



EEnvest H2020 project GA #833112



EEnvest platform
29 June 2022

EEnvest Final Conference

Dimitris Ntimos

Our goal is to develop...

...a user-friendly online platform to promote investments in Energy Efficiency Building Retrofits...

...which acts as a match-making service, connecting building owners with potential investors...

... using an innovative de-risking model that simplifies the assessment of potential outcomes for both sides...

...operating in a secure environment that ensures data integrity

...developed based on existing IES products and new risk probability calculation models

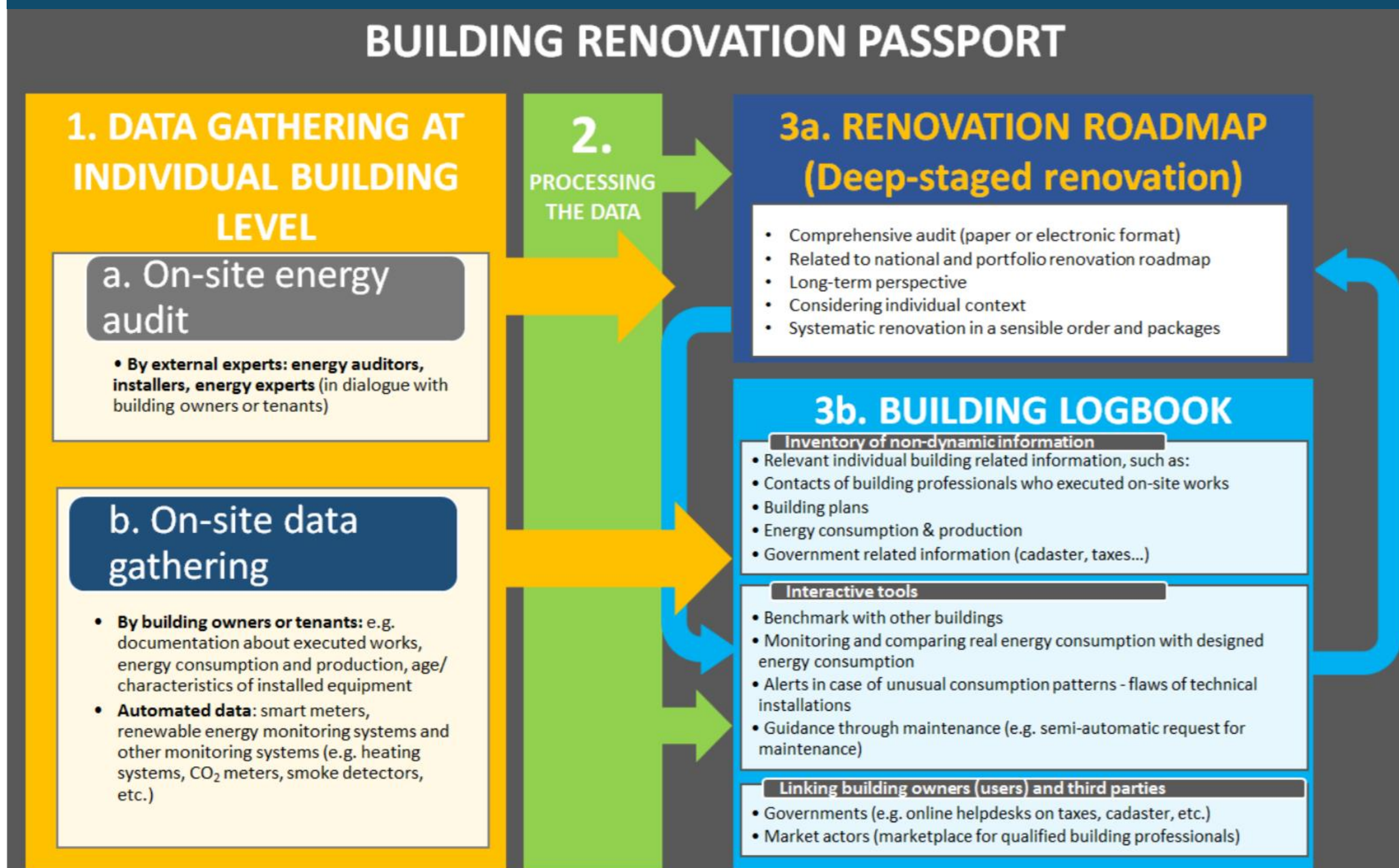
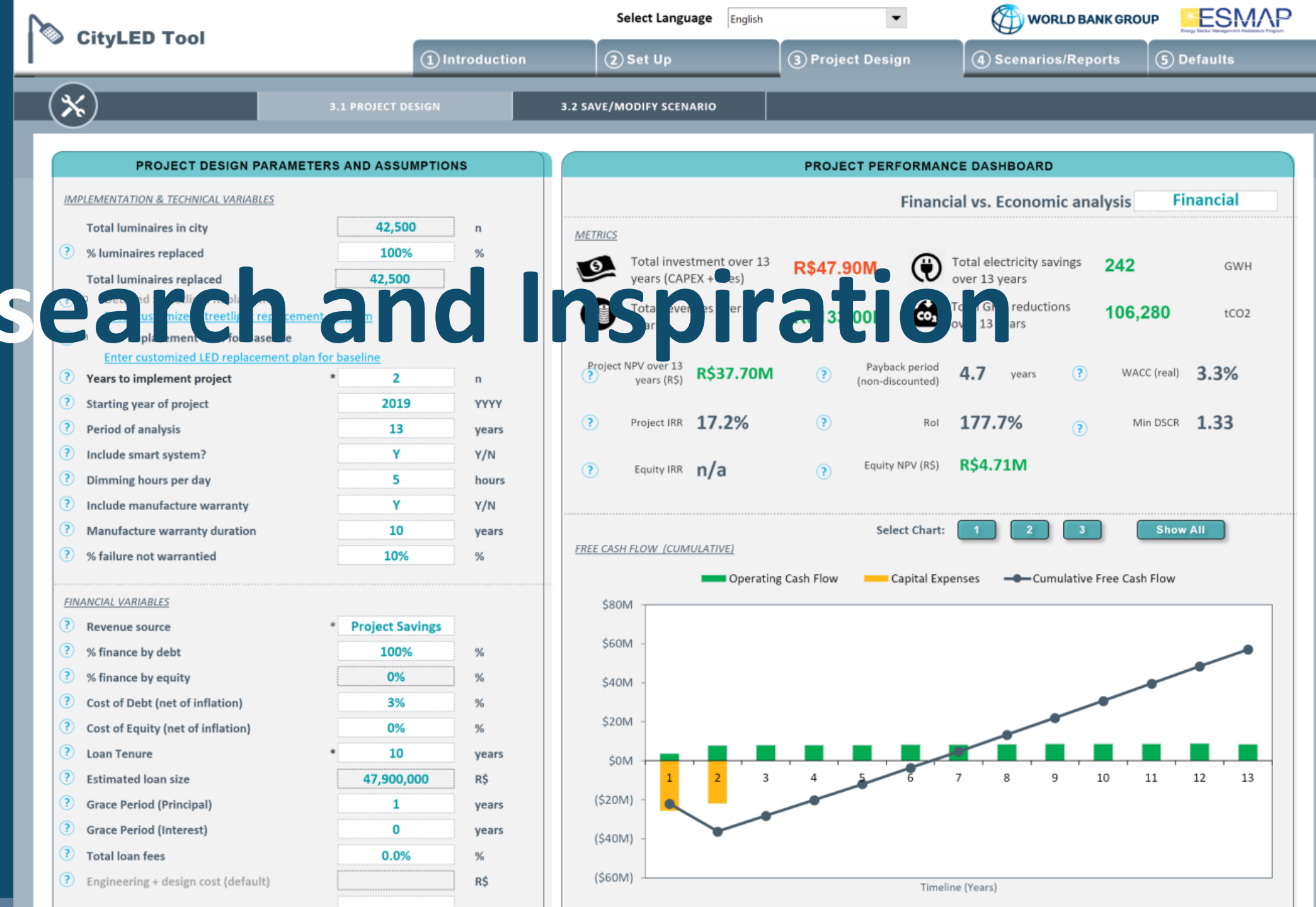


