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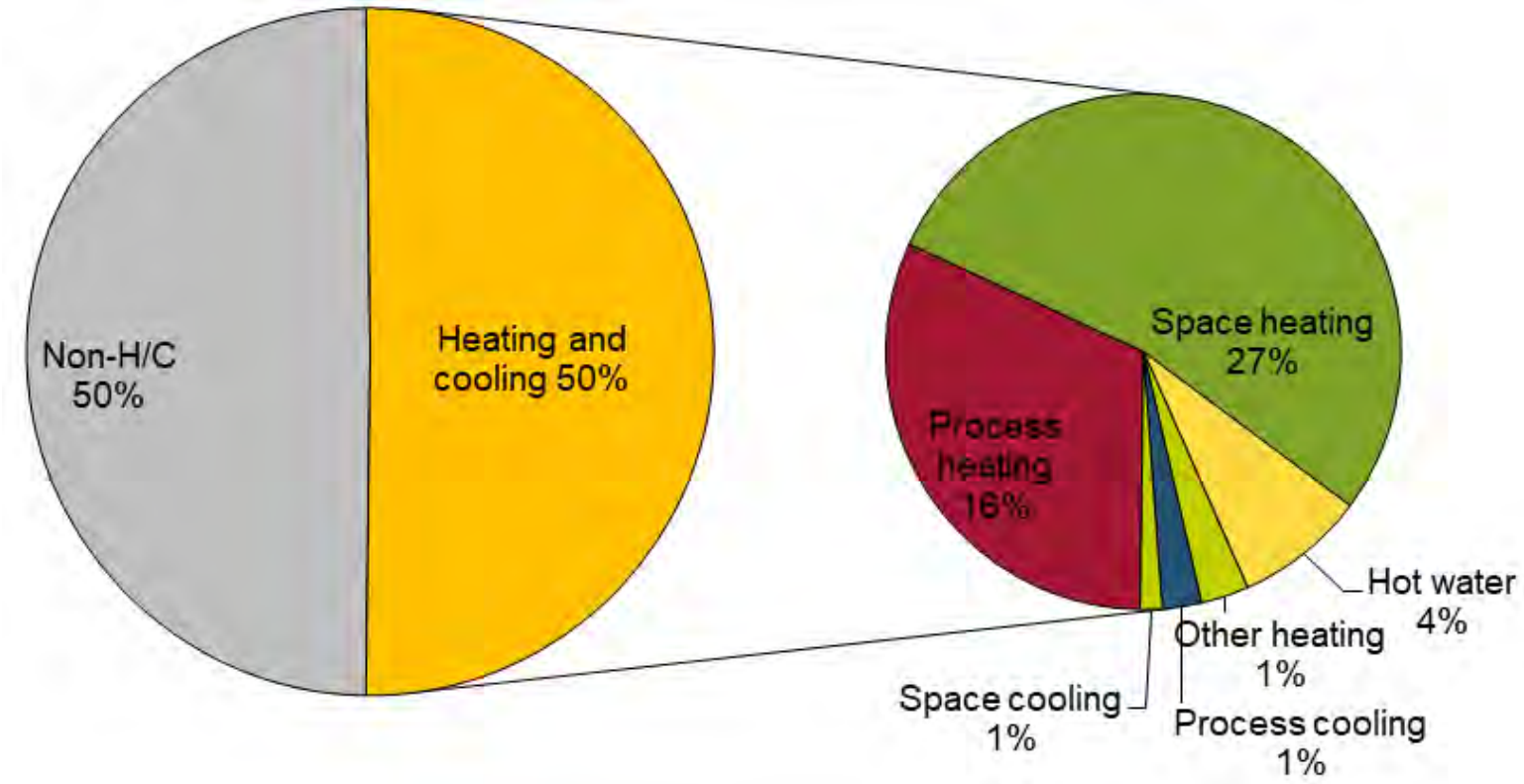
Hotmaps

