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New business models for innovative energy services bundles for residential consumers

#### **Deliverable D8.6**

# First Stakeholders' vision document and outcomes of Workshops

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Coordinator	CIRCE – Fundacion Circe Centro de Investigacion de Recursos y
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Consoutium noutrous	CIRCE, S5, EI-JKU, CARTIF, UBITECH, UBE, KONCAR KET, KRK, COMSA,
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# Deliverable D8.6 First Stakeholders' vision document and outcomes of Workshops

Deliverable number	D8.6
Deliverable name	First Stakeholders' vision document and outcomes of Workshops
	(M24)
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#### **ABBREVIATIONS**

EPC	Energy Performance Contracts
P4P	Pay for Performance
C&D	Communication and Dissemination





#### **EXECUTIVE SUMMARY**

D8.6 "First Stakeholders' vision document and outcomes of Workshops" aims at presenting the outcomes of the stakeholder engagement activities and present the results of the events/workshops organised by the consortium and outcomes of the survey shared with the public (in the framework of WP8 and WP2).

Within this document we start in chapter 2 by presenting how the stakeholders engagement strategy has been developed in frESCO and how many stakeholders registered in the project's platform till M23.

In chapter 2.1 we are diving into more details and presenting the stakeholders events, with specific focus to the 2 workshops organised by frESCO (2.1.1.1 and 2.1.1.2) and feedback collected by the stakeholders. In these paragraphs we aim at giving a full overview of what was presented during the event, and what are the main take away messages and feedback collected by the participants.

While chapter 3 showcase the outcomes of the stakeholders survey shared before the latest workshop, and in Annex 1 we present all questions and comments received by the participants in the latest online workshop.

To conclude in the "conclusions" chapter, are summarised the activities developed till M23, comments of the results achieved from a communication and dissemination perspectives, and what thus it means in terms of C&D goals and targets for frESCO.





#### 1 INTRODUCTION AND OBJECTIVES

Deliverable 8.6 "First Stakeholders' vision document and outcomes of Workshops" is a document produced in the framework of WP8 "Communication and Dissemination Activities". In the framework of WP8 fresco has to organize dissemination events to engage with stakeholders and additionally with sister projects.

In the first 24 months of the project, the frESCO project has been disseminated among key stakeholders, has put in place specific strategy to engage with stakeholders and sister projects. In the following chapters we will present the outcomes of the events, feedback collected by stakeholders and main conclusions from each event.

#### 2 STAKEHOLDERS ENAGAGEMENT

Since the beginning of the project the consortium has been active in trying to get stakeholders on board with the frESCO project, and specific actions have been put in place, such as:

- Creation of a stakeholders subscription on the frESCO website (see *Figure 1*)
- Ad hoc communication campaigns (such as **Figure 3**)
- Sending ad hoc communication to stakeholders
- Inviting stakeholders to events
- Creation of ad hoc survey for stakeholders.

The first step was the creation of a dedicated webpage in the frESCO website, where all stakeholders could voluntarily subscribe as frESCO stakeholders, and agreeing to receive frESCO communications.







Figure 1 Banner for the subscription

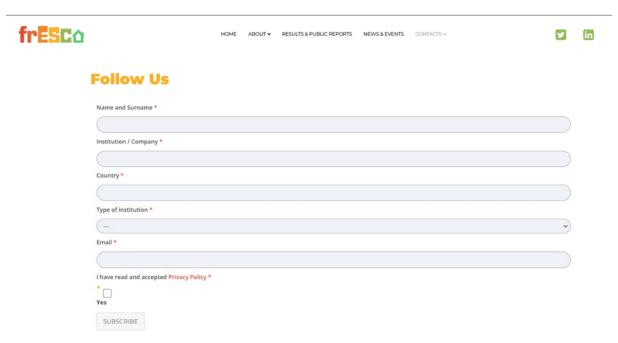


Figure 2 Subscription format

From M1 to M23, 30 people registered to the format and are receiving: frESCO's newsletter, invitations to the dissemination events and surveys.

The same contents are also published online on the frESCO's website and social media profiles (Twitter, LinkedIn), thus, to reach a broader audience.

