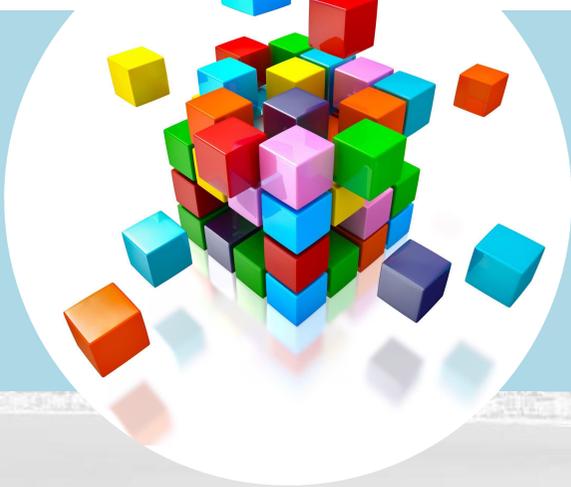




#SUSTAINABLEPLACES2022



DEEP RENOVATION

Integrating tried-and-tested solutions for deep renovation of the EU building stock

SEP. 7TH, 14:45-16:15 CET, ONLINE

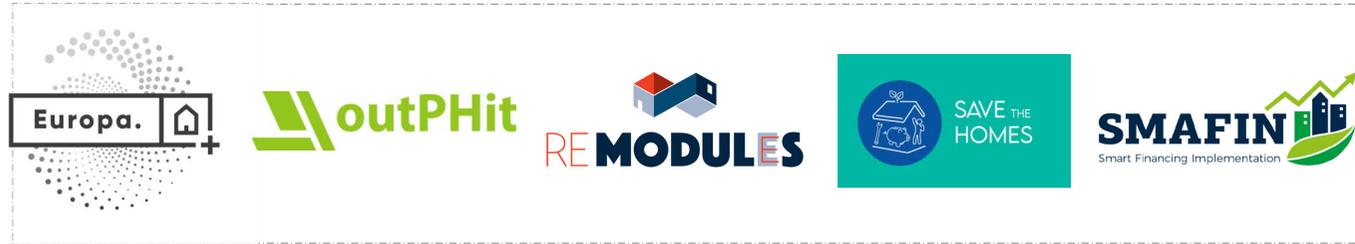
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MÉTROPOLE
NICE CÔTE D'AZUR



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- Moderated virtual roundtable discussion

Moderator: Alexander Deliyannis,
re-MODULEES project, Sympraxis Team

Europa.



Sustainable Projects 22

Deep renovation workshop :

The EUROPA Project

Jérôme CHARDON – AGEDEN
European project manager

Date: 7/09/2022



This project has received funding from the European Union's "Horizon 2020" research and innovation programme under grant agreement No. 956649

About the EUROPA Project

Introduction

EUROPA is a HORIZON 2020 project bringing together the expertise of nine European partners to create a simpler and better **deep renovation journey** for **residential buildings**. The project responds to the challenges and barriers house owners/property managers face when planning and implementing renovation projects.

EUROPA Partners

<ul style="list-style-type: none"> - Regione Piemonte, Piemonte, Italy 	
<ul style="list-style-type: none"> - Parco Scientifico Tecnologico per l'Ambiente Environment Park Torino Spa, ENVIPARK, Italy 	
<ul style="list-style-type: none"> - Energie & Umweltzentrum Allgäu Gemeinnützige GmbH, Eza!, Germany 	
<ul style="list-style-type: none"> - Areeanatejo – Agência Regional De Energia E Ambiente Do Norte Alentejano E Tejo, AREANATEJO, Portugal 	
<ul style="list-style-type: none"> - Climate Alliance – Klima-buendnis – Alianza Del Clima E.V., CA, Germany 	
<ul style="list-style-type: none"> - Reimarkt Concept B.V., REIMARKT, Netherlands 	
<ul style="list-style-type: none"> - Eku Saglabasanas Un Energotaupibas Birojs, ESEB, Latvia 	
<ul style="list-style-type: none"> - Funding For Future Bv, F3, Netherlands 	
<ul style="list-style-type: none"> - Ageden, AGEDEN, France 	
	<p style="text-align: right;">3</p>

AGEDEN

Is a not-for-profit organization located in Isère – France, with a team of 52 people, specialized in energy management, promoting renewable energies and environmental protection.

AGEDEN brings support and training to local authorities and end-users designing, financing, implementing and monitoring energy efficiency projects.

Support targets : home and flat owners, social housing companies, municipalities, pupils and private companies and associations

The EUROPA mission

Our mission is to accelerate the transition towards carbon neutral and healthy living environments.

To simplify the deep renovation journey for all stakeholders involved, we will render the journey transparent by building trust and applying the highest caliber of expertise.

Furthermore, we will boost the capacity and skills of public authorities through mutual learning programmes to become influential players in the field.



3 core mechanisms of EUROPA

The One-Stop-Shop

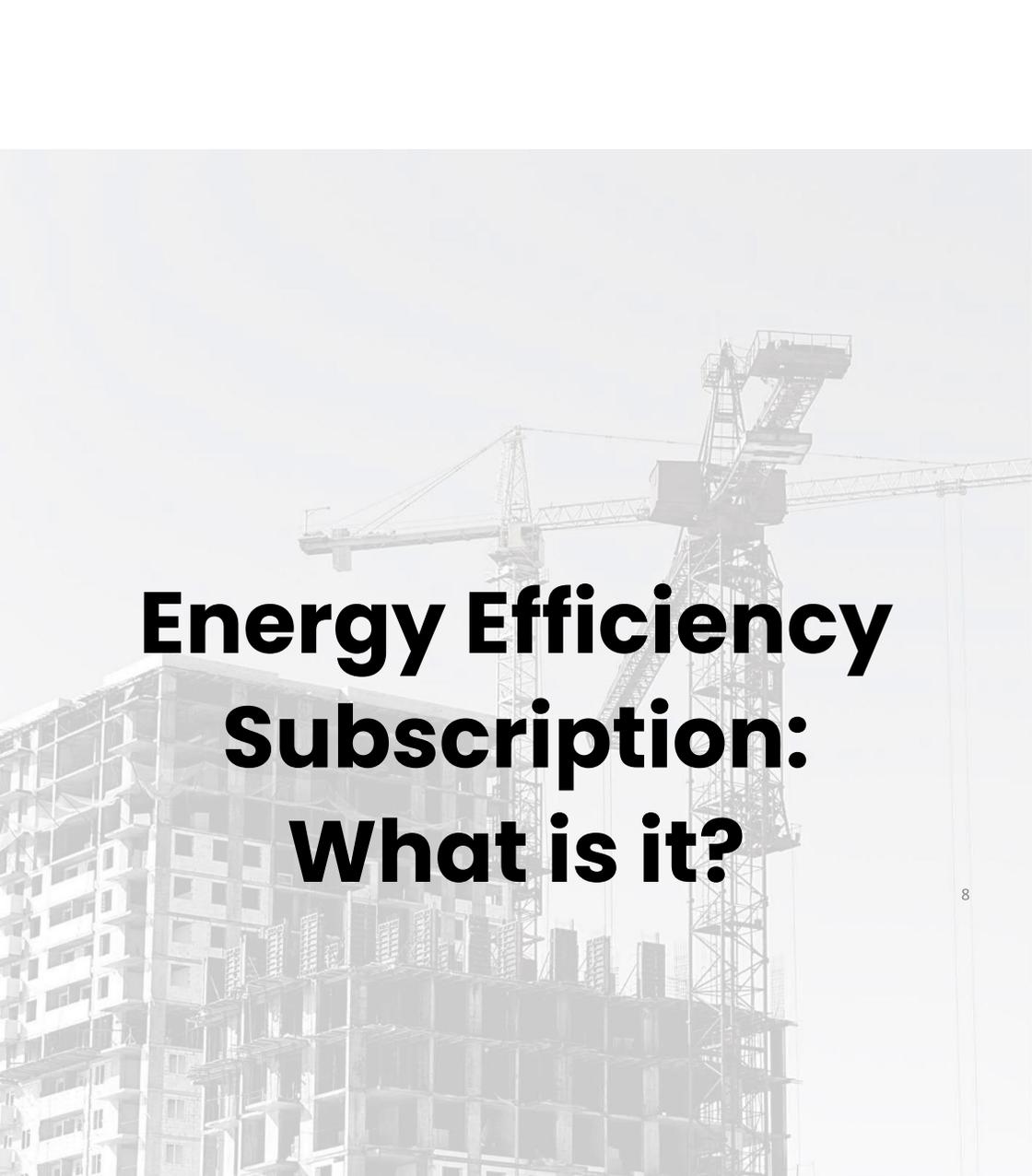
The Energy Efficiency
Subscription

The Replication Process

Energy Efficiency Subscription – EES

Let's focus on EES





Energy Efficiency Subscription: What is it?

The Energy Efficiency Subscription (EES) is a set of requirements and standards for service providers in the building renovation sector.

The main goals of the EES are to:

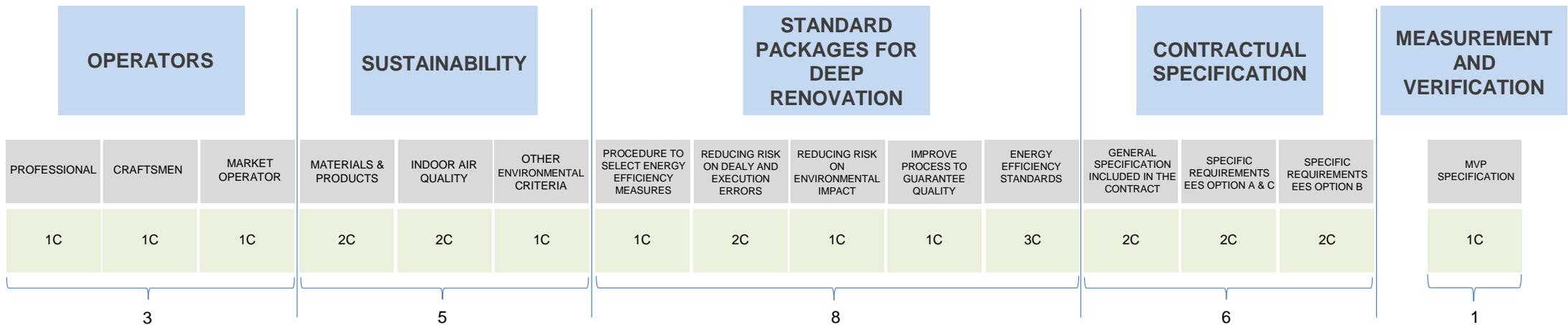
- **build trust** between residents and service providers;
- **ensure transparency** throughout the whole renovation process;
- implement **energy efficiency** measures;
- guarantee **health, safety, and comfort** to residents;
- **standardize and scale up** the building renovation process across Europe.

8

Energy Efficiency Subscription – General Structure

To comply with the EES, market operators should meet a set of requirements and standards:

- 23 criteria referring to 15 groups and 5 topics.
- 10 compulsory criteria – 13 optional criteria.



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ENERGY PERFORMANCE CONTRACT Plus (EPC+)

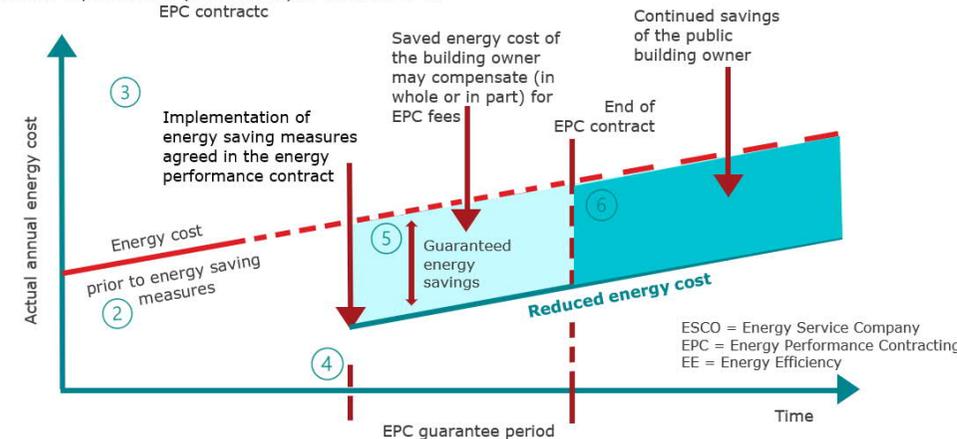
- The investment **risks are transferred from the building owner to the service provider.**
- **No up-front payment** required from the building owner.
- Service provider delivers the required energy services which the building owner benefits from.
- Service provider **guarantees EE improvements** which serve as basis for their payments.
- Maintenance costs are transferred from the building owner to the service provider during the contract.
- The productivity and **value of buildings are optimized** through professional services.