Heating and Cooling:
Open Source Tool for Mapping and Planning of Energy Systems

Lukas Kranzl
Final Conference, 30 June 2020

Heating and Cooling: Need for transformation

Final energy consumption, EU-28, 2015



Source: Fleiter et al, Heat Roadmap Europe, 2017

Heating and Cooling: Need for transformation

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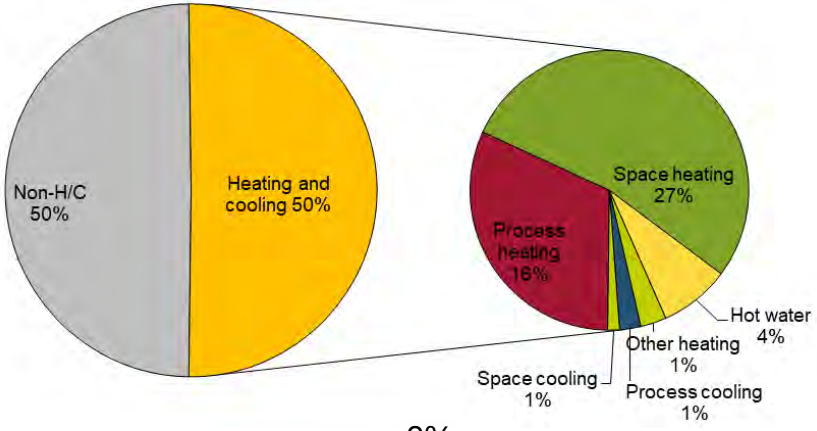
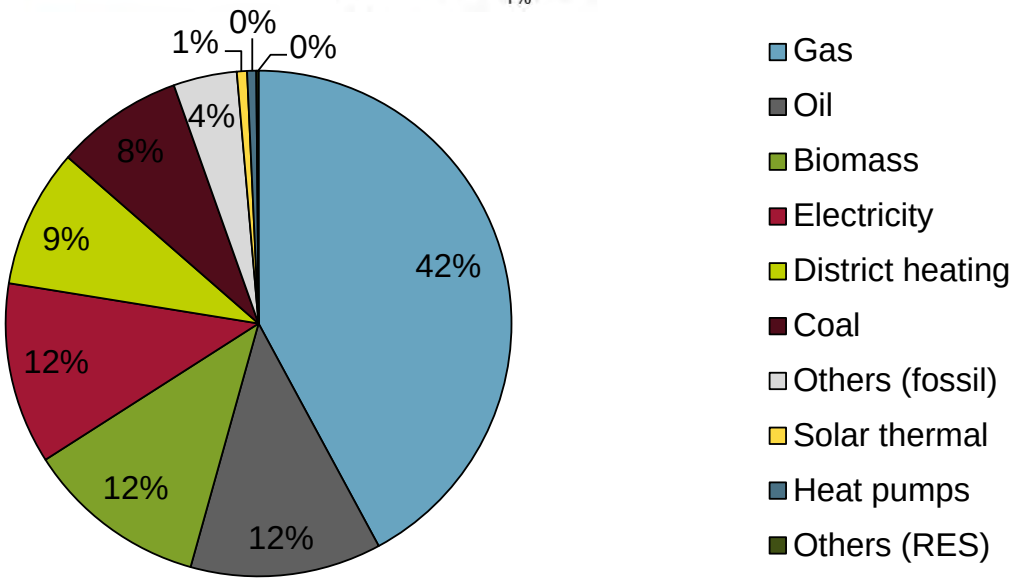




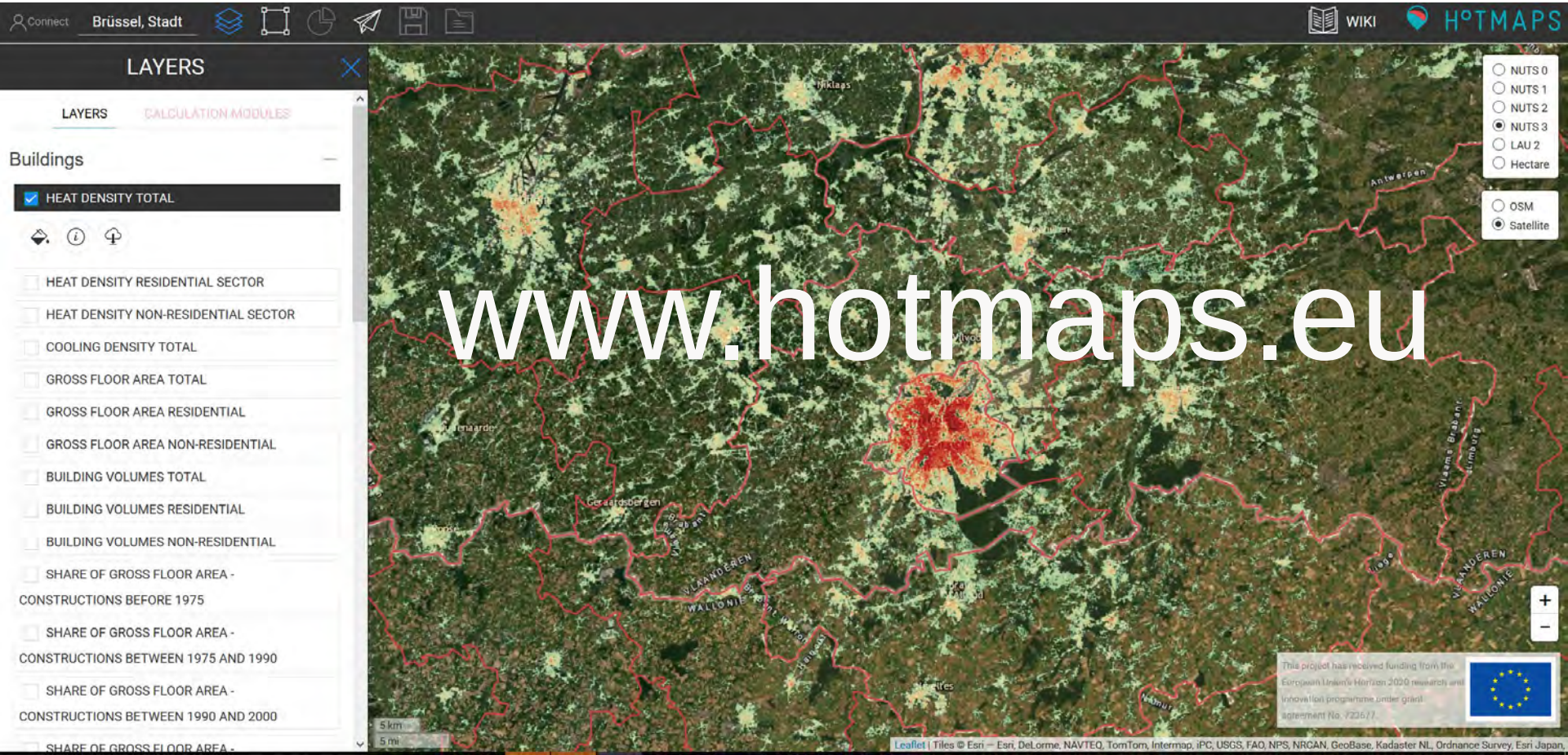
Source: Fleiter et al, Heat Roadmap Europe, 2017

Challenges of local heat planning

- How high is heating and cooling demand in different areas?
- Where are potential and most economic areas for district heating and cooling?
- How high are potentials of building renovation, renewable heating and industrial excess heat?
- What are favourable pathways of decarbonizing the heating sector?