EEnvest Energy Efficiency Project:

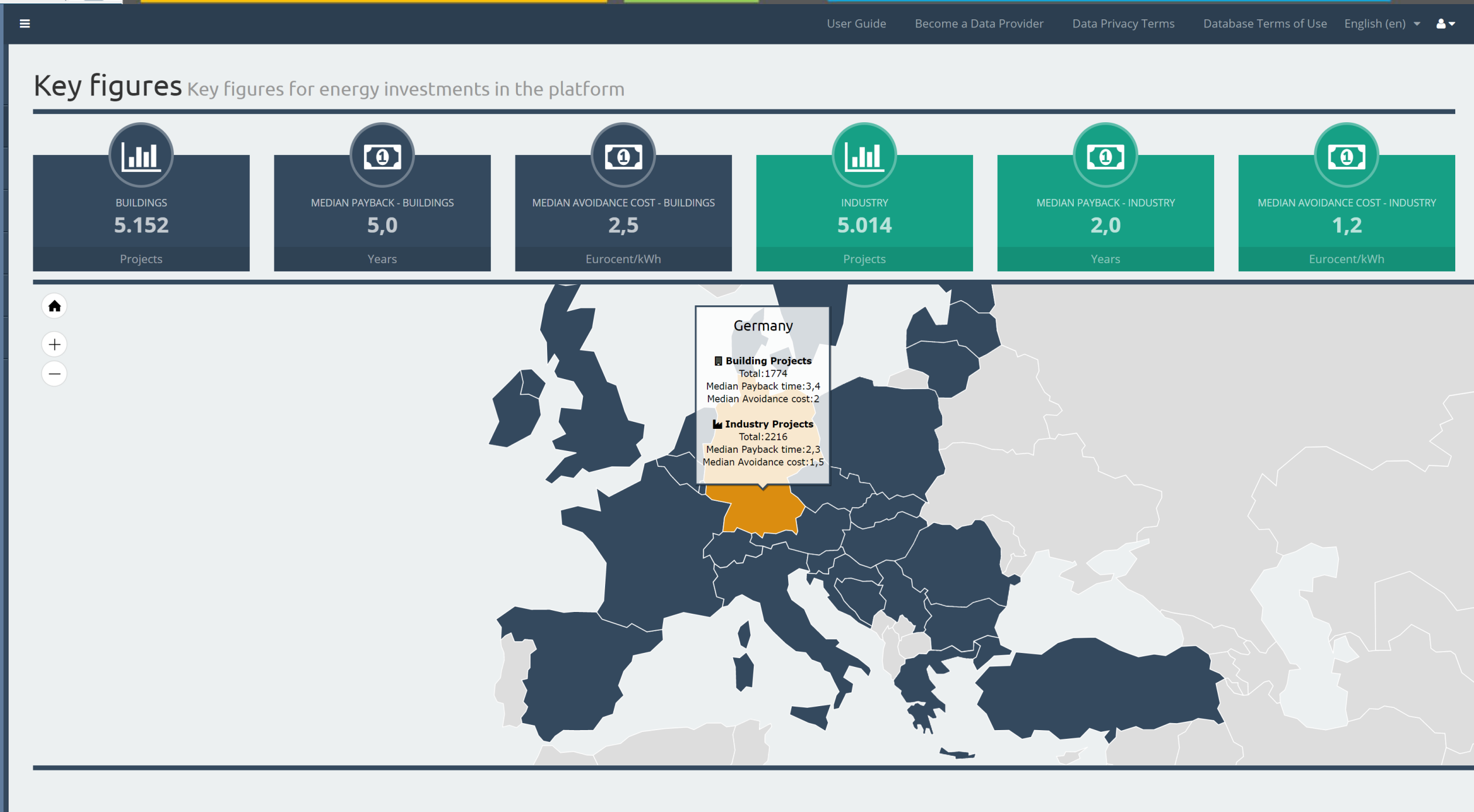
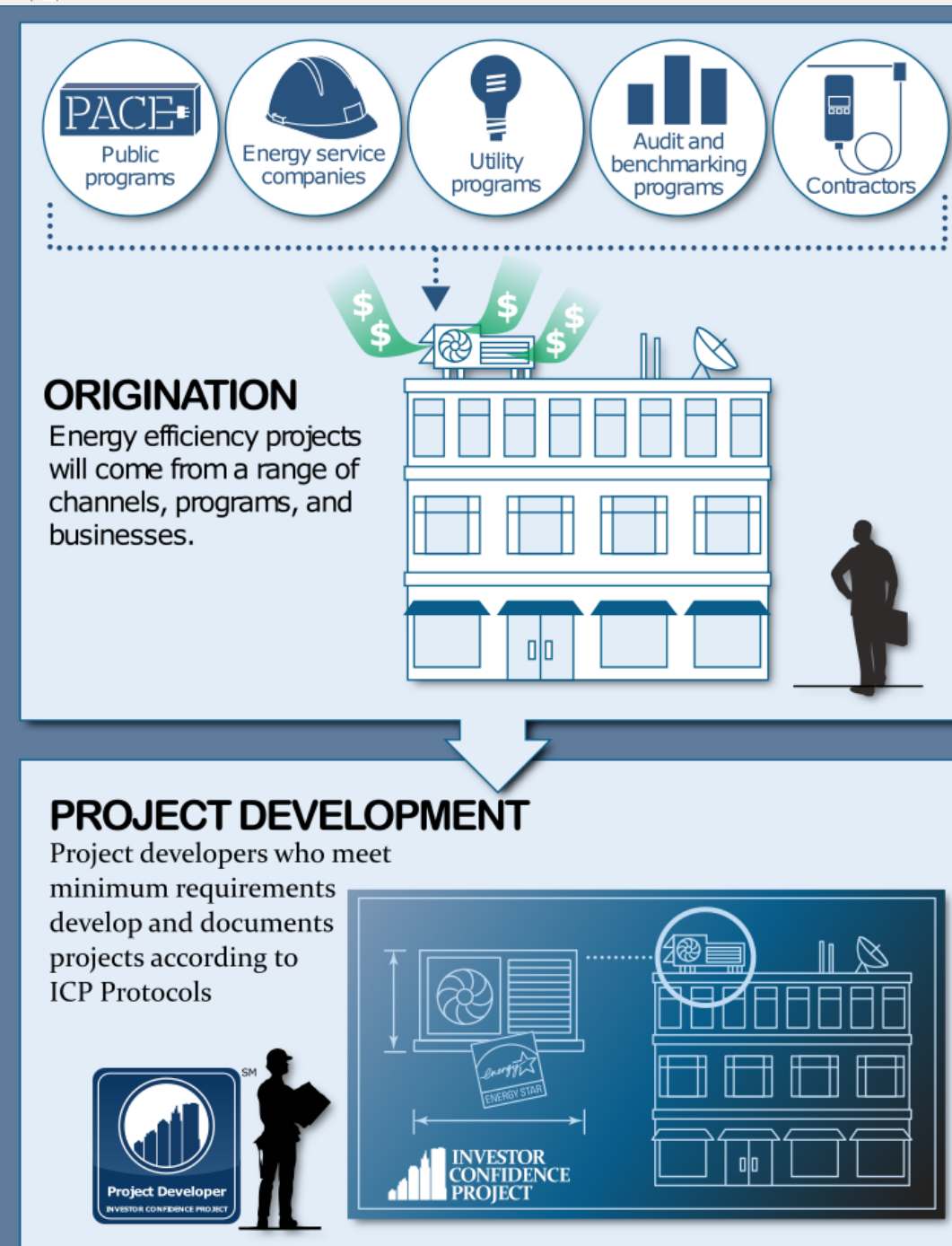
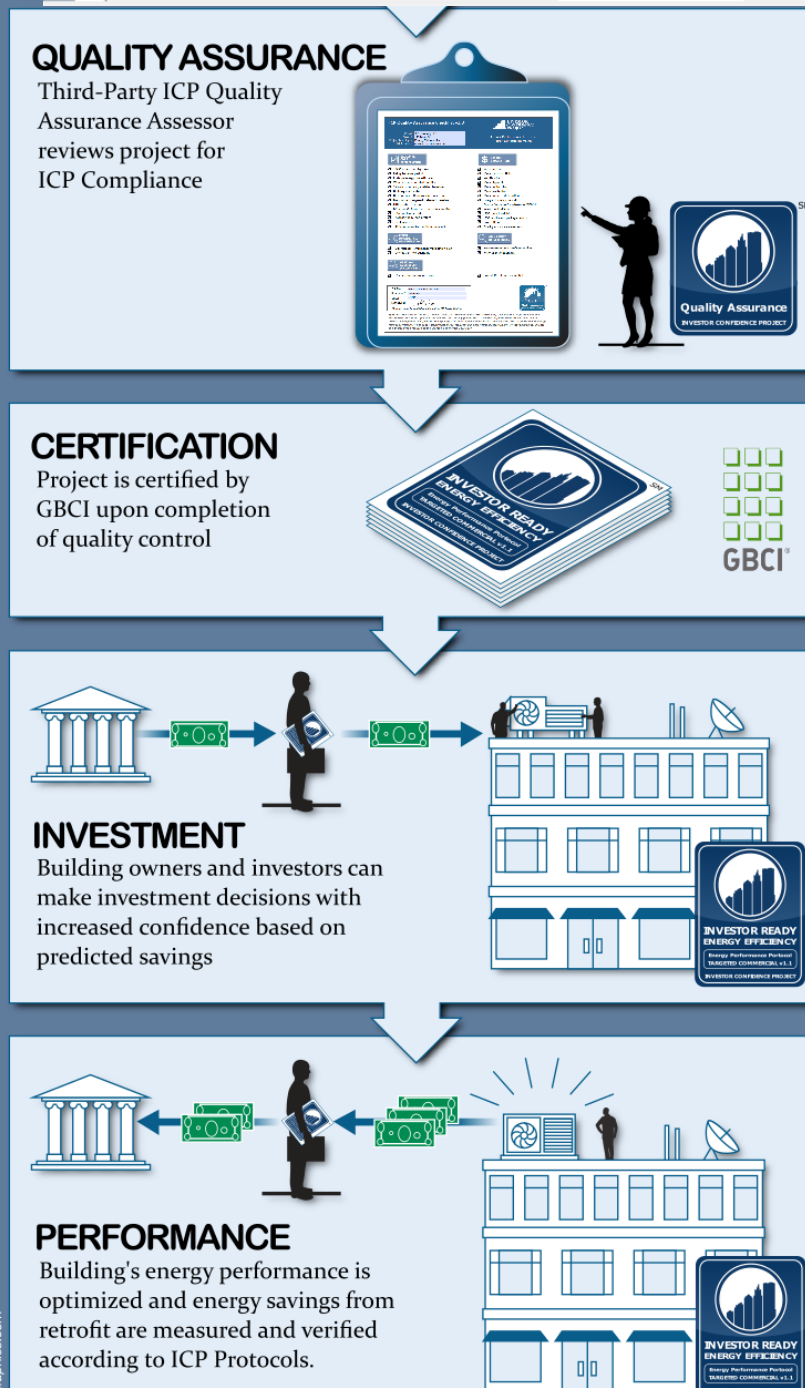
- A Building retrofit project, where the Owner has already performed an engineering analysis outside the platform
- The owner wants to assess the quality and risks of their projects and attract investors
- The investor wants to trust and assess the risks of a green investment without diving into details
- Focus is on commercial buildings



