



**SUSTAINABLE  
PLACES 2020**



# Facilitating energy efficiency project financing at an early stage: **The Triple-A case**

Sustainable Places 2020, 29 October, Digital Event

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# GENERAL INFO

**Title:** Enhancing at an Early Stage the Investment Value Chain of Energy Efficiency Projects

**Funding:** European Union's Horizon 2020 Research and Innovation Programme-H2020-EU.3.3.7. H2020-EU.3.3.1.

**Started:** September 2019

**Duration:** 30 Months

**Coordinator:** National Technical University of Athens (NTUA) - Greece

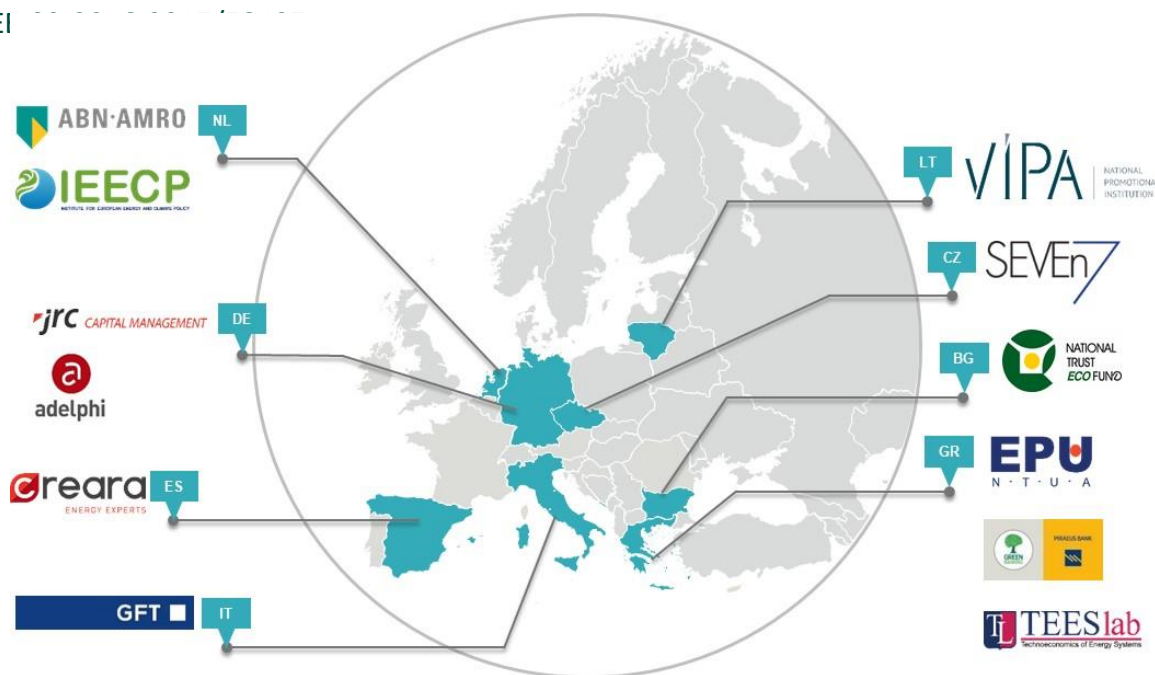
Prof. John Psarras

**Participants:** 12

**Budget:** 1.486.196,25€

**Contract No:** H2020-EI

**Grant agreement ID** 846569



# SCOPE



**Triple-A** aims to:

- ❖ Identify **which investments can be considered as Triple-A investments**, fostering sustainable growth, while also having an extremely strong capacity to meet their commitments, **already from the first stages of investments generation and pre-selection/ pre-evaluation**.
- ❖ Cover the **energy efficiency gap**: Plenty of energy efficiency **ideas exist**, but **never get financed** because of:
  - Lack of expertise, by project developers, to make a convincing financing case.
  - Lack of energy efficiency-based criteria in the banking sector.



# CONTRIBUTION



## How EE financing becomes mainstream?

### Triple-A methodology and tools offer:

- ❖ Standardized process for the identification of **attractive project ideas** for bankers, funds and other financing institutions.
- ❖ Categorisation of the projects and **Triple-A EE investments** selection, which merit attention by the funding organizations.
- ❖ **Funding strategies** (Warehouse lending, Green Bonds, Energy Efficiency Auctions) & **portfolio of EE projects** that better match with the needs of respective beneficiaries.
- ❖ Stakeholder Consultation: Key actors enable the **development, implementation, testing** and **exploitation** of the proposed Triple-A innovative scheme for energy efficiency financing.
- ❖ **8 Case Studies** strategically selected to **promote diversity** across a number of factors. **Synthesis paper** for each case study with **targeted recommendations** on **policy framework** and **market architecture**.