Hotmaps toolbox

Designed to address challenges of strategic heating and cooling planning



Hotmaps offers …

- Starting **data set**
- **Calculation modules** for assessing the potential of renewable heating and comparing future scenarios
- Opportunity to upload and **use own data sets** for your calculations,
- **Training** and support services
- **Customisation of the software** for your specific needs

Hotmaps‘ value added for …

- **City planners:** support for stakeholders engagement, allowing to speed up the process; data-driven decision making tool; support to develop SECAP thanks to forecasting modules
- **Consultants:** open access to data and source codes that you can potentially use for your own tools; calculation modules to perform studies for your clients, possibility to work abroad easily as if offers data for EU 28
- **Utilities:** identify potential areas of interest for projects; easily perform pre-planning studies to be sent to potential customers, share common data with your stakeholders
- **Researchers:** data and methodologies to produce knowledge, development platform for further projects

The experts behind the project

Scientific partners

TU WIEN – Technische Universität Wien | Vienna | Austria

Aalborg Universitet

cem

energycities – Where action & vision meet

Hes·so – Haute Ecole Spécialisée de Suisse occidentale; Fachhochschule Westschweiz; University of Applied Sciences and Arts Western Switzerland

EURAC research

Fraunhofer ISI

ethink Energy Research

PlanEnergi

energy center

Pilot areas for developing and testing the tool

Aalborg Kommune

Ville de Genève

Bistrita Municipality

Stadt Frankfurt am Main – Energiereferat > Die kommunale Klimaschutzagentur

Milton Keynes Council

Kerry County Council – Cumhain, Cabhair, Comhbhrón

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Funded by the Horizon 2020 programme of the European Union

Project duration: October 2016-September 2020

Hotmaps: the key role of pilot areas

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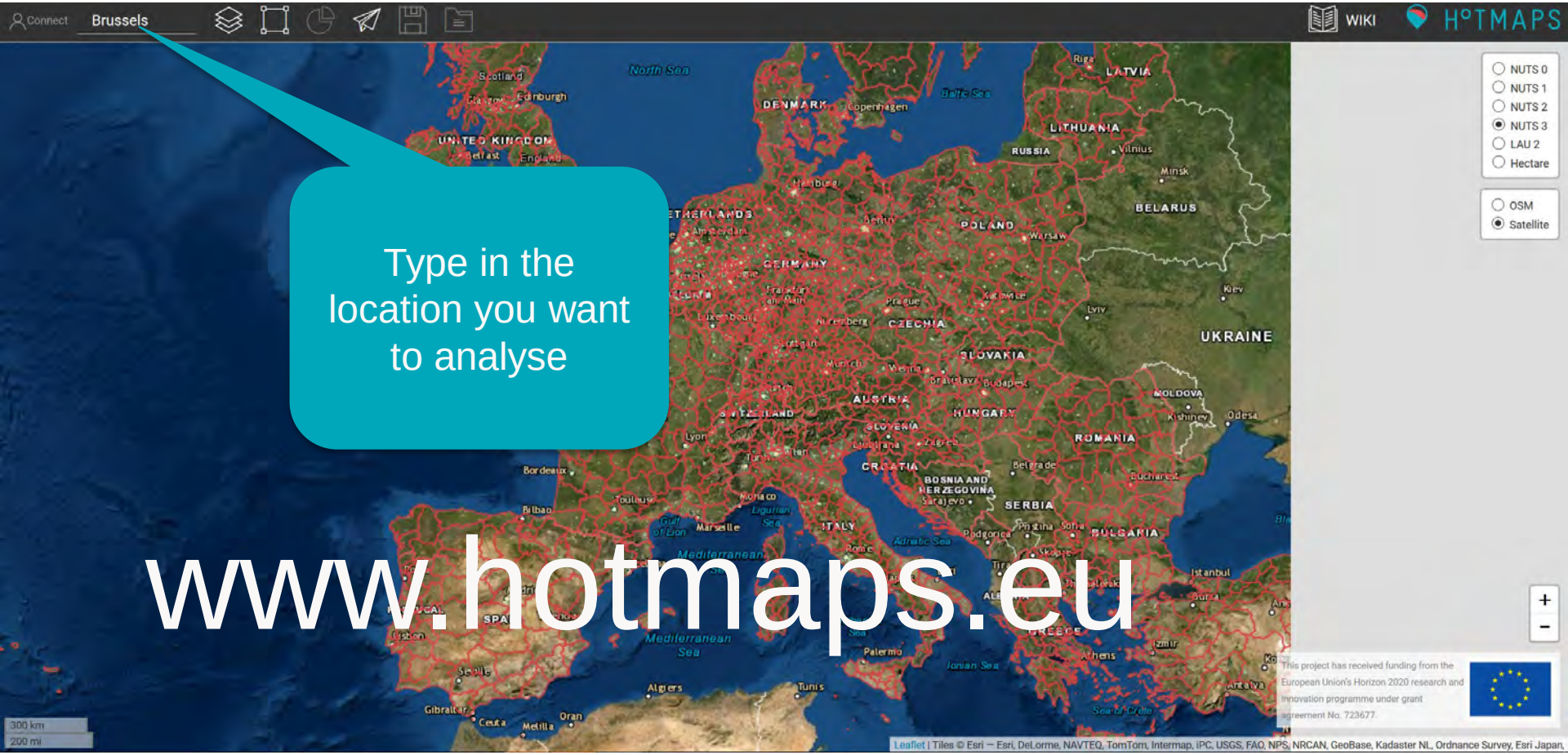
How high is heating and cooling demand in different areas of a region?



