



REMODULES

flexible building renovation shared solutions

The re-MODULEES Project: an innovative vision for the effective deep renovation of the European building stock

14-16 June 2023 - Sustainable Places, Madrid



This project has received funding from the European Union's HORIZON 2020 research and innovation programme under grant agreement No 955529



REMODULEES

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At a glance...

**The re-MODULEES Project: an innovative vision
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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	30 April 2024
Overall budget	€ 2 099 518,75
Consortium	Leader Huygen Engineers & Consultants, HI&A 15 Partners from Italy, the Netherlands, Greece, Spain, France, Bulgaria & 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

Methodology adopted | Modularity

Modularity is to be understood as



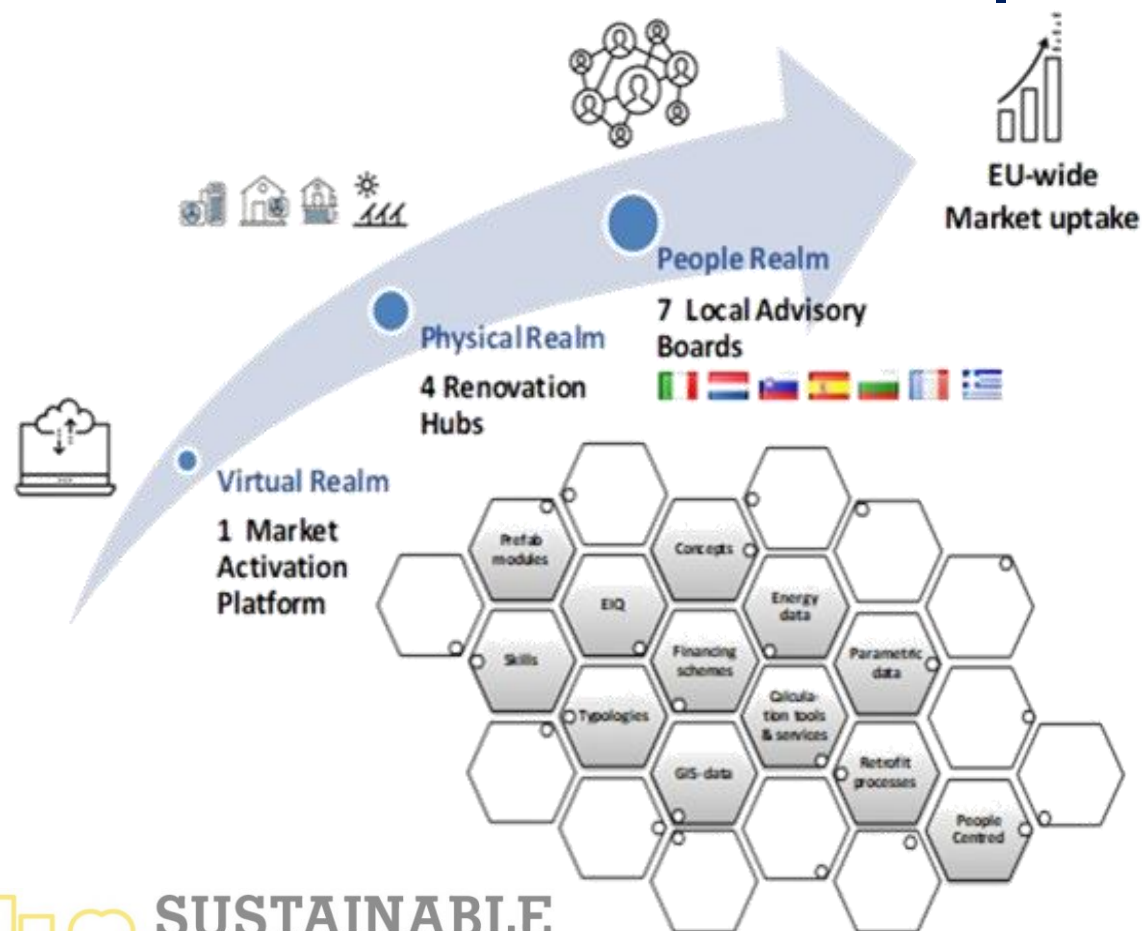
Multi-level

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



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Vision | Hands on Approach

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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**"

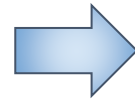
Co-design Process

re-MODULEES Digital Platform

Interviews



Participants in the
re-LAB Stakeholders
of the retrofitting value chain



Aggregated data in the framework
of the renovation process

Physical
Needs

Digital
Needs

Functionalities



Output of past
projects/good practices

Vision | Hands on Approach

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**"

A. Starting point | Renovation Market profiling and Analysis of the renovation process in its phases and sub-phases

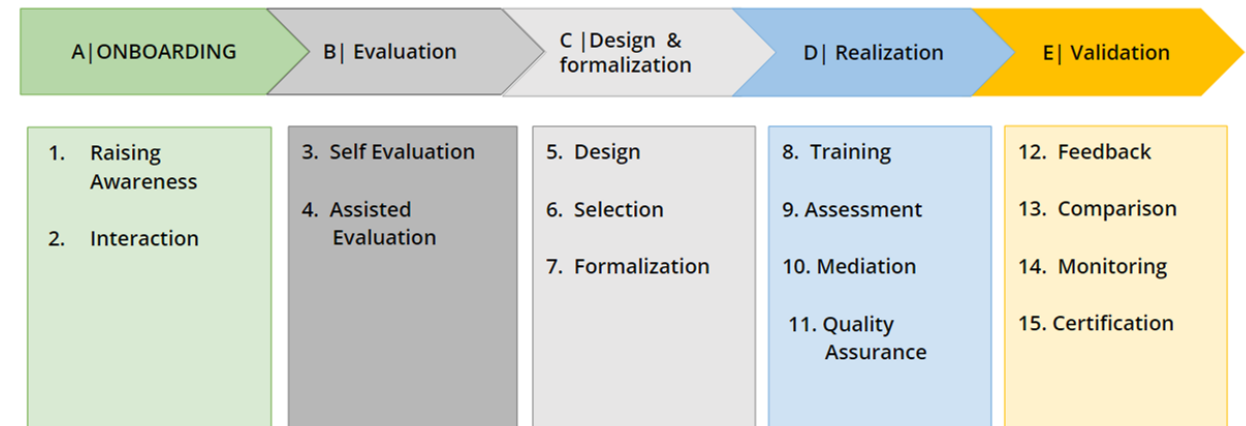
Two different ways of intervention:

a. Study and Analysis of market data and literature

b. Interviews with re-LAB participants

Laying the foundations for

- **assessing** the degree of innovation and market potential of tools, solutions, and approaches to be capitalized on
- **devising** efficient strategies to effectively use the results on the market



Vision | Hands on Approach

How to activate and concretely impact on renovation processes?

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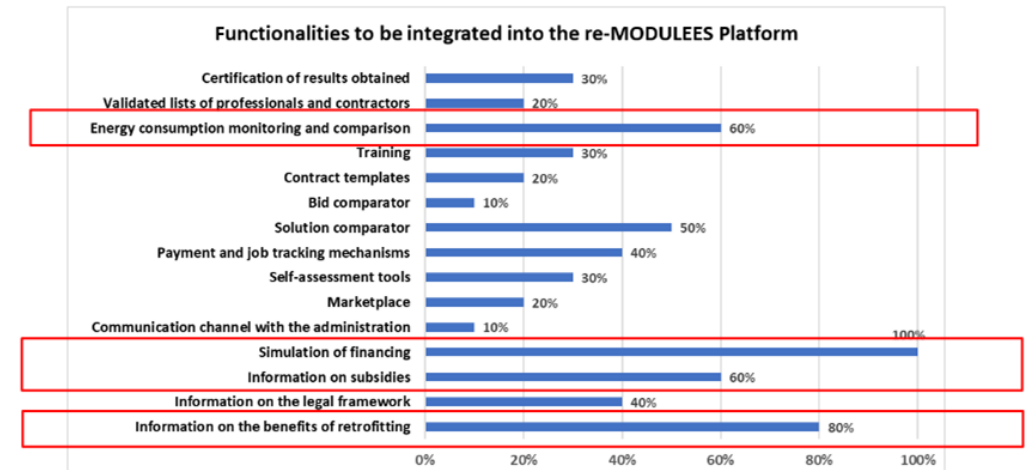
B. Through the **interaction with re-LAB participants**, it was possible to define **in each pilot market** and for **each target group**

Interviews

- needs
- difficulties
- benefits
- innovation trends
- main improvements to be made to processes

Questionnaires

- functionalities needed to be implemented in the platform



...Development of the co-design process...

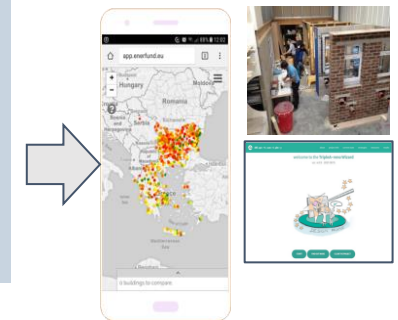
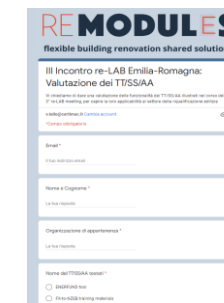
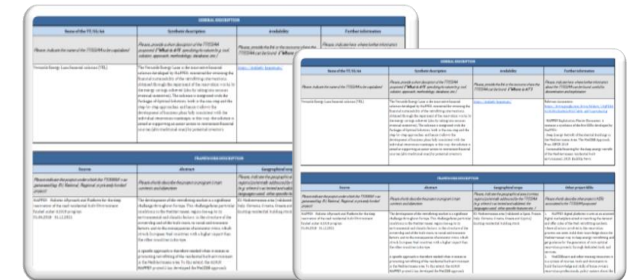
Vision | Hands on Approach

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**"

C. On this basis, the **re-MODULEES Partners**, in collaboration with the **re-LAB participants, selected**, through **specific criteria, the resources** (tools, solutions, approaches, and success stories) to be implemented in the **re-MODULEES digital platform** so as to:

