



Title of the project

Building a low-carbon, climate resilient future: secure, clean and efficient energy

Acronym

frESCO

Content of the project

Clean energy for all Europeans aims to empower consumers to become fully active and central players in the energy markets of the future. In this context the necessity and value of demand and subsequently **demand response** as a novel means of **flexibility** is gaining significant momentum. It has been recognized that a shift towards more active demand is required as a way of **energy democratization** and consequently, small energy consumers/prosumers need to be provided with the services to offer an additional, cheaper and more responsive source of flexibility for the electricity system.

General objectives

To engage with ESCOs and aggregators in the co-creation of innovative and viable energy service offerings with the use of ICT technologies.

To ensure objective measurement and verification of the performance of the new hybrid energy service offerings, towards facilitating transparent share of benefits between all involved parties.

To integrate existing big data technologies, tools and libraries, with energy-relevant legacy systems and ICT-enabled assets and components to accelerate the data management and analysis cycle for powering the **frESCO** innovative services, turning the 4 Big Data V's into Stakeholder Value.

To complement innovative service models with novel business models and contractual schemes that reflect the new modus operandi of integrated services.

To address key regulatory, market, societal, financial and technological barriers for the provision of hybrid energy services, so as to set-up a sustainable future business framework for ESCOs and Aggregators.

Validate the resulting solutions in real-life environments and ensure enhanced consumer engagement in the innovative hybrid energy schemes offered by the project.

Promote the adoption of **frESCO** as a next-generation energy service framework through intense dissemination and knowledge transfer of the project's outcomes towards the targeted stakeholders, reaching out to international audiences within and beyond the EU.

Project Work Packages

WP1: Management and coordination.

WP2: Project Baseline, User Requirements and System Design.

WP3: Novel Performance-based Business Models and Verification Method for bundled energy services.

WP4: Big data collection and management, automation, privacy and interoperability.

WP5: Multi-service package toolkit for service providers.

WP6: Testing and validation of the new services.

WP7: Exploitation and replication of the projects results.

WP8: Communication and dissemination activities.

Results and conclusions

As an overview of the progress up to the end of the project in Month 42, November 2023, it's been reached 10 out of 10 milestones (MS) up to the end of the project, in line with the plan. During reporting period 1 MS1 to MS5 were reached, and in Reporting period 2 Milestones 6 to 10 have been achieved, items such as:

- Release of the beta version of the multiservice package toolkit for service providers.
- Measurement of the pre-retrofit demo sites and monitoring plan released.
- Final release of frESCO integrated Big Data platform and multi-services toolkit for services providers.
- Successful demonstration of the energy services and measurement of post retrofit demo site.

PROJECT PARTNERS

• CIRCE	• S5
• EI-JKU	• CARTIF
• UBITECH	• UBE
• KONCAR KET	• KRK
• COMSA	• LCTE
• VOLT	• VERD
• IOSA	• RINA-C

BUSSINESS AREAS

R&D and Technical Area

COMSA

DURATION

June 2020 – November 2023 (42 months)

BUDGET

Consortium: 5,127,801,25 €

COMSA: 419.375,00 €

COORDINATOR COMSA

Daniel Sánchez