What is an EPC+?

Energy performance contracting, or EPC, is an innovative financing scheme offered by energy service companies to building owners who are in need of energy efficiency improvements but have limited financial means or technical capacities to implement such projects on their own. What makes EPC innovative is that a service provider finances the project based on the guaranteed energy savings that will be generated in the future. Under the BEEF scheme we build upon the standard EPC to develop an EPC+ where energy efficiency is at the core of retrofit dEEP building renovation to deliver “**safety, health and comfort**”

① THE CONCEPT OF EPC FOR BUILDINGS

An ESCO provides an agreed service-package, including technical improvements (investments) on the basis of an EPC contract



THANK YOU!

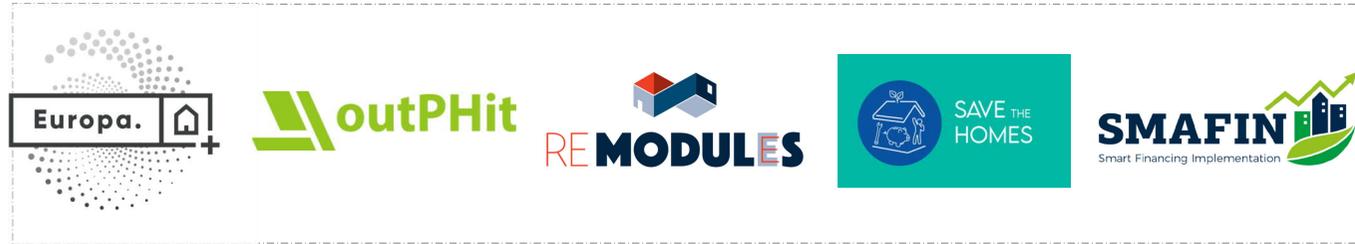
Let's Talk

We're open for questions
and comments.

WEB SITE

<https://europaonestop.eu/>





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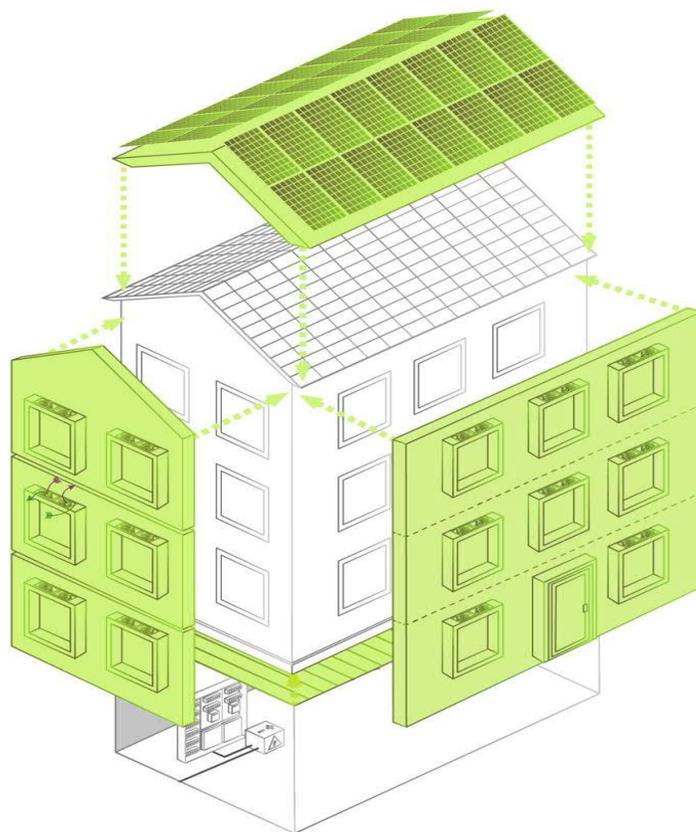
Cheaper, faster and more efficient global renovations thanks to prefabrication



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 957175. The presented contents are the author's sole responsibility and do not necessarily reflect the views of the European Union. Neither the EASME nor the European Commission are responsible for any use that may be made of the information contained therein.



The idea:



 outPHit



PROPASSIF
La transition en action

The realization:

- ▶ Deep Renovation Projects made more reliable, faster and cheaper
- ▶ 10 project partners:
 - ▶ PHI, UIBK, NHT, VAND, HPHI, Eneffect, CA, PHB, EW, ProPassif
- ▶ 7 realization countries:
 - ▶ France, Netherlands, Austria, Germany, Spain, Greece and Bulgaria
 - ▶ 20 Case studies “CS”: <https://outphit.eu/en/case-studies/>

- ▶ 7 Observer Projects “OP”: too big, outside time frame
 - ▶ “Colbert Project”, Colombes FR (6.000 m2, 70 dwellings)
 - ▶ Goese Polder, NL (194 Houses)
 - ▶ Bruno Sander Haus, Innsbruck AU (10.000 m2. High Rise B.)
 - ▶ ...

Case Study Projects



« Colbert » Project : Observer Project @OutPHit (OP08):

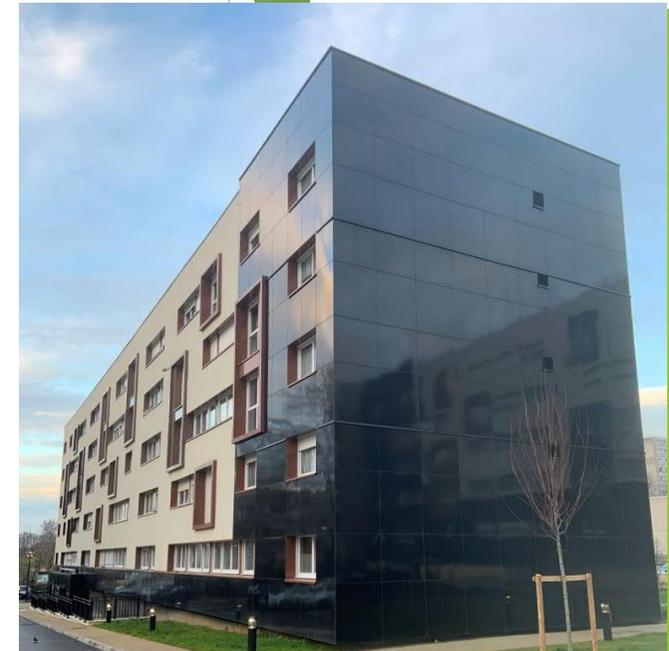
- ▶ Project Logirep/Polylogis in Colombes (Paris region)
 - ▶ Social landlord
 - ▶ Waiting to be renovated
- ▶ Why Observer Project?
 - ▶ «pure» OutPHit project: 100% prefabricated retrofit
 - ▶ High consumption on fossile fuels before retrofit

 - ▶ But outside OutPHit's time frame (3 years)
 - ▶ Project not EnerPHit certified yet
 - ▶ Waiting for operating data (economy, measures)



What have been done so far :

- ▶ Prefabricated modules on flat facade
- ▶ Project on lived-in site: no inhabitants relocation
- ▶ 70 dwellings ranging from F2 to F6 (2 to 6 rooms apartments)
- ▶ Use of Prefabricated “Panobloc”/Techniwood modules:
 - ▶ Over-insulation of the envelope, both opaque and glazed walls
 - ▶ Treatment of thermal bridges,
 - ▶ Air tightness,
 - ▶ Optimization of the compactness of the thermal envelope
 - ▶ High-performance technical systems (ventilation with HR, pellet)



A pool of experts :



ARCHITECTE



LANCTUIT ARCHITECTURE
21 Rue Charles Laffite
92200 Neuilly-sur-Seine

ENTREPRISE GENERALE



EIFFAGE
14-18 Rue de la Vanne
92120 Montrouge

BET THERMIQUE



INDDIGO
40 Rue de l'Echiquier
75010 Paris

ENTREPRISE BOIS



ECOLOGGIA BATIMENT
35 Rue Haroun Tazieff
54320 Maxeville

PILOTAGE



BIOTOPE
59 Boulevard de Verdun
94120 Fontenay-sous-Bois

BET FACADES

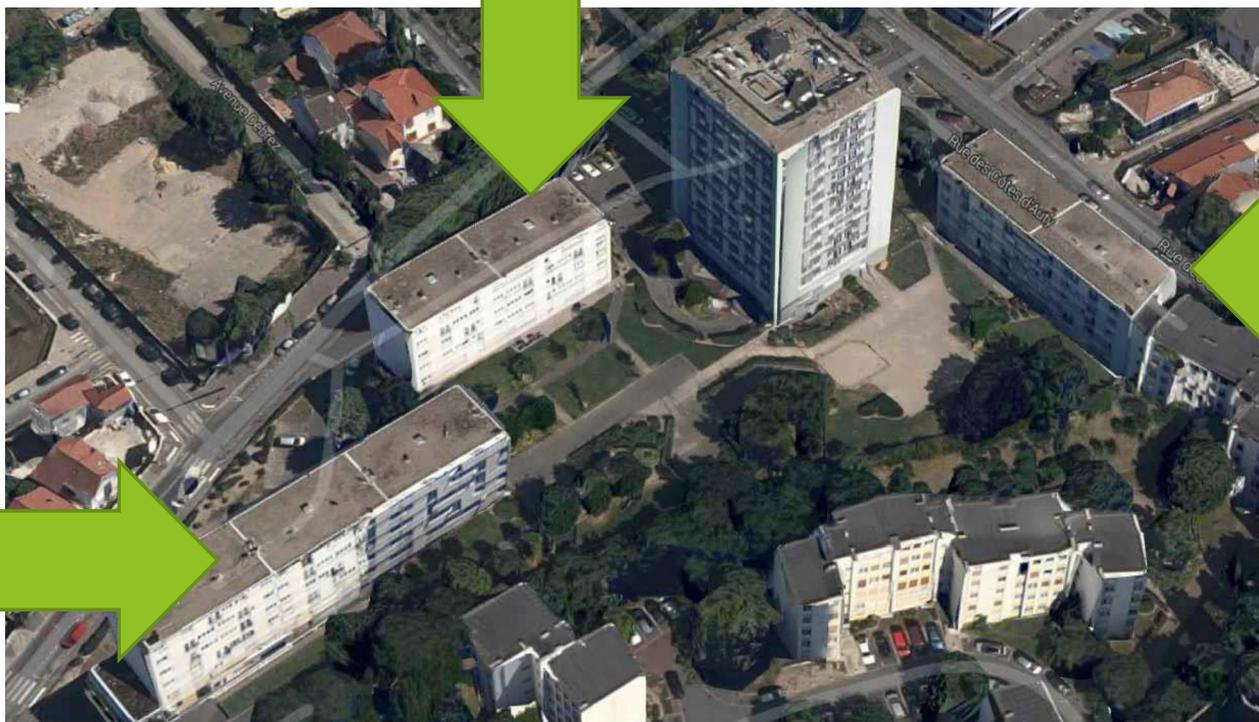


ACTR
44 Rue de la Commanderie
45760 Boigny-sur-Bionne



The buildings from the air :

Building «B» 1523 m²,



Building «A» 2529 m²

Building «C», 1758 m²

A lot of design hard work: no surprise!