Nevertheless, all partners have been invited to spread the news and personally invite their stakeholders and contacts to follow the project and subscribe to frESCO's channels.





This action will be boosted in the next weeks with targeted communication campaigns on social media, taking advantage of the high number of followers. In *Figure 3* we present a typical message publish online to attract stakeholders to register to the form.



Figure 3 Social media campaign to boost subscriptions.

In the last months, the registered people received the latest project's updates and have been invited to the frESCO's events and survey defined in section 3 of this document.

#### 2.1 Workshops organised by frESCO

As already presented in D8.4, the project has been disseminated in **9** events, (full list in **Table 1**).

Table 1. list of dissemination events

#	Type of event	Event Title	Date	Place
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1	Participation in a workshop	"From smart cities to smart communities"	11/12/2020	Online
2	Participation in a workshop	Smart buildings: meet EU innovators	25/02/2021	Online on the Build Up platform
3	Participation in a conference	10th Energy Conference of the Island of Krk: Energy Transition in the Context of Climate Change and the New European Green Plan	09/06/2021	Online and physical event
4	Participation in a workshop	Workshop for Croatian DSO in the framework of MIPRO 2021 - Information and communication technology in the power industry	27/09/2021	Physical event
5	Participation in a conference	Sustainable Places 2021 - frESCO and SENSEI - Opportunities and business models for smart energy services	29/09/2021	Online event
6	Participation in a conference	Autoconsumo fotovoltaico, comunidades energéticas y comercializacion de electricidad	21/10/2021	Physical event
7	Organisation of a workshop	Meeting in Las Carolinas - Madrid demosite	16/12/2021	Physical event
8	Participation in a conference	Colloque flexibilité énergétique des bâtiments	08/03/2022	Physical event
9	Organisation of a workshop with sisters projects	From commercial to residential: extending Energy Performance Contracts – organized with	18/03/2022	Online event





	Sensei and	
	Ambience projects	

As highlighted in green in *Table 1*, event in line n.7 and 9 have been organised, lead, and coordinated by frESCO. Among those two workshops, several calls with sister projects have been organised in 2021. These activities are part of the C&D strategy put in place by RINA-C in frESCO's project, thus to build strong relationships among sister projects and external stakeholders.

In depth analysis of these events and calls can be found in paragraph 2.2. and 2.3.

#### 2.1.1 Calls with sister projects

During 2021 fresco dissemination leader (RINA-C) participated in several calls with sister projects with similar goals, such as EPC and supporting building in green energy transition.

Due to the covid-19 pandemic and the participation of many EU projects, all the meetings have been held online via web telco.

During the meetings, frESCO project had the opportunity to present its goals, objectives, and consortium to 10 EU projects, and it was a great opportunity to identify sister projects with which organize common events and share C&D strategies.

The dissemination leaders from each project were attending the calls, therefore was a good chance to share know-how, experiences from professionals, and share tips on how to improve C&D strategies and join forces.

In these meeting the following 10 EU projects were taking part:

SENSEI, NOVICE, LAUNCH, TRIPL-A, RENONBILL, AMBIENCE, X-TENDO, U-CERT, QUEST, ENTRACK.

Find in **Annex 2** some more details about each project.

It is important to note that thanks to these calls, frESCO strengthen relationships with some of the projects, and has already organized some events with some of them, and other in the next months are planned.





#### 2.1.2 Workshop organised by frESCO #1: "Meeting las Carolinas"

The workshop organised in the Madrid demo site, named "Meeting in Las Carolinas" was held on the 16<sup>th</sup> of December 2021. During this onsite project visit the members of the frESCO consortium visited the building in order to get to know better the installations and plan the energy monitoring implementation.

Afterwards, a meeting with the residents was organized for the community that could understand better the project context, the goals, which data the frESCO project will monitor and solved all their initial doubts.

Las Carolinas is a building run by the housing cooperative "Entrepatios" which has received several awards for their innovative and environmental-friendly way of living. The building counts with communal areas, efficient equipments and a strong community unity.

The community showed high interest in increasing the knowledge they currently have about their energy consumption in order to become more efficient.

