

BUILD UP

The European Portal For
Energy Efficiency In Buildings

HERON  Forward-looking socio-economic research on
Energy Efficiency in EU countries
GA 649690

WEBMINAR: HERON – DECISION SUPPORT TOOL

INCORPORATING END-USERS BEHAVIOR IN ENERGY EFFICIENCY POLICY MAKING

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OVERVIEW OF HERON PROJECT

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Introduction

- Energy-related emissions are responsible for just over three-quarters of global Greenhouse Gas Emissions (IPCC, 2014, 2016)
- Improving Energy Efficiency (EE) contributes in the combat against Climate Change and the achievement of the Sustainable Development Goals (SDG 7, 13)
- Behavioral barriers demonstrated by end users create negative deviations in EE set targets between 5-20 per cent, in EU and 20-30 globally (UNEP, EGR2016)

At a Glance

- Title: *A forward-looking socio-economic research on Energy Efficiency in EU countries*
- Project : HERON (no. 649690), EU, HORIZON 2020, R&I
- Total budget: €958.750,00
- EC contribution: 100%
- Duration : 31 months
- Consortium: Seven (7) partners. (Six (6) EU and one (1) EU candidate.)
- Web Sites: <http://heron-project.eu/>
<https://heron2017.wordpress.com/>
- Project coordinator: NKUA-KEPA (Hellas)*

Consortium of HERON

1. ETHNIKO KAI KAPODISTRIAKO PANEPISTIMIO ATHINON
SHORT NAME: **UoA-KEPA** (GREECE),(COORDINATOR)
2. UNIVERSITA COMMERCIALE LUIGI BOCCONI
SHORT NAME: **UB** (ITALY)
3. SDRUZHENIE CHERNOMORSKI IZSLEDOVATELSKI ENERGIEN TSENTAR
SHORT NAME: **BSERC** (BULGARIA)
4. OXFORD BROOKES UNIVERSITY
SHORT NAME: **OBU** (UNITED KINGDOM)
5. **UNIVERSITEIT ANTWERPEN** (*LEFT THE PROJECT*)
SHORT NAME: **UA** (BELGIUM)
6. WUPERTAL INSTITUTE FUR KLIMA, UMWELT, ENERGIE GMBH
SHORT NAME: **WI** (GERMANY)
7. UNIVERSITY OF BELGRADE-FACULTY OF MINING AND GEOLOGY
SHORT NAME: **UB-FMG** (SERBIA)
8. ESTONIAN INSTITUTE FOR SUSTAINABLE DEVELOPMENTS, STOCKHOLM ENVIRONMENT INSTITUTE
TALLIN CENTRE
SHORT NAME: **SEI T** (ESTONIA)

The challenge

Facilitate policy makers and market stakeholders in EU to develop and implement effective Energy Efficiency (EE) policies in the sectors of buildings and transport, incorporating barriers performed by the end-users behavior.

The process

1. Map of the EE policy instruments and technologies in HERON's countries (WP1-**WI**)
2. Establish an intensive policy dialogue with policy makers and market forces in the countries of HERON (The Consortium)
3. Map and qualitative assessment of behavioral barriers in buildings and transport (WP2-**OBU, IEFE UB**)
4. Incorporation of behavioral barriers into scenario analysis (WP3-**UoA KEPA**)
5. Forward-looking scenario analysis (WP4-**SEI T**)
6. Policy recommendations (WP5-**UoA KEPA**)
7. Dissemination and communication (WP6-**BSERC**)

The HERON - DST

HERON – Decision Support Tool (DST) provides the policy makers with a **user-friendly** software that facilitates the selection of the optimum combination of technologies and practices minimizing the negative impact of end-users behavior in the implementation of Energy Efficiency scenarios.

Incorporating HERON-DST in EE forward looking analysis

The HERON – DST allows:

- Calculation of the impact factors of behavioral barriers on the input drivers or alternatively on final targets
- Calculation of the deviations imposed on input drivers and final target due to impact factors
- Optimization of the set of barriers
- Development of a set of scenarios reflecting optimization of impact factors applied to input drivers

A pathway to facilitate policy makers to include end-users behavioral barriers into EE scenarios

1. Define the set of behavioral barriers (*in relation to input drivers*). Collect and develop a reliable qualitative data base
2. Calculate (through the HERON – DST) the impact and total impact factors of barriers
3. Calculate the emerging deviations, due to behavioral barriers, on both the input drivers and EE targets, in scenarios' analysis
4. Optimize the mixture of input drivers and final targets with HERON - DST
5. Identify the optimum accrued EE targets through comparative analysis against *Environmental performance, Political acceptability and Feasibility of implementation* (AMS)
6. Conclude with a set of input drivers (policy mixture) leading to a more effective and preferable forward looking EE scenario

Thank
you