Layout Panobloc + Timber frame modules

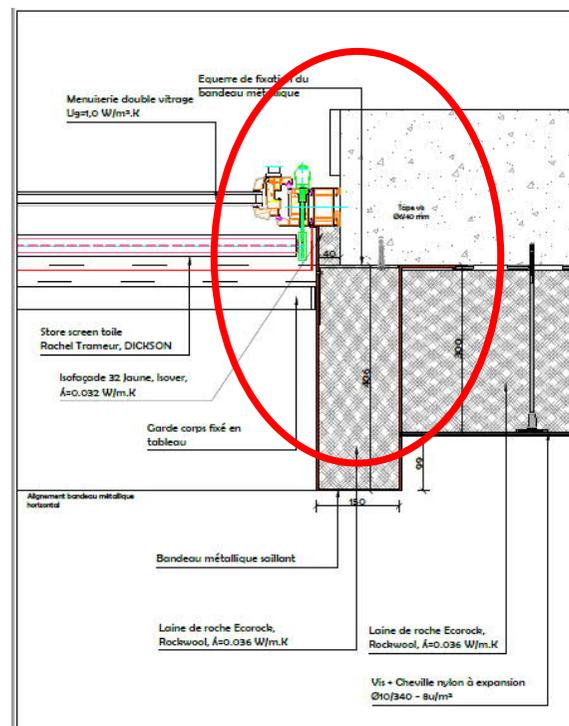
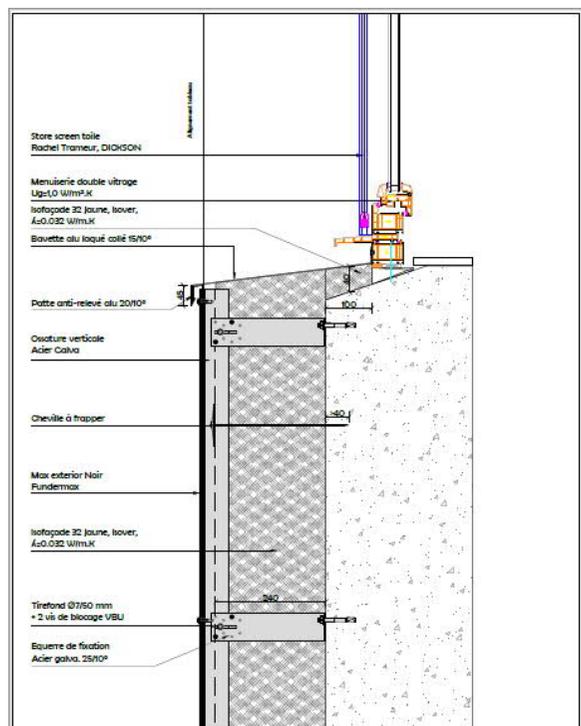
Prefabricated modules : before leaving assembly workshop

Nr. de la paroi		02ud		Mur ext. Equitone Tectiva		Isolation intérieure?		0		
Orientation des parois		0,13		Résistance superficielle [m ² K/W]		interieure R _{si}		0,13		
Adjacent à		0,04				extérieure R _{se}		0,04		
Section 1	λ [W/mK]	Section 2 (optionnelle)	λ [W/mK]	Section 3 (optionnelle)	λ [W/mK]	Epaisseur [mm]				
Equitone Tectiva Blanc	0,390		0,000		0,000	8				
Ossature bois	0,130		0,000		0,000	30				
PANOBLOC 9 plis	0,038		0,000		0,000	270				
Laine de roche	0,038		0,000		0,000	20				
Béton armé	2,100		0,000		0,000	280				
	0,000		0,000		0,000	0				
	0,000		0,000		0,000	0				
	0,000		0,000		0,000	0				
Pourcentage de surface de la section 1		100%		Pourcentage de surface de la section 2		0,0%		Total		60,8 cm
Majoration de la valeur U		0,00 W/(m ² K)		Valeur U :		0,121 W/(m ² K)				



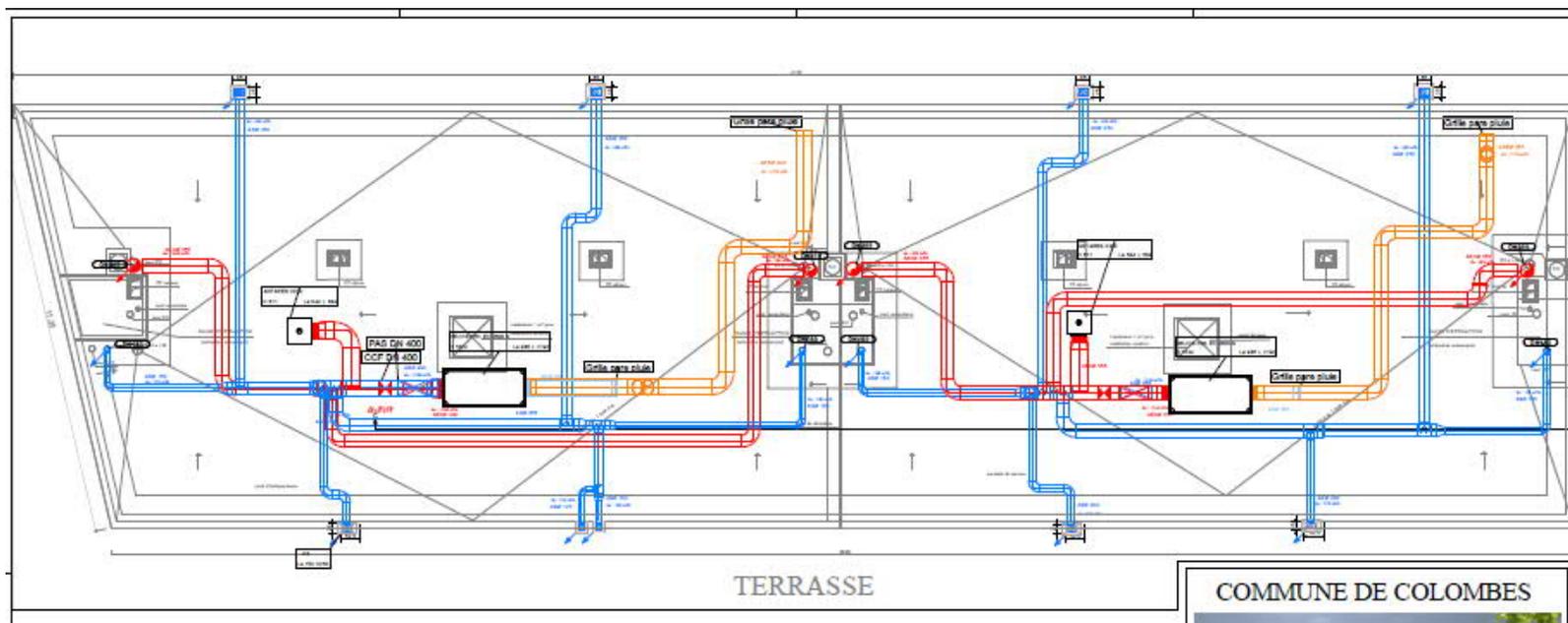
external wall with Panobloc U = 0,121 W/m².K by Techniwood (thick. = 61 cm)

Carpentry detail book:



Ventilation detail booklet: comfort ventilation (VMC2F) and heat exchangers

- Building “C” / Roofing: ventilation and heat exchangers



Partial sum-up: costs (€), emissions (CO₂)

QUELQUES CHIFFRES ■■■

- Performance énergétique (conso RT en KWheP/m²/an) :

	Etat initial	Etat après travaux
Bâtiment A	234	53
Bâtiment B	242	56
Bâtiment C	223	54

- Insertion professionnelle : 2560 heures
- Montant des travaux : 3,6M€ HT
- Costs : **600 €/m²**
- Energy carbon **saved per year**: 18 m³ gas/m².a x 6000 m² = **200 t CO₂/a**
- Carbon **saved on** deconstruction : 700 m³ concrete = **700 t CO₂**
- Breakeven over 50 years, tons CO₂: 3,6 M€/10 kt= **360 €/t**
- Breakeven over 100 years, tons CO₂: 3,6 M€/20 kt= **180 €/t**

Questions ?

- ▶ Thank you for your attention
- ▶ Any questions?



Etienne VEKEMANS

Gérant

01 45 08 86 80

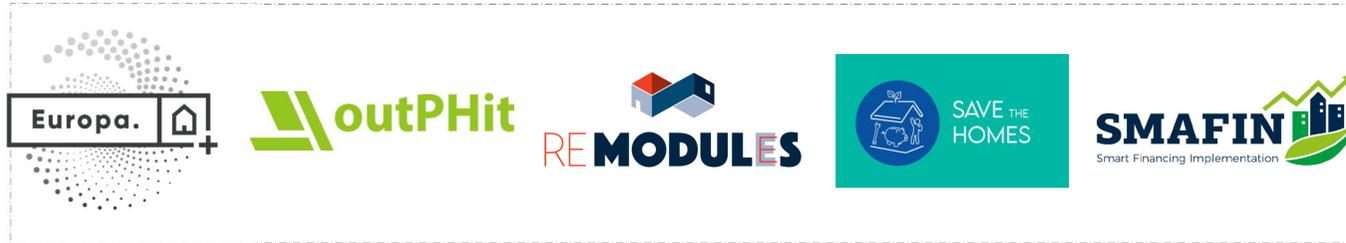
e.vekemans@propassif.fr

110 rue Réaumur - 75002 Paris

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194 Zero-ready houses Goese Polder, NL

Chiel Boonstra

chiel.boonstra@trecodome.com

7 september 2022

194 ZERO-READY HOUSES GOESE POLDER



Integrated solutions + local team = social

Beveland Wonen +
Marsaki



PREFAB FABRIEK CULEMBORG
www.prefab-fabriek.nl



KINGSPAN UNIDEK
www.kingspanunidek.nl



Arton
www.artonbv.nl



Trecodome
www.trecodome.com



The Source
www.thesourcegroup.nl



Scenario's

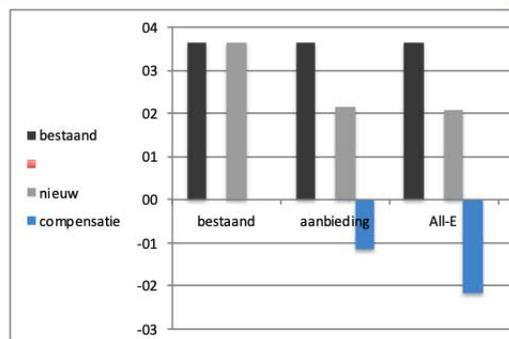
TRECODOME - ENERGIE EN WOONLASTENCALCULATOR Versie 2.0 **Bestaand** **Pakket 12-PV** **NOM**
 Goese Polder, Goes 11-Sep-19 103,5 103,5 103,5
 Netto vloeroppervlak in m²: per variant bestaand pakket 12 All-E

BESTAAND		Bestaand	Bestaand	Bestaand
Gasverbruik	m3 gas	1321	1321	1321
Elektriciteit individueel	kWh	2323	2323	2323

ENERGIEGEBRUIK gemiddeld		bestaand	aanbieding	All-E
Gasverbruik	m3 gas	1321	653	0
GJ warmte	GJ	0	0	0
Elektriciteit gebruik	kWh/jaar	2323	2423	4992
Elektriciteit PV	kWh/jaar	0	-2746	-5148

Variant nieuw		bestaand	aanbieding	All-E
CO2 woning bestaand	ton CO2/jaar	bestaand	3,7	3,7

CO2 woning nieuw	ton CO2/jaar	nieuw	3,7	2,1	2,1
CO2 woning compensatie	ton CO2/jaar	compensatie	0,0	-1,2	-2,2



Tender

zero energy ready

Heat demand < 25 kWh/m²

Prefab approach

Selected solution

New roof U-value 0,14 W/m².K

Facade U-value 0,14 W/m².K

Ground floor U-value 0,14 W/m².K

12 integrated PV 325 Wp panels

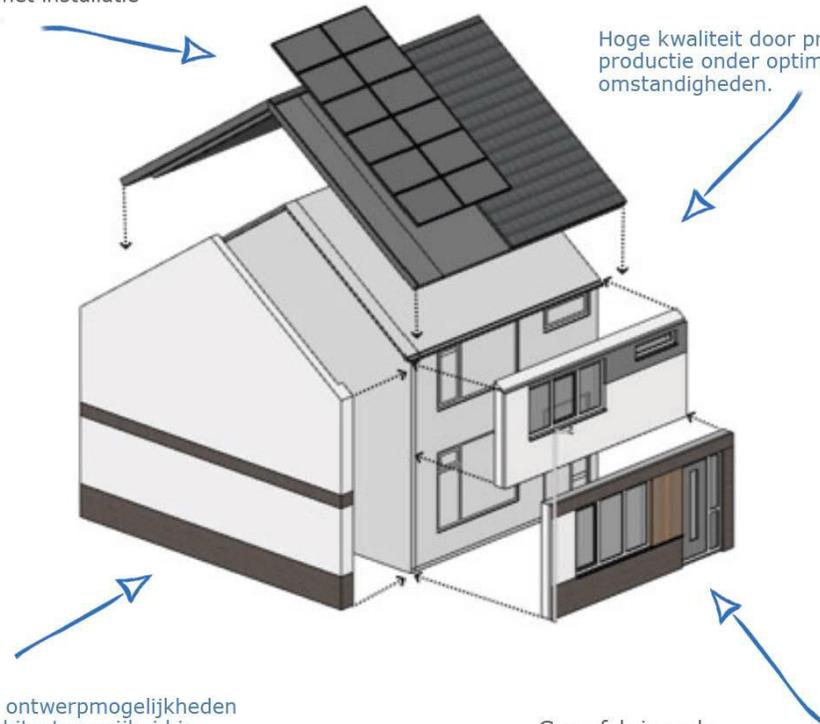
Optional shading

Heat recovery ventilation

Summer night ventilation

Goede gevelschil vanuit de trias energetica en de stapsgewijze mogelijkheid om van NOM ready naar NOM te gaan met installatie componenten.