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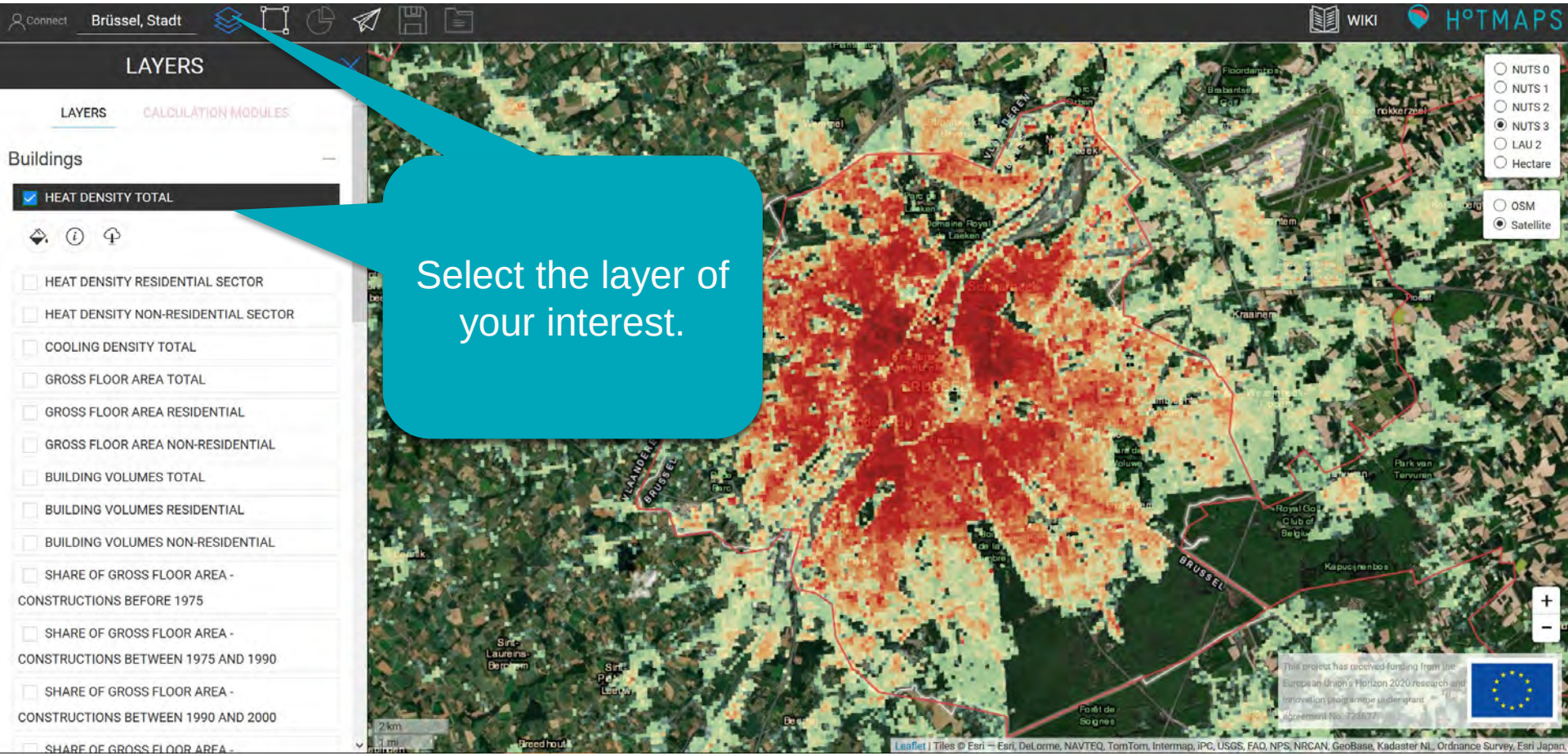