# TRIPLE-A APPROACH

Practical result-oriented approach, seeking to answer three questions:



How to **assess** the financing instruments and risks an early stage?



How to **agree** on the Triple-A investments, based on selected key performance indicators?



How to **assign** the identified investment ideas with possible financing schemes?

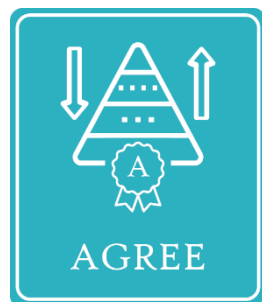


Doukas, H. (2018). **On the appraisal of “Triple-A” energy efficiency investments**, *Energy Sources, Part B: Economics, Planning, and Policy*, DOI: 10.1080/15567249.2018.1494763

# TRIPLE-A METHODOLOGY



**Step 1 - Assess:** Member States **risk profiles** and **mitigation policies**, including a Web based **database**, enabling national and sectoral comparability, market maturity identification, good practices experiences exchange, reducing thus uncertainty for investors. Complete **risk assessment** of projects and incorporation of **EU Taxonomy eligibility criteria**.

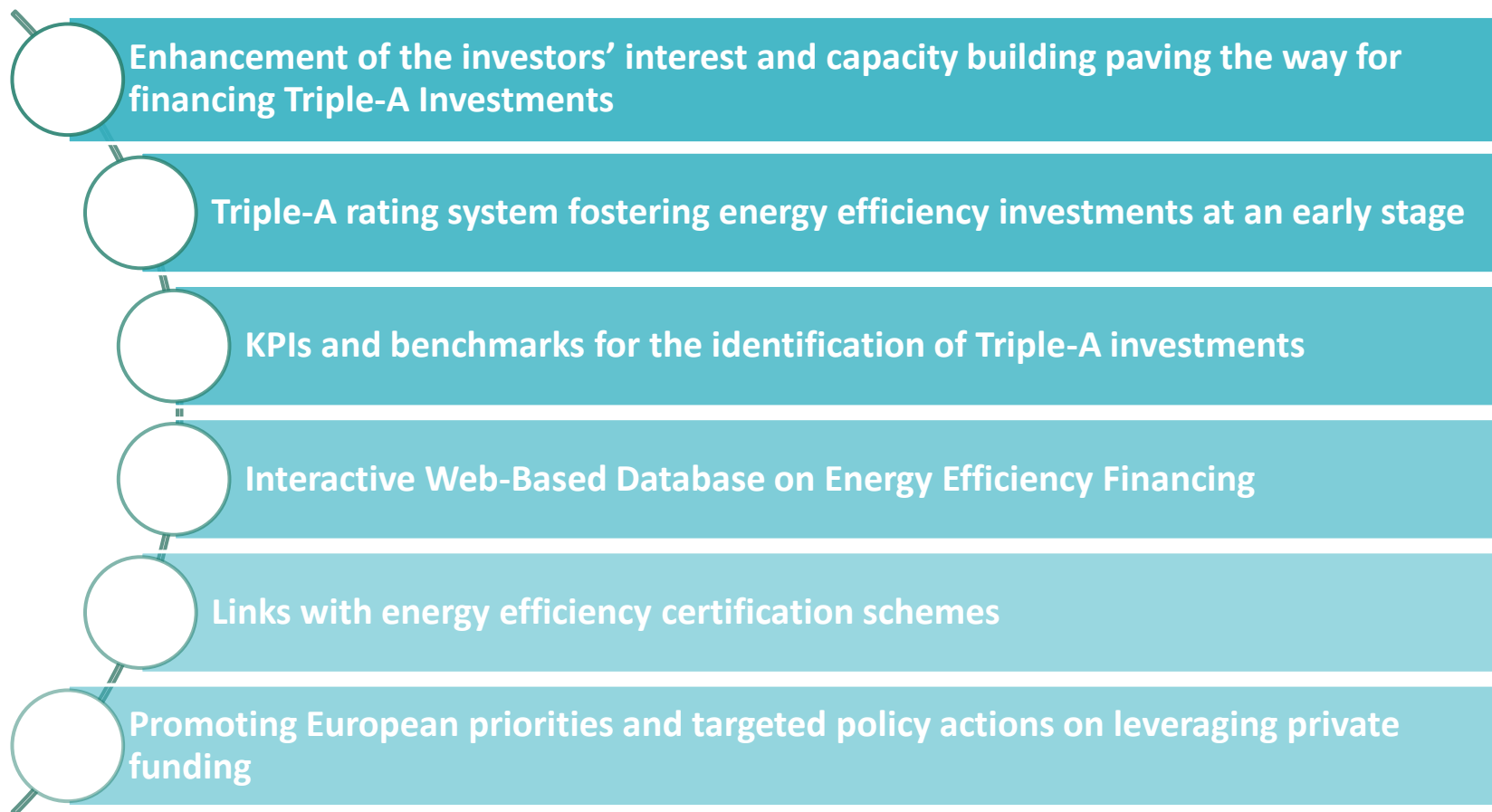


**Step 2 - Agree:** Standardised Triple-A tools, efficient **benchmarks**, and **guidelines**, translated in consortium partners' languages, **accelerating** and **scaling up** investments.