Hoge kwaliteit door prefab productie onder optimale omstandigheden.



Brede ontwerpmogelijkheden en architectuurvrijheid in afwerking.

Geprefabriceerde gevelementen en dakplaten worden in 1 dag aangebracht (excl. voorbereidende werkzaamheden en afwerking).







Van Karnebeek
straat

8



PROVEN QUALITY



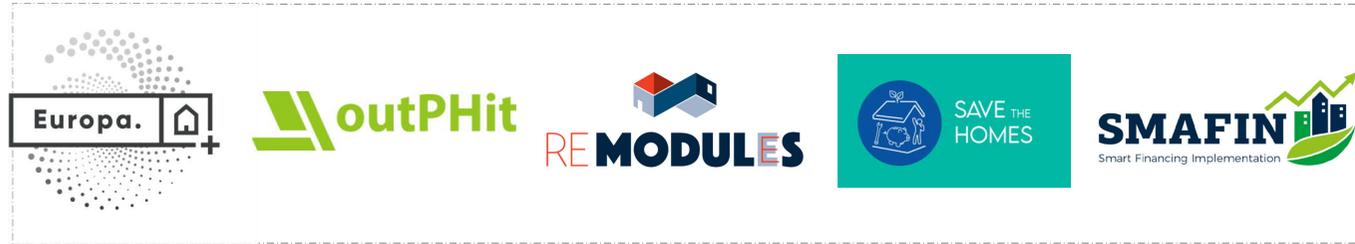
Performance in comparison to standard practice in NL



kWh/m²

	Existing	'Standard'	New construction	Partial	Desired	Goese Polder	PassivHaus new
	100	70	50	50	30	20	< 15
Roof U-value		0,3	0,17	0,17	0,12	0,14	0,12
Long facades U-value		0,7	0,21	0,7	0,21	0,14	0,14
End facades U-value		0,7	0,21	0,7	0,21	0,14	0,14
Floor U-value		0,3	0,3	0,3	0,3	0,14	0,14
Windows		lowE	lowE	triple	triple	0,8	0,8
Ventilation		CO2 exhaust	CO2 exhaust	balanced	balanced	balanced	balanced
Airtightness n50		2	1,5	1,5	1,5	1	0,6

chiel.boonstra@trecodome.com



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REMODULES

flexible building renovation shared solutions

Integrating tried-and-tested solutions for deep renovation of the EU building stock

7 September 2022 - Sustainable Places, online

re-MODULEES at a glance

*re-MODULEES | the **R**etrofitting Market Activation Platform based on the generation of standard **modules** for **e**nergy **e**fficiency and clean energy **s**olutions*

Topic	LC-SC3-B4E-1-2020 - Towards highly energy efficient and decarbonised buildings
Funding Scheme	CSA - Coordination and support action
Start date	1 November 2020
End date	31 October 2023
Overall budget	€ 2 099 518,75
Consortium	Leader Huygen Engineers & Consultants, HI&A 15 Partners from Italy, the Netherlands, Greece, Spain, France, Bulgaria and Slovenia

Funded under Programmes

H2020-EU.3.3.7. - Market uptake of energy innovation - building on Intelligent Energy Europe

H2020-EU.3.3.1. - Reducing energy consumption and carbon footprint by smart and sustainable use

Overall mission & scope

- **Creating and developing a platform to facilitate the activation of the EU market** for energy renovation of buildings
- **Devising market uptake strategies to capitalize the results** developed in EU-funded projects on deep renovation over the last 5 years



Five main objectives

- 1** To make deep renovations easier, faster and more attractive for stakeholders by fostering market uptake and giving access to **key results of relevant European projects**
- 2** To nudge relevant stakeholders to renovation by fostering **holistic consumer-centred business models and decision tools**, supported by evidence-based performances
- 3** To facilitate decision making on deep renovation by tackling demand and supply sided **social, financial and legal barriers**
- 4** To foster the implementation of the re-MODULEES actions in **seven demonstration pilot markets**
- 5** To roll out the re-MODULEES concept on a European level, supported by a **go-to-market exploitation at MS-level**

Methodology adopted | Modularity

Modularity is to be understood as

Multi-level

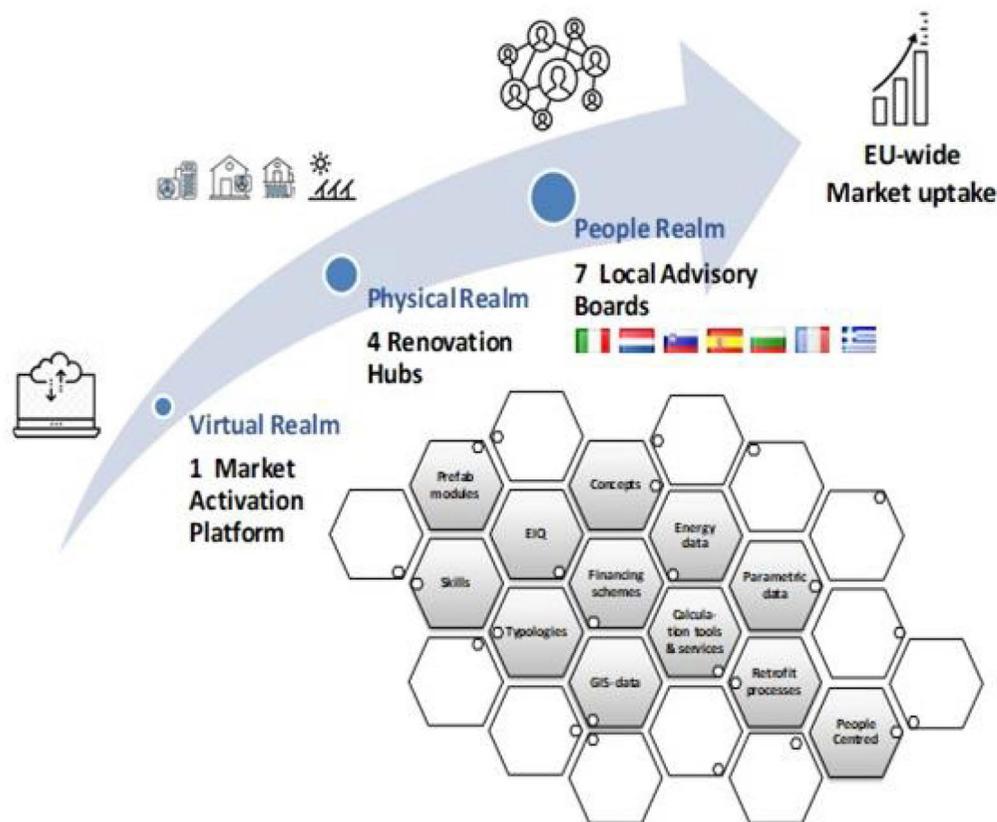
regarding the **“breakdown”** of the overall renovation process into standardized segments, energy efficiency and clean energy solutions, to select the most effective tools and approaches

Multi-target

regarding the **“customization”** of renovation solutions according to regional climatic, building, socio-economic and market conditions, to maximize cost-reduction, business spillovers and local impact



Levels of intervention | 3 market domains



- the **“virtual realm”** meant as the domain of digital services aimed at fostering and enhancing the market uptake of deep retrofitting
- the **“physical realm”** meant as the concrete conditions of local EU retrofitting markets
- the **“people realm”** meant as the human component of retrofitting market

Planned and Ongoing Activities | 3 Transition Paths

From Project "exploitation" to market practice



- 1** CAPITALIZING available outcomes, both technical and non-technical from recent EU projects on deep renovation
- 2** Making "capitalized" results ACCESSIBLE through the re-MODULEES Digital HUB.
 - Market activation platform
 - Diagnosis tools and definition of intervention scenarios
- 3** Impactful and concrete implementation of "capitalized" SOLUTIONS in national markets.
 - 4 Physical Renovation Hubs
 - 7 re-LABs | Local Advisory Boards

Planned and Ongoing Activities | 3 Transition Paths

1 CAPITALIZING available outcomes, both technical and non-technical from recent EU projects on deep renovation

Sustainable Place 2018 ([link](#)) – Cluster workshop: Barriers and Lesson Learned from H2020 Deep renovation projects

Sustainable Place 2019 ([link](#)) – Cluster workshop: Exploitation of Business Models for Deep Renovation. Follow up of the SSERR services

Sustainable Place 2021 ([link](#)) Paper Session: Renovation Cases and Tools

Consortium expertise and re-LAB Members' feedback

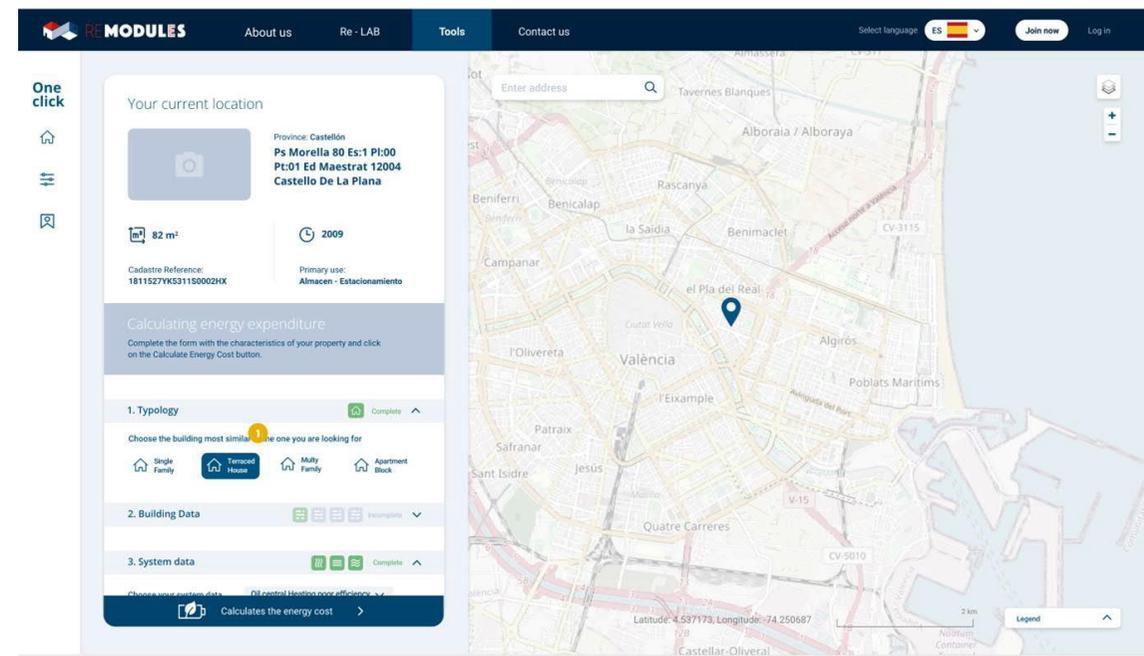


Planned and Ongoing Activities | 3 Transition Paths

2 Making "capitalized" results ACCESSIBLE through the re-MODULEES Digital HUB

re-MODULEES Market activation Platform

The re-MODULEES digital hub a core application/tool for diagnosing and pre-sizing the retrofitting options/modules



Planned and Ongoing Activities | 3 Transition Paths

3 Impactful and concrete implementation of "capitalized" SOLUTIONS in national markets

1 Pilot Markets

7 European countries (Italy, Bulgaria, Spain, France, Greece, the Netherlands and Slovenia)

2 Renovation HUBs

7 digital and 4 physical to test/implement re-MODULEES results: platform, tools and services

3 Renovation Local Advisory Boards (re-LABs)

Established at local level to help make re-HUBs operational (test, steer, engage). Formed of 12-20 members - stakeholders from demand, supply, institutions and finance

