# Policy brief: Spatial Analyses of Energy Efficiency Potentials and Development of GIS Visualization Platform

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sEEnergies

POLICY BRIEF

# Spatial Analyses of Energy Efficiency Potentials and Development of GIS Visualization Platform


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## Key messages

- *A coherent geospatial representation of energy efficiency potentials on the local level for building, industry, and transport sectors has been developed for the present and future.*
- *For about 150,000 Urban Areas, key characteristics of energy efficiency have been mapped.*
- *An online web-map interface and an Open Data Hub facilitate visualisation and data sharing.*
- *Energy efficiency potentials determined on the local level are made available for national studies.*
- *Story Maps improve the dissemination of a magnitude of results.*

## Key findings and key recommendations

This work package sits at the centre of the sEEnergies project, where data on energy efficiency potentials in all sectors are collected and spatially disaggregated to local areas. Researchers have been active throughout the project to continuously consider and discuss with project partners data and spatial representation of energy efficiency. A common geographical database was developed and refined for online mapping. All resulting data are made available on an Open Data Hub, and while the Pan-European Thermal Atlas in its version 5.2 contains all layers, Story Maps generated for each sector help understand the main messages. The results may be used to promote energy efficiency for all sectors and beginning at the local level everywhere in Europe.

## Main features

Disaggregated representations of energy efficiency potentials reveal spatial distributions, relations, and locations to target political action and actual projects.

High-resolution grids on the 1-hectare level, 150,000 urban areas, and national aggregates may be used to quantify and locate energy efficiency across sectors.

Geographical properties of energy efficiency in buildings, transport, and industry are made available for the analysis and comparison of energy efficiency measures and their synergies.

## Main results

EU-27 plus UK-wide map layers and output datasets of energy efficiency potentials by scenarios for buildings, transport, and industry sectors.

Spatially explicit datasets of physical and economic suitability of heat supply solutions for different end-use efficiency scenarios in urban and rural areas, to be used in smart energy systems analysis.

A geographical allocation of renewable and waste heat sources to local settlements and their potential district heating systems.

The sEEnergies Index: a simple way to assess, combine, and compare the potential to implement energy efficiency in buildings, transport, industry, and infrastructure for all urban areas.

### Links

Peta version 5.2: https://www.seenergies.eu/peta5/

Open Data Hub: https://s-eenergies-open-data-euf.hub.arcgis.com/

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