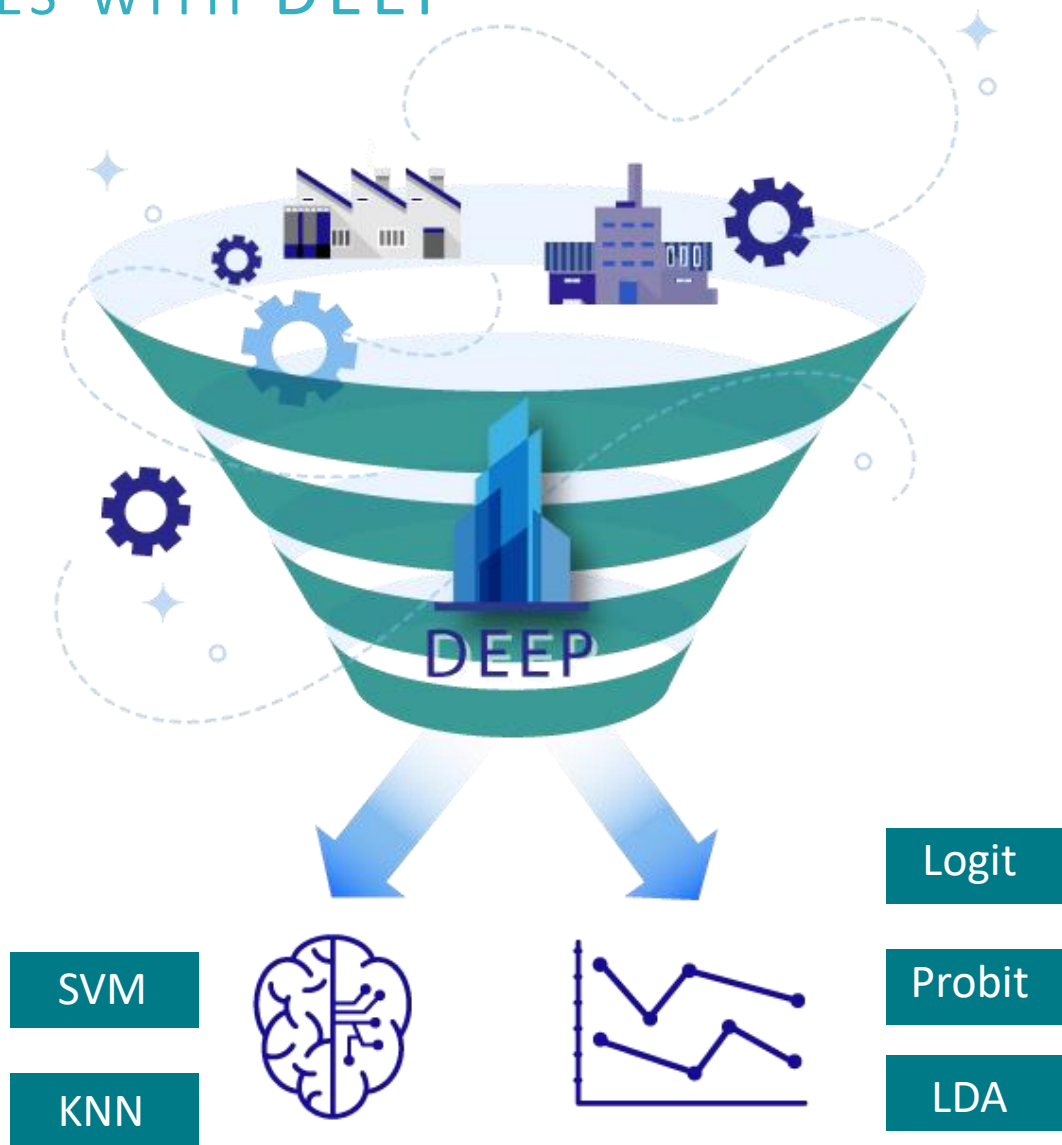


**Step 3 - Assign:** In-country **demonstrations**, **replicability** and overall **exploitation**, including **recommendations** on realistic and feasible investments in the national and sectoral context, as well as on short – and medium – term financing.