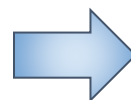
- effectively meet the specific needs of the pilot markets
 - for each target group*
 - in each stage and sub-stage of the process*
- make the platform a **GENERATOR OF USEFULNESS FOR USERS.**



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**"



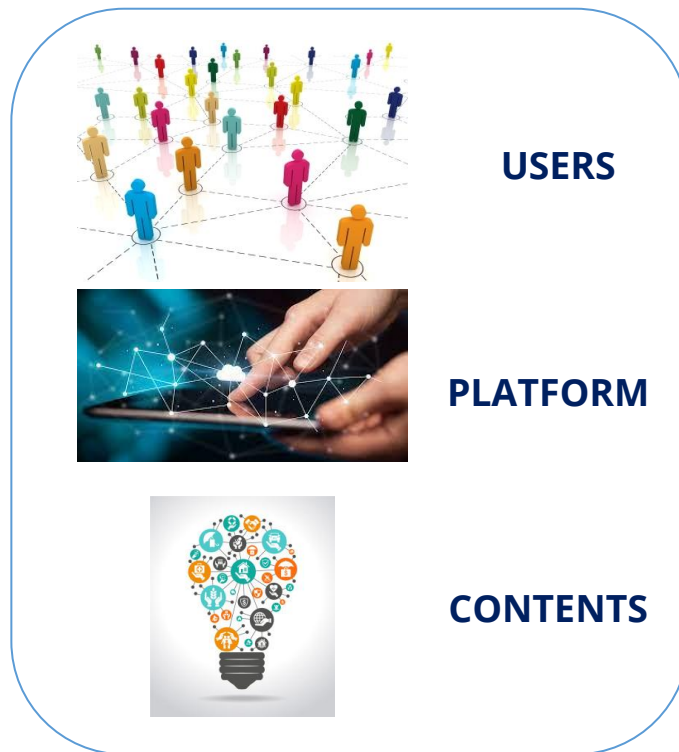
COMMUNITY



Vision

How to activate and concretely impact on renovation processes?

"CLASSIC" VISION



NEW VISION



Contacts



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REMODULEES

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Where everything converges

**The re-MODULEES Project: an innovative vision
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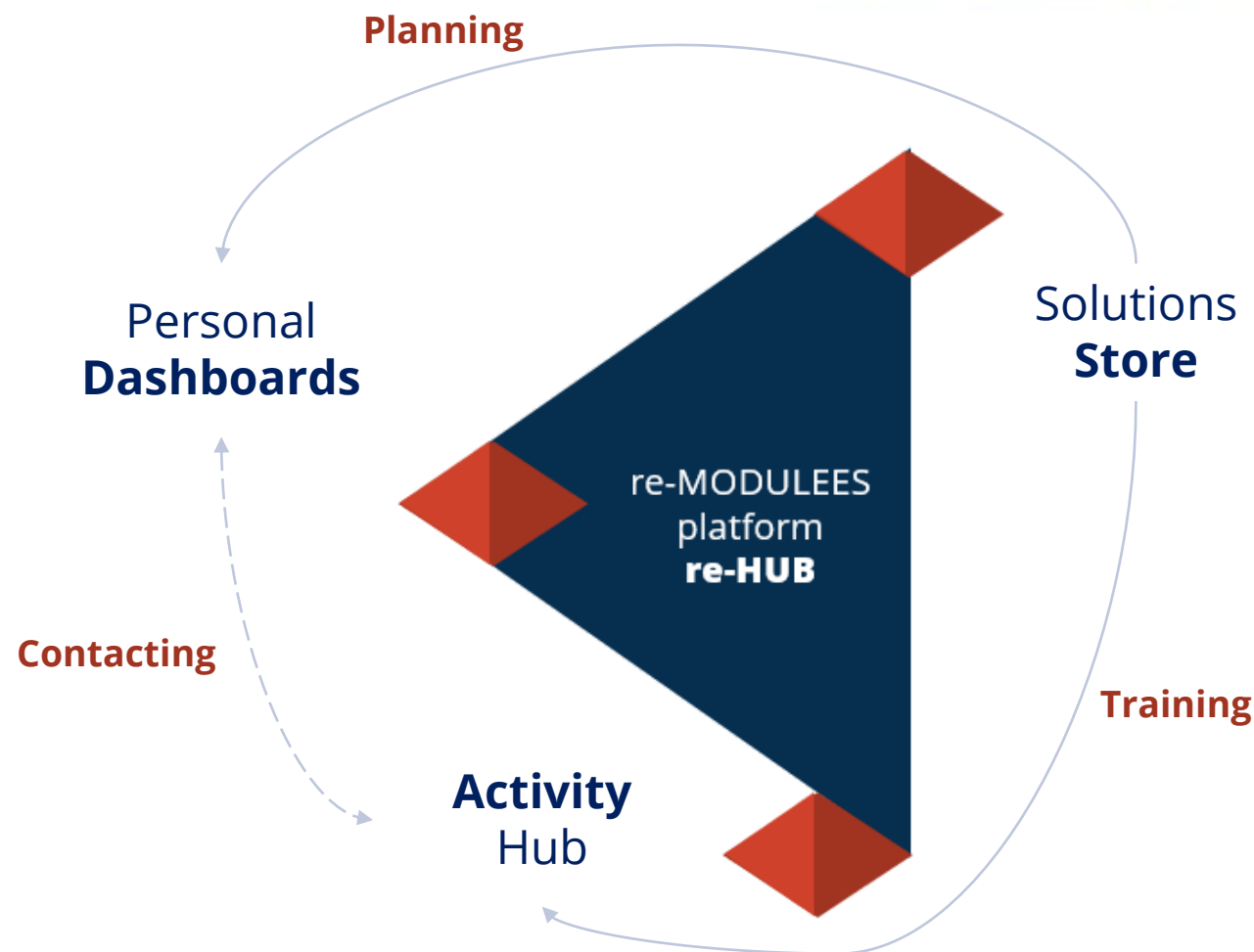
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The platform