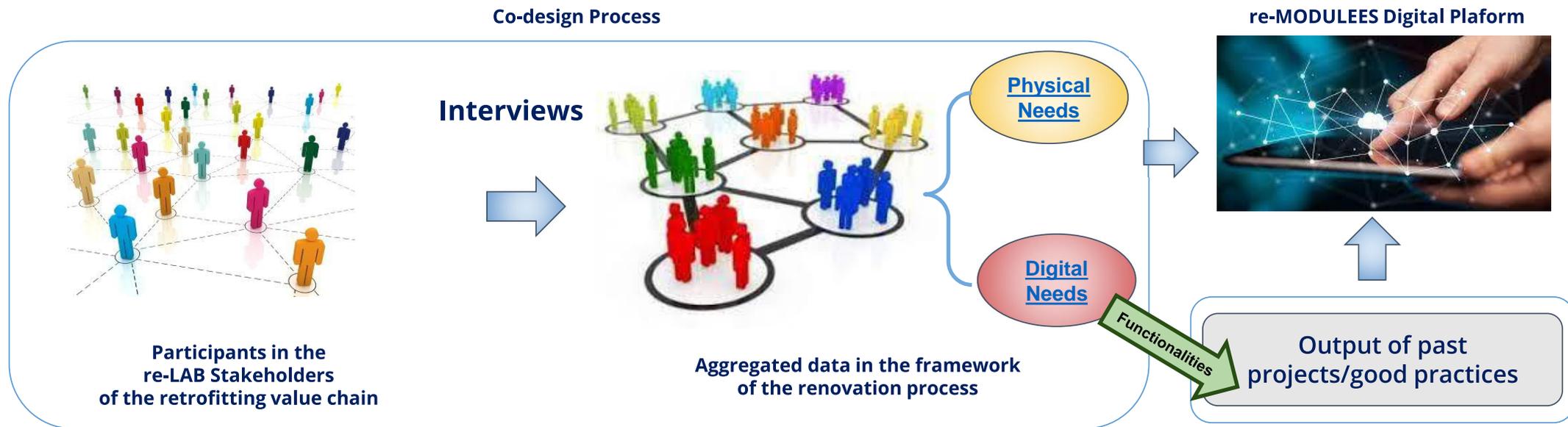
4 Local Support Networks (LSNs)

To enlarge the number of actors engaged at Member State and European level: 100 members

Vision

How to activate and concretely impact on renovation processes?

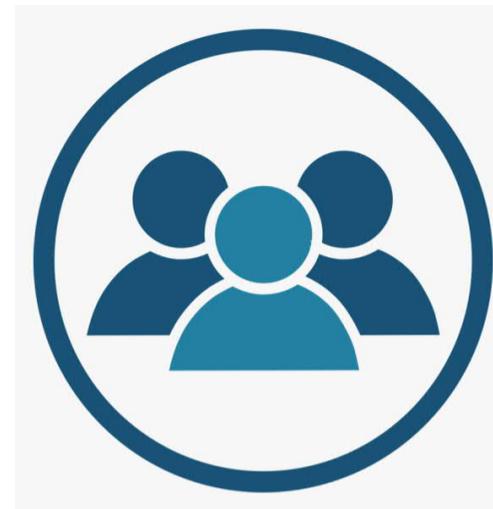
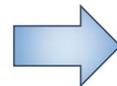
Going beyond the traditional concept of "user - platform - content" to a new one of "**community - utility - results**"



Vision

How to activate and concretely impact on renovation processes?

Going beyond the traditional concept of "user - platform - content" to a new one of "**community - utility - results**"



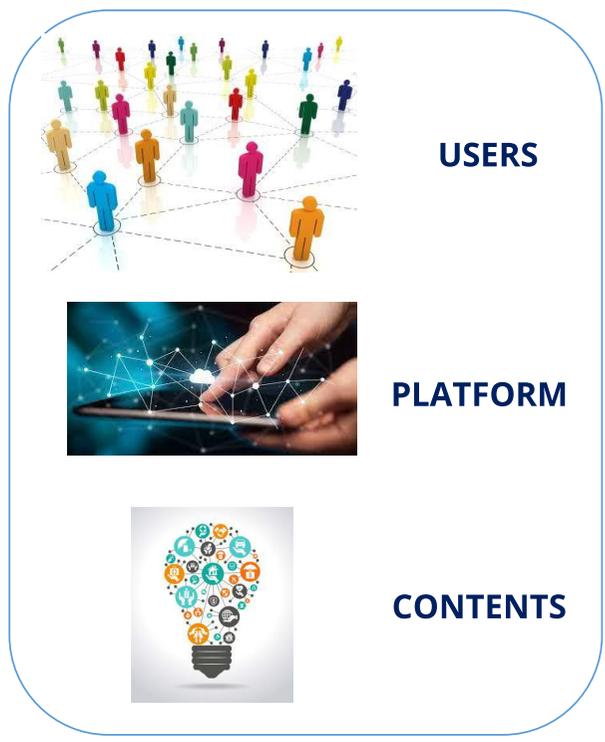
COMMUNITY



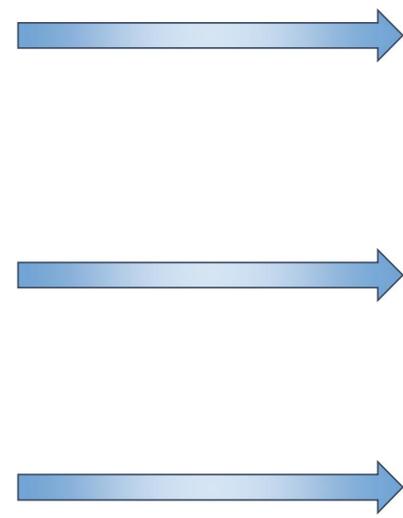
Vision

How to activate and concretely impact on renovation processes?

"CLASSIC" VISION



NEW VISION



Contacts



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Senior Researcher and PM

certimac | 



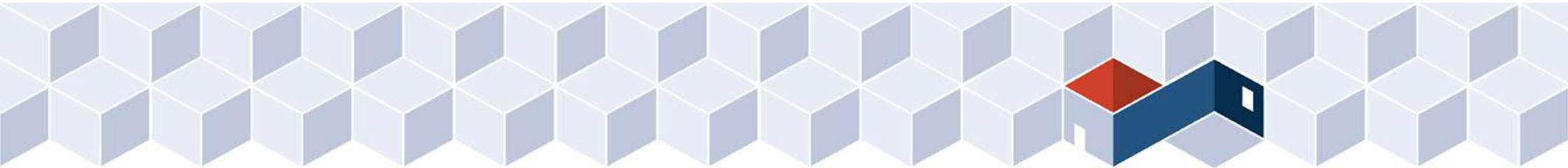
(+39) 0546 678558



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www.certimac.it



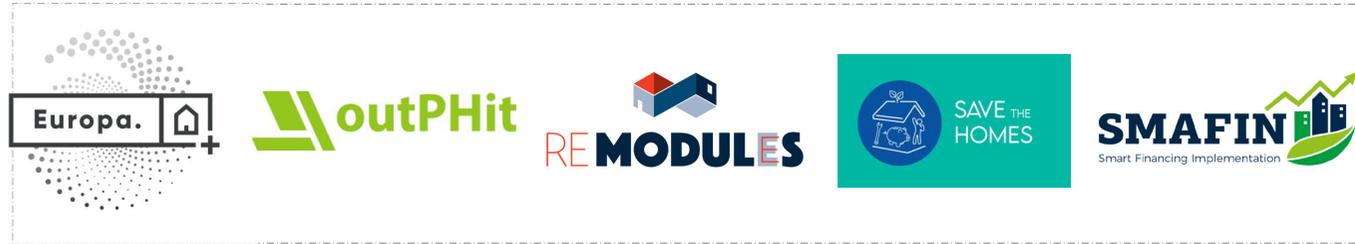
certimac | 

REMODULES
flexible building renovation shared solutions

Thank you



The sole responsibility for the content of this presentation lies with the authors. It does not necessarily reflect the opinion of the European Union. Neither the EASME nor the European Commission are responsible for any use that may be made of the information contained therein. This project has received funding from the European Union's HORIZON 2020 research and innovation programme under grand agreement No 955529.



DEEP RENOVATION

Integrating tried-and-tested solutions for deep renovation of the EU building stock

SEP. 7TH, 14:45-16:15 CET, ONLINE



SUSTAINABLEPLACES.EU



VILLE DE NICE

MÉTROPOLE
NICE CÔTE D'AZUR

PART 1

- Welcome by moderator
- Jérôme Chardon, EUROPA project / AGEDEN
- Etienne Vekemans, OutPHit project / PROPASSIF
- Chiel Boonstra, outPHit project / Trecodome
- Giulia De Aloysio, re-MODULEES project / CERTIMAC
- Ana Sanchis Huertas & Miriam Navarro Escudero, SAVE THE HOMES project / IVE
- Kiki Papadopoulou, SMAFIN project / CRES

PART 2

- Q&A
- Moderated virtual roundtable discussion

Moderator: Alexander Deliyannis,
re-MODULEES project, Sympraxis Team



SAVE THE
HOMES

One-Stop Shops as Citizens' Hubs to support the decision-making process for integrated home renovations



**GENERALITAT
VALENCIANA**
Vicepresidència Segona
i Conselleria d'Habitatge
i Arquitectura Bioclimàtica



This project has received funding from the European Union's H2020 framework programme for research and innovation under grant agreement no 841850



SAVE THE
HOMES

Objectives

- 1) To make home renovation **easier**, **faster** and more **affordable**
- 2) To introduce an attractive and transparent **customer journey**
- 3) To offer easy access to affordable **financing** for deep renovation
- 4) To deliver **real benefits** to citizens and other stakeholders
- 5) To roll out the Citizen Hub concept on a wider **scale** (regional, national and European)



Strategy

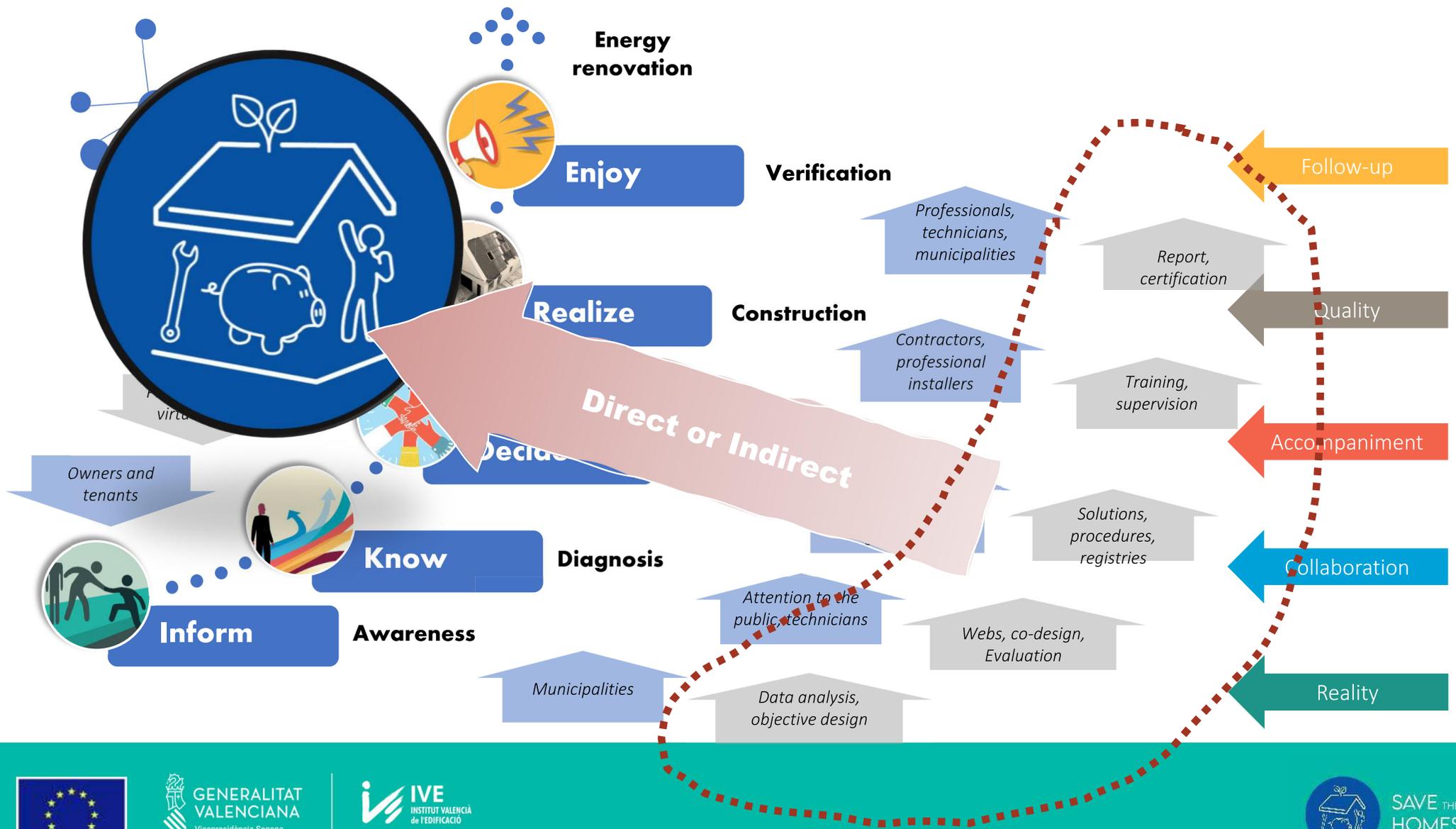
Climate emergency...
Buildings...
Renovation!