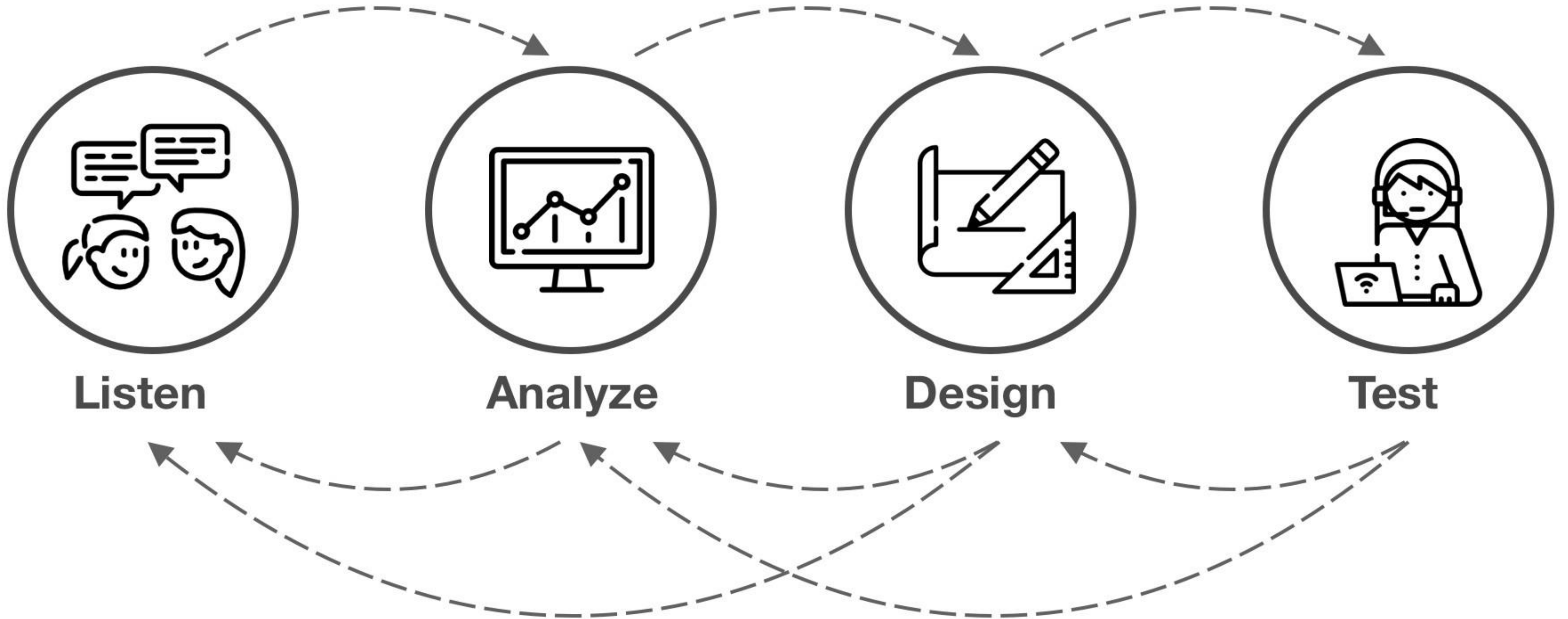
Our Research and Inspiration



Investor Ready Energy Efficiency™ Roadmap to Investor Confidence



Design Process



Who is the user?



Project Promoter

Project Uploader/Viewer

Data Upload
View results of their own portfolio
Customise/Filter results



Investor

Platform Viewer

View results of all portfolios
Customise/Filter results



Website Admin

All permissions

What are the users needs and pain points



Jack
Building's Investor



What **kind of issues** do you face in the decision making of an energy efficiency investment, regarding technical/financial evaluation and risk assessment?

