**Horizon Europe - Missions** 

ADAPTATION TO CLIMATE CHANGE & CLIMATE NEUTRAL AND SMART CITIES



# Fabio Aprà & Laura Pérez R2M Solution SL

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## **R2M Solution SL**



#### R2M in Numbers

3.9M€ 70 employees

Turnover 2020 45% Women → 25% PhDs

Top 3 SME in H2020

65 projects → 15.5M€

+278M€

Funds raised



IES ICL: Intelligent Communities Lifecycle

**IES** 



Matterport: Virtual tours, 3D survey and digital twin



ZUTEC: REAL ESTATE information management

**BIMcollab** 

BIMcollab: cloud

based BIM issue

management



Synavision: Monitoring Based Commissionina

**TABLE OF THE PROPERTY OF THE** 

GREENPASS: asses

the greenery impact

on resilience



BrainBox AI: Autonomous Al **HVAC** technology

onyx

Onyx Solar: photovoltaic glass for buildings



Strategic innovation partnering



10 years of EU Projects experience



Multi-disciplinary staff



We customize our offer and approach









































































# Novel Agro-Photovoltaic systems LOOKING for COORDINATOR



Sustainable, secure and competitive energy supply (HORIZON-CL5-2022-D3-01) [Innovation Action / Deadline date: 26 April 2022]

## Objectives:

- Harvesting of crops and photovoltaic electricity, providing sustainable solutions for energy production/use/efficiency, soil protection and water conservation.
- Reinforce the European PV value chain, introduce new business models and open new markets for novel Agro-Photovoltaic systems.
- Minimise the impact of PV on landscape and environment exploiting its modularity and synergies of use.

### Expected results:

- Develop and demonstrate agro-photovoltaic systems or building integrated agro-photovoltaic systems for green houses employing PV cell technologies
- Demonstrate feasibility, reliability, replicability, robustness and ease of maintenance of the system and its performance using relevant KPIs
- Demonstrate a business case for the concept and market introduction strategy.
- Address the following related aspects: low environmental impact (avoiding or minimizing land impact from PV systems), resource efficiency and circularity potential.
- Include a strong involvement of citizens/civil society, together with academia/research, industry/SMEs and government/public authorities.







# **Novel Agro-Photovoltaic systems**

# **Potential partners**



#	Expertise	Туре	Role in the project
1	Technology provider	SME/LE	Providing PVs to use for agrifotovoltaic systems
2	Engineering company	SME/LE	Providing data collection systems and data analysis for validation
3	Agricultural organization	ORG	Pilot site aiming at using novel Agro-PV novel systems
4	Sustainability organization	SME	LCA, LCC, s-LCA and circular economy, re-use and recycle
5	Social-science and humanities	UNI	Involve, co-create, develop the agro-PV systems with its final users
6	Small municipality or NGO	ORG	Rural town and/or NGO focused on rural areas development
7	Exploitation of results	RESEARCH TO MARKET SOLUTION	How to get the technology closer to the market







# Demand Response in Residential Energy Communities [Innovation Action / Deadline date: 06 Sep 2022]



#### **HORIZON-CL5-2022-D4-01-01: Demand response in energy-efficient residential buildings**

## Objectives:

- Investigate innovative DR solutions for the residential sector, involving as many devices as possible.
- Ensure compliance with the principle of privacy by design and with best practices on data protection.
- Minimise the effort required to elicit user preferences (user segmentation and engagement).
- Take due account the regulatory frameworks in designing the innovation, and related exploitation plans.
- Seek of social and economic enablers in the design of the innovative solutions.
- Consider social innovations leading to active citizen engagement and as drivers of social change.
- Demonstrate that the proposed solutions lead to reducing costs of small demand response assets.
- Demonstrate suitability for explicit DR, or a combination of both explicit and implicit residential DR.

### Expected results:

- Increased potential benefits, trust and acceptability of DR solutions for residential consumers.
- Advanced asset control and aggregation approaches that enable the participation of residential buildings in commercial DR.
- Expanded pool of assets relevant for DR in the residential sector.







# **Consortium - required partners LOOKING FOR COORDINATOR and PARTNERS**



#	Expertise	Type	Role in the project
1	Project Management		Coordinator
2	Technology research & development	RTO/ SME/LE	DR solutions, new control modes, asset optimisation techniques
3	Equipment providers	SME/LE	e.g. monitoring equipment, batteries
4	Energy providers & ESCos	SME/LE	Service providers, demo-site support
5	Social Sciences & Humanities	UNI	Social innovation leading to active citizen engagement, new social practices
6	Public authorities / Associations / Cooperatives	ORG	Demo-site support, regulatory framework, socio-economic analysis, user perspective
7	Awareness raising	ORG/ SME	Communication & Dissemination
8	Exploitation of results	SOLUTION	Bring the proposed solution closer to the market, market analysis, business models









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