Some pictures of the event are shown below:



Figure 4 Picture from the event







Figure 5 Picture of the event

The participants showed a high interest in the frESCO solutions and on the ambitious goals the project aims at. The tenants who participated in the event, seemed positively accept frESCO's solutions and were happy to be part of such cutting-edge EU project, and satisfied for the organisation of a physical event, where they had the opportunity to directly connect with the partners and authorities.

The community overall expressed positive feedback on the event and had the chance to clarify all their doubts and better understand the overall project goals and structure.

Not all the participants were familiar within the EU H2020 programme, and the event provided a good opportunity to further present the EU funding opportunities.

Moreover, particular attention was dedicated to present the EPC scheme. Not all participants were familiar with its concept and functionality, therefore frESCO partners took the time to reply to some questions on the topic.





# 2.1.3 Workshop organised by frESCO #2: "From commercial to residential: extending Energy Performance Contracts"

The second organised workshop was held on the 18<sup>th</sup> of March 2022, with the title, "From commercial to residential: extending Energy Performance Contracts". It was organised online by the frESCO project together with 2 sister projects, "Ambience" and "Sensei".

The workshop was attended by around 40 people, and the event was recorded and published online, thus, to allow more people to view the event and access to it also in the future. All the material used during the event is uploaded in the project website, available here.

The goal of the project was to discuss about EPC, what are the main innovation developed in the 3 projects, discuss about EPC policy barriers in Europe and how to remove those obstacles.

The event was structured in 4 sessions, as shown in Figure 6.

## Agenda

14:30 Welcome speech

Topics of discussion:

14:40 Market and regulatory framework

15:00 Strategies to promote energy efficiency and reduce costs of the energy transition in the residential sector

15:20 Emerging business models and actors

15:40 Risks and opportunities

16:00 Polls and Q&A session

16:30 Conclusions

Figure 6 Agenda of the event with sister projects

Each session presented key aspects for each EU project involved, and for the EPC sector in general. Each session aimed at presenting the enablers and barriers for each topic of discussion.

Before initiating the panel discussion in each topic, we presented the results from a stakeholders survey shared few weeks before the event.





In this way the panel had the chance to face what are the stakeholders' feedback on the topics and then present his point of view.

This exercise allowed us to have a better view on what are the stakeholders opinions on the current EPC market, what they identify as effective business models and what do they see as risk and opportunities.

Moreover, at the end of the event there was 20 minutes of Q&A sessions, where the participants had the opportunity to ask their queries.

The questions raised during the Q&A are available in **Annex 1**.



Figure 7 Banner of the sister projects workshop

In this event 77 organisations registered to the event. As we can see from the full registration lists (in *Table 2*), many companies form different countries and sectors, register to the event. This proved we managed to reach an extended audience of participants in Europe.





Table 1. Registered organisations to the event

Registered o	rganisations:
ADENE - agencia para a energia	ICLEI
Agency for Energy Efficiency and Environmental	
Protection	IEA
Alfa Laval	IEECP
AM Mayer Ltd	IEECP
BBRI	INESC TEC
Berlin Partner für Wirtschaft und Technologie	Institute for European Energy and Climate
GmbH	Policy (IEECP)
BPIE	Invesis
BuildingPhysics South Africa	iqbi
CarbonLaces	Joule Assets Europe
CarbonLaces Limited	LA CORRIENTE SOCIEDAD COOPERATIVA
Chair of Energy Network Technology of	
Montanuniversität Leoben	Municipality of Gabrovo
CIMNE	NRGsurf
CIRCE	Olum
City of ghent	REHVA
Clúster AEICE	RINA
COMSA Industrial	RINA Consulting
CSTB	s3aec
Deutsche Energie Agentur GmbH	Sauber Srl
Efficiency Valuation Organization	Self employed industrial engineer
ELECTRICA DE SOT DE CHERA S.C.V.	Signify
Elin VERD S.A.	Sinergie Soc. Cons. a r.l.
	Technoeconomics of Energy Systems (TEESlab),
ENEA	University of Piraeus Research Center (UPRC)
Ener	Technoeconomics of Energy Systems Lab
Energy Institute at the Johannes Kepler	Technoeconomics of Energy Systems
University	laboratory (TEESlab)
	Technoeconomics of Energy Systems
	laboratory (TEESlab)- University of Piraeus
Entrepatios Las Carolinas	Research Center (UPRC)
EP Group	TEESlab - UPRC
ESCI	UBITECH Energy
European Copper Institute	UC3M
FEUP	University of Calabria
Flemish Energy and Climate Agency	University of Piraeus
Glensol	University of Piraeus Research Center
Hellenic Petroleum	UPRC
IBTECH	





