

fresca

THE NEXT GENERATION OF ENERGY PERFORMANCE CONTRACTING FOR RESIDENTIAL CONSUMERS

THE CHALLENGE

Energy Performance Contracting (EPC) is a form of 'creative financing' which allows funding energy upgrades with cost reductions based on the demonstrated performance. Under an EPC arrangement an external organization (ESCO) implements a project to improve the energy efficiency and uses the stream of incomes from the cost savings to repay the overall costs of the project, including the initial investment.

Despite the large economic energy saving potential in the EU, very few ESCOs currently apply Energy Performance Contracting to the residential market due to high transaction costs, high fragmentation of market, variation of individual needs and behaviours requiring customized and personalized treatment and lack of information and expertise on the residential consumer.



































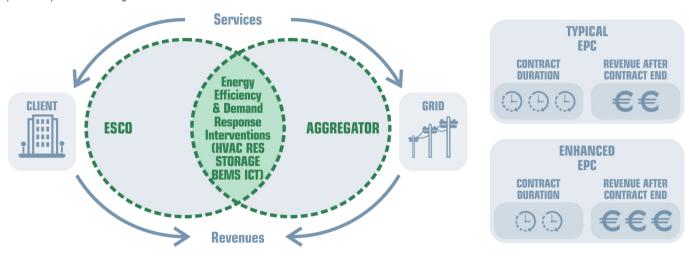
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THE PROJECT

frESCO project is developing new EPCs to disengage from current out-dated savings-based performance contracts and allow evolution of energy market trends towards **new hybrid schemes** that not only **reduce costs**, but also create **new revenue streams** for the end-consumers/ prosumers, by empowering them to participate in energy transactions and become active players to the overlying energy market actors. In this context, frESCO project will deliver the **next generation of EPC** under the principle of **Pay for Performance**.

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THE MAIN OBJECTIVES

- Engage with ESCOs and aggregators in the co-creation of innovative energy service offerings with the use of ICT technologies
- Ensure objective measurement and verification of the performance of the new hybrid energy services
- Integrate existing big data technologies, tools and libraries, with energy-relevant legacy systems to accelerate the frESCO data management
- Complement innovative service models with novel business models and contractual schemes that reflect the new modus operandi of integrated services
- Address key regulatory, market, societal, financial and technological barriers for the provision of hybrid energy services
- Validate the resulting solutions in real-life environments and ensure enhanced consumer engagement in the innovative hybrid energy schemes offered by the project

THE DEMONSTRATORS

frESCO will test and demonstrate the performance of the innovative energy services packages and business models and the overall ICT solution through a demonstration campaign in real environment in **four representative pilot sites**.

Gironde - Minimize the energy consumption while maintaining comfort conditions

Madrid - Combine collectively owned generation with other energy services

Krk Island - Demonstrate new business models in a highly touristic location

Thassos Island - Facilitate the transformation to an environmentally friendly hotel

