

HOME NEWS IMPACT EVENTS CALL FOR ABSTRACTS PUBLICATIONS & PRESENTATIONS PROJECTS NETWORK VIDEO ABOUT 4DH LOGIN

CONFERENCE 2017

CONFERENCE 2018

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4TH INTERNATIONAL CONFERENCE ON SMART ENERGY SYSTEMS AND 4TH GENERATION DISTRICT HEATING - AALBORG 13-14 NOV 2018

The 4DH Strategic Research Centre, the RE-INVEST project and Aalborg University invited researchers and experts from industry and businesses to the 4th International Conference on Smart Energy Systems and 4thGeneration District Heating. This year's conference took place from 13-14 November 2018 in Aalborg. With more than 130 interesting presentations, high-profile keynote speakers, exciting workshops and technical tours, the conference received a high level of interest. This year, we welcomed 320 participants representing 27 different countries. The aim of the conference was to present and discuss scientific findings and industrial experiences related to the subject of Smart Energy Systems based on renewable energy and future 4th Generation District Heating Technologies and Systems (4GDH).



CONFERENCE 2018
PROGRAMME
PRESENTATIONS
PICTURES
BOOK OF ABSTRACTS



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Funded by the Horizon 2020 programme of the European Union

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www.hotmaps-project.eu

H°TMAPS

INTERNATIONAL ENERGY POLICY & PROGRAMME EVALUATION CONFERENCE (IEPPEC) JUNE 2018

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The Hotmaps project develops a toolbox that supports heating and cooling mapping and planning processes. Website: <u>www.hotmaps-project.eu</u>



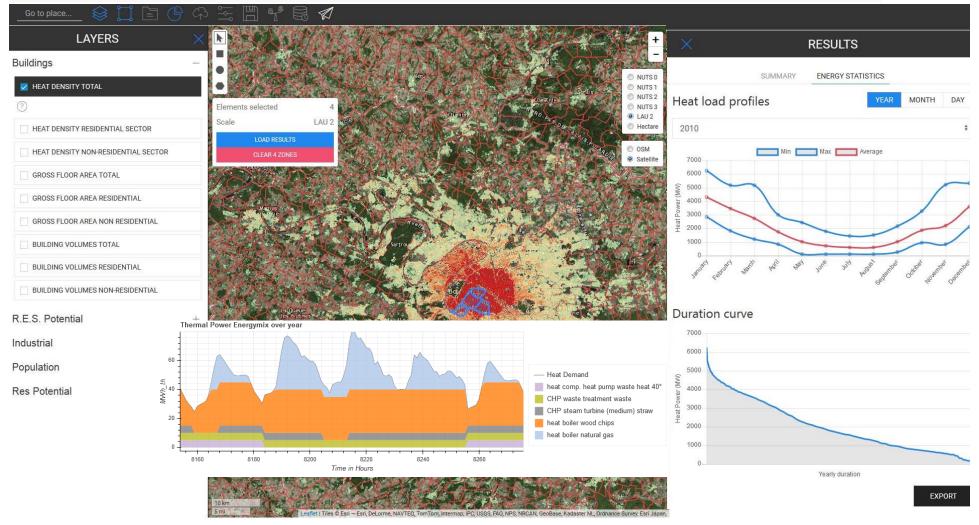
Development of a toolbox that will be:

- User-driven: developed in collaboration with pilot areas
- Open source: the developed tool will run without requiring any other commercial tool or software and the code will be accessible
- EU-28 compatible: the tool will be applicable for cities in all 28 EU Member States

The experts behind the project: 17 partners combining scientific institutions and pilot areas for developing and testing the tool



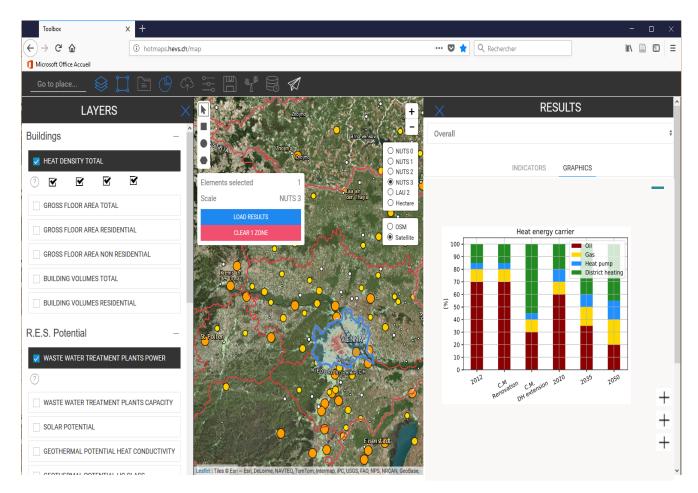
Evaluation of heat load and availability of supply – up to hourly resolution







 Work in progress..... Beta version to be released early 2019 – for more information or to register as a beta user please contact: <u>info@hotmaps-project.eu</u>







- 1. Content of mapping which layers are shown in the toolbox?
- 2. Mapping on different levels from EU28 to hectar level selection features
- 3. Get valuable indicators
- 4. Calculation modules attached to Hotmaps database