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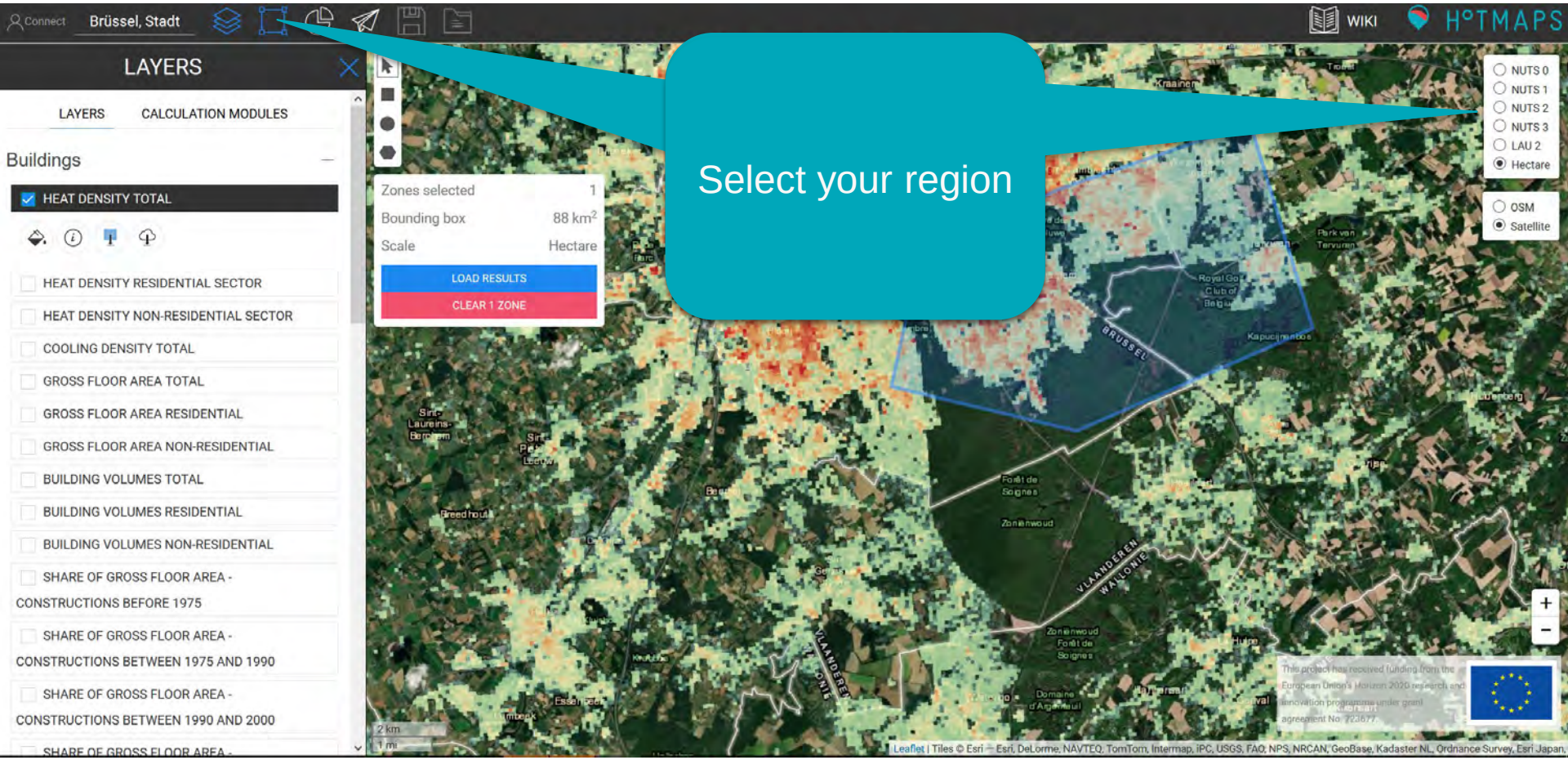