# OUTCOMES



# INTERFACES WITH DEEP





# INTERFACES WITH DEEP



SVM	0.7840
KNN	0.7840



Logit	0.7720
Probit	0.7720
LDA	0.7650

1<sup>st</sup> time that these 5 popular techniques have been set side by side in predicting the outcome of an energy efficiency investment

Classification rates for all methods are relatively high, all of them can be helpful in predicting the outcome of an energy efficiency investment

ML methods surpass traditional methods regarding their predictive accuracy

# TRIPLE-A TOOLS (1/2)



## Launched in the EUSEW 2020 Policy Conference

- ❖ 2 out of the 3 Triple-A Tools are fully operational ready for project fiches benchmarking and collection.



## EU Sustainable Energy Week 2020 Policy Conference Session

- ❖ **Title:** Energy transition: new business models to de-risk investments and kick start the EU building renovation wave
- ❖ **Date:** 18<sup>th</sup> of June 2020, 12:00-13:30 CET, online
- ❖ **Co-organisarion:** Triple-A, SENSEI, NOVICE, LAUNCH, QualitEE, QUEST and U-CERT



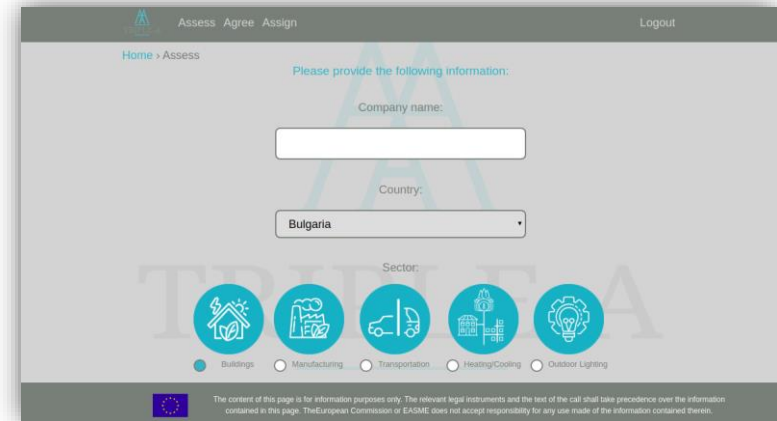
Successful organization  
with 83 participants



# TRIPLE-A TOOLS (2/2)

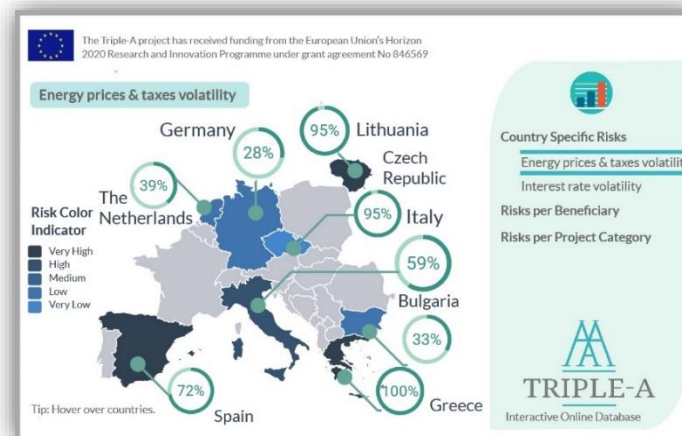
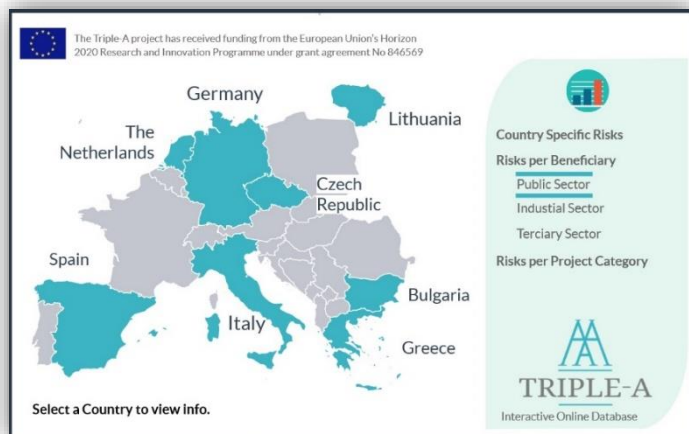
## Standardized Triple-A Tools

<https://toolbox.aaa-h2020.eu/>



<https://aaa-h2020.eu/database>

## Web-based Database on Energy Efficiency Financing



# *Enhancing at an Early Stage the Investment Value Chain of Energy Efficiency Projects*



## Thank you!

Please reply to our **polls** and to our **survey** right after this session.  
**You feedback is valuable!**

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