Newsletter 2

FinSESCo

Fintech Platform Solution for Sustainable Energy System Intracting and Contracting, Boosting Energy Saving and Renewable Energy

FinSESCo exploits pre-existing building information from Energy Performance Certification and a fully digital implementation of the energy contracting process for faster decarbonisation.

Dear readers!

We are happy to present to you news from the project. This is the second newsletter of the project. FinSESCo has finalised two dliverables:

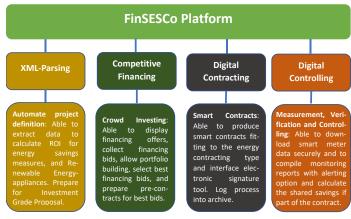
- Research Analysis D2.1
- Requirements Manual D2.2

Please find in the following some summary and findings. We also started to analyse pilots and tested the usage of CITY GML to extract data which is stored in the XML to be used as source of the economic calculations of the saving measures.

During the last months the energy prices were decreasing and the interest rates were increasing. We will see the impacts on the renovation rate.

If you want to express your thoughts you might visit the social media channels listed at the next page, or write to office@energycontracting.info Enjoy reading!

Gerfried Cebrat, project lead



ERA-Net Smart Energy Systems



This project has been funded by partners of the ERA-Net Smart Energy Systems (www.era-net-smartenergysystems.eu) and Mission Innovation (mission-innovation.net) through the Joint Call 2020. As such, this project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement no. 883973.



Crowd Investing Platform for Decarbonising the Building Stock

Project Duration

01.05.2022 - 31.12.2024

Project Budget

Total Budget: € 1,032,760.-

Project Coordinator

effiziente.st (Austria)

Project Partners

- Europa University Viadrina (Germany)
- SEnerCon (Germany)
- BEIA Interbational Consultants (Romania)
- Institute for Energy Studies Anna University (India)
- Velore Institute of Technology (India)

Project Website

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ERA-Net Smart Energy Systems Joint Call 2020 (MICall20)

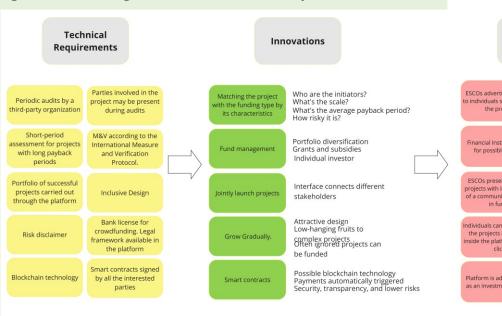
This project has been awarded funding within the ERA-Net SES Joint Call 2020 for transnational research, development and demonstration projects. 22 Mio EUR of funding have been granted to 21 projects active in 17 regions and countries.



Requirements for the FinSESCo platform solution

Our requirement analysis reveals several key functionalities and novelties that can greatly contribute to the energy contracting innovation process. These features aim to overcome barriers, enhance user engagement in our platform, improve transparency, and drive the success of EPC projects. Let's delve into them.

One crucial function is the implementation of periodic audits by third-party organisations. These audits serve to observe project performance, make necessary adjustments, and ensure accountability. In addition, the contracts should guarantee the opportunity for all project stakeholders to visit the construction site and participate in audits, fostering transparency throughout the process. Crowdfunding plays a vital role in energy measures, and community support is essential for its success. The platform can establish partnerships with construction companies and Energy Service Companies (ESCOs) to jointly present projects to consumers. This collaboration helps educate consumers about the potential energy savings and builds trust in the platform as a reliable investment opportunity. To establish trust and credibility, the platform must host past projects carried out by ESCOs, showcasing their success and the amounts raised. This portfolio of successful projects becomes a fundamental factor in reassuring users and financing institutions about the reliability of ESCOs.





