leads to sustainability and decarbonization through new models of public intervention and business.**



Key principles

A Living Lab is characterized by five key principles:



Co-creation



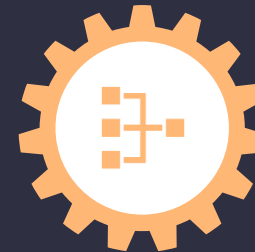
**Real-life
application**



**Active citizen
involvement**



**Multiple stakeholder
participation**



**Multidisciplinary
approach**

Afurada Living Lab

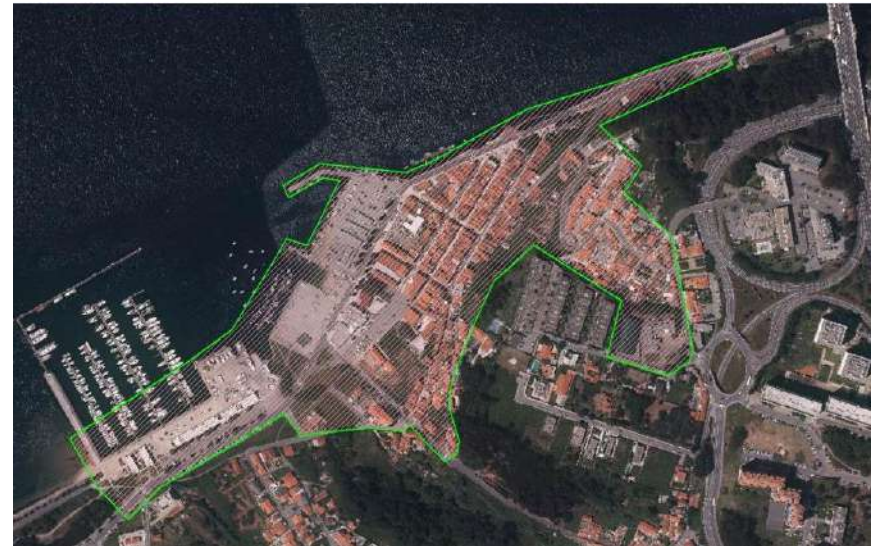


Considering the key principles identified, the Living Lab strategic vision is intended to be implemented in the territory of Afurada:

"To affirm the Afurada Living Lab as a hub of urban innovation and a space for testing, prototyping and developing innovative solutions in a real context, based on a collaborative and co-creation model between the local community and relevant stakeholders, to promote the transition to a low carbon economy".

Afurada Living Lab

The Living Lab **implementation area** is located in the parish of Afurada, on the banques of the Douro river.



Objectives



OBJ 1. Increase the resilience of Afurada's territory through the experimentation of sustainable and transversal technological solutions.



OBJ 2. Raise awareness in the local community about the benefits of adopting more sustainable behaviors with low environmental impact.



OBJ 3. Promote the active participation of the local community in the design, experimentation and evaluation of technological solutions to identified urban problems.



OBJ 4. Promote the potential transferability of technological solutions tested in a real context, for the entire territory of Vila Nova de Gaia.



OBJ 5. Reduce greenhouse gas emissions and the carbon intensity of economic activities and services in the Living Laboratory area and its surroundings.

Guidelines

The methodological approach is based on a set of **guidelines** built on the intrinsic characteristics of the implementation area.



Explore



Experiment



Assess

Partnership



ubiwhere

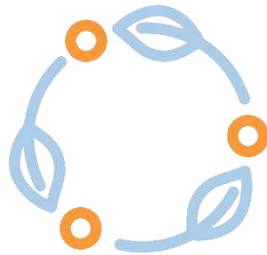


Action Plan

Over a period of 3 years different actions and activities will be implemented, focused on **four Thematic Areas**:



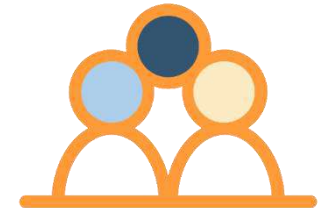
**Sustainable Urban
Mobility**



**Circular Economy
and Environment**



**Energy and
Buildings**



**Community,
Management and
Communication**

Action Plan



Sustainable Urban Mobility

01

AFURADA SMART PARKING

Real-time parking monitoring system on public roads and/or in car parks

02

AFURADA HOTSPOT

Implementation of an electric mobility system

03

AFURADA CONNECT

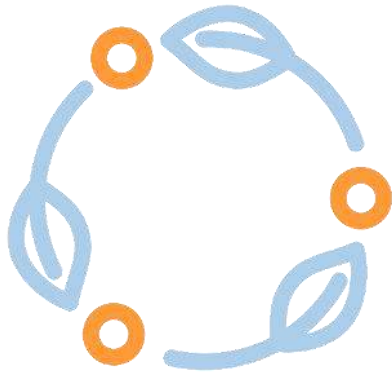
Development of a sustainable urban mobility platform

04

AFURADA "GO OUTSIDE"

Implementation of a set of activities to create a "green territory"

Action Plan



Circular Economy and Environment

05

AFURADA SMART RAYT

Implementation of activities aimed at promoting eco-consumption, prevention and recycling

06

AFURADA_UPCYCLE

Reuse of waste produced namely in two "territorial anchors" related with fishing activity: Fishing Dock and the Market.

07

AFURADA: ROADMAP

Promote operations leading to circularity, namely in terms of consumption and habits.

08

AFURADA RESPONSIBLE COMMUNITY

Holding a co-creation event to promote responsible citizenship for a carbon neutral and resilient environment.

Action Plan



Energy and Buildings

09

CER AFURADA

Implementation of an Intelligent Energy Community with Storage System for 3 emblematic buildings in Afurada

10

INTELLIGENT ENERGY MANAGEMENT SYSTEM

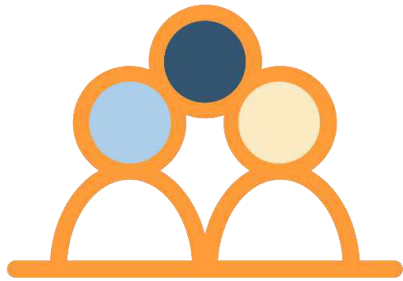
Integration and development of intelligent data analytics functionalities of the energy flows between 3 emblematic buildings in Afurada

11

SUSTAINABLE ENERGY MARINA

Use of urban furniture as a vehicle to aggregate different technologies in Marina of Afurada

Action Plan



**Management,
Monitoring and
Communication**

12

COORDINATION COMMITTEE

Maximum management body

13

MONITORING COMMITTEE

Responsible for the management of the project and for the operationalization of foreseen activities

14

EXPERTISE

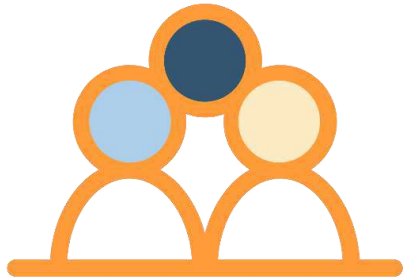
Identification of best practices in scientific and technical level with the Norwegian University of Science and Technology's (NTNU)

15

STAKEHOLDERS ASSEMBLY

Representatives of relevant local entities that contribute to decision making in face of local needs

Action Plan



Management,
Monitoring and
Communication

16

FINANCIAL MANAGEMENT

Ensure the good financial execution of all operations

17

COMMUNICATION

Development of initiatives to promote the project and its results, and to involve the community in the decarbonization process of the territory of Afurada.

18

MONITORING

Development of an information management platform for monitoring and evaluating the actions and technologies tested.

Support and implementation

Iceland
Liechtenstein
Norway grants



Funding:

EEA Grants: 850 M€

Total: 1.084 M€



Calendar :

2021 -2024

AFURADA
LIVING LAB



CEDES - Associação para um Centro
de Estudos para o Desenvolvimento
Sustentável

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THANK YOU!
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