Barriers...
Motivations....
One Stop Shop!

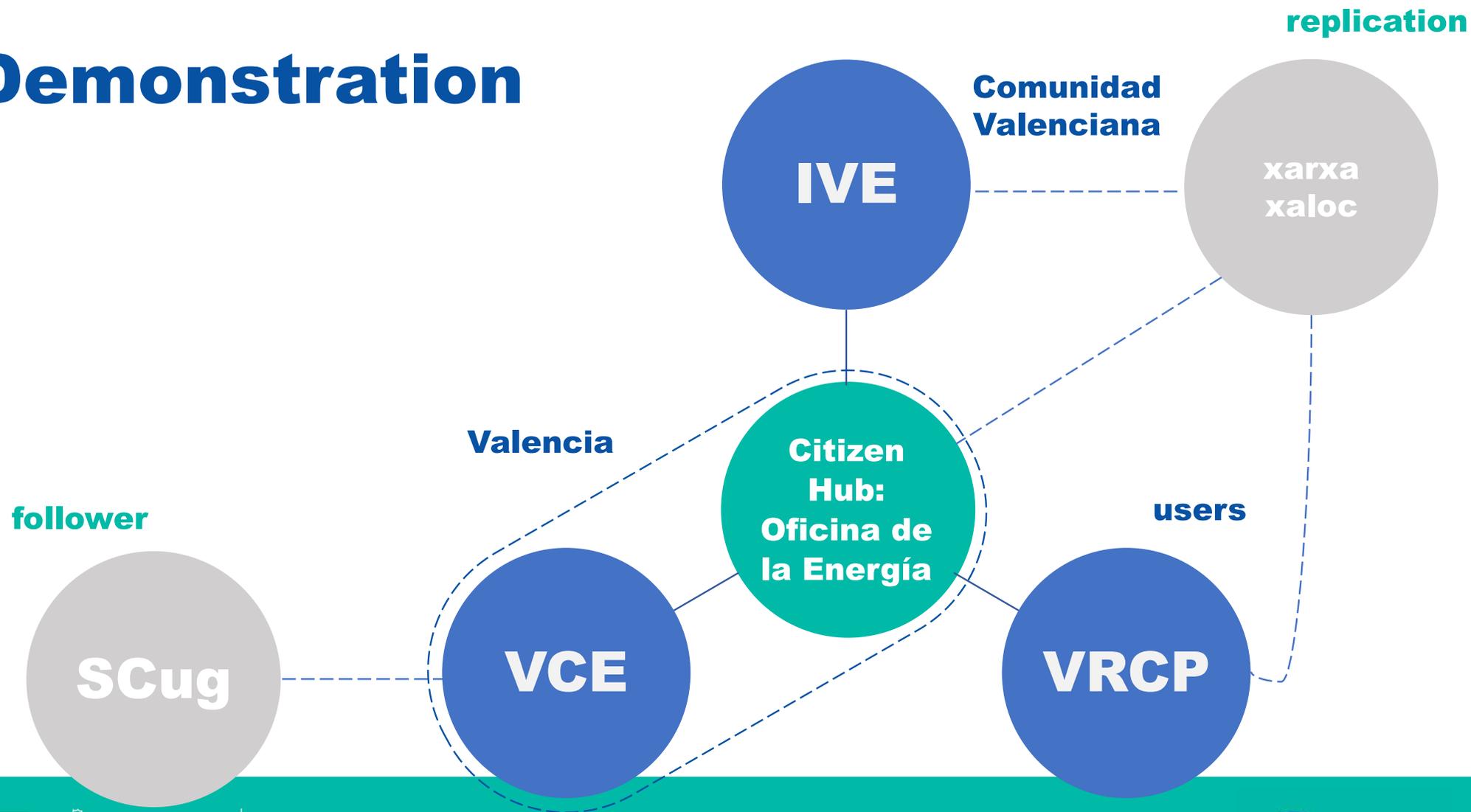




Physical or Virtual?



Demonstration



SAVE THE HOMES

Locations

- **Physical office**

- Valencia (Energy Office)
- Existing offices (Municipality premises, Neighbors' Associations, etc.)

- **Mobile Office**

- smaller municipalities with less infrastructure and resources

- **Virtual office?**



Rehabilitación




Pasos a seguir

¿Cómo te podemos ayudar?

- #### 1. Infórmate

 - Piensa: ¿qué necesitas?
 - Infórmate e inspírate
 - Habla con tus vecinos/as si es necesario
 - Decide rehabilitar

Talleres informativos
Citas de asesoramiento
Tabla con todas las ayudas disponibles
Guía de ahorro energético doméstico
Casos reales: Escuela Ciudadana de Rehabilitación Energética
- #### 2. Diseña tu reforma

 - Estudia las posibles intervenciones
 - Investiga las ayudas que hay disponibles
 - Comparte dudas y consejos con otras personas
 - Decide la reforma que quieres hacer

Informe de costes y ahorros
Análisis de ayudas
Referencias y consejos de otras personas:
Escuela Ciudadana
- #### 3. Contrata profesionales

 - Pide presupuesto a agentes o gestores de rehabilitación
 - Pide presupuesto a otros profesionales
 - Comparte consejos con otras personas
 - Compara las ofertas y contrata la mejor

Listado de:
Gestores de las ayudas
Técnicos Certificados Eficiencia
Empresas de calidad
Ayudando a comparar ofertas
Referencias y consejos de otras personas:
Escuela Ciudadana
- #### 4. Supervisa la construcción

 - Asegúrate de que la obra se realiza según lo planeado
 - Compara con otras intervenciones
 - Consulta cualquier duda
 - Pide la documentación necesaria para justificar las ayudas

Ejemplos de obras
Resolución de dudas
Referencias y consejos de otras personas:
Escuela Ciudadana
- #### 5. Disfruta tu nueva vivienda

 - Analiza los ahorros conseguidos
 - Disfruta la mejora de confort y el ahorro
 - Fórmate para seguir mejorando
 - Comparte tu experiencia con otras personas

Medición de resultados y ahorros
Formación para maximizar el ahorro conseguido
Cuenta tu experiencia:
Escuela Ciudadana

escolarehabilitacio@climaenergia.com - www.climaenergia.com - T 96 106 15 82



Guidelines ELIH-MED

Register BUS-LEAGUE

Solutions TABULA/EPISCOPE

Solutions ReMODULEES

Monitoring MATCH-UP



UNIDADES DE SERVICIO:



**Ventanilla
única**

1. Información,
asesoramiento y
derivación

**Awareness
ELIH-MED**



**Gestión
del hábitat**

1. Gestión y
mantenimiento del
parque de viviendas

**Solutions
TABULA/
EPISCOPE**



**Protección de la tenencia
de la vivienda**

1. Servicio de emergencia
2. Servicio de mediación

**Solutions
Re
MODULEES**

XALOC

Red de Administraciones
Locales y Comarcales
de Vivienda



**Rehabilitación y
eficiencia energética***

1. Mejora de las
viviendas del parque

2. Mejora de la
eficiencia energética y las
energías renovables

**Register
BUS-
LEAGUE**

3. "Save the homes"



**Observatorio Local
de la Vivienda**

1. Información y análisis
2. Coordinación con el
Observatorio del Hábitat

**Monitor
TRIPLE A
RENO**



SAVE THE
HOMES



GENERALIDADES

AHORRO DE ENERGÍA

ACCESIBILIDAD

CONSERVACIÓN

CONFORT ACÚSTICO

Edificio
Elementos comunes
Vivienda
Cocina y lavadero
Baño y aseo
Ventanas
Fachadas
Cubiertas
Particiones
Revestimientos

AHORRO DE ENERGÍA

Disponer un medidor de consumo eléctrico interior por vivienda permite saber cuánta energía se gasta o se ahorra. Este dispositivo permite analizar el consumo eléctrico de la vivienda, permitiendo tomar decisiones tendentes a reducir el consumo y aumentar la eficiencia energética. Es aconsejable, que ofrezca el mayor número de datos de consumo eléctrico y potencia su ahorro.

¿Cómo ahorrar energía med...

Incorporando elementos de ahorro:

- Instalando sistemas de ahorro en electrodomésticos

Ahorro de energía – Instalación eléctrica

Disponer un medidor de consumo eléctrico interior por vivienda permite saber cuánta energía se gasta o se ahorra. Este dispositivo permite analizar el consumo eléctrico de la vivienda, permitiendo tomar decisiones tendentes a reducir el consumo y aumentar la eficiencia energética. Es aconsejable, que ofrezca el mayor número de datos de consumo eléctrico y potencia su ahorro.

Cómo ahorrar energía instalando sistemas de ahorro en electrodomésticos y aparatos electrónicos

¿CUÁL ES EL PROBLEMA?

La gran mayoría de los electrodomésticos y aparatos electrónicos que habitualmente tenemos en nuestras viviendas no los utilizamos de forma continuada las 24 horas del día, si no que los encendemos según los vamos necesitando. Sin embargo, muchos de ellos consumen energía cuando no los estamos utilizando ya que en lugar de apagarlos los dejamos en espera (con el piloto encendido). El consumo que suponen los electrodomésticos que no estamos usando pero que están en modo espera puede suponer entorno a un 15% del consumo eléctrico de la vivienda, cantidad que nos ahorraríamos si apagamos los aparatos completamente.



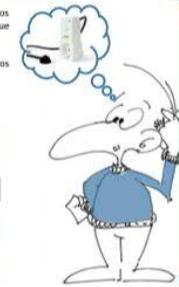
¿CÓMO PUEDO SOLUCIONARLO?

Actualmente se comercializan diferentes dispositivos que facilitan el apagado de los electrodomésticos de forma individual o agrupados mediante regletas, sin modificar el uso que hacemos de los mismos.

Este tipo de aparatos pueden ayudarnos a ahorrar energía debido a que eliminan el consumo de los electrodomésticos en modo espera.

Los diferentes sistemas para monitorizar el consumo de la vivienda se dividen en:

- Dispositivos de apagado de modo espera o "Stand by"**
 - Nos permiten apagar los aparatos con su mismo mando de la misma forma que antes los dejábamos en espera.
- Temporizadores**
 - Nos permiten programar el tiempo de uso de un electrodoméstico.
- Enchufes o regletas con interruptor**
 - Nos permiten apagar desde la clavija del enchufe los aparatos.
- Control remoto de electrodomésticos**
 - Nos permiten apagar los electrodomésticos que no disponen de mando a distancia.



¿QUÉ AHORRO PUEDO OBTENER?

Si instalamos en nuestra vivienda alguno de los sistemas descritos en esta ficha podremos conseguir ahorros en el consumo de hasta el 15%. El ahorro que obtendrá al aplicar las medidas dependerá de:

- El tipo de sistema de instalado**
 - El ahorro puede variar dependiendo las opciones que ofrezca el sistema instalado.
- La eficiencia, el uso y el número de equipos**
 - El ahorro dependerá de si son eléctricos los equipos que disponemos de calefacción, refrigeración y agua caliente, ya que cuantos más equipos eléctricos posea la vivienda menor será el porcentaje que supongan los electrodomésticos con modo de espera. También influirá el uso que demos a cada equipo y cuantos equipos tengamos.
- Hábitos de uso**
 - El ahorro que conseguiremos en cada hogar dependerá del uso previo que hagamos de los electrodomésticos. Si no disponemos de muchos electrodomésticos con modo de espera y aquellos que tienen modo de espera nos aseguramos de apagarlos será poco o nulo el ahorro que podremos conseguir.