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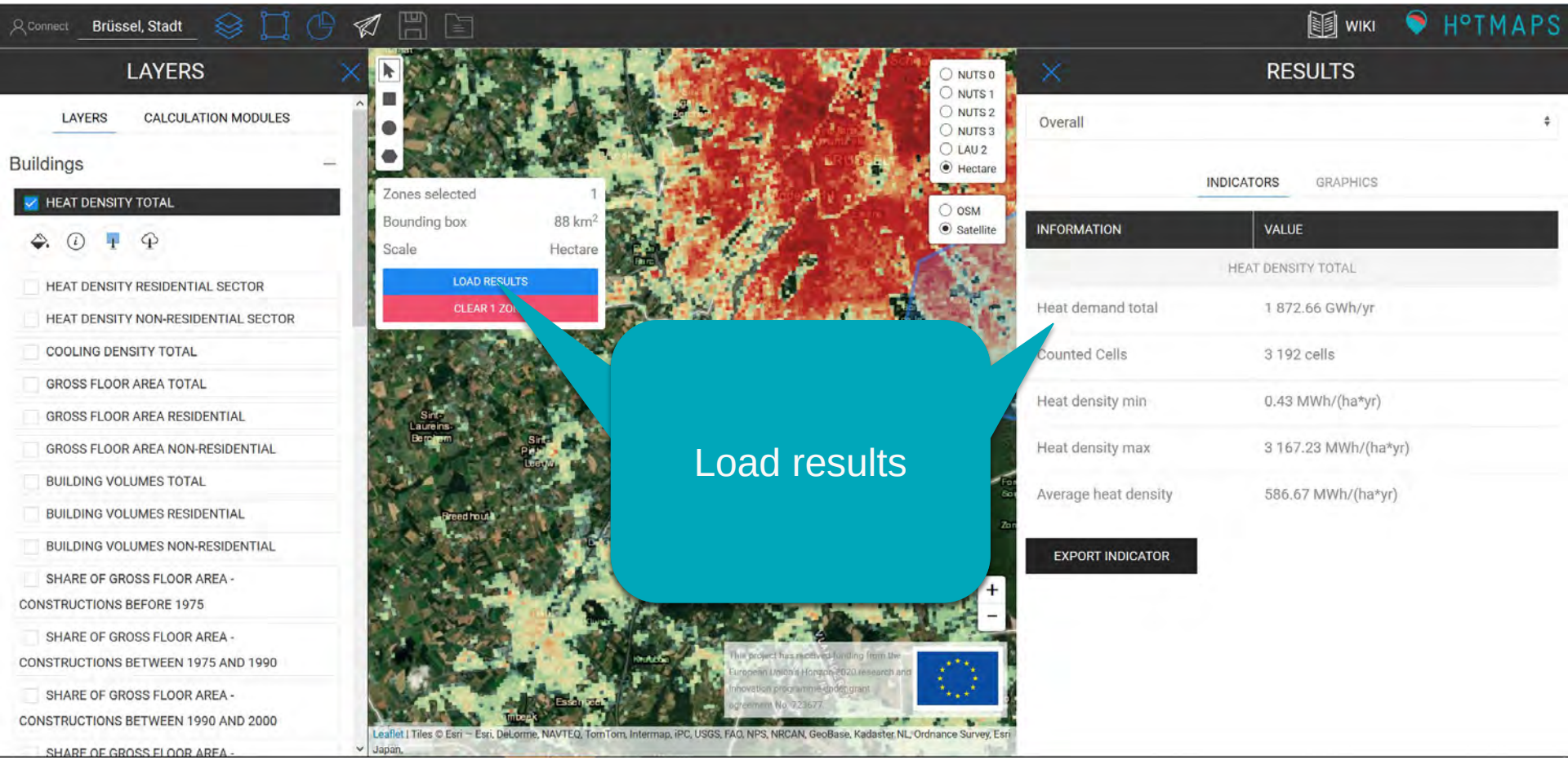
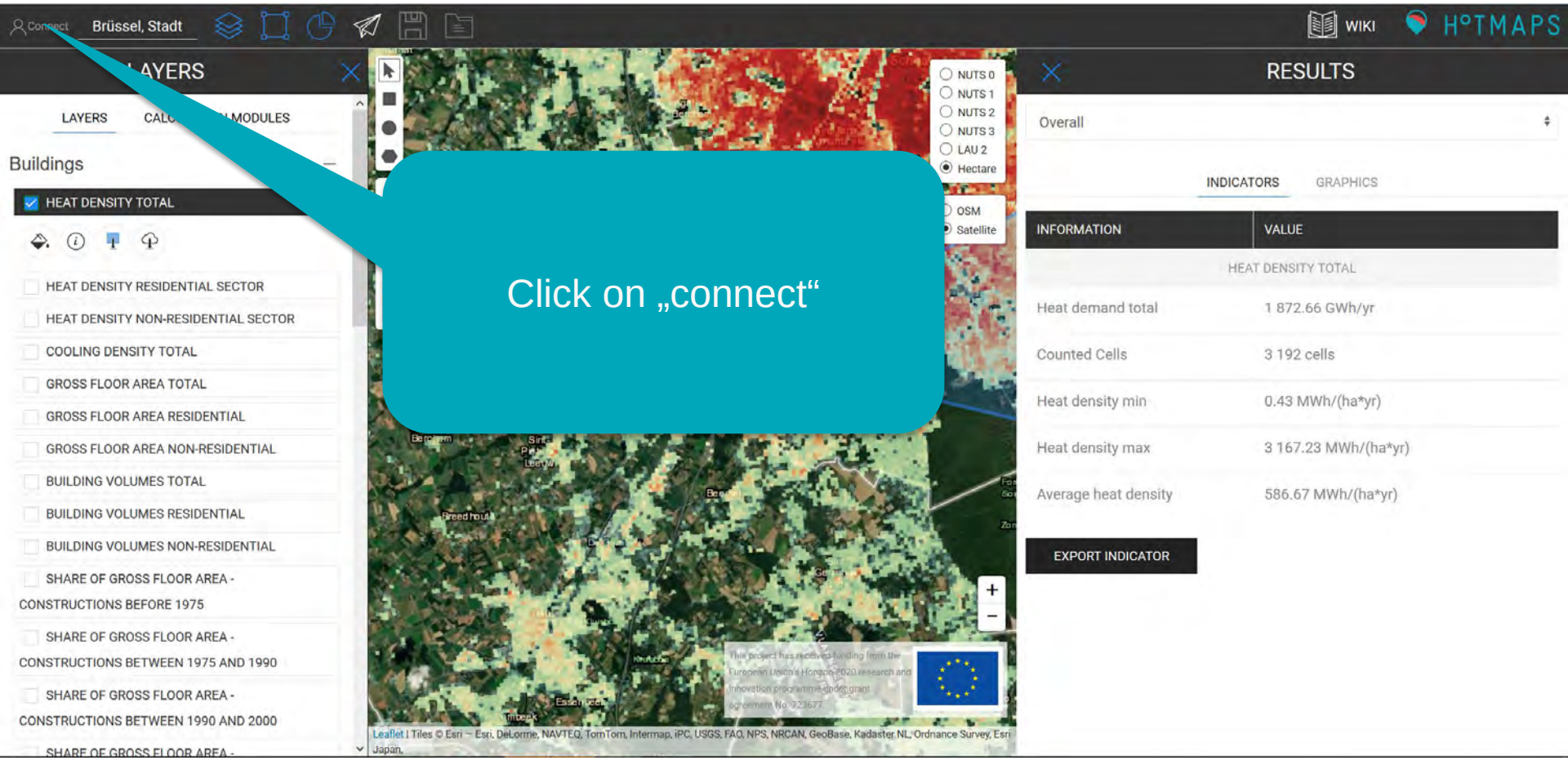