workspaces

- ◆ People → follow-up
- ◆ Buildings → search
- ◆ Market → interact

& relations

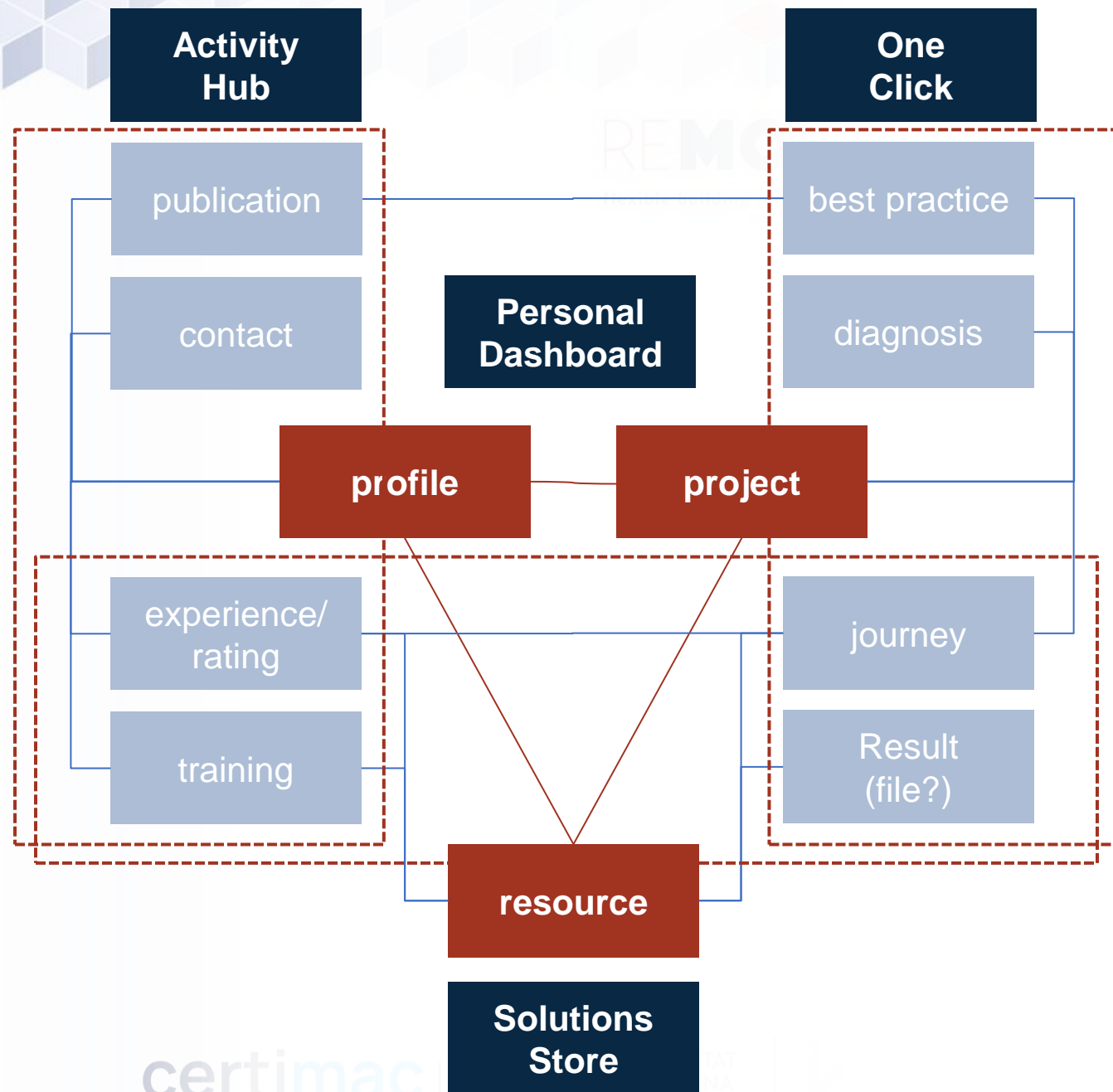


The platform

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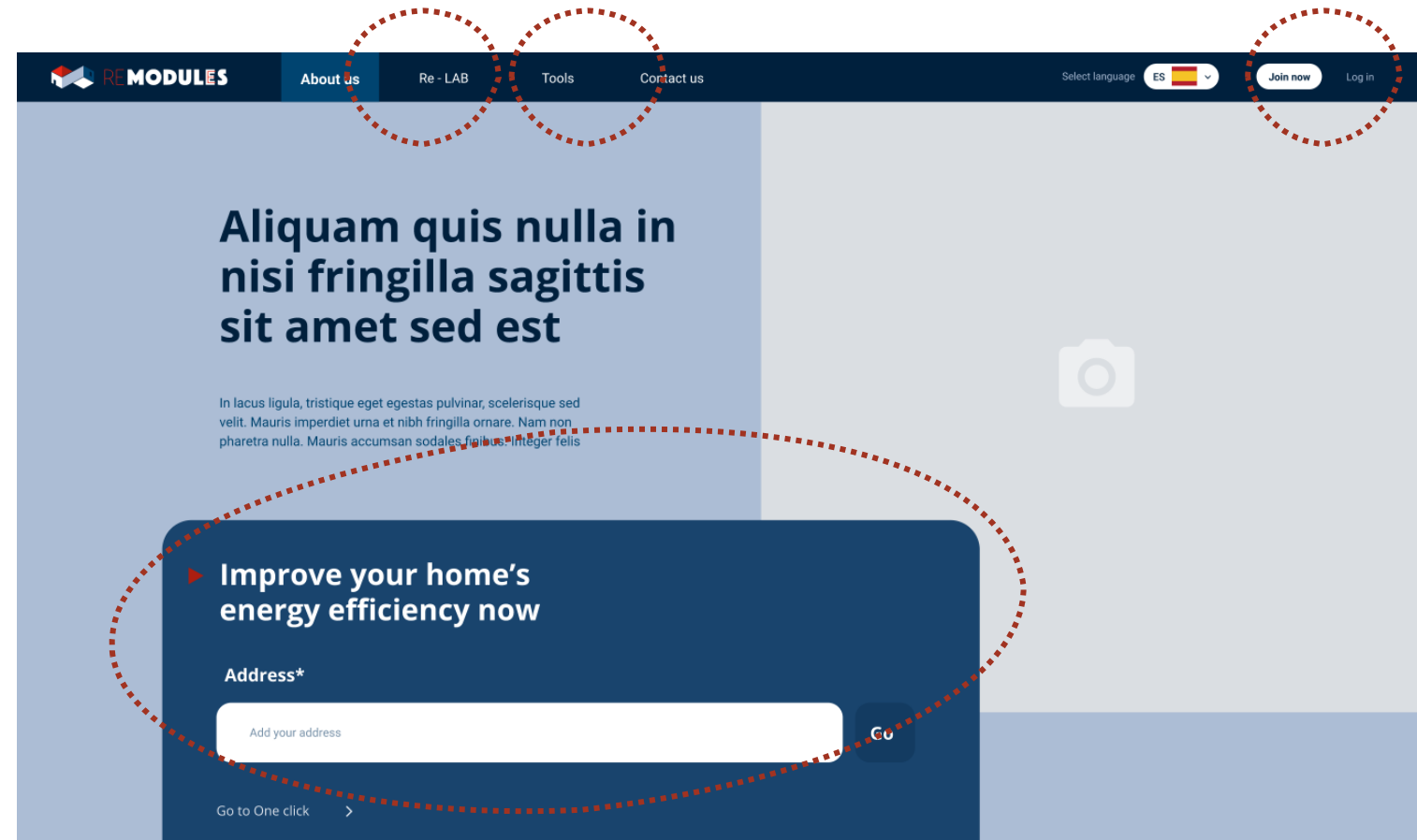
The platform

Landing page

- ◆ People → follow-up
- ◆ Buildings → search
- ◆ Market → interaction

Featured apps

- ◆ One Click

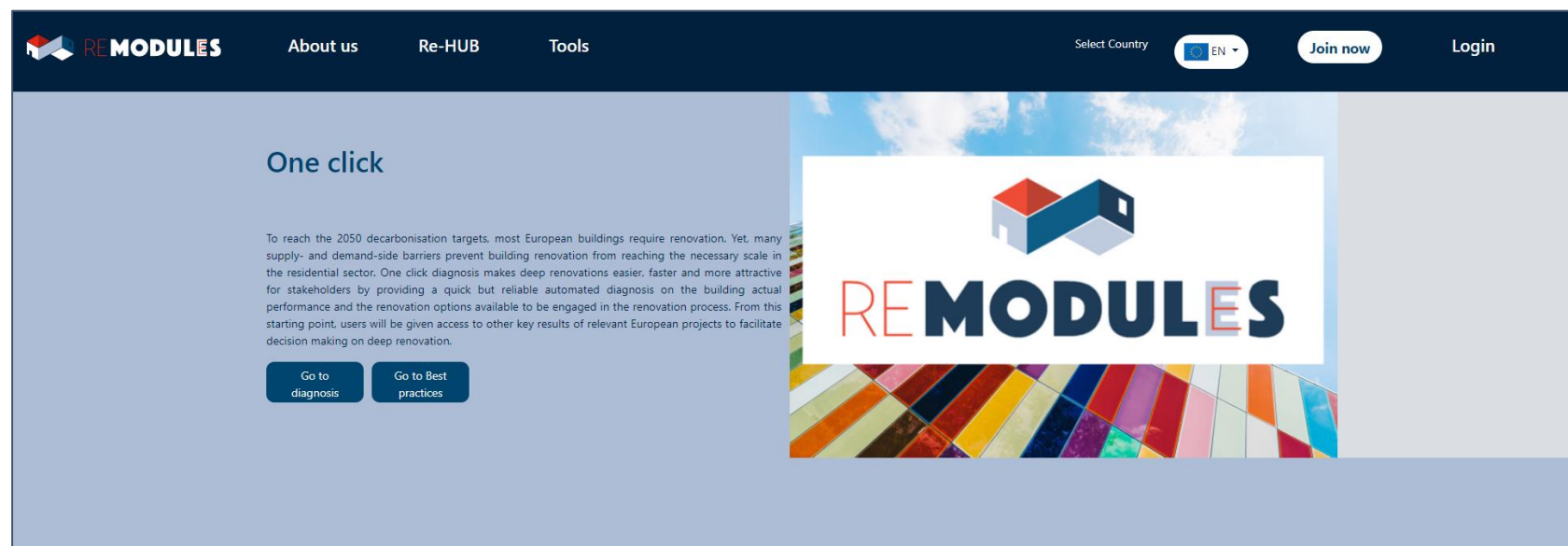


The platform

Let's take a look!

◆ [Mock-up](#)

◆ [Demo](#)



One click

To reach the 2050 decarbonisation targets, most European buildings require renovation. Yet, many supply- and demand-side barriers prevent building renovation from reaching the necessary scale in the residential sector. One click diagnosis makes deep renovations easier, faster and more attractive for stakeholders by providing a quick but reliable automated diagnosis on the building actual performance and the renovation options available to be engaged in the renovation process. From this starting point, users will be given access to other key results of relevant European projects to facilitate decision making on deep renovation.

[Go to
diagnosis](#)[Go to Best
practices](#)

► Most popular tools

Explore the tools that are most visited in your country

[See all tools](#)