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Stakeholder **Engagement Strategies** ESCOs advertise measures to individuals so they submi the projects ndividuals can easily upload the projects information inside the platform, Financial Institutions look for possible projects with the ideal ESCO and the remaining amount. Uses the platform to guarantee banks that there is support. Diminishes the risk for larger projects and attract bank investment ESCOs presents complex projects with initial support ndividuals can easily upload the projects information nside the platform with few ndividuals can find the ideal through the platform clicks as an investment platform

Prior to hosting and funding a project, a thorough analysis is necessary. This analysis should consider the initiator(s), scale, and average payback period associated with the energy measures. Understanding these factors allows for better selection of the funding model and development of effective campaigns. To attract a broader range of investors, the platform should **adjust interest rates** based on the associated risks. This strategy ensures the platform's attractiveness to investors who are not directly involved in the project but see it as an opportunity to diversify their investment portfolio. It is also essential to **promote the platform** to common investors unfamiliar with energy efficiency measures, highlighting it as an opportunity for investment diversification. Collaboration between ES-COs, financial institutions, and the platform is crucial. ESCOs should be encouraged to seek projects with consumers and use the platform to secure investments. Similarly, financial institutions should actively search for projects to partially finance, utilising the platform to find suitable ESCOs. This **collaborative approach** strengthens the platform's project pipeline and increases its chances of success.

Residential energy measures present untapped potential. To bridge this gap, the platform can encourage users to easily **share their energy certificates and house blueprints**. This information empowers ESCOs to assess project feasibility, identify possibilities for cost reduction, and understand the associated risks. Transparency plays a crucial role in the platform's success. Clear communication of project risks, financial requirements, estimated timeframes, potential disturbances, and fees is essential for all stakeholders involved. Transparent documentation and storage of this information ensure trust and accountability throughout the contracting process.

Smart contracts offer a novel and efficient approach to hosting terms and procedures signed by interested parties. By automating rules, procedures, and the distribution of energy savings, smart contracts enhance efficiency, accuracy, and trust within the platform.

To attract a diverse range of users, the platform must prioritise **user-friendly design** and visuals. A wide variety of available projects, along with a track record of successful execution and fundraising, further reinforce user confidence in the platform.

The platform should serve as a space where investors, builders, local communities, individual consumers, and governments can find suitable project matches and collaborate through a user-friendly interface. This **inclusive approach** encourages stakeholder engagement and supports the joint launch of energy projects.

Gradual growth is crucial for the platform's sustainability. Initially, smaller Energy Performance Contracting (EPCo) projects should be undertaken to build portfolios, address interface issues, and establish trust. However, the platform must adapt to accommodate projects with **longer payback periods**. This **differentiation** sets the platform apart from other investment interfaces and ensures that projects lacking funding opportunities can still raise necessary funds.



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Requirements Manual

The requirements manual was structured according to the phases we adapted from "Energy Performance Contract (EPC): contract guidance note and model contract" published by the Government of the UK. The research also has revealed some new marketing options i.e. stating the return of investment based on own capital.

The financing shall be fed from three sources: own money – subsidies and third party money. Since pay-back times for investments in buildings may be long, we expect more charity type investors here, which would reduce the demanded interest rate.

Some regulations for crowd investing make the process more complex and we will collect requirements for an ESCo optimised legislation.

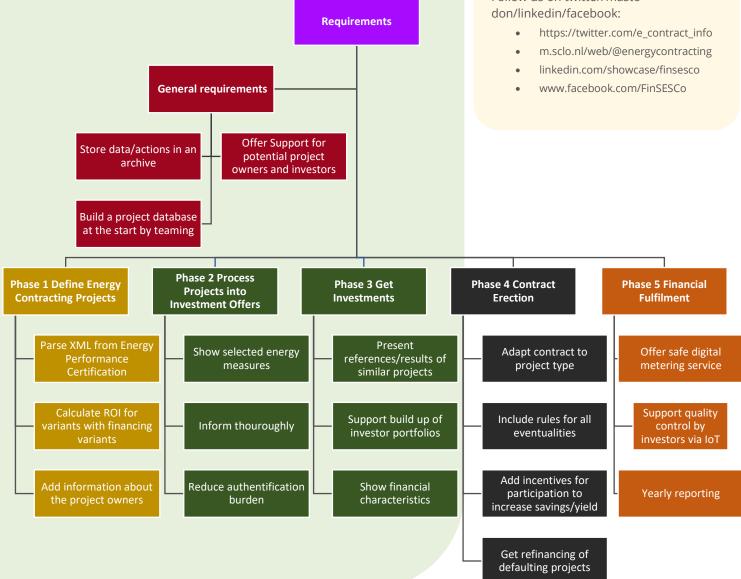
The specification shall also account for different scenarios:

- One (private) owner as contractee
- Several owners with a facility management as contractee
- Social housing with tenants as contractee

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Outlook

In the following a simplyfied **SWOT** analysis is presented to create an outlook for the next months where the pilots will be implemented.