Other: Energy Agency, 100% publicly owned

7 respondents

- **EnergieAgentur:** Finding the correct and most suitable technical solution in terms of investment cost and return. Having correct and reliable data on energy consumption and cost



Aspirations

“ I want to invest in a building that has the best outcomes of all”

Building indicators I am interested in

- Simple payback time
- Project and equity IRR
- Project and equity NPV
- Increase in investment cost
- Want to know the building's productivity
- Increased building value
- Inaccurate baseline data provided
- Keep low costs for maintenance
- Delays in construction timing and latest renovations, along with their improvements
- I want to know the competence/skill of executor of works
- Non-adequate use of equipment by users
- Variation in energy prices
- Management costs

Hesitations and Pain points

- In current platforms information is too technical and parameters are not understandable
- The current platforms don't help with decision making,
- Building investors for banks have their own risk assessment, and don't see any added values
- Too much financial information in the current platforms
- Building investors for banks want to see a rating in energy efficiency In order to issue green bonds
- Not evaluating appraisal of buildings
- Current platforms are not updated frequently



Basic

Advanced

LOCATION

All locations



RADIUS

+30 km



CONSTRUCTION
YEAR

1998



TOTAL INVESTMENT

220 k



INVESTMENT COST PER
METER SQUARE

1k



PAYBACK TIME

5 Years



SHOW IMAGES



NPV

All



List

Grid

Map

Arena Tower

City, Country, Postal code



INVESTMENT

200,000 €

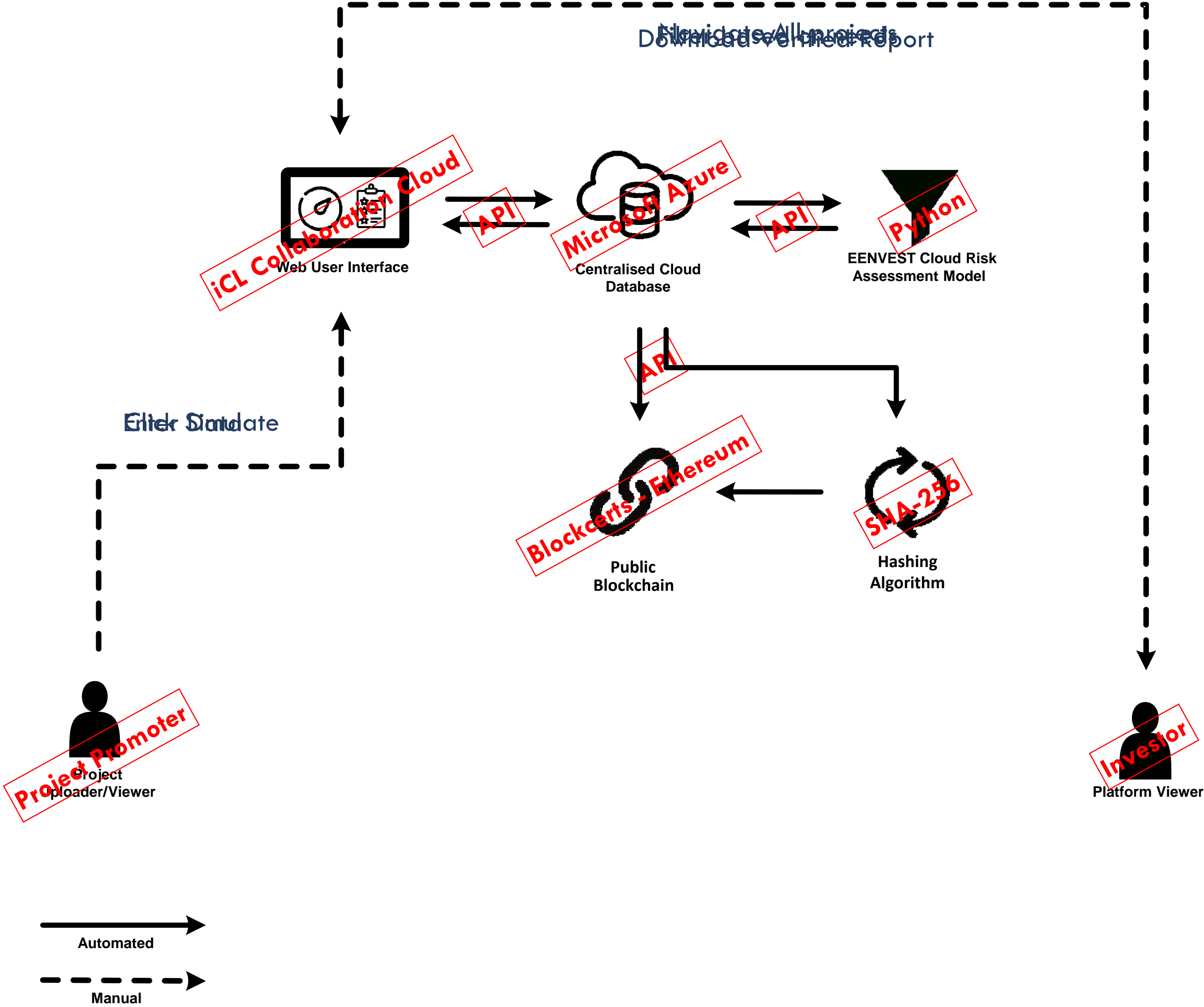
CASH FLOW


€189,000

FINANCIAL
Low

MULTI BENEFIT
Medium

TECHNICAL
High





Certificate of Authenticity

Building ID