Use your own data



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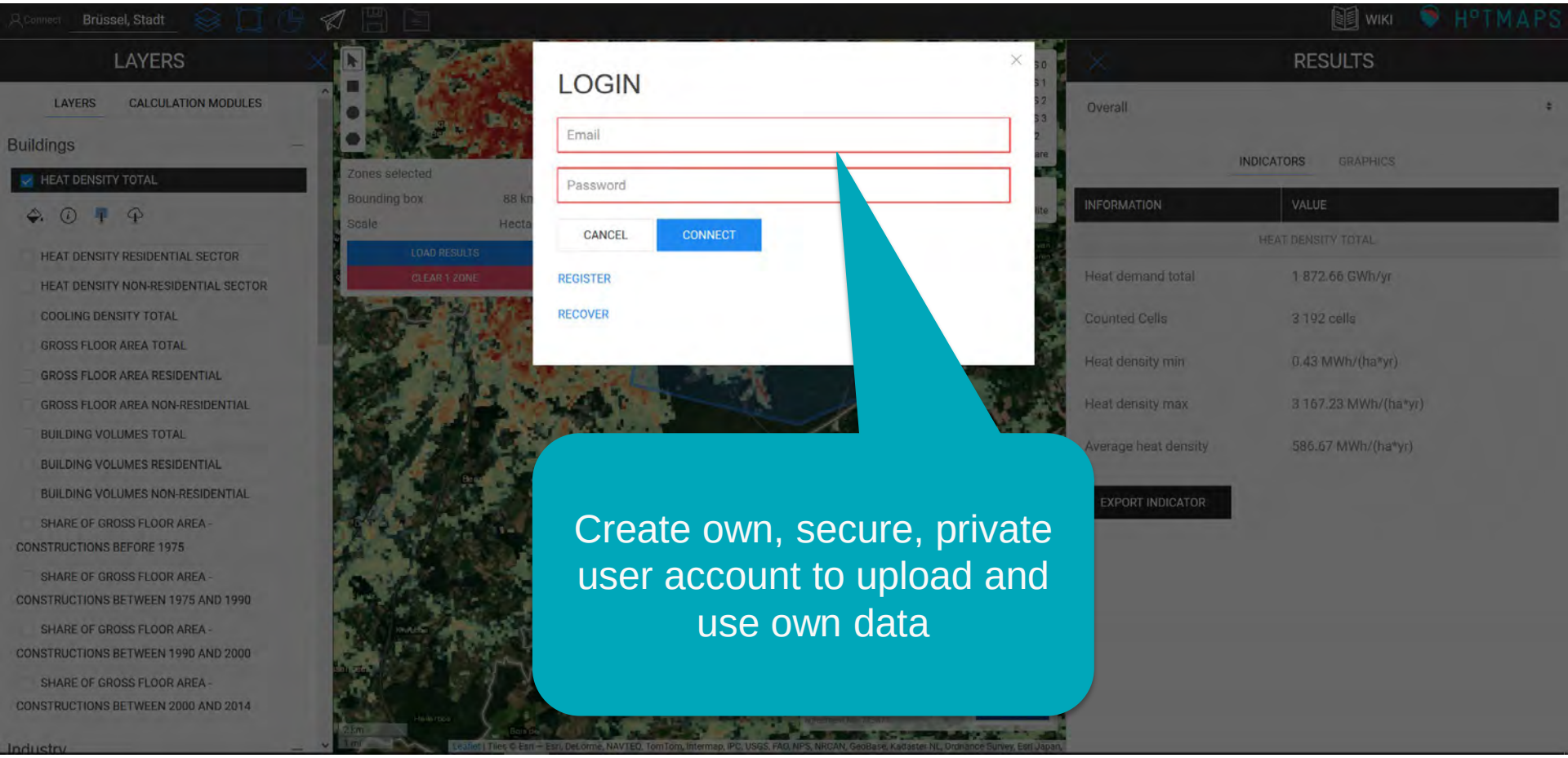
