



Risk reduction for Building Energy Efficiency investments

Video interviews

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List of abbreviations and acronyms

EE	Energy Efficiency
NPV	Net Present Value
IRR	Internal Rate of Return
KPI	Key Performance Indicator
ESG	Environmental, social and governance criteria

1 INTRODUCTION

As part of the activities related to the dialogue with the professionals and with the scientific community, the EEnvest project partners organised a series of event in order to engage the targeted audience, present them the results realised by the project and collect their feedback on them.

The activities planned for this task were four dissemination workshops held at national level by four consortium partners, four webinars and two events: the mid-term conference and the final conference.

The original rationale of the four webinars was to elaborate on the feedback collected from the participants to the national workshops and share to a broader audience of targeted stakeholders. Therefore, each webinar should correspond to a workshop and translate at EU level the results of the workshops gathered at local or national level.

This rationale has been completely altered by the Covid-19 pandemic because it was not possible anymore to carry out national workshops in presence. Therefore, they have been realised as online events gathering audience from different countries. In the meanwhile, the number of online events massively increased, leading to difficulty in engaging the targeted audience. Also, the main stakeholders, such as those from sustainable finance, real estates, asset managers and construction industry, are all working on urgencies for the time being and are undergoing a very intense and busy period. Most feedback from workshops referred about a real interest on knowing more on EEnvest results as a way to simplify their daily work, but no free time to follow any events, which has been done through 1:1 communication.

Thus, basing on the abovementioned considerations, a different strategy has been adopted, consisting in producing and promoting a series of short video interviews where an expert introduces a specific result or tool that can be helpful for a specific stakeholder, in order to allow people to grasp key information at any time and quickly, without having to join a webinar at a given date and time, or to hear for long recordings.

Hence, the four webinars have been replaced by four video-interviews which are available on the project's website, YouTube and other social media channels, covering different topics of the project and intended to stimulate the attention of targeted stakeholders on the impact of EEnvest results in their business. As the videos have specific targets and their length is quite short, it helps to give quick and direct piece of information and keep the viewer engaged. Videos point to resources on EEnvest website for details. This strategy also helps the dissemination through social media channels. Furthermore, specific reminders have been sent by direct communication to known stakeholders, then allowing to reach out and further engage the targeted audience (i.e. by re-posting content on social channels) or routing the content through their organisations.

The four video-interviews are listed in Table 1:

Table 1: List of the four video-interviews

Webinar title	Interviewee	Targeted audience	Link to video
The importance of considering technical risks in EE projects	Graziano Salvalai from Politecnico di Milano	Designers, project coordinators, project promoters, general contractors, building owners, ESCOs	Video URL
How to read indicators related to energy efficiency investments	Gabriele Fregonese from SINLOC	Investors in Energy Efficiency Assets as investment funds, sustainability teams from Financial Institutions, asset managers	Video URL
How EEnvest can boost new business opportunities	Jordi Solé Muntada from Ecrowd, Stefania Mascolo from GNE Finance	Impact investors, investment consultant, crowdlenders, sustainability teams in Financial Institutions	Video URL
Benefits for investors from the EEnvest platform	Dimitrios Ntimos from IES, Cécile Barrère from R2M Solution	Asset managers, professional investors, ESCOs	Video URL

The video interviews have been realised by Eurac Research. They are published in the [“communication” section](#) of the EEnvest website. Furthermore, they are disseminated through the YouTube channels of R2M Solution and of the Institute for Renewable Energy of Eurac Research.

The following paragraphs provide specific information about each single video-interview.

2 THE IMPORTANCE OF CONSIDERING TECHNICAL RISKS IN ENERGY EFFICIENCY PROJECTS

This three-minute video has the purpose to address the advantages in technical risks since the design phase of a project. It also explains what the technical risks are, how they can affect the reliability of renovation projects and the economic trend of the investment, by providing examples. It particularly targets project promoters.

Graziano Salvalai, from Politecnico di Milano, replies to the following questions:

- **Could you explain what the technical risks are?**

Technical risks could be defined as uncertainties that arise due to purely technical issues, usually related to major activities such as design, project, calculation, manufacturing, installation, construction, or operation phase of a building. A complete assessment and evaluation of the technical risks associated with a renovation project should take into account both the probability of occurrence and the magnitude of their consequent impacts.