The oportunities result from the energy price crisis, were people experienced price peaks. Also investment into manufacuring and renovation technology allow for scale effects.

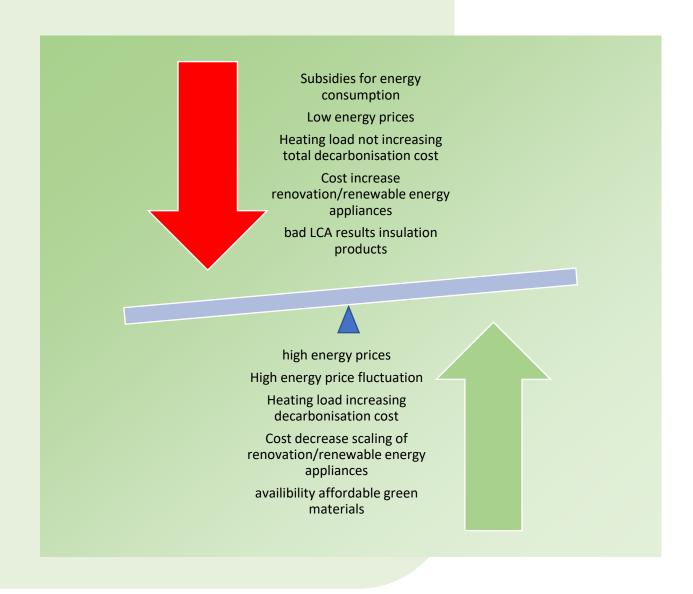
On the other hand threats arise from the dynamic situation on the financial markets and inflation but also from effects of the war in Ukraine.

Since energy saving contracting was not a huge success until now, it is very important to analyse the hurdles and ask for legal interventions where the conditions hinder investments into renovation of buildings. The influence of adding crowdinvesting is evaluated in the course of the project. It might help adding crowd kowledge and create a snowball effect. But it certainly would ease implementation if state owned banks or charitable funds will lead the implementation of the energy saving contracting schemes and take the associated risks of defaulting projects.



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The project in a nutshell

Main Objectives

The aim of the project is to research technology and enabling factors for a platform supporting energy performance contracting. Individuals and investing entities may put their bids, financing implementation of small renewable installations and energy efficiency measures for individual single family building owners, apartment owners up to owners of servera I buildings. The applications utilsing the platform componentens shall create trust by using secure transmission of meter data, automated publishing results for yields/ savings and payments.

Implementation

The FinSESCo platform supports, via end-to-end digitisation, the process of project definition, investor search, contracting and energy flow metering, quality control and payments. Using already existing data on buildings and energy saving measures, the definition of ESPCo/ESPCo projects can be done with less effort. The gamified investment process with a competitive component and the embedded networked meter-based repayment process with secured transmission is complemented by machine learning-based error detection, which aims to detect deviating yields for renewable energy in EPCo projects, and lower savings in ESPCo projects to be able to plan counteraction in due time.

The FinSESCo platform will include components for portals that focus on private projects, but can also be used by companies and across sites to build an intracting solution. The project will explore the best use cases and test the acceptance and attractiveness among stakeholders, reaching TRL7 with the pilot implementation. The competences of the partners from 4 EU countries + India include the development of energy services, smart metering, machine learning, the implementation of energy contracting as a legal construct and social research.

Main Results

The outcome of the project is a specification validated through stakeholder acceptance, testing and technological assessments of the test implementations. Deliverables 2.1 Research analysis , 2.2 requirements manual prepare the pilots and a tool for interested parties to design a portal and test its suitability. Deliverable 4.1 Evaluation plan, 4.2 Evaluation summary, and 4.3 Exploitation plan follow. The dissemination comprises web site, newsletters, Social Media appearance, scientific articles and conference posters.















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