☆☆☆☆☆

Save

☆☆☆☆☆

Save

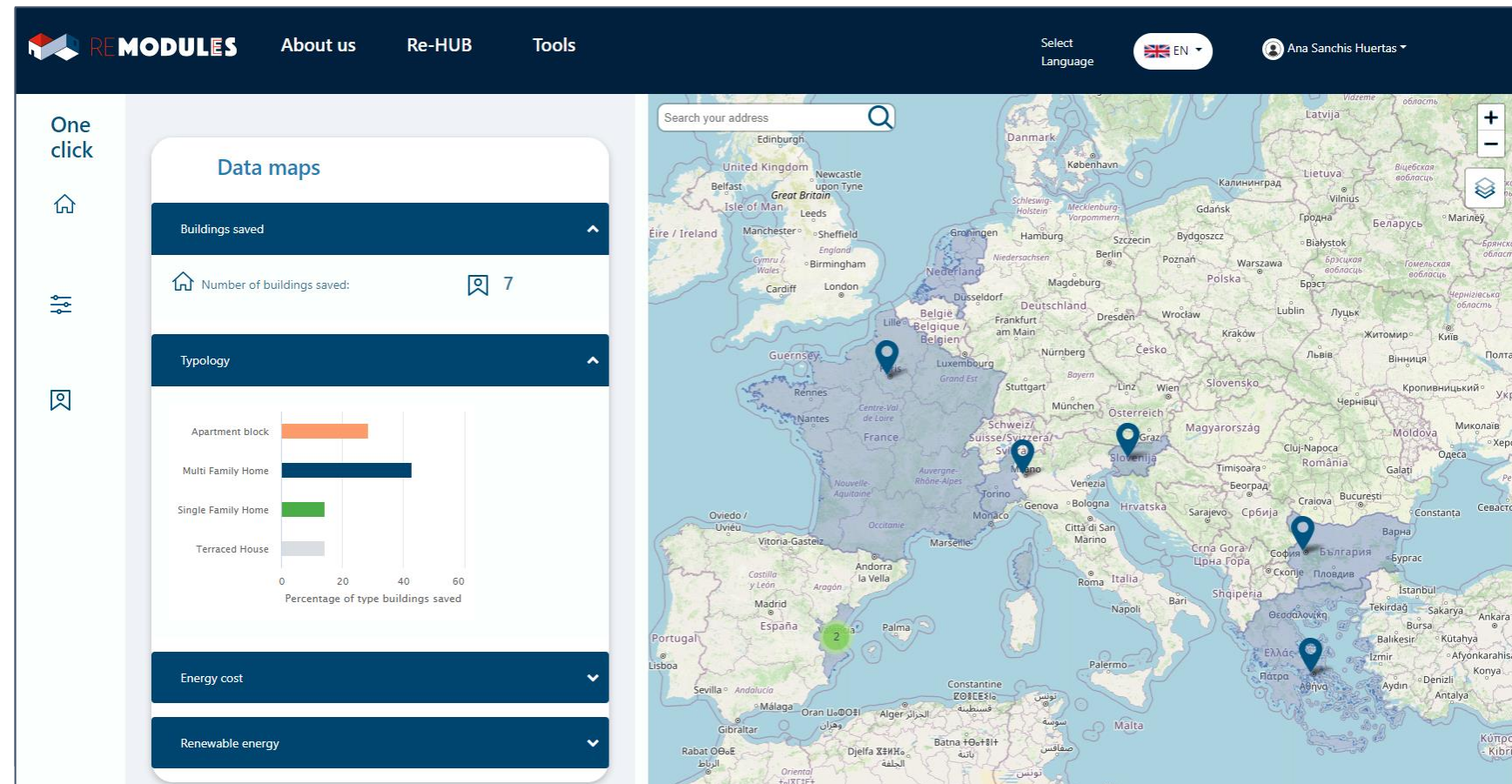
☆☆☆☆☆

Save

One Click - Diagnosis

Status

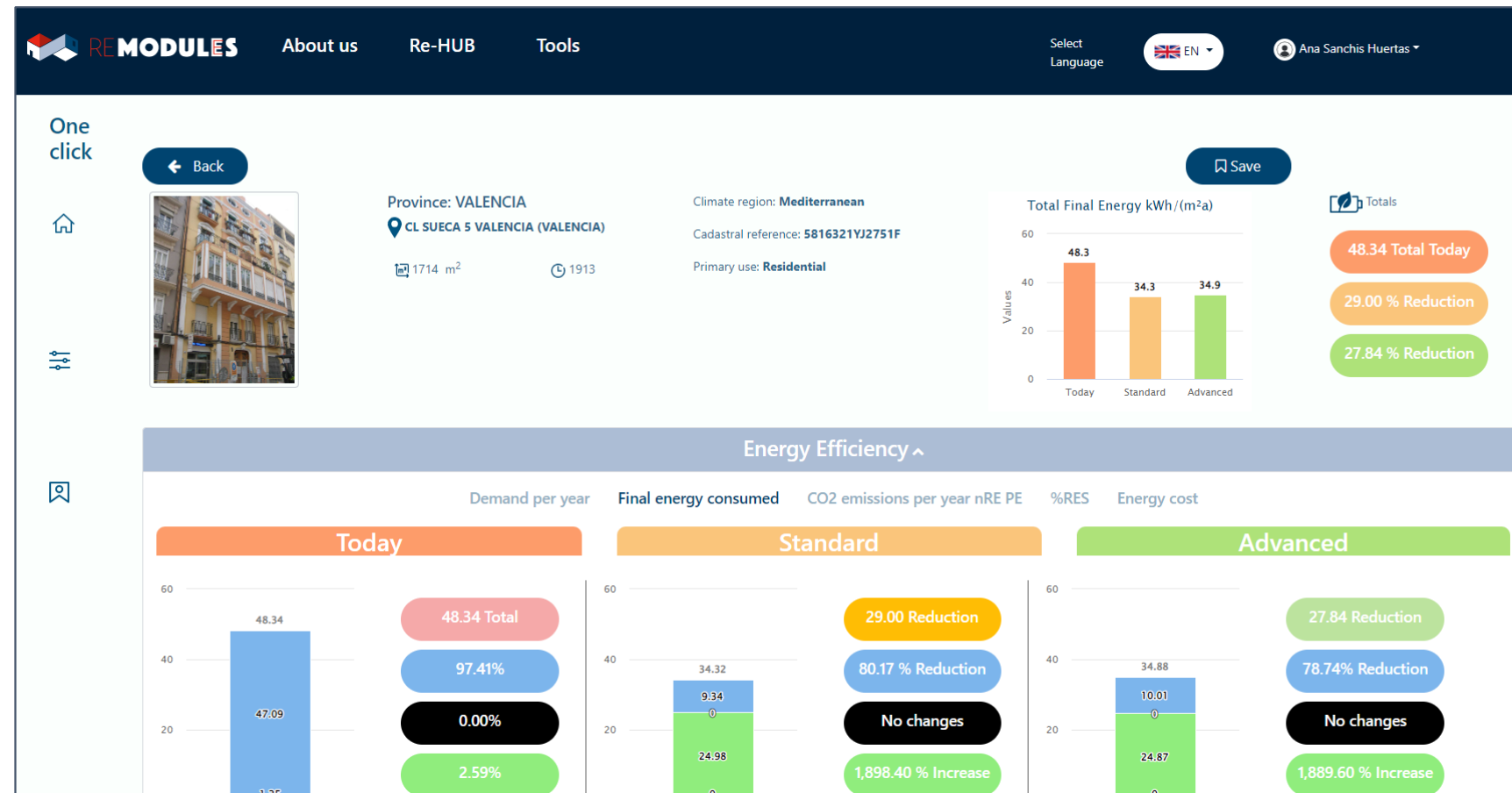
- ◆ Layers
- ◆ Multilanguage
- ◆ Appearance
- ◆ Still TABULA



One Click - Diagnosis

To improve

- ◆ Layers limits
- ◆ Indicators
- ◆ Errors
- ◆ Still TABULA





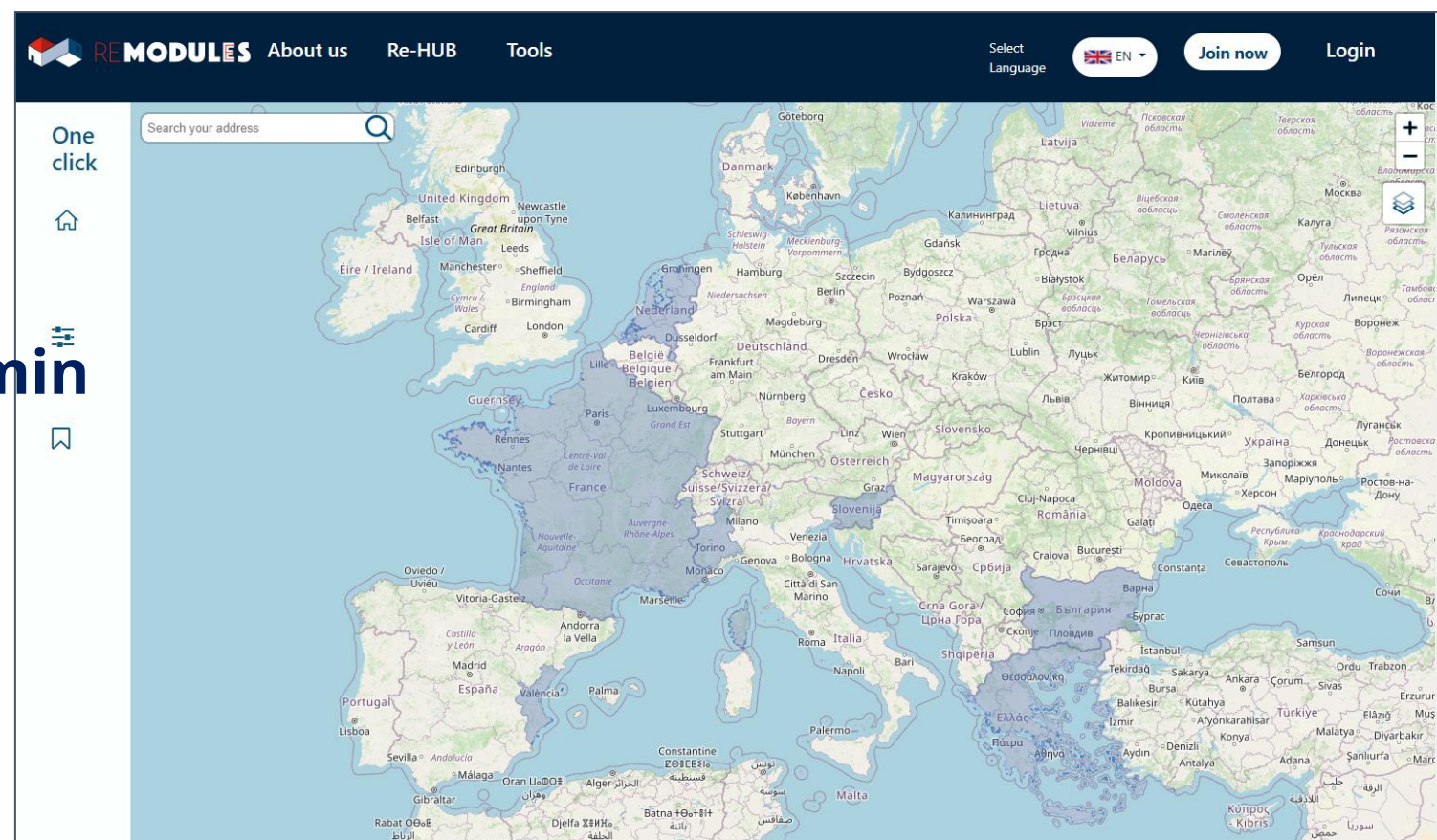
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One Click - Diagnosis

Who can do what?