0-15%
de ahorro en el consumo eléctrico



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Solutions Re MODULEES



1

1 Conoce y mejora tu edificio

Esta herramienta permite calcular de forma aproximada el consumo energético de tu edificio, ofreciéndote 9 opciones de mejora para el ahorro energético y el aumento del confort, cumpliendo con los requisitos necesarios para la obtención de las ayudas del Fondo de Recuperación Europeo.

¡Primero dínos qué te preocupa realmente, y encontraremos la mejor estrategia para ti!

Accesibilidad



Cubierta



Estructura



Fachada



Cas Val




This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 892749.







Informe preliminar

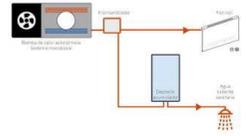
Informe preparado para la referencia catastral:
5223603YJ2752C

Este documento muestra el resultado de la aplicación renovEU (<http://renovEU.five.es>) sobre edificio seleccionado. Es importante recordar que los parámetros, cálculos y valores expresados se basan en tipologías, por lo que los resultados corresponden a un edificio representativo, lo más parecido posible al seleccionado.

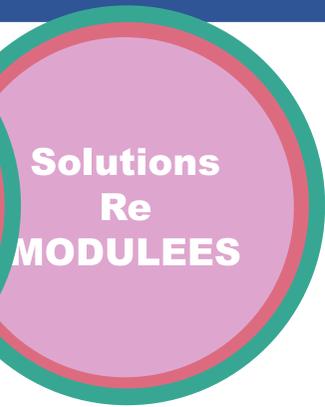
1. Datos del edificio

Según dirección facilitada o coordenadas y datos disponibles de catastro, se clasifica

Edificio tipo		Características		Valoración de actuaciones de mejora	
Categoría:	Bloque de viviendas	N.º de viviendas	10	Fachada 1	911
Zona climática:	B3	N.º de viviendas por planta	2	Fachada 2	-
Periodo de construcción:	Anterior a 1900	N.º de plantas	6	Medianera	-
		Superficie por vivienda (m2)	124	Cubierta plana	-
		N.º de estancias	4	Cubierta inclinada	248
		N.º de baños	3	Suelo en contacto con el terreno	-
				Suelo en contacto con recinto no habitable	248
				Suelo en contacto con forjado sanitario	-



Actuación	Descripción	PEC total	PEC por vivienda
Bomba de calor	Sistema de bomba de calor aerotérmica compacta para climatización y agua caliente sanitaria, para montaje en exterior o interior y de instalación mural. Incluye todos los accesorios y elementos para su correcto funcionamiento.	60.597,41 €	6.059,74 €
Fan coils	Fan coils de regulación de agua con intercambiador de agua/aire, para su colocación en suelo/techo en cada una de las estancias climatizadas, realizado con sistema de dos tubos, un motor de velocidades seleccionables, válvula de cuatro vias y todos los elementos necesarios para su correcto funcionamiento.	27.839,29 €	2.783,93 €
Conductos	Canalización vista realizada con tubo de cobre, diámetro exterior de 28 mm, incluso garras de sujeción y con un incremento del precio del tubo del 30% en concepto de uniones, accesorios y piezas especiales.	5.929,25 €	592,92 €
Total		94.365,94 €	9.436,59 €



SAVE THE HOMES

GENERALITAT VALENCIANA
Vicepresidència Segona i Conselleria d'Habitatge i Arquitectura Bioclimàtica

IVE
INSTITUT VALENCIÀ DE FERRIACIÓ
INSTITUT VALENCIÀ DE LA EDIFICACIÓ

VAL / EN / ES

REGISTRO CHC Edificios y espacios urbanos Empresas y profesionales Materiales y productos Contacto

REGISTRO CHC Empresas y profesionales

AVISO *

*El siguiente listado de empresas se muestra en orden alfabético según el nombre de la empresa.

ESPECIALIZACIÓN	ECER-0016	AKRA REHABILITACIÓN, S.L.
<input type="checkbox"/> Mejora de la accesibilidad (22) <input type="checkbox"/> Reforma de viviendas (24) <input type="checkbox"/> Refuerzos estructurales (25) <input type="checkbox"/> Rehabilitación integral de edificios (28) <input type="checkbox"/> Reparación de fachadas (26)		Prolong. Rosa de los Vientos, 2 - 03007 Alicante / Alacant (ALICANTE) 965113348 info@akra-rehabilitacion.com www.akra-rehabilitacion.com Ámbito de trabajo: Alicante Especializaciones: Reparación de fachadas, Mejora de la accesibilidad, Reforma d Refuerzos estructurales Verificación: Nivel 3 (18/03/2022) OTROS REGISTROS CHC: Especialistas en la gestión de la rehabilitación EGRE-0002
ÁMBITO DE TRABAJO <input type="checkbox"/> Alicante (25) <input type="checkbox"/> Castellón (17) <input type="checkbox"/> Valencia (23)	ECER-0027	ANTRA GESTIÓN INTEGRAL DE CONSTRUCCIÓN, S.L. Pl. Doctor Gómez Ulla, 3-b-1 - 03013 Alicante / Alacant (ALICANTE) 965 201 039 recepcion@antragic.com www.antragic.com Ámbito de trabajo: Alicante Especializaciones: Reparación de fachadas, Mejora de la accesibilidad, Reforma d Refuerzos estructurales Verificación: Nivel 3 (20/06/2022)
UBICACIÓN DE LA SEDE Provincia	ECER-0018	AVANT GESTIÓ TÈCNICA S.L.
CLASIFICACIÓN <input type="checkbox"/> Nivel 1 (14) <input type="checkbox"/> Nivel 2 (1) <input type="checkbox"/> Nivel 3 (13)		

REGISTRO POR LA CALIDAD EN EL ÁMBITO CONSTRUIDO

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TABULA/
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Re
MODULEES

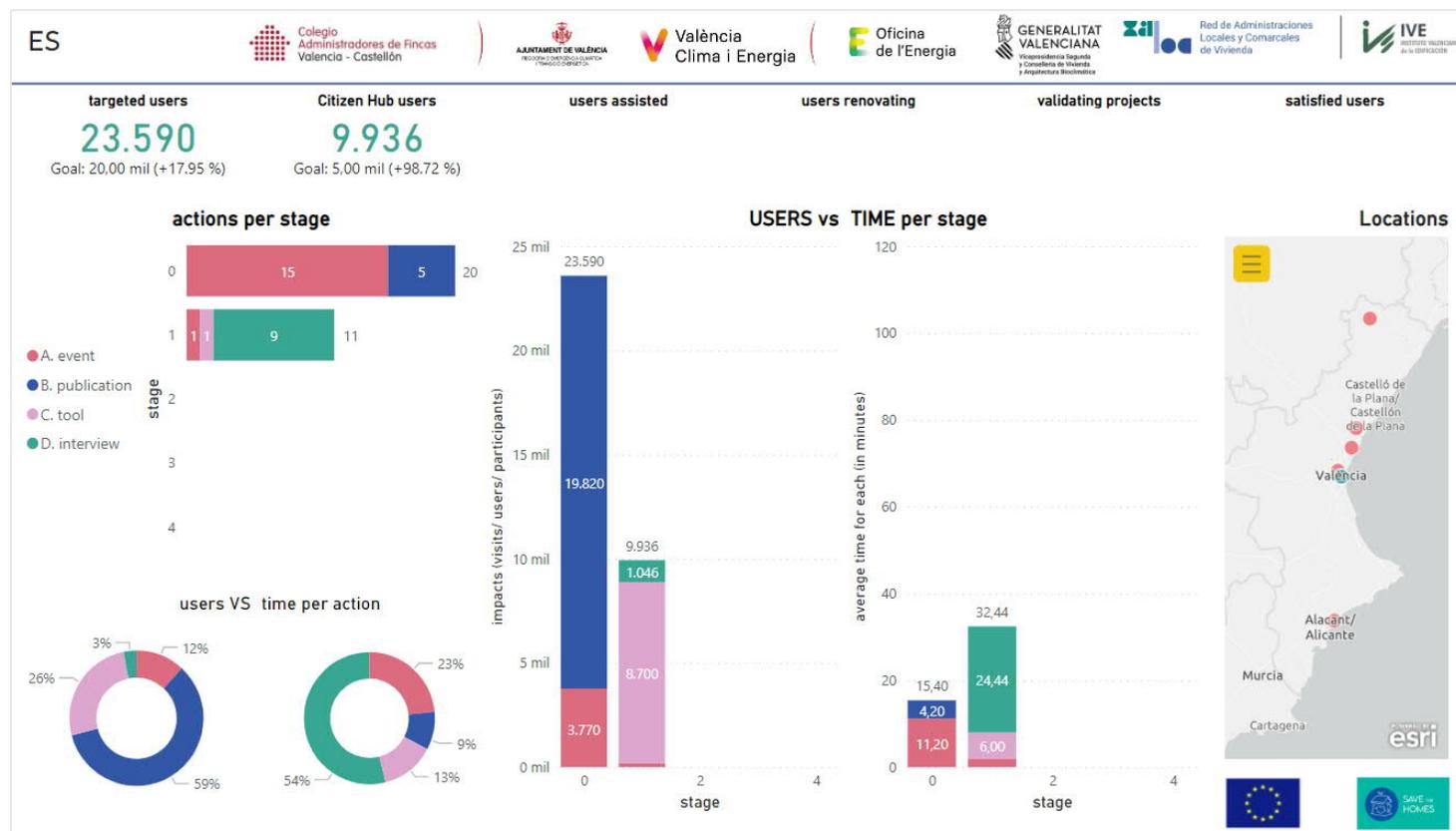
Register
BUS-
LEAGUE

Monitor
TRIPLE A
RENO



Results so far...

- 21 Citizen Hubs
- 74 Municipalities
- 9.000 Visitors
- Renovations?





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HOMES

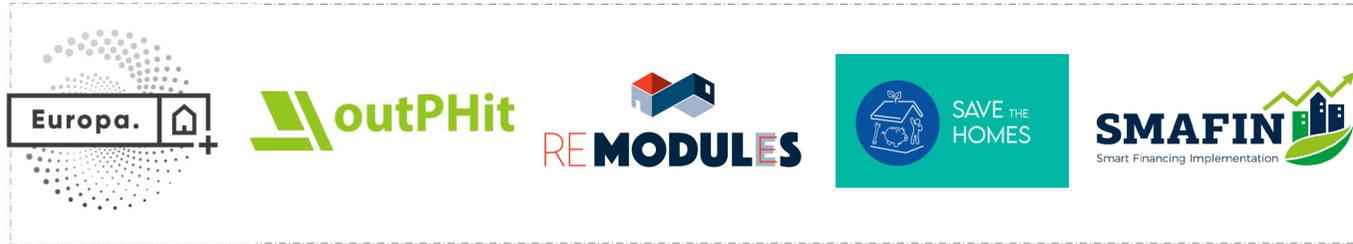
**Thanks for
your attention**

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Lucía Ramírez Pareja – lr Ramirez@five.es
Ana Sanchis Huertas – asanchis@five.es
<https://www.five.es>

<https://savethehomes.org/>



**This project has received funding from the
European Union's H2020 framework
programme for research and innovation
under grant agreement no 841850**



DEEP RENOVATION

Integrating tried-and-tested solutions for deep renovation of the EU building stock

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VILLE DE NICE

MÉTROPOLE
NICE CÔTE D'AZUR

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PART 2

- Q&A
- Moderated virtual roundtable discussion

Moderator: Alexander Deliyannis,
re-MODULEES project, Sympraxis Team



Structured dialogue and cooperation to support the financing
of energy-efficient buildings

Sustainable Places 2022 (online)

7 September 2022

Kiki Papadopoulou, CRES
SMAFIN Coordinator



ΚΑΠΕ
CRES

ΚΕΝΤΡΟ ΑΝΑΝΕΩΣΙΜΩΝ ΠΗΓΩΝ
ΚΑΙ ΕΞΟΙΚΟΝΟΜΗΣΗΣ ΕΝΕΡΓΕΙΑΣ



The project has received funding from the
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Grant Agreement No. 955857

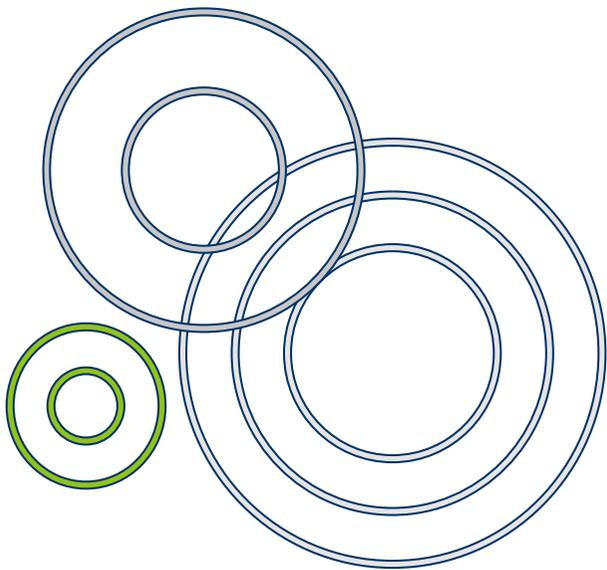
Introduction to SMAFIN Project



SMAFIN is a three-year project, financed by HORIZON 2020, and implemented in 4 countries -Greece (CRES & INZEB), Bulgaria (EnEffect), Croatia (REGEA), and Romania (ENERO & PRONZEB)- with the aim of **supporting financing for energy investments mainly in private and public buildings, but also in SMEs, industry, and infrastructure**, organising roundtable discussions, at least once per year in each country.