At the event we shared some pools with the participants to the event, and we asked them the following questions:

- 1. Did you get to know more about EPC and P4P thanks to this webinar?
- 2. Would you like to be contacted in the future for similar activities?
- 3. How did you hear about this event?

Question 1. 85% of the participants declared to have learned more about EPC and P4P thanks to the workshops, while only the 15% declared that still have some doubts. This feedback proves we managed to satisfy most of the participants, but we will take into consideration to organise other events, to further explain EPC and P4P structure, goals and opportunities, thus, to clear all doubts to our stakeholders.

<u>Question 2</u>: all participants said yes. This is a clear sign that projects' stakeholders liked the event's structure, which was not focused on a PowerPoint presentation but more on panel exchange and active discussions.

Question 3: 70% heard about the event from the invitation sent by the projects, and 30% from colleagues.

The feedback collected by the polls and the 20' Q&A are a sign that the event was a success and we manged to engage with stakeholders and all participants stay connected till the closure of the event.

The positive replies gathered within this event, will be taken into consideration for the organisation of the next project events, which RINA is already planning.

#### 3 SURVEYS

In the framework of the frESCO project, engaging with stakeholders is considered fundamental, and surveys are used as tool to receive feedbacks from the audience. The inputs received are then taken into consideration and pave the planning for the next actions taken in the project.





As of today, two surveys have been shared with external stakeholders, and their outcomes are presented in the below sub paragraphs, 3.1 and 3.2.

#### 3.1 Survey shared before the 2<sup>nd</sup> workshop (18.3.22)

As mentioned in the paragraph 2.1.1.2, some weeks before the workshop we shared an online survey with the thematic developed during the event, thus, to gather specific feedback from the stakeholders, and use it to stimulate the discussion during the event and provide inputs also to the speakers.

From figure 8 to figure 13 we present the results collected form the survey.

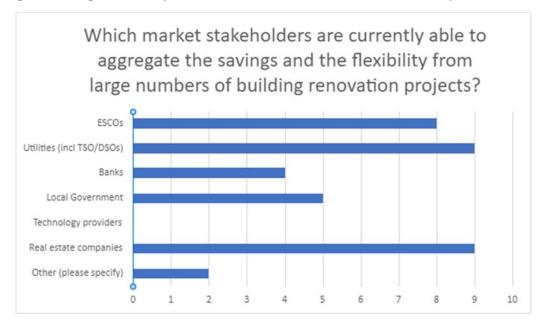


Figure 8 : Question 1 in the survey.