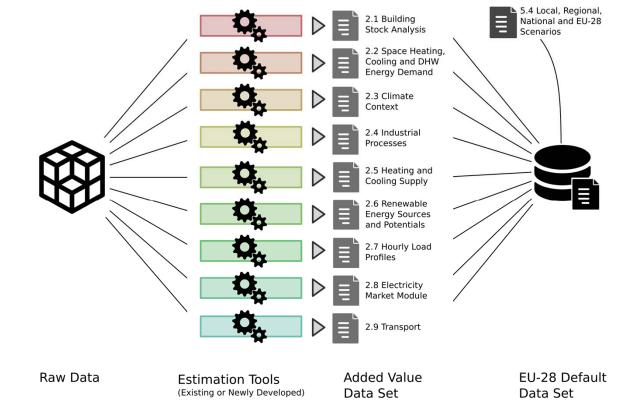


EU – 28 mapping of heat demand and heat supply resources

NETHERLANDS LAYERS GROSS FLOOR AREA TOTAL GROSS FLOOR AREA RESIDENTIAL NUTS NUTS 2 GROSS FLOOR AREA NON RESIDENTIAL NUTS 3 LAU 2 Hectare BUILDING VOLUMES TOTAL BUILDING VOLUMES RESIDENTIAL OSM Satellite BUILDING VOLUMES NON-RESIDENTIAL R.E.S. Potential WASTE WATER TREATMENT PLANTS POWER Hauts de Pre WASTE WATER TREATMENT PLANTS CAPACITY (?) BIOMASS POTENTIAL MUNICIPAL SOLID WASTE Industrial INDUSTRIAL SITES EMISSIONS V INDUSTRIAL SITES EXCESS HEAT Bourgogne-Fran INDUSTRIAL SITES COMPAGNY NAME INDUSTRIAL SITES SUBSECTOR FRANCE Population **Res** Potential



Open EU – 28 dataset



- All datasets available at:
- https://gitlab.com/hotmaps
- D2.3 WP2 Report Open Data Set for the EU28: <u>http://www.hotmaps-project.eu/library/</u>



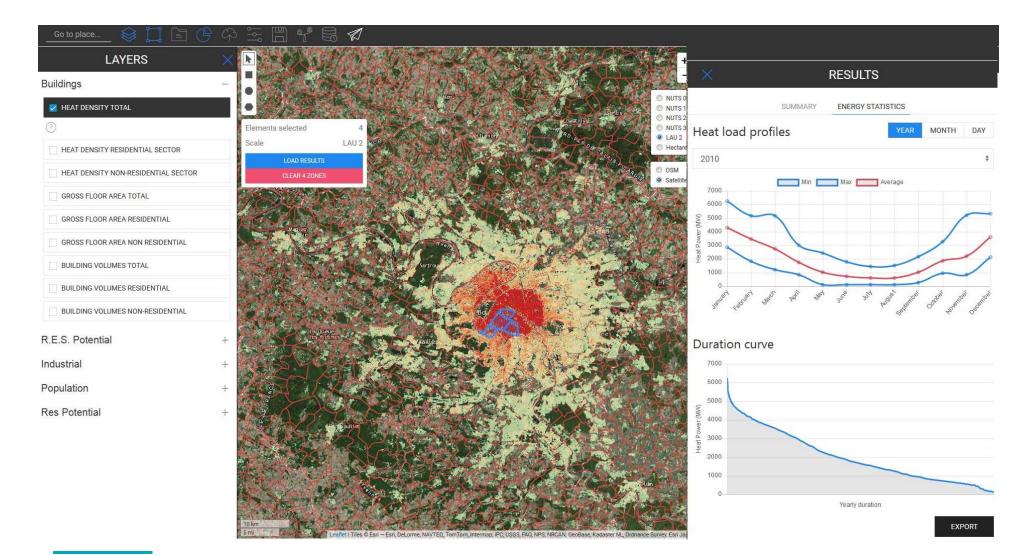


LAYERS RESULTS Buildings Summary NUTS 0 V HEAT DENSITY TOTAL NUTS 1 INFORMATION VALUE NUTS 2 Elements selected NUTS 3 HEAT DENSITY TOTAL LAU 2 Scale LAU 2 HEAT DENSITY RESIDENTIAL SECTOR Hectare 6,511,959.44 MWh Heat consumption O OSM HEAT DENSITY NON-RESIDENTIAL SECTOR Average Heat density 3.055.82 MWh/ha Satellite GROSS FLOOR AREA TOTAL Counting cells with values 2,131.00 cells GROSS FLOOR AREA RESIDENTIAL EXPORT GROSS FLOOR AREA NON RESIDENTIAL BUILDING VOLUMES TOTAL BUILDING VOLUMES RESIDENTIAL BUILDING VOLUMES NON-RESIDENTIAL R.E.S. Potential Industrial Population **Res Potential**

USGS, FAO, NPS, NRCAN, GeoBase, Kadaster NL, Ordnance Survey, Es









4) Final stage: Adding calculation modules

Evaluation of heat load and availability of supply – up to hourly resolution