Issued on Mar 2, 2021 by EEnvest

✓

Format validation

5 Items ▲

✓

Hash comparison

3 Items ▲

✓

Status check

3 Items ▲

⚠

Verified

This is a valid Ethereum Testnet certificate

[View transaction link](#)



EEnvest platform

Demo



Search & Match Platform

Profit Through Savings & Energy Efficiency

[Continue to IES login](#)



This project has received funding by the EU under GA 833112





Register

Already registered, [sign in here](#)

Firstname

Lastname

Email

Password

Repeat Password

☐ I have read and agree to the [Terms](#)

REGISTER





Filters and Analysis tools



METRICS VIEWER

Metric

Internal rate of return

Colour Scheme

Data Range

Min. value

Max. value

Display

All

With values

Internal rate of return

Invert

Reset

Apply

FILTERS

☒ Internal rate of return is greater than 5

☒ Debt Service Coverage Ratio is greater than 1

☒ Predicted Energy Savings is greater than 80 kWh/m2year

☒ Payback Time is less than 10 year(s)

☐ Net Present Value on Investment is less than 0

New Filter

Match All


Projects are colour coded based on metrics and filters selected



METRICS LEGEND

Internal rate of return

ATTRIBUTES ×



Edit

Name:	Italian case study - IFAD	Address:	Via Paolo di Dono 44, Rome, IT
Building Use:	Office	General Owner:	Building Owner Ltd.
General Contact:	01234 56789	Building Construction Year:	2,001 year(s)
Building Renovation Year:	2,019 year(s)	Gross Floor Area:	4.6 ha
Gross Volume:	0 m³	Heating Degree Days:	1,415 HDD
Total Investment:		Finance Amount Requested:	

← Edit attributes and run calculations



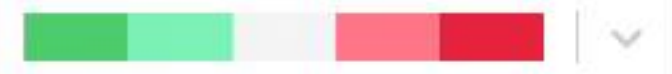
METRICS VIEWER



Metric

Internal rate of return

Colour Scheme



Data Range

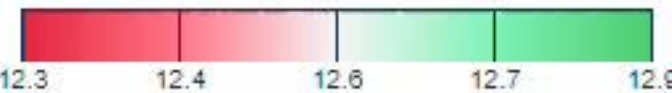
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Internal rate of return