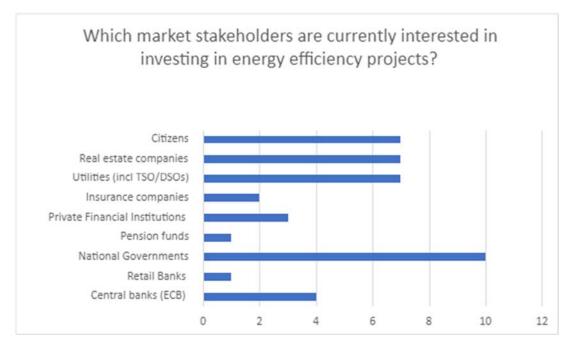


Figure 9 Question 2 in the survey

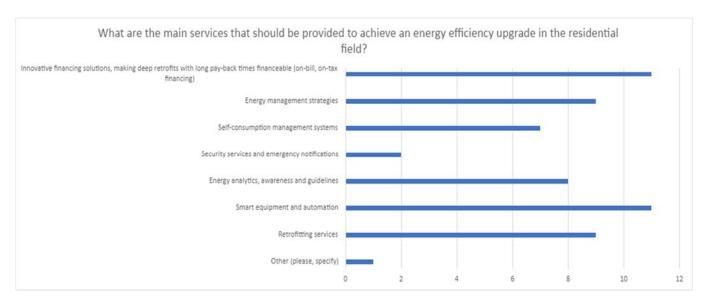


Figure 10 Question 3 in the survey





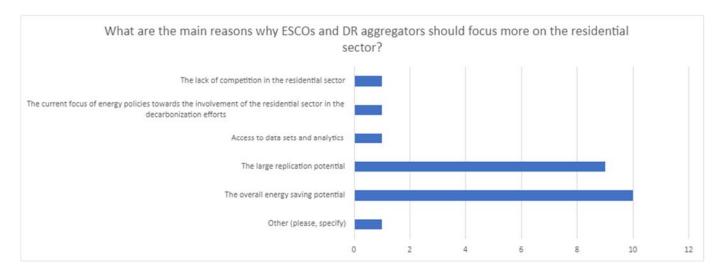


Figure 11 Question 4 in the survey

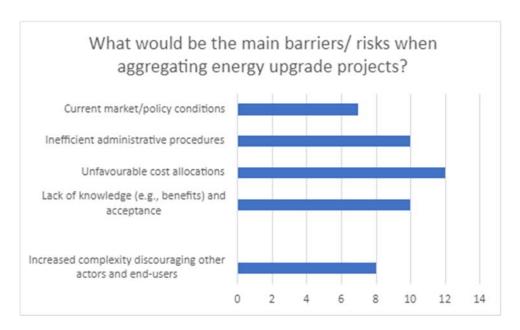


Figure 12 Question 5 in the survey





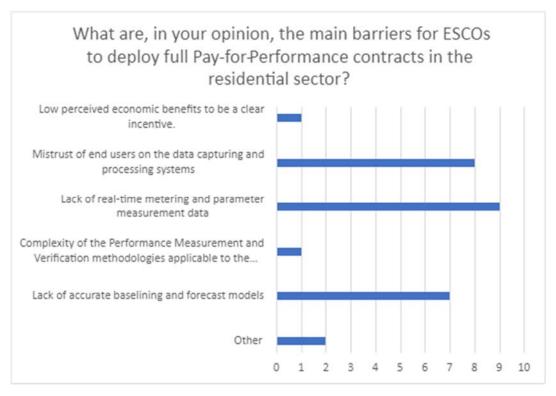


Figure 13 Question 6 in the survey

#### 3.2 Surveys organised in WP2

frESCO's WP 2 focuses on "Project Baseline, User Requirements and System Design".

In the framework of the project, four demo-sites are tested and located in different EU countries (Spain, France, Croatia, and Greece). In Task 2.3, "Elicitation of Stakeholders and End-User Requirements", several surveys have been conducted with the stakeholders related to each demo. The results of the surveys are presented in D2.3. Specifically, this document gives the results of stakeholder in-depth interviews and end user surveys that are conducted around each pilot site. The surveys provide an understanding of the needs and preferences of the relevant groups around each pilot site, as well as a general understanding of the challenges and opportunities for energy services and the frESCO solution in each of the four pilot nations. D2.3 was submitted as confidential report; therefore, it is not published on the website.





#### 4 CONCLUSIONS

The targets achieved within the first 23 months of the project, showcase that the communication and dissemination activities developed within the WP8 have been effective, and we managed to engage with an extended audience, also thanks to the organisation of online events. The feedback received via polls shows that stakeholders are satisfied with the content shared within the events.

The activities developed with sister projects allowed frESCO to extend its network, reach an extended audience and enrich the project with relevant inputs (such as the feedback from the survey) which stimulated the discussions during the event, and will be taken into account in the next project activity. Thanks to the built cooperation, we expect to increase frESCO's traffic on the website and to increase the number of followers on frESCO's social media channels. In the next phase of the project, we aim at fostering cooperation with sister projects and EU initiatives, and to increase the number of subscribers to the frESCO newsletter. Moreover, RINA is already planning next relevant events, which could be hosted online or physical (depending on the covid-19 pandemic). Particular attention will be addressed to the creation of survey and other tools to collect stakeholders' feedback.