Specific objectives:

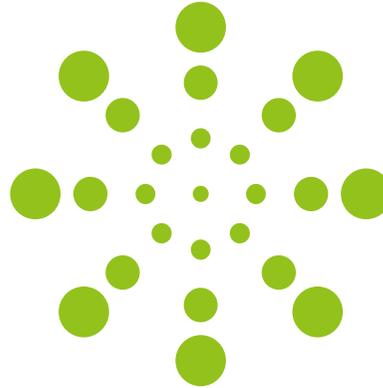
- Capitalisation of Sustainable Energy Investment Forums (SEIFs) results;
- Drafting policy recommendations for energy efficiency measures and/or financing tools;
- Connecting relevant initiatives and stakeholders through roundtable discussions and the project's online platform www.smafin.eu.



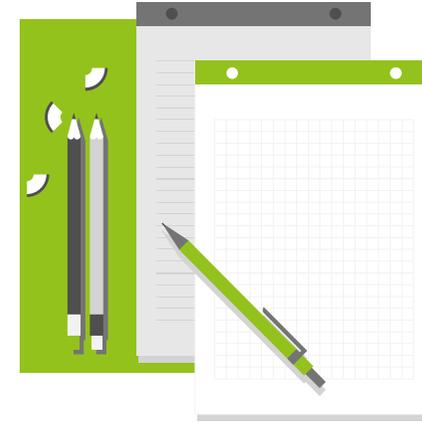
Achievements up to now (1/2)



4 Technical Reports: Analysis of previous initiatives, Market analysis, Best practices and financing tools for energy upgrading of buildings, Selection of policy measures for redesign.



4 Roundtable Discussions of the 1st cycle and 4 more from the second one in Bulgaria, Croatia, Greece and Romania have been organised up to now.

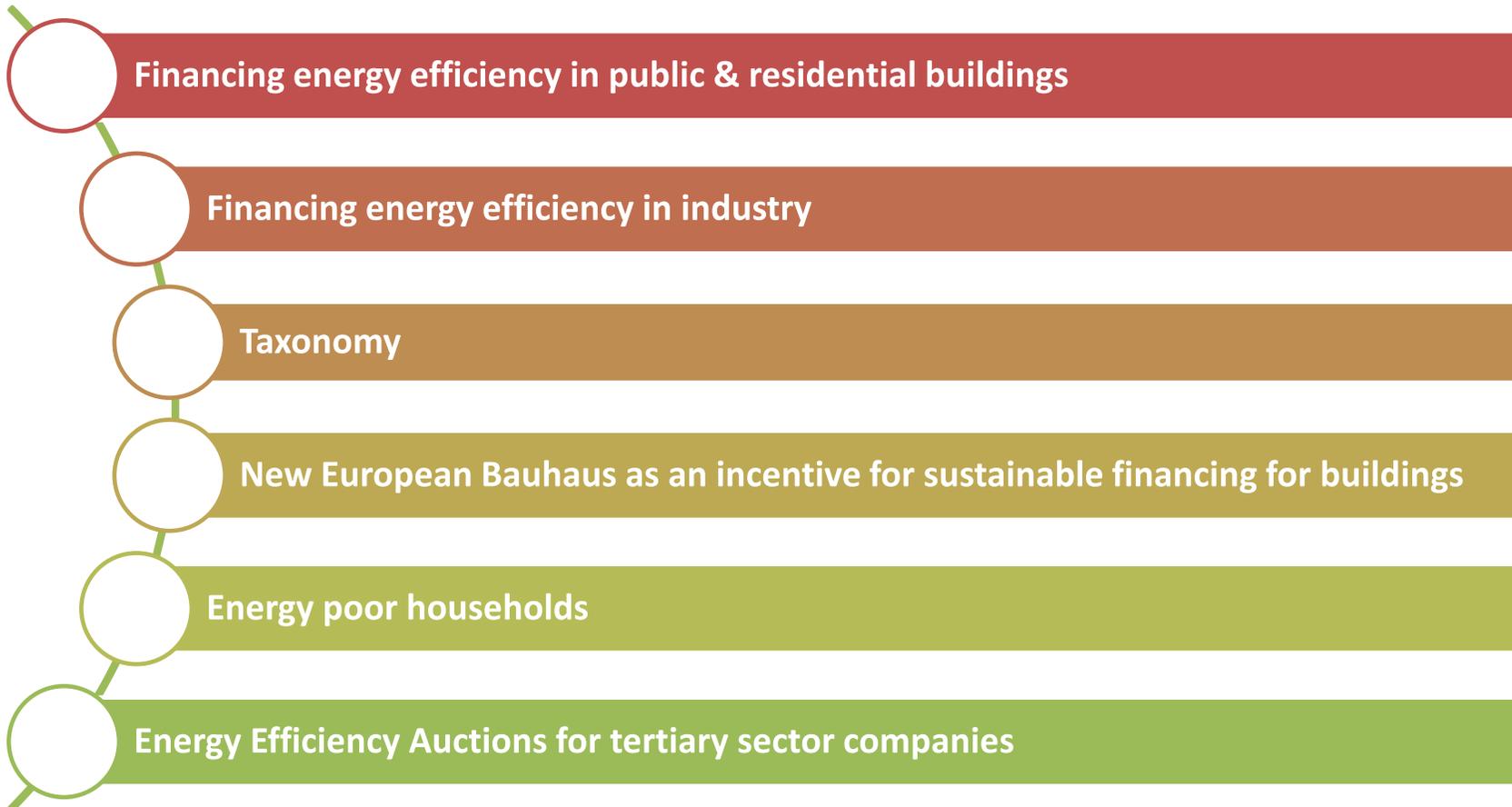


10 Meetings of the external Working Groups of the project.

Achievements up to now (2/2)

- 💡 **The online platform** of the SMAFIN project (www.smafin.eu) with:
 - News
 - Toolbox (*10 technical reports, 55 financing tools, 19 best practices to support stakeholders in capitalising on energy efficiency projects*)
 - E-Forum for the exchange of views and communication material
- 💡 **10 Satellite events** and participation in relevant workshops and conferences;
- 💡 **4 issues of the SMAFIN Newsletter** with 1600 recipients in the 4 project countries;
- 💡 **80 references** (articles/press releases) for the project only in Greece;
- 💡 **6 communication campaigns** on the project's social media accounts.

Roundtables Indicative Topics



Bulgaria

- I. The most sustainable solution to reduce energy poverty is building renovation.
- II. There is a need for quality assurance of materials as well as transparency of procedures throughout the whole renovation process.

Croatia

- I. Continuous and regular publication of calls for financing are often more critical for building co-owners than the co-financing rate.
- II. One of the future challenges will be motivating and convincing the building co-owners to start the renovation using their own funds.



Greece

- I.** Banks consider that the investment process can be smoother if other actors are also involved in activities such as in preparing a credible dossier.
- II.** Main problems for ESCOs to fund energy efficiency projects for public buildings are lack of energy consumption data, high initial costs in terms of project design and lack of various information regarding the buildings.

Romania

Need for actions to:

- I.** Increase building owners' and tenants awareness & trust towards products, services and players in the renovation market.
- II.** Improve standardised technical procedures to reduce costs and improve the quality of services offered by market operators.
- III.** Improve the financing conditions of the investment plans targeting the renovation of the houses offered by OSS.



SMAFIN's contribution to energy policy development



- 💡 Acts as an **informal consultation** before the introduction of new measures.
- 💡 **Identify solutions and measures** that encourage the financing of sustainable energy projects.
- 💡 Provides feedback deriving from the roundtables & the Working Groups' discussions to **European and national policy makers**.
- 💡 Supports technically the **development of the new policy measures/financing tools**.
- 💡 **Introduce new concepts** to stakeholders.
- 💡 **Facilitates dialogue** between the financial sector, public authorities, and all stakeholders involved in energy sustainable investments.
- 💡 **Inform** about energy policy developments/calls/events.

How one can participate to SMAFIN discussion?



- 💡 Visit the project website (www.smafin.eu) and join the discussion in the E-Forum
- 💡 Subscribe to newsletter recipients
- 💡 Follow us on social networks:

 twitter.com/smafin_eu

 www.linkedin.com/company/smafin-h2020-project

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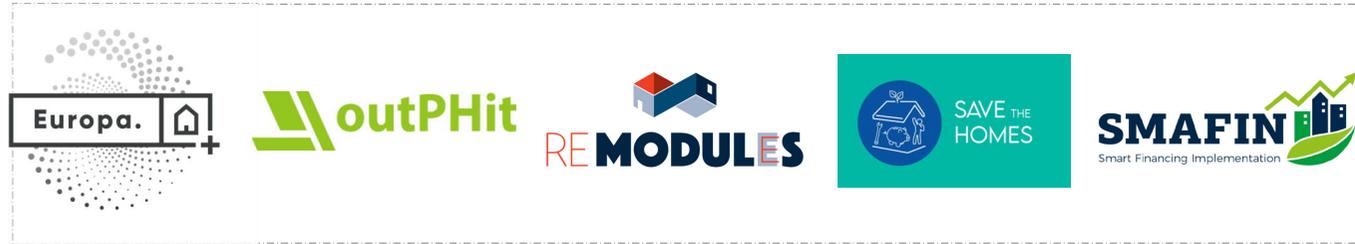
THANK YOU!



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ΚΑΙ ΕΞΟΙΚΟΝΟΜΗΣΗΣ ΕΝΕΡΓΕΙΑΣ



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DEEP RENOVATION

Integrating tried-and-tested solutions for deep renovation of the EU building stock

SEP. 7TH, 14:45-16:15 CET, ONLINE

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VILLE DE NICE

MÉTROPOLE
NICE CÔTE D'AZUR

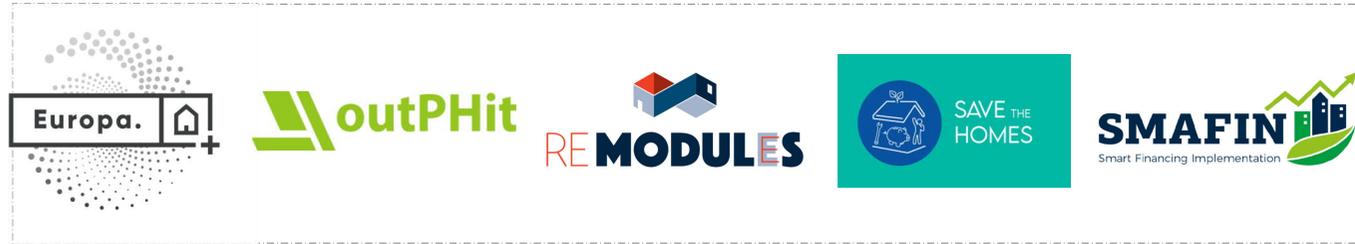
PART 1

- Welcome by moderator
- Jérôme Chardon, EUROPA project / AGEDEN
- Etienne Vekemans, OutPHit project / PROPASSIF
- Chiel Boonstra, outPHit project / Trecodome
- Giulia De Aloysio, re-MODULEES project / CERTIMAC
- Ana Sanchis Huertas & Miriam Navarro Escudero, SAVE THE HOMES project / IVE
- Kiki Papadopoulou, SMAFIN project / CRES

PART 2

- Q&A
- Moderated virtual roundtable discussion

Moderator: Alexander Deliyannis,
re-MODULEES project, Sympraxis Team



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