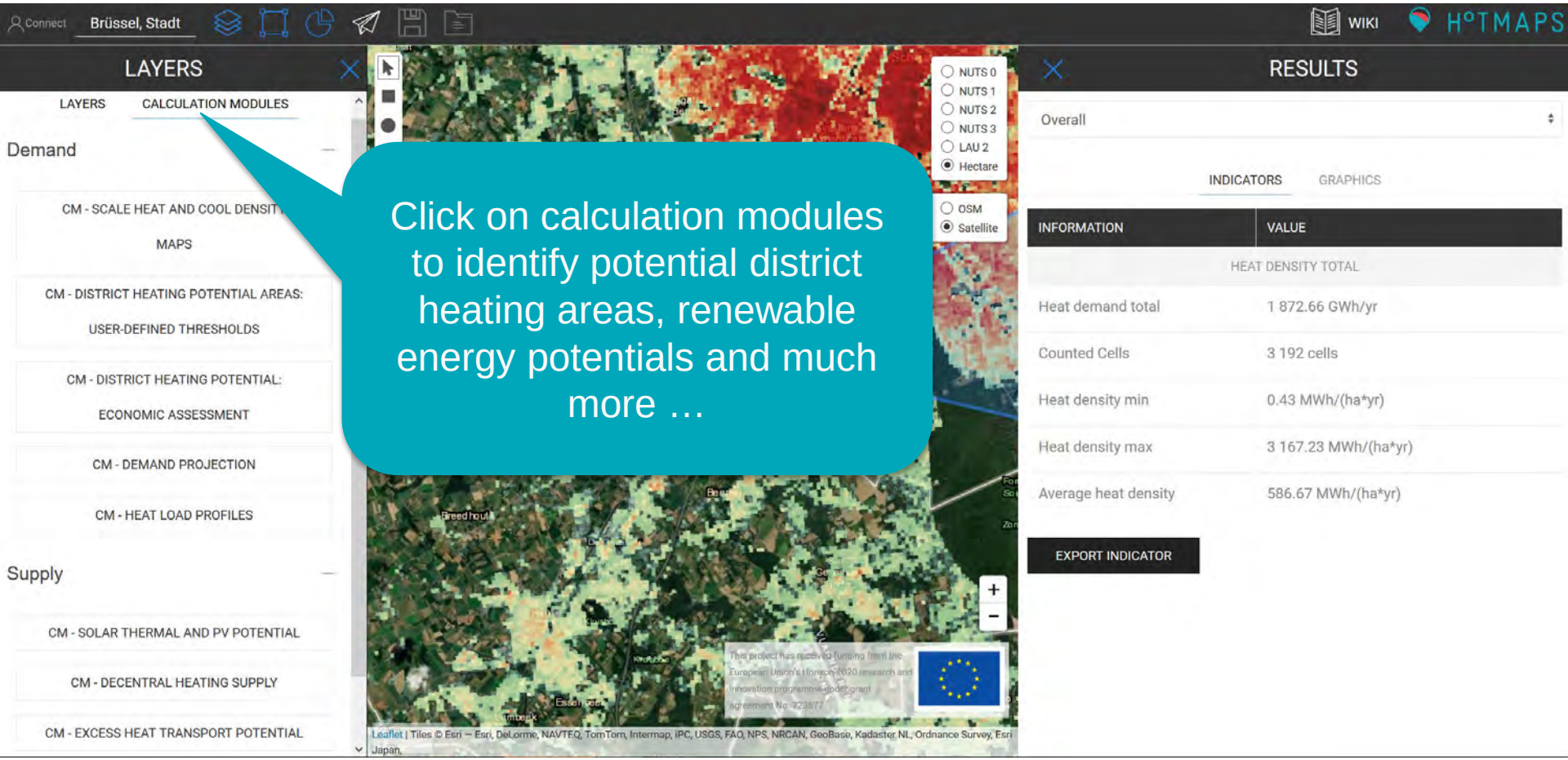
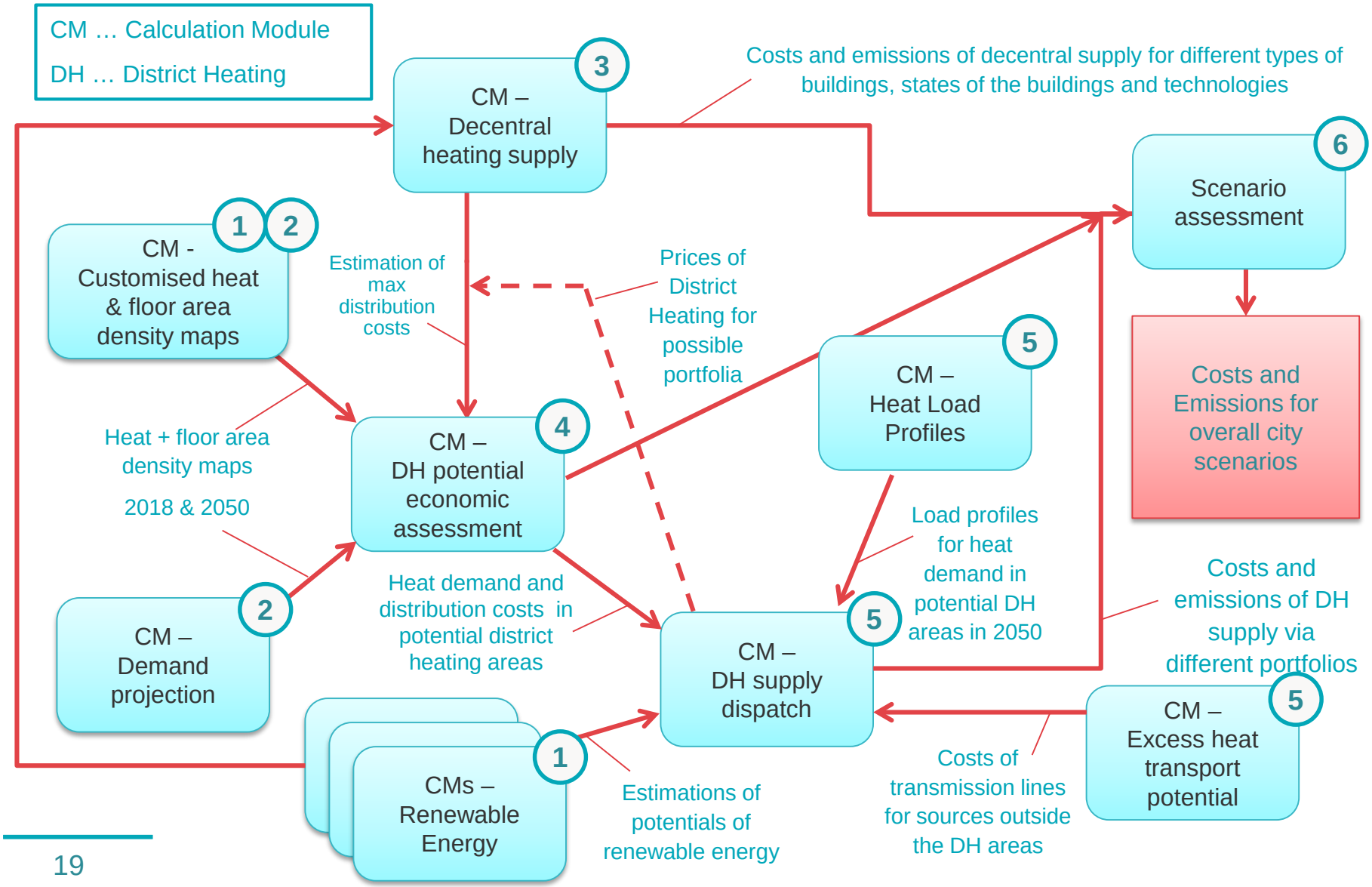