Furthermore, as soon as the results from the frESCO demonstrators will be available, we will organise an online seminar to present them.

#### 5 ANNEX 1

Questions and comments received in chat during the event: "from commercial to residential: extending energy performance contracts".

1. Shallow insulation combined with heat pumps and flexibility might be more cost-effective on short term for the building owners/users, but this will not enable to achieve the collective long-term goal of carbon neutrality (as then the energy demand from buildings would remain too high, and overall, the sustainable potential for RES is limited). Can the EPC business model be adapted to include public incentives to make deep renovations cost-effective for both, the individual owners and society as a whole.





- 2. Very relevant to point also the benefits on tackling energy poverty, but maybe this is tricky in the usual EPC business model? In practice, there might not be a reduction in the energy consumption/costs after improving the dwelling of an energy poor household (due to the prebound effect: occupants were likely restricting their use of heating before the improvement). Did you look at specific business model for the case of EE measures tackling energy poverty?
- 3. Another question to the three speakers would be about how the approaches developed in their project address the uncertainties about future energy prices. The current situation surely changes dramatically the business case for energy efficiency investments.
- 4. But then the question is: for how long energy prices will be so high?
- 5. Thanks for the clarifications! 60% savings is indeed already a kind of deep retrofit!
- 6. There have been good examples of EPCs projects in social housing in Italy.
- 7. Thanks for the webinar: a bit long, but very interesting!

#### 6 ANNEX 2

Presentation of the 10 EU projects participating in the C&D calls with sister projects presented in paragraph 2.1.1.



**SENSEI** enables energy efficiency to be rewarded as an energy resource and a new grid service while turning the energy efficiency retrofit project's value into an investable asset for private financing. The project combines pay-for-performance (P4P) arrangements with the Energy Performance Contracting (EPC) model and engages in negotiation games with





preliminary stakeholders. This offers the possibility for stakeholders to shape the SENSEI business models according to their needs. In making buildings more energy-efficient and attractive for third-party investors, SENSEI is fostering the business community to contribute to the EU climate goals while avoiding the construction of new power plants and reducing grid infrastructure costs.



**NOVICE** will develop and demonstrate a new business model in building renovation to better monetize energy efficiency by consolidating services and subsequent revenue streams from both energy savings and demand response.



**LAUNCH** aims to accelerate deal closure and pipeline growth for Sustainable Energy Assets through standardised material. This includes investor-grade Energy Performance Contracts, standardised risk assessment protocols for investors, a roadmap for project developers to access growth capital, and market-tested value propositions for project developers' endclients.



**TRIPLE-A** to assist financial institutions and project developers increase their deployment of capital in energy efficiency, making investments more transparent predictable and attractive.



**RenOnBill** aims to scale up investments towards deep energy renovations of residential buildings by promoting the development and implementation of on-bill schemes, based on the cooperation between energy utilities and financial institutions.

# **a** ambience

**AmBIENce** – Actively Managed Buildings with Energy Performance Contracting – is an H2020 project that aims to extend the concept of energy performance contracting for active building and making the model available and attractive to a wider range of building typologies.







**X-tendo** and its toolbox introduce ten features of the next generation of energy performance certificates, to provide public authorities with improved compliance, reliability, usability and convergence of next-generation energy performance assessment and certification.



**U-CERT** is a Horizon 2020 project (September 2019 – August 2022) with the main aim to introduce the next generation of user-centered Energy Performance Assessment and Certification Scheme to value buildings in a holistic and cost-effective manner.



The main goal of **QUEST** is to promote investments in Sustainability and Energy Efficiency by identifying and empirically risk-grading factors that influence energetic performance of buildings, making it more profitable to invest in sustainable buildings.



The **EN-TRACK** platform will facilitate increased energy efficiency investments in the European building stock by enabling massive gathering of data of energy and cost savings from energy efficiency investments. Building on previous and parallel efforts in this area, EN-TRACK will be fully interoperable with other databases and tools such as the De-risking Energy Efficiency Platform (DEEP) and eQuad.