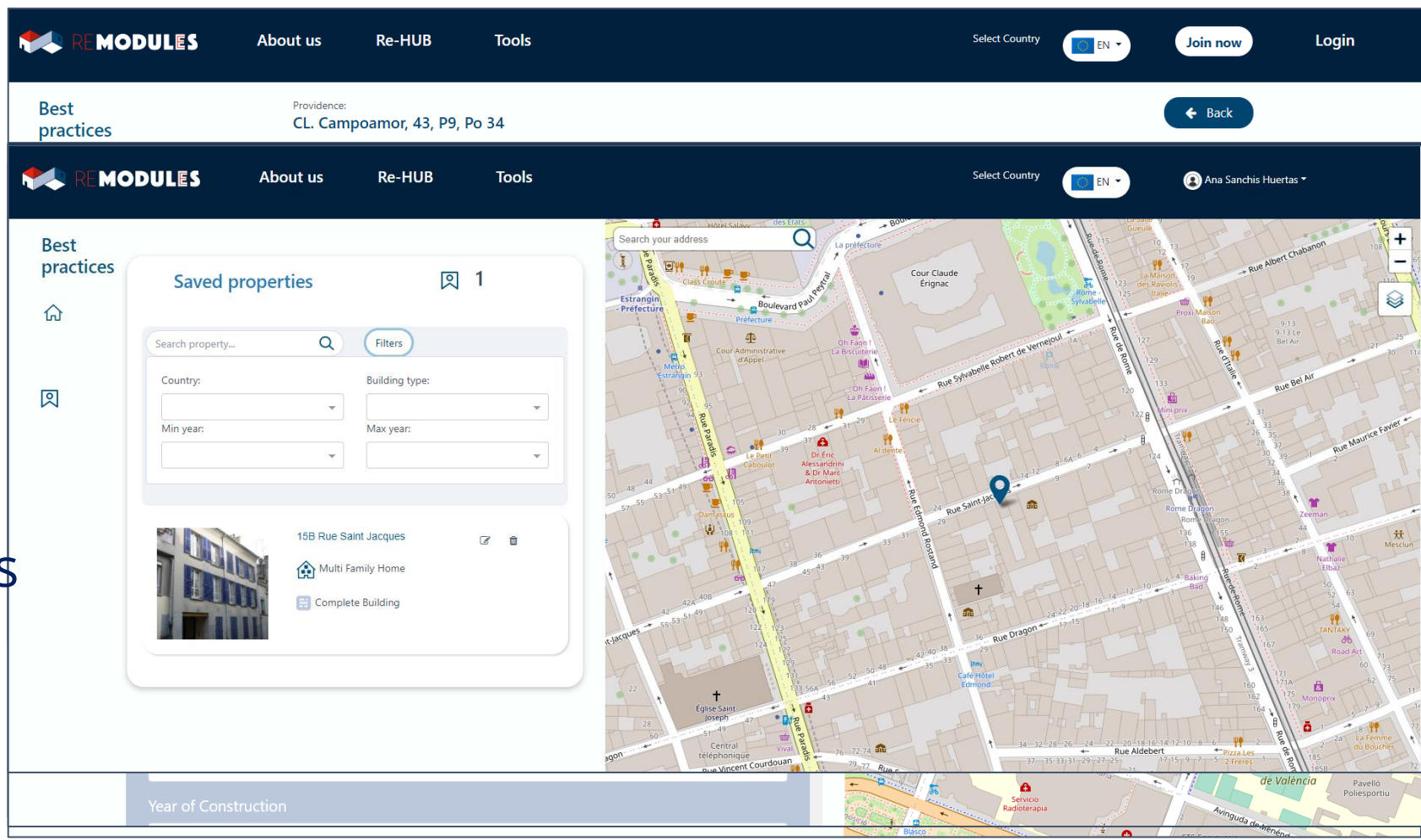
◆ Diagnose	Visitor
◆ Save	Registered
◆ Edit	Regional admin



One Click - Success Stories

Status

- ◆ General map
- ◆ Get info
- ◆ Add story
- ◆ Save story
- ◆ Filter owned stories
- ◆ Edit owned stories

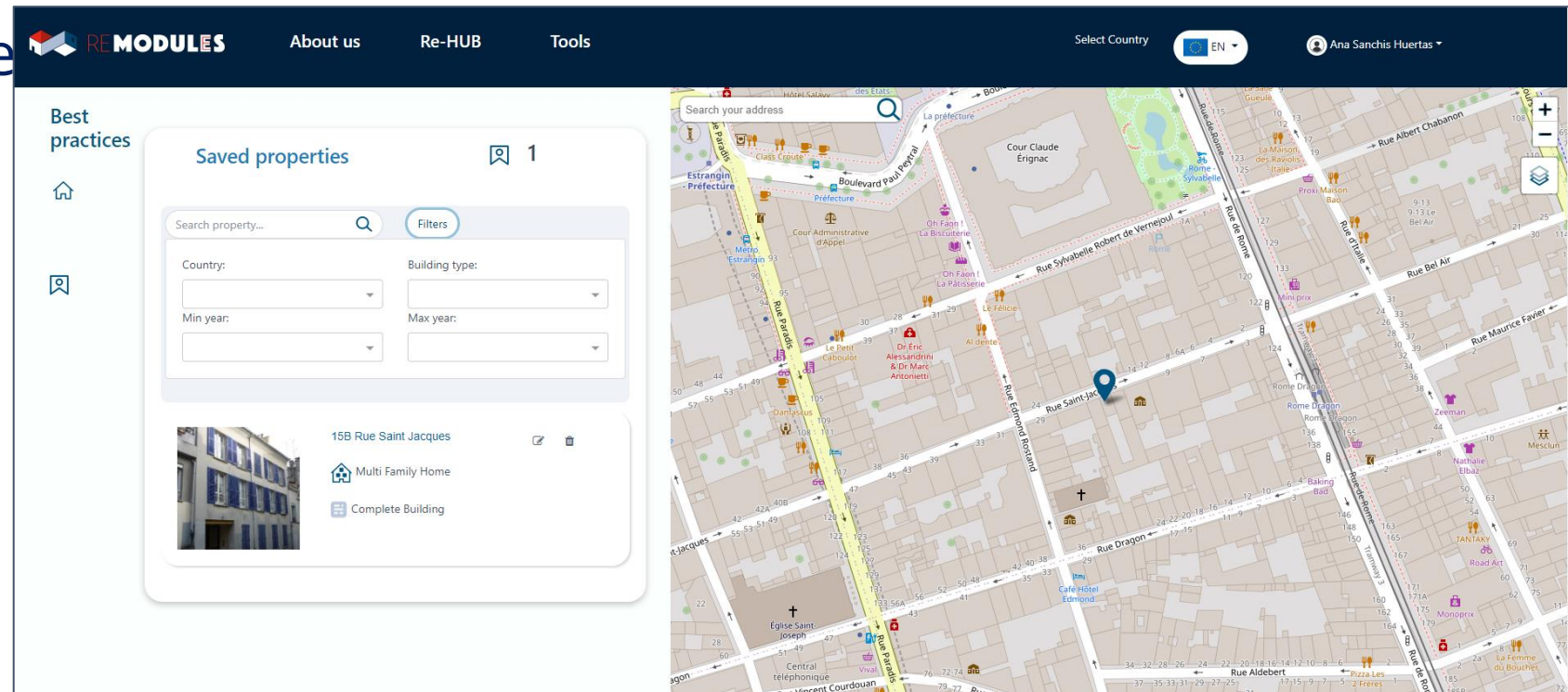


The screenshot displays the REMODULES web application interface. At the top, there is a navigation bar with the REMODULES logo, links for 'About us', 'Re-HUB', and 'Tools', a 'Select Country' dropdown set to 'EN', and buttons for 'Join now' and 'Login'. Below this, a header section shows 'Best practices' and 'Providence: CL. Campoamor, 43, P9, Po 34' with a 'Back' button. The main content area is divided into two parts. On the left, a 'Saved properties' panel shows a search bar, filters for 'Country' and 'Building type', and a list of saved properties. One property is listed: '15B Rue Saint Jacques', identified as a 'Multi Family Home' and 'Complete Building'. On the right, a map view shows a street grid with various landmarks and a blue location pin. The bottom of the interface features a 'Year of Construction' section.

One Click - Success Stories

To improve

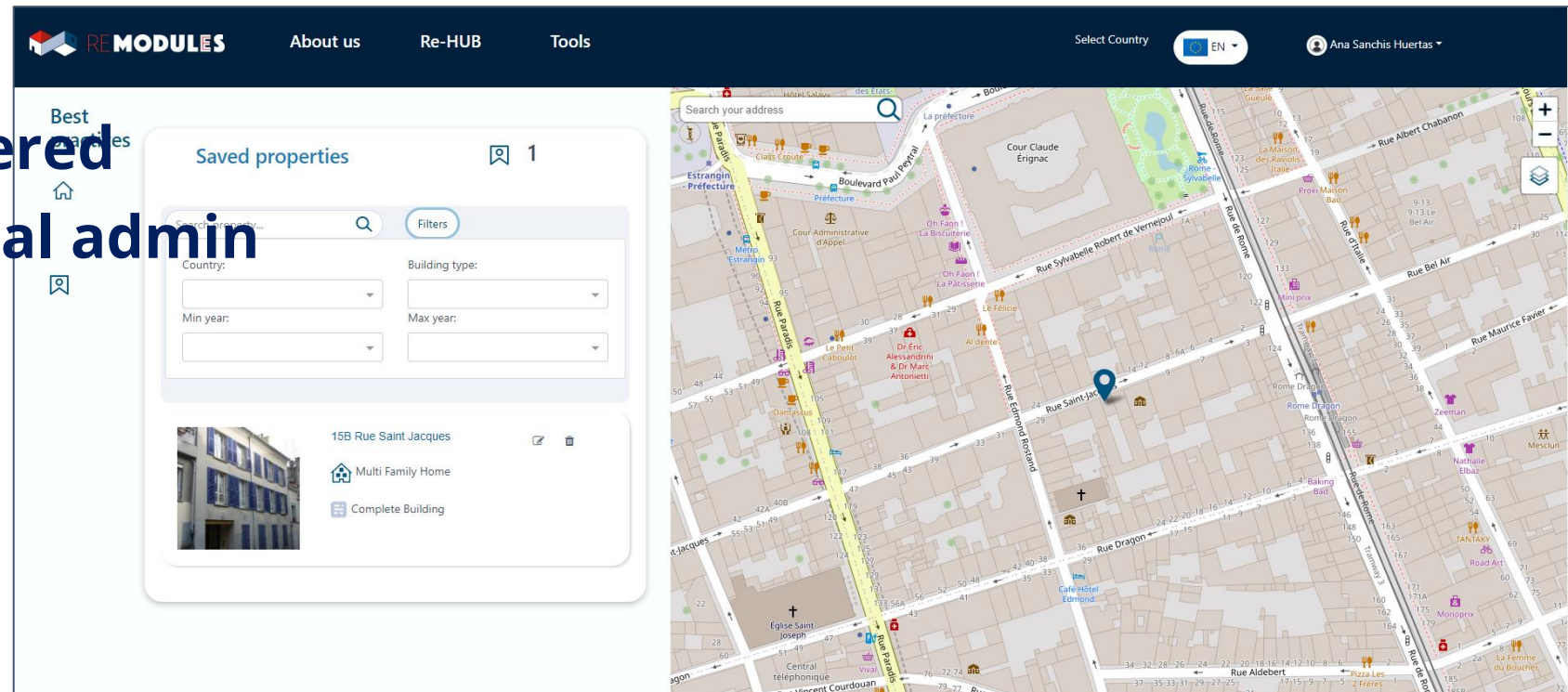
- ◆ Filter general stories
- ◆ Multilanguage
- ◆ Add monitoring



One Click - Success Stories

Who can do what?

