## Bridging the transparency gap in energy efficiency financing by codesigning an integrated assessment framework with involved actors

What tools would investors need for assessing the economic performance of energy efficiency investments?

The Technoeconomics of Energy Systems Laboratory (TEESlab) in collaboration with the <u>Decision</u> <u>Support Systems Lab (EPU-NTUA)</u> published a scientific paper entitled **"Bridging the transparency gap in energy efficiency financing by co-designing an integrated assessment framework with involved actors".** The paper is published in the <u>Elsevier's</u> Energy Reports journal and is based on the activities of the EU H2020 funded project, <u>Triple-A</u>.

Energy efficiency investments are subject to various risks and uncertainties, which may affect involved actors' profitability, and as such, there is a **need for developing tools** to support their decisions. So far, the developed methodological frameworks that aim at projecting the profitability and risk of such investments present a high technical complexity, and involved actors have difficulties in digesting their results. Consequently, despite their technical and academic value, the existing frameworks cannot achieve the essence of their scope, i.e., to provide concrete implications to capital providers.

This article introduces the concept of **IRR curve**, as an appropriate tool for **assessing the economic performance of energy efficiency investments from investors' point of view**. Based on this tool, an integrated framework for profitability assessment of energy efficiency investments is developed, by linking their economic performance and riskiness to investor preferences. The added value of this framework lies in the **comparability** that it provides between different energy efficiency investments, thereby facilitating investment selection.

Utilising this framework, capital providers can be supported in the selection of the country, sector, and project type to invest, while on the other hand, they can better comprehend the risk nature of energy efficiency investments as well as project their profitability and optimal investment holding period. To demonstrate the functionality of the proposed framework, we applied it to the **German energy efficiency sector**. Our findings provide evidence for the profitability potential of energy efficiency investments and implications about investment holding period.

You can read and download the open access scientific publication here.

## **Triple-A project at a glance**

Triple-A project has a practical result-oriented approach, seeking to identify which investments can foster sustainable growth, while also having an extremely strong capacity to meet their commitments, already from the first stages of investments' generation and pre-evaluation. The Triple-A scheme aims to reduce the respective time and effort required at the crucial phase of the investment conceptualization, as well as to improve efficiency of respective decision making. In

particular, Triple-A seeks to make energy efficiency investments more transparent, predictable, and attractive for investors and project developers.

The Triple-A Consortium consists of academic, research and industry partners: NTUA (coordinator), ABN AMRO, IEECP, JRC Capital GmbH, GFT ITALIA srl, CREARA SL, adelphi, Piraeus Bank, TEESlab UPRC, SEVEn, VIPA, NTEF.

## Stay in touch

More detailed information about Triple-A's objectives and results is available at the <u>project's</u> <u>website</u>. You are invited to follow Triple-A in social media to stay informed about all related activities and interact with the project.

- LinkedIn: <u>Triple-A project</u>
- Twitter: <u>Triple-A</u>

For more information, feel free to contact:

- Nikos Kleanthis, Researcher, e-mail: kleanthis@unipi.gr and/or
- Prof. Alexandros Flamos, Director, e-mail: aflamos@unipi.gr

Visit our website for more updates about our activities:

• <u>https://teeslab.unipi.gr/</u>

## **Technoeconomics of Energy Systems laboratory - TEESlab**

Dept. of Industrial Management & Technology School of Maritime & Industry, University of Piraeus (UNIPI)



