

Abstract Template ESCC 2020

Benchmarking Energy Efficiency Projects: A Multicriteria Approach

First Name of first author: Aikaterini

Last Name of first author: Papapostolou

Affiliation of first author: National Technical University of Athens, School of Electrical and Computer Engineering, Decision Support Systems Laboratory (DSS Lab), Energy Policy Unit (EPU), Iroon Politechniou 9, 157 80, Athens, Greece

Email: kpapap@epu.ntua.gr

First Name of Co-author: Charikleia

Last Name of Co-author: Karakosta

Affiliation of Co-author: National Technical University of Athens, School of Electrical and Computer Engineering, Decision Support Systems Laboratory (DSS Lab), Energy Policy Unit (EPU), Iroon Politechniou 9, 157 80, Athens, Greece

Email: chkara@epu.ntua.gr

First Name of Co-author: Filippos Dimitrios

Last Name of Co-author: Mexis

Affiliation of Co-author: National Technical University of Athens, School of Electrical and Computer Engineering, Decision Support Systems Laboratory (DSS Lab), Energy Policy Unit (EPU), Iroon Politechniou 9, 157 80, Athens, Greece

Email: pmexis@epu.ntua.gr

First Name of Co-author: John

Last Name of Co-author: Psarras

Affiliation of Co-author: National Technical University of Athens, School of Electrical and Computer Engineering, Decision Support Systems Laboratory (DSS Lab), Energy Policy Unit (EPU), Iroon Politechniou 9, 157 80, Athens, Greece

Email: john@epu.ntua.gr

Full Name of First Participant: Charikleia Karakosta

Registering as: Presenting Author

Student (YES or NO): NO

Email Address of First Participant: chkara@epu.ntua.gr

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Abstract (min 300 words – max 500 words):

Nowadays, European Union (EU) considers Energy Efficiency (EE) as one of its main pillars in order to reduce pollution and energy imports. The recently released Technical Expert Group (TEG) report on EU Taxonomy is a guide to green development, in continuance to EU's focus on reducing carbon emissions, scale down energy consumption and secure European energy autarky.

However, to the best of our knowledge hardly any standardized or integrated method supporting investors and financing institutes to identify highly efficient economic activities at an early stage that can unambiguously be considered environmentally green exist. In addition, investment benchmarking contributes in pointing out cost-effective and highly efficient EE project proposals, making them more attractive to investors by following a standardized procedure.

In the above context, this paper presents a multi-criteria approach based on the Electre Tri method, which aims to benchmark EE investment ideas incorporating financial, environmental and risk criteria. The EE investments are classified into three classes: Triple-A, Reserved or Rejected, reflecting their capacity to achieve environmental and financial goals, while stakeholders engagement will play a crucial role in this proposed approach. The profiles of the benchmarking classes and the criteria thresholds will be formed through a stakeholder consultation process, in order to be harmonized with the requirements and the specifications of investors, financing institutes and green financing instruments. The benchmarks obtained by the multicriteria method could facilitate decision makers in reducing uncertainty involved with EE investments, and support investors and financing institutes to target their capital towards green financing.

Select one of the following Topics: [“3. Decision Making”](#)

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15. Multi-criteria Analysis
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