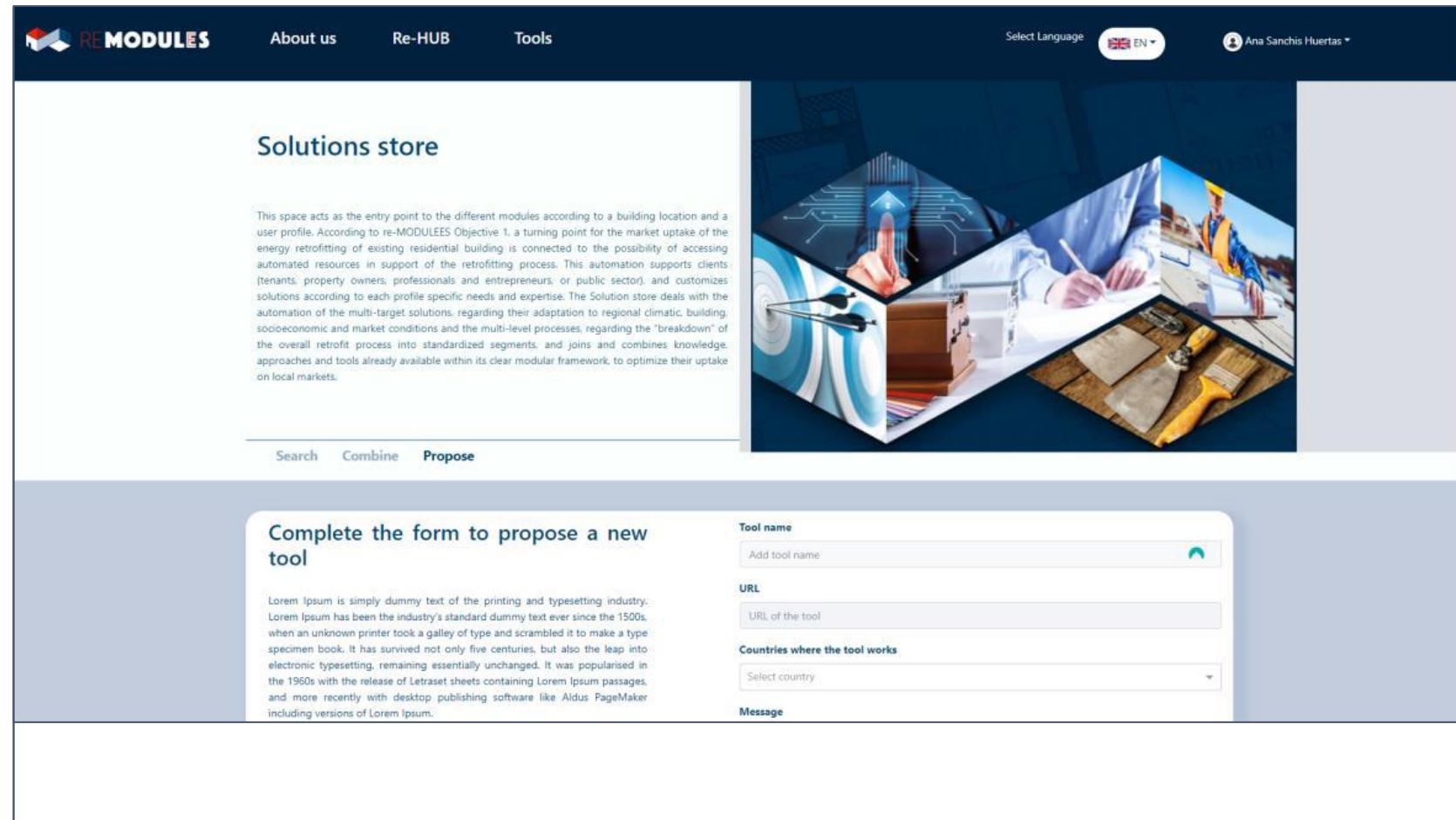
- ◆ See story **Visitor**
- ◆ Save/ edit **Registered**
- ◆ Validate **Regional admin**



Solutions Store

Status

- ◆ Catalogue
- ◆ Filters
- ◆ Search by word
- ◆ Order by
- ◆ Menus
- ◆ Propose new

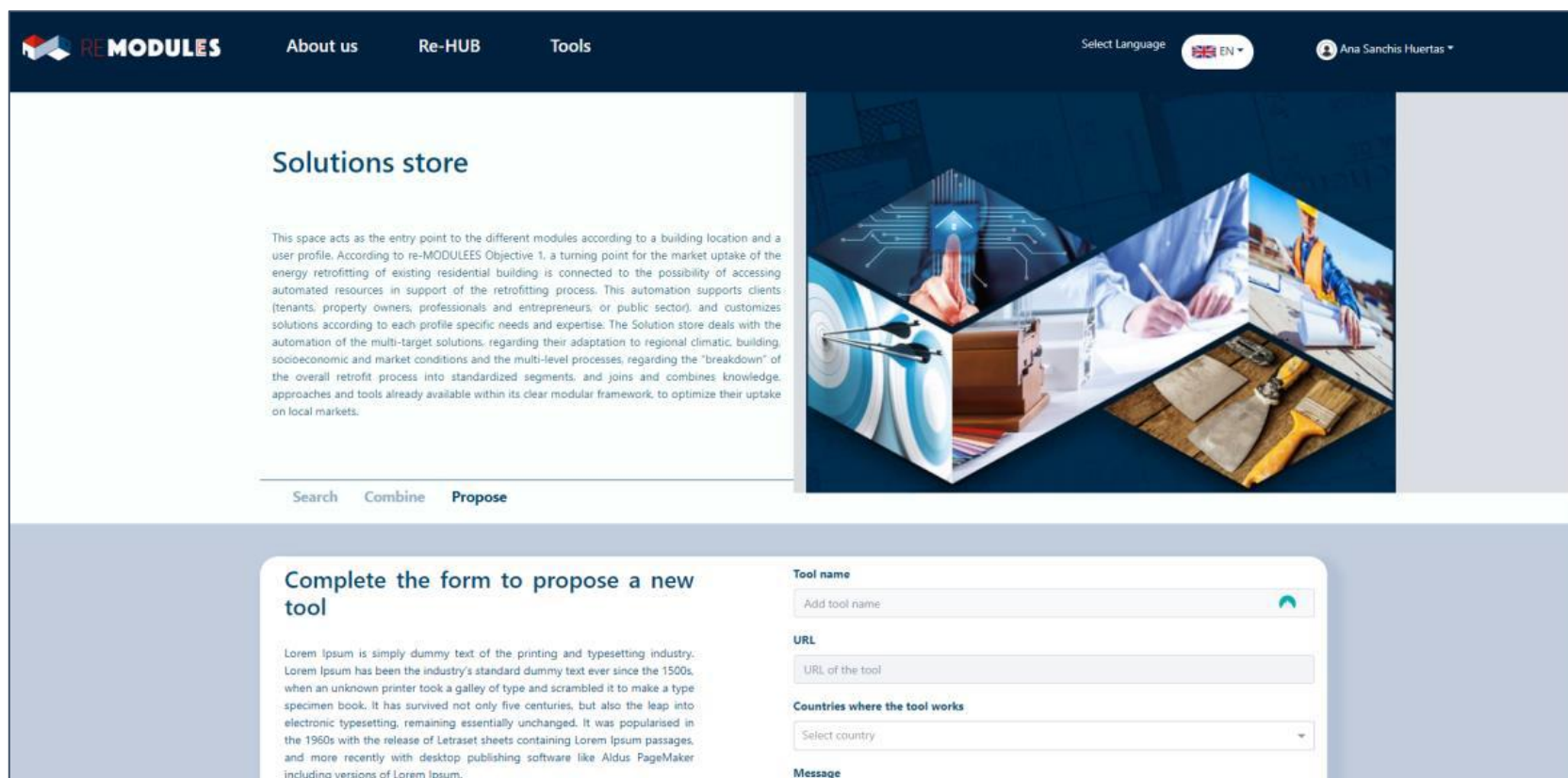


The screenshot shows the REMODULES Solutions Store interface. The header includes the REMODULES logo, navigation links (About us, Re-HUB, Tools), a language selector (EN), and a user profile (Ana Sanchis Huertas). The main content area is titled "Solutions store" and contains a descriptive paragraph about the store's purpose. Below the text are three tabs: Search, Combine, and Propose. The "Propose" tab is active, showing a form to "Complete the form to propose a new tool". The form includes fields for Tool name, URL, Countries where the tool works, and a Message field. A large image on the right side of the page depicts a hand pointing at a digital screen, a person writing on a document, and a construction worker on a roof, symbolizing the integration of digital technology and construction in building renovation.

Solutions Store

To improve

- ◆ Validate tool
- ◆ Create new menu
- ◆ Multilanguage



The screenshot shows the 'Solutions store' page of the REMODULES website. The page has a dark blue header with the REMODULES logo and navigation links: 'About us', 'Re-HUB', and 'Tools'. On the right of the header, there is a 'Select Language' dropdown set to 'EN' and a user profile for 'Ana Sanchis Huertas'.

The main content area is titled 'Solutions store' and contains a paragraph of placeholder text: 'This space acts as the entry point to the different modules according to a building location and a user profile. According to re-MODULEES Objective 1, a turning point for the market uptake of the energy retrofitting of existing residential building is connected to the possibility of accessing automated resources in support of the retrofitting process. This automation supports clients (tenants, property owners, professionals and entrepreneurs, or public sector), and customizes solutions according to each profile specific needs and expertise. The Solution store deals with the automation of the multi-target solutions, regarding their adaptation to regional climatic, building, socioeconomic and market conditions and the multi-level processes, regarding the "breakdown" of the overall retrofit process into standardized segments, and joins and combines knowledge, approaches and tools already available within its clear modular framework, to optimize their uptake on local markets.'

Below the text is a navigation bar with three buttons: 'Search', 'Combine', and 'Propose'. The 'Propose' button is highlighted.

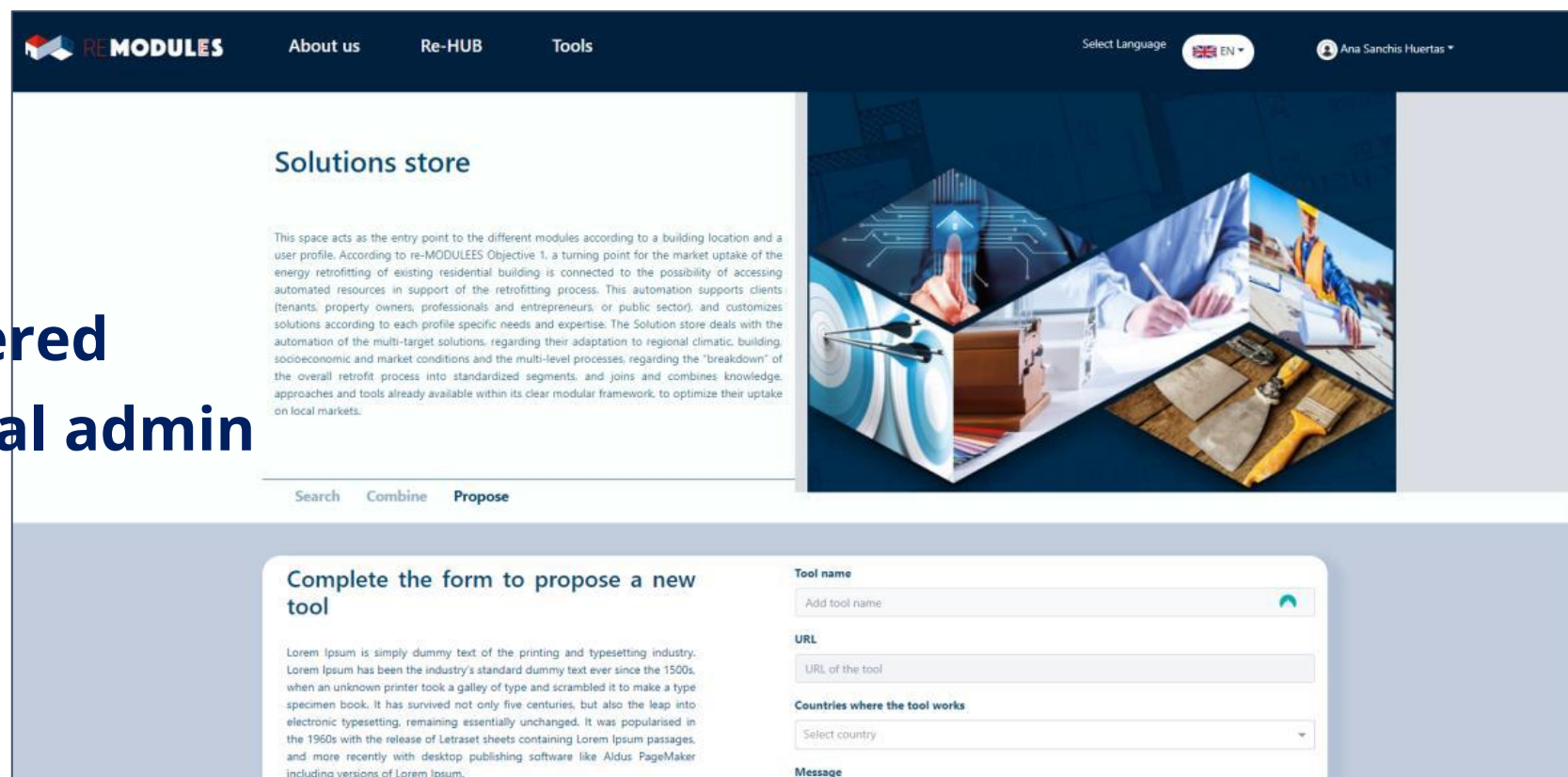
At the bottom of the page, there is a form titled 'Complete the form to propose a new tool'. The form includes a text area for 'Tool name', a text input for 'URL', a dropdown menu for 'Countries where the tool works', and a text input for 'Message'. There is also a small green checkmark icon next to the 'Tool name' input.

Solutions Store

Who can do what?

- ◆ Search
- ◆ Propose
- ◆ Combine

Visitor
Registered
Regional admin

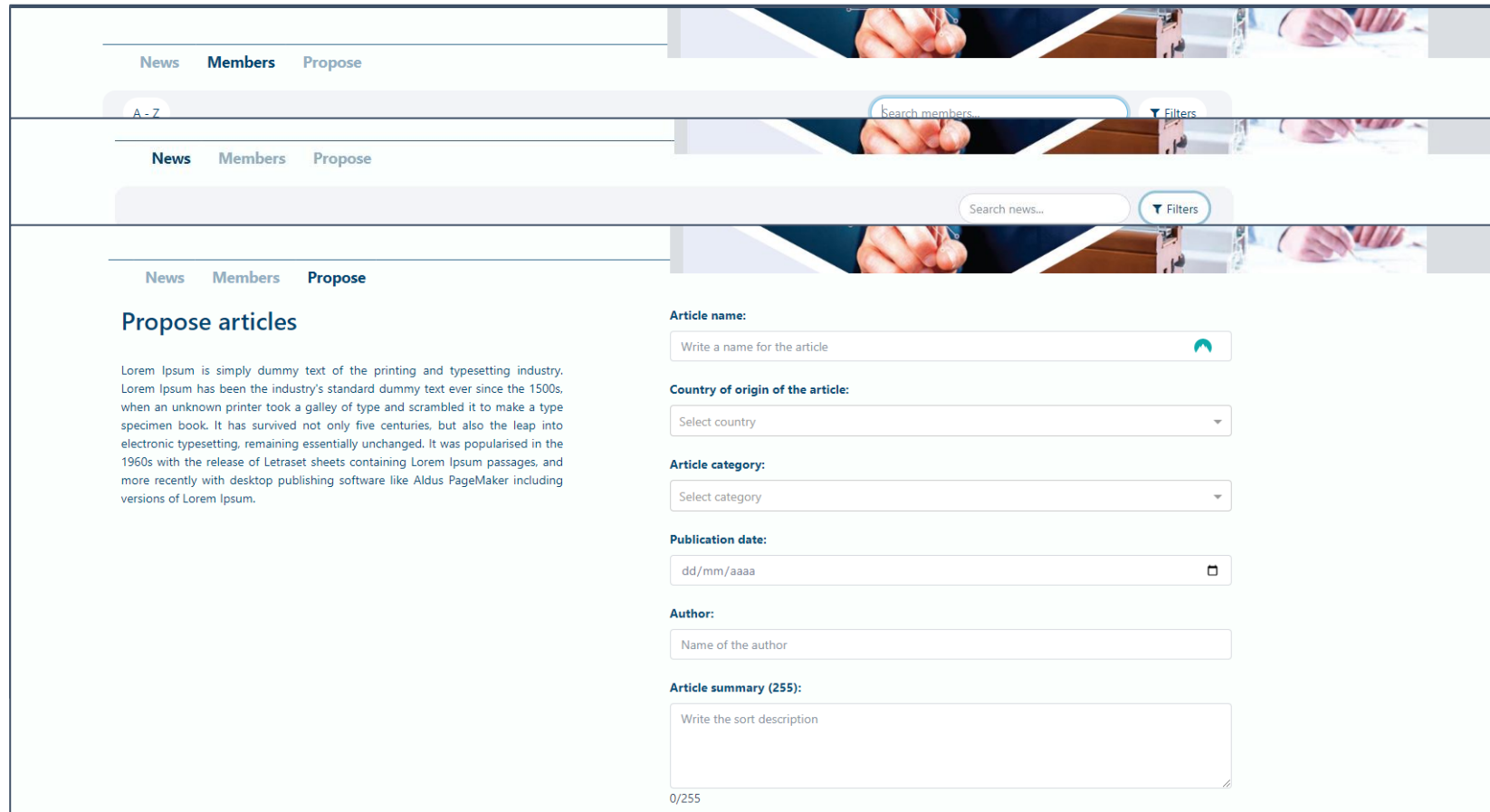


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Activity Hub

Status

- ◆ Register user
- ◆ Search
- ◆ Filter
- ◆ Search by word
- ◆ Order by
- ◆ Propose



The screenshot displays the RE MODULES Activity Hub interface, which is organized into three horizontal sections. Each section features a navigation bar with 'News', 'Members', and 'Propose' tabs. The first section includes a 'Search members' input field and a 'Filters' button. The second section includes a 'Search news...' input field and a 'Filters' button. The third section is titled 'Propose articles' and contains a text area with placeholder text, a 'Country of origin of the article' dropdown menu, an 'Article category' dropdown menu, a 'Publication date' input field with a calendar icon, an 'Author' input field, and an 'Article summary (255)' text area. The bottom right corner of the interface shows a page count of '0/255'.

News Members Propose

A - Z Search members Filters

News Members Propose

Search news... Filters

News Members Propose

Propose articles

Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown printer took a galley of type and scrambled it to make a type specimen book. It has survived not only five centuries, but also the leap into electronic typesetting, remaining essentially unchanged. It was popularised in the 1960s with the release of Letraset sheets containing Lorem Ipsum passages, and more recently with desktop publishing software like Aldus PageMaker including versions of Lorem Ipsum.

Article name:
Write a name for the article

Country of origin of the article:
Select country

Article category:
Select category

Publication date:
dd/mm/yyyy

Author:
Name of the author

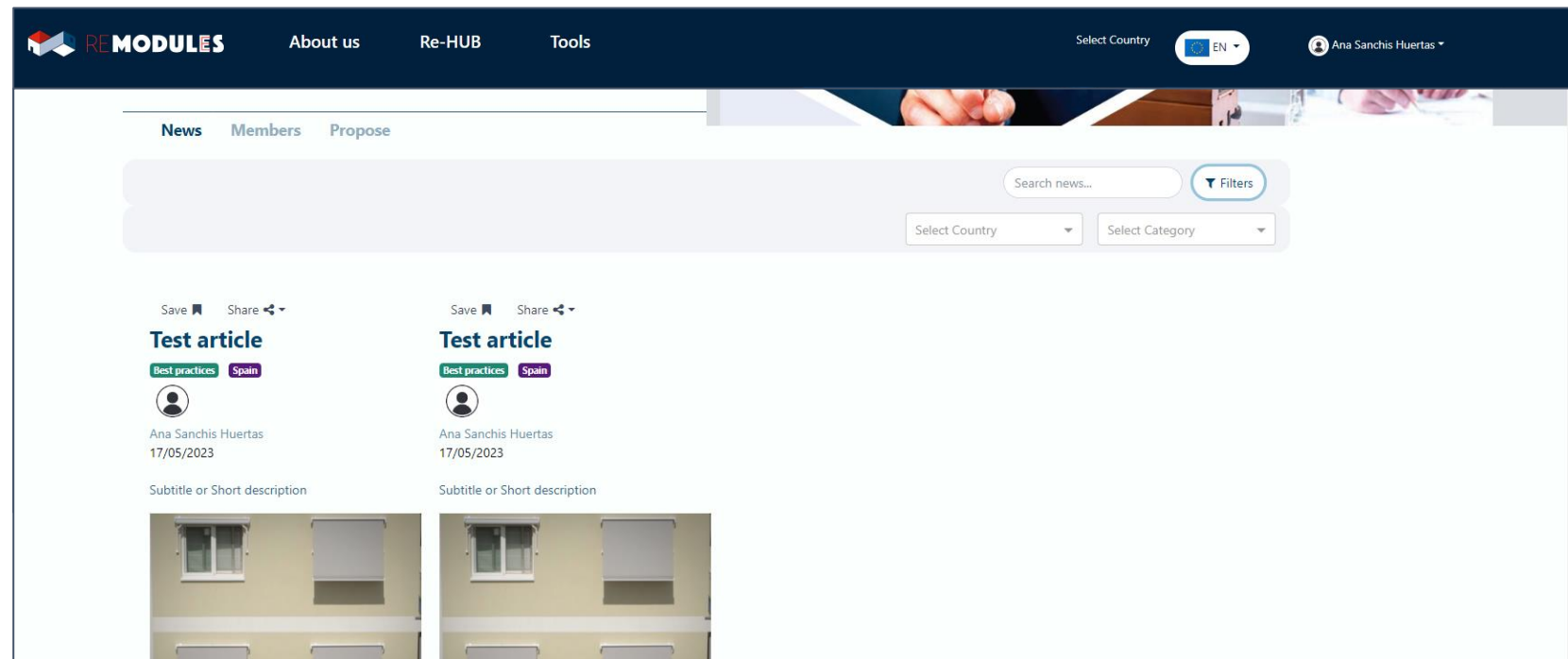
Article summary (255):
Write the sort description

0/255

Activity Hub

To improve

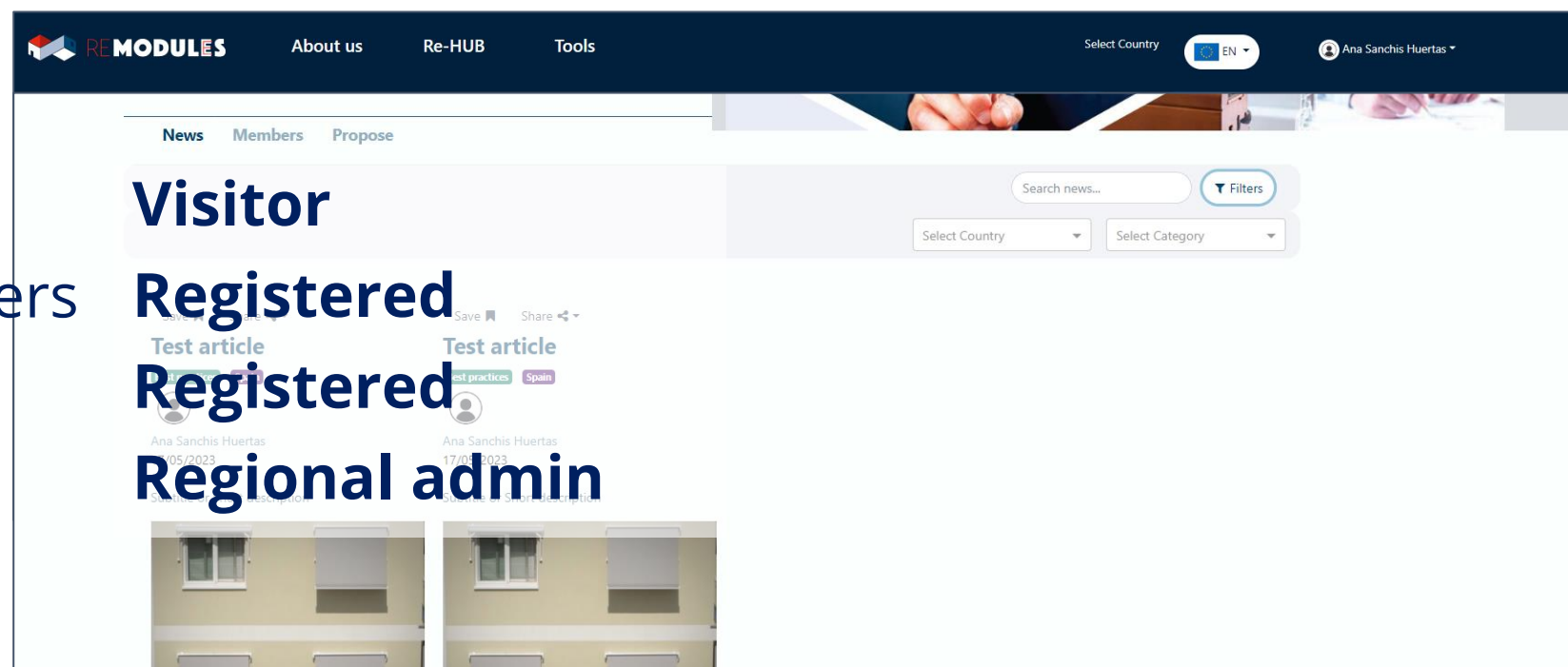
- ◆ Complete registry
- ◆ Multilanguage
- ◆ More filtering



Activity Hub

Who can do what?

- ◆ See news
- ◆ See/ contact members
- ◆ Propose news
- ◆ Validate

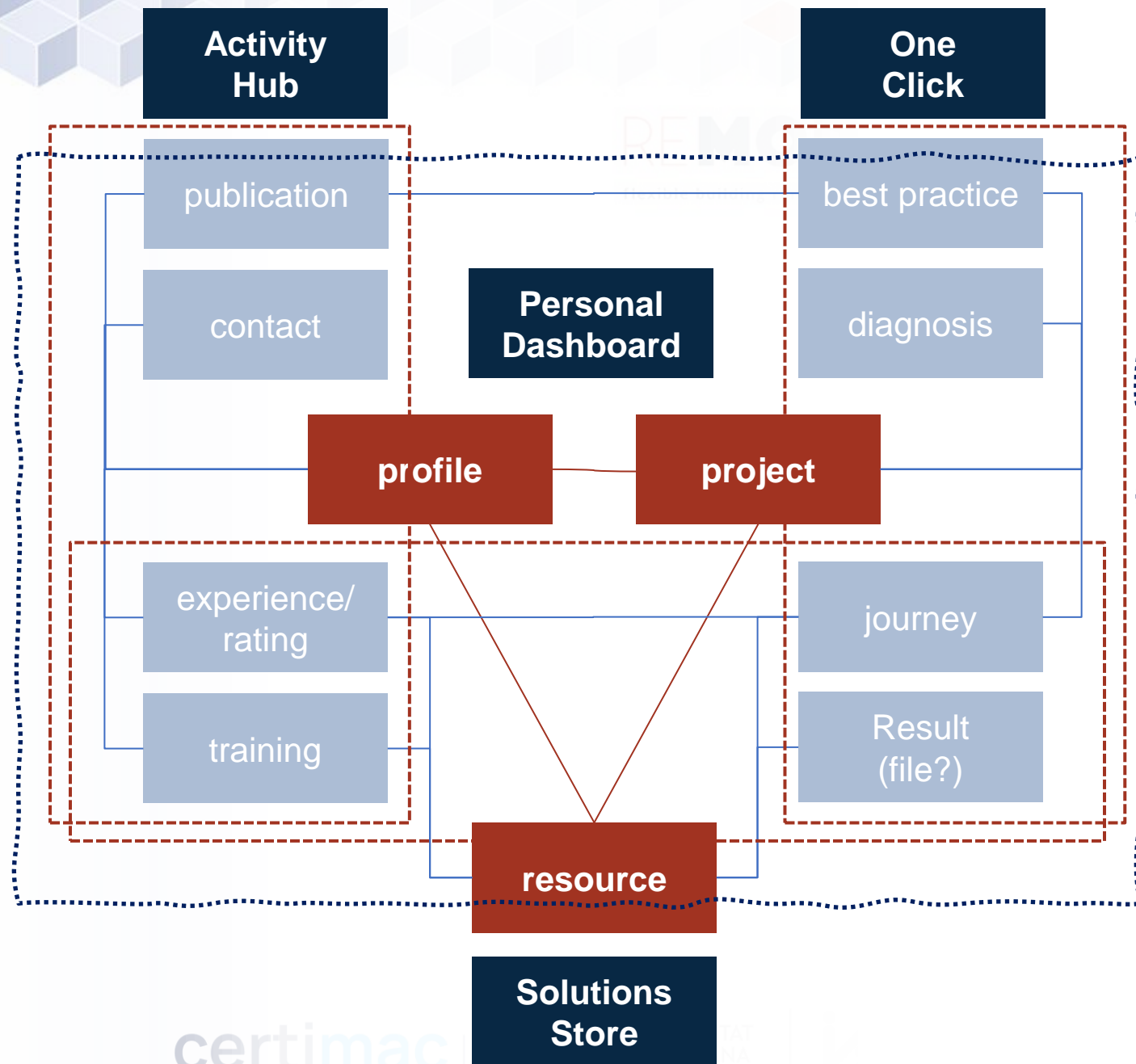


The platform

Workspaces

- ◆ People → follow-up
- ◆ Buildings → search
- ◆ Market → interaction

& relations



Contacts



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Thank you



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