

The RESONANCE project is creating a software framework that enables rapid development and plug-and-play deployment of standard-compliant solutions for demand-side flexibility management

RESONANCE



Facilitating cost-efficient development of replicable & standard-compliant demand-side flexibility management solutions

The aim of the RESONANCE project is to make it more cost-efficient to harness flexibility from distributed and small-scale assets in homes, buildings, and places and thus help mobilise demand-side flexibility at a larger scale. To do so, the project is developing an innovative software framework that facilitates easy design and deployment of standard-compliant solutions for demand-side flexibility management, thereby reducing the workload and development costs.

The RESONANCE Framework provides three catalogues of software services for standard-compliant Resource Manager and Customer Energy Manager solutions as well as for Aggregation & Market Integration. Included are tools for configuring the services in a plug-and-play manner and for managing trust, security, and privacy aspects. A Data & Service Marketplace enables developers and integrators to advertise and explore the services, tools, and data assets in the different catalogues.

resonance-project.eu

























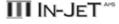














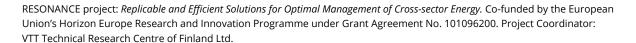
















Six pilot sites, several flexibility resources, various customer sectors

Pilot sites in six European countries develop and test the RESONANCE software catalogues and services.

The populated services are then replicated at other pilot sites with different stakeholders and constraints.

The sites include and combine several flexibility resources and solutions, across various customer and energy sectors, engaging a multitude of stakeholders and market settings in a cross-sector energy ecosystem.

Place Objectives Sectors Resources & Solutions **HVAC** systems Demand-side flexibility Helsinki Apartment buildings for markets Heat pumps Cost-driven local District heating optimisation Marseille Demand-side flexibility EVs & ebikes Industrial site for markets PV systems Cost-driven local Smart EV charging optimisation **HVAC** systems Bavaria Local optimisation, cost-Industrial & commercial & environment-driven Heat pumps buildings Demand-side flexibility **HVAC** systems **Ptolemaida** for markets Heat pumps Municipality of Eordaia Public & private Cost-driven local District heating buildings and places optimisation Celje and other Local optimisation, cost-PV systems & environment-driven Heat pumps Slovenian regions Households

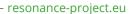


Mölndal &

Gothenburg

Single-family houses

Commercial buildings





PV systems,

Heat pumps

HVAC systems District heating

Smart EV charging

Batteries





Local optimisation, cost-

Demand-side flexibility for

& environment-driven

markets