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FILTERS



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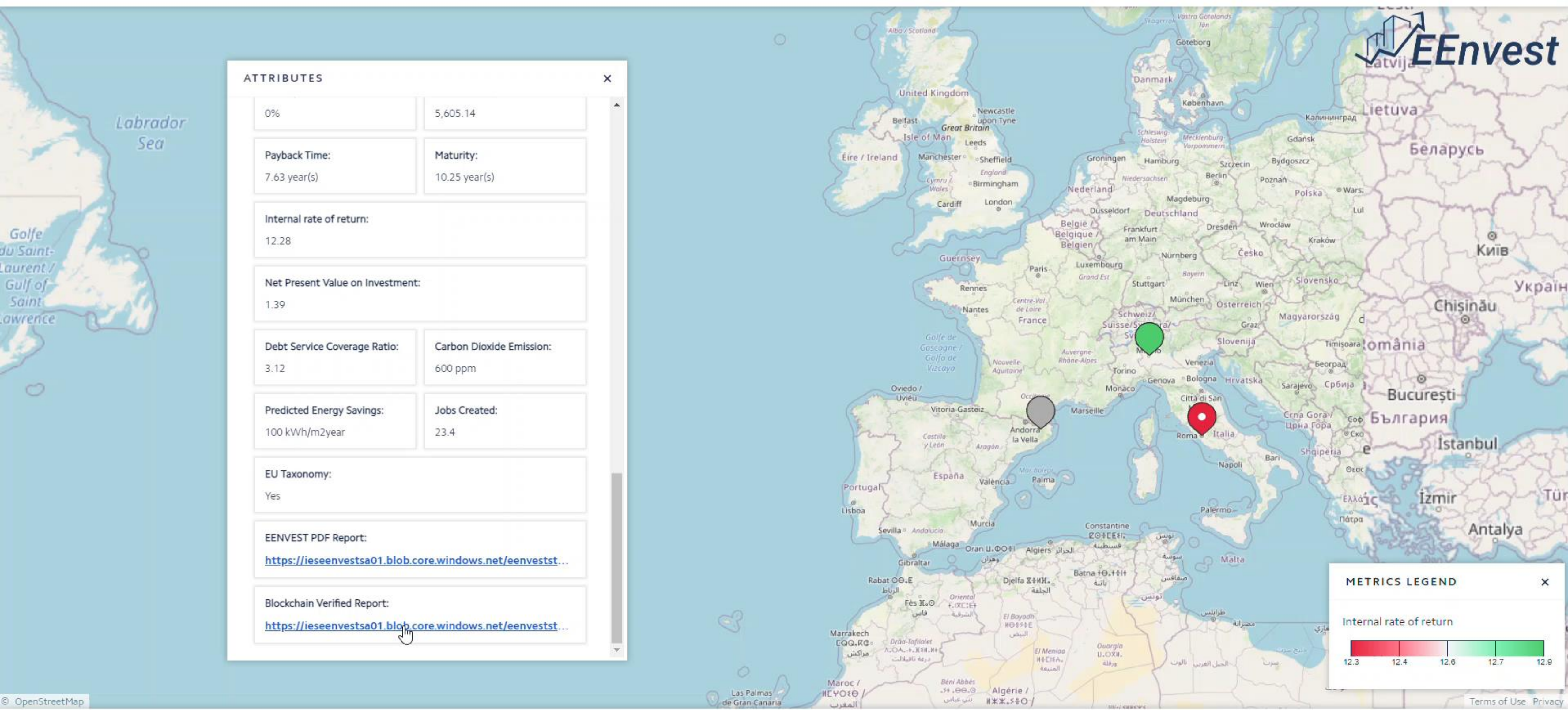
☐ Net Present Value on Investment is less than 0



New Filter

Match All





ATTRIBUTES

0%

5,605.14

Payback Time:
7.63 year(s)

Maturity:
10.25 year(s)

Internal rate of return:
12.28

Net Present Value on Investment:
1.39

Debt Service Coverage Ratio:
3.12

Carbon Dioxide Emission:
600 ppm

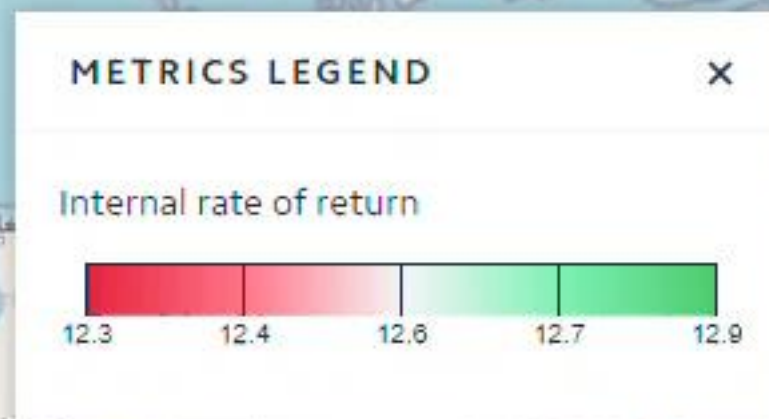
Predicted Energy Savings:
100 kWh/m2year

Jobs Created:
23.4

EU Taxonomy:
Yes

EENVEST PDF Report:
<https://ieseenvestsa01.blob.core.windows.net/eenvestst...>

Blockchain Verified Report:
<https://ieseenvestsa01.blob.core.windows.net/eenvestst...>





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Newest first



Arena Tower

City, Country, Postal code

FINANCIAL
LowMULTI BENEFIT
MediumTECHNICAL
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INVESTMENT

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TOTAL NET CASH FLOW

189,000 €

PAYBACK

6 years

COST/M²

20,000 €

CO₂ SAVED

370 ton p/ year

MARKET VALUE INCREASE

+ 6,90 %

NPV

20.000 €

IRR

4,20 %



Report



Compare



Favourite



Building Name 2

City, Country, Postal code

FINANCIAL
HighMULTI BENEFIT
LowTECHNICAL
Low

INVESTMENT

200,000 €

TOTAL NET CASH FLOW

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MARKET VALUE INCREASE

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NPV

20.000 €

IRR

4,20 %



Compare

Building name 1
£200.000Building name 2
£200.000Building name 3
£200.000Building name 4
£200.000



Thank you

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GRANT AGREEMENT
833112 — EENVEST