- **Could you make a practical example?**

Generally speaking, some of the most recurring technical risks are for example thermal bridges, air or water infiltration, failure, malfunctioning, breakages, which could involve multiple different building components, such as the building envelope, HVAC systems or renewable energy production systems. To give a more practical example, a quite common practice in building renovations is the replacement of windows with new and better performing components. Often the replacement of the window with no further interventions on the surrounding opaque envelope can lead to the formation of surface condensation and mold, due to the great reduction of air infiltrations.

Therefore, what could be suggested to reduce the impact of the resulting technical risk in this specific case is for example to carefully plan the temporal scan of the different renovation measures, in order to avoid major technical issues.

- **Is a project with lower technical risks advantaged when seeking for financing?**

Absolutely yes. Technical risks may have, in fact, important implications in terms of reliability of the renovation project and could negatively affect the economic trend of the investment, resulting in possible deviation from what expected in the business plan. To that end, different mitigation measures and correction factors can be implemented in order to reduce the technical risks of a renovation project, resulting at the same time also in an overall more attractive renovation project when seeking for financing.

Some of the most generally effective mitigation measures that we could name are, for example, the adoption of standard protocols for the design and process verification (e.g., Passive House, LEED), the set-up of specific analyses and tests during the construction phase (e.g., Blower Door Test, thermography), and the ongoing assessment of the energy performance during the operation phase (e.g., energy consumption monitoring and maintenance programs).

3 HOW TO READ INDICATORS RELATED TO ENERGY EFFICIENCY INVESTMENTS

This four-minute video targets investors and explains what they should expect when investing on a EE project and how EEnvest financial KPIs can help.

Gabriele Fregonese, from SINLOC, replies to the following questions:

- **What should an investor know when approaching investments in energy efficiency?**

When approaching an energy efficiency investment, an investor must take into consideration that the return on the investment is strictly connected to the amount of energy that is saved thanks to the energy conservation measures, in terms of kilowatt-hours. Then, another important factor that affects the monetary value of the energy savings is of course the energy price. In the context of higher energy prices, it is even more convenient to make energy efficiency investments as the value of every kilowatt-hour that is saved becomes higher.

Another important factor that affects the return on the investment is the so-called heating degree days meeting the climate situation in every year. In warmer winters it is less convenient to do the renovation, while colder winters make energy renovation more convenient.

- **When looking at financial indicators, which are the main differences in these particular investment type?**

When looking at financial indicators of energy efficiency investments, there are not so many differences from common investments. Usually, you evaluate energy efficiency investments according to the IRR or the NPV. What is important to understand is that deep energy retrofit projects, meaning those projects that aim at achieving very high energy savings (more than 50% of energy savings), may have a low or even negative financial indicators, because the payback time is so long that is not able to remunerate the investment.

However, you can still consider those investments as attractive or convenient, because an investor might be interested in other types of benefits, beyond the financial ones, from the increased indoor comfort and increased building value, to ESG impacts.

- **What is the added value that EEnvest provides through the report for the investors?**

The EEnvest report provides the investor with very useful information about the project that can create added value. First of all, it provides an indication about the technical riskiness of the project. Then, there are several financial KPIs, such as NPVs, IRR of the investment which also are useful indication. Furthermore, you can also find the probability distribution of those indicators, and this is the typical feature of the EEnvest platform and report.

Hence, instead of providing only the expected value of the IRR, the EEnvest platform is able to provide the user with the full probability distribution of those KPIs. The user can thus have complete information about the riskiness of the project, also from the financial point of view. Therefore, you can assess what is the probability that your project will actually achieve those expected results, but you can also check whether there is a risk of not getting those values (worst case) and what is the level of risk that your project is exposed to.

4 HOW EENVEST CAN BOOST NEW BUSINESS OPPORTUNITIES

This video explains how EEnvest methodology and tools can help investors in the decision-making process of the evaluation of EE investments. It also gives an example of a new alliance to foster high impact investments in sustainability projects in Spain and across Europe.

Jordi Solé Muntada, from Ecrowd!, and Stefania Mascolo, from GNE Finance, reply to the following questions:

- **Could you introduce Ecrowd, GNE Finance and the newborn alliance?**

GNE Finance and Ecrowd have recently forged an alliance to foster high impact investments in sustainability projects in Spain and across Europe.

Ecrowd as first crowdlending platform in Spain for sustainability enables businesses and communities to borrow from a diverse group of people quickly and transparently, without relying on intermediaries or bank.

GNE Finance will act as lead investor, making Ecrowd and its network of over 5000 investors able to access more opportunities, carefully selected so that they can align values and financial objectives. The partnership will give Ecrowd investors - middle-income and socially minded - more opportunities to invest and participate in social and environmental projects.

- **How could EEnvest methodology and tools support you?**

EEnvest has developed an innovative methodology to support investors in the decision-making process of evaluation for energy efficiency investments, incorporating multi benefits as strategically interesting. The standardisation of multiple benefits assessment seeks to expand the perspective of the investors beyond the financial return by identifying and measuring selected KPIs that provide to investors with a clear picture of the full impact of investment opportunities and can choose where to allocate their investment according to their values.

These KPIs concern environmental benefits like CO2 emission reduction and energy savings, but also economic benefits like jobs creation and transversal ones that deal with general societal objectives and international standards like the Sustainable Development Goals. We see how impact investing is increasingly relevant, fostered by regulations like the EU Taxonomy. Investors take more and more into consideration the generation of positive, measurable social and environmental impact.

GNE Finance and Ecrowd clients are exactly looking for socially and environmentally responsible investing opportunities, so EEnvest methodology offers a very effective investor-friendly methodology to easily compare investment opportunities based on sustainability criteria as well as financial performance.

Therefore, the partnership will further exploit EEnvest methodology and results in their daily businesses to respond to investors needs and accelerate attractiveness in impact investing for sustainable projects.

5 BENEFITS FOR INVESTORS FROM THE EENVEST PLATFORM

This video illustrates with some mock-ups the features of the EEnvest platform, and it explains how it can provide values for different investors.

Dimitrios Ntimos, from IES, and Cecile Barrère from R2M, reply to the following questions:

- **Could you introduce the EEnvest platform?**

The EEnvest platform is a two-sided search&match platform for building renovation project promoters and investors. The project promoters are expected to enter into the EEnvest database the renovation project data needed to produce the EEnvest de-risking KPIs. The EEnvest platform calculates the risks related to the investments in energy efficiency renovation and produces KPIs unveiling the technical and financial risks as well as the social and environmental benefits of each project. The investors will have access to a database of projects associated to EEnvest KPIs. The EEnvest platform benchmark functionality allows the investors to compare between projects supporting their decision-making process.

The EEnvest platform produces a blockchain certified report per project showing the most relevant project data and EEnvest KPIs. This useful report presents in a synthetic manner, the project set-up and computed technical, financial and non-energy benefit performances. In the context of EU Taxonomy gaining force, this information is of prime importance for financiers with growing reporting requirements.

Additional services are available to project promoters, for instance a Project Quality Self-Assessment Tool offers to associate the project data to a project quality score based on an online desktop due diligence questionnaire filled by the project promoter. This project data quality score is useful to a project promoter who can understand if its project has been set-up following the best practices. If shared with the investors, the project data quality score associated with a project complements the dataset available to evaluate each investment opportunity.

- **What is the value of the EEnvest platform and tools for investors?**

EEnvest will create value for investors by de-risking energy efficiency investments, supporting bankers and intermediaries in their selection of investments and allowing them to attract new customers interested in working with sustainable bankers. After interviewing retail bankers, investment funds and ESCOs, it seems that several EEnvest tools retains particularly their interest.

The first EEnvest tool investors want to use is the technical and financial de-risking model because it is project data driven and quantifies the technical and financial risks associated with the project. Bankers do not need to have technical background to compare the projects between them and save time and money.

The second tool of high interest for investors is the EEnvest multi-benefits assessment methodology. Following this approach will unveil the full impact of the EE investments quantifying for instance the CO₂-equivalent emission reduction, the number of jobs created and the percentage of primary energy consumption reduction. This last parameter is one of the KPIs of the EU taxonomy compliance. This sustainability reporting will become a real added value to attract

customers and capitals in the coming month and year. EEnvest is there to support the investors climbing the step towards the EU taxonomy.

Finally, investors will find comfortable to see an EEnvest Project Quality Self-Assessment tool (PQSAT) providing score reached by each project and indicating the probability that the energy efficiency project will achieve its intended objectives. This PQSAT score attests that the project has been developed following the sector best practices. This score contributes to increase the trust of the investors.

6 CONCLUSION

The production and dissemination of these videos has helped to spread the main project's results and to target specific audience (e.g. project promoters and investors). Based on the questions and answers developed, we tried to make the message clear to the recipient by also showcasing the project's results. Moreover, the publication of the videos right before the EEnvest final conference worked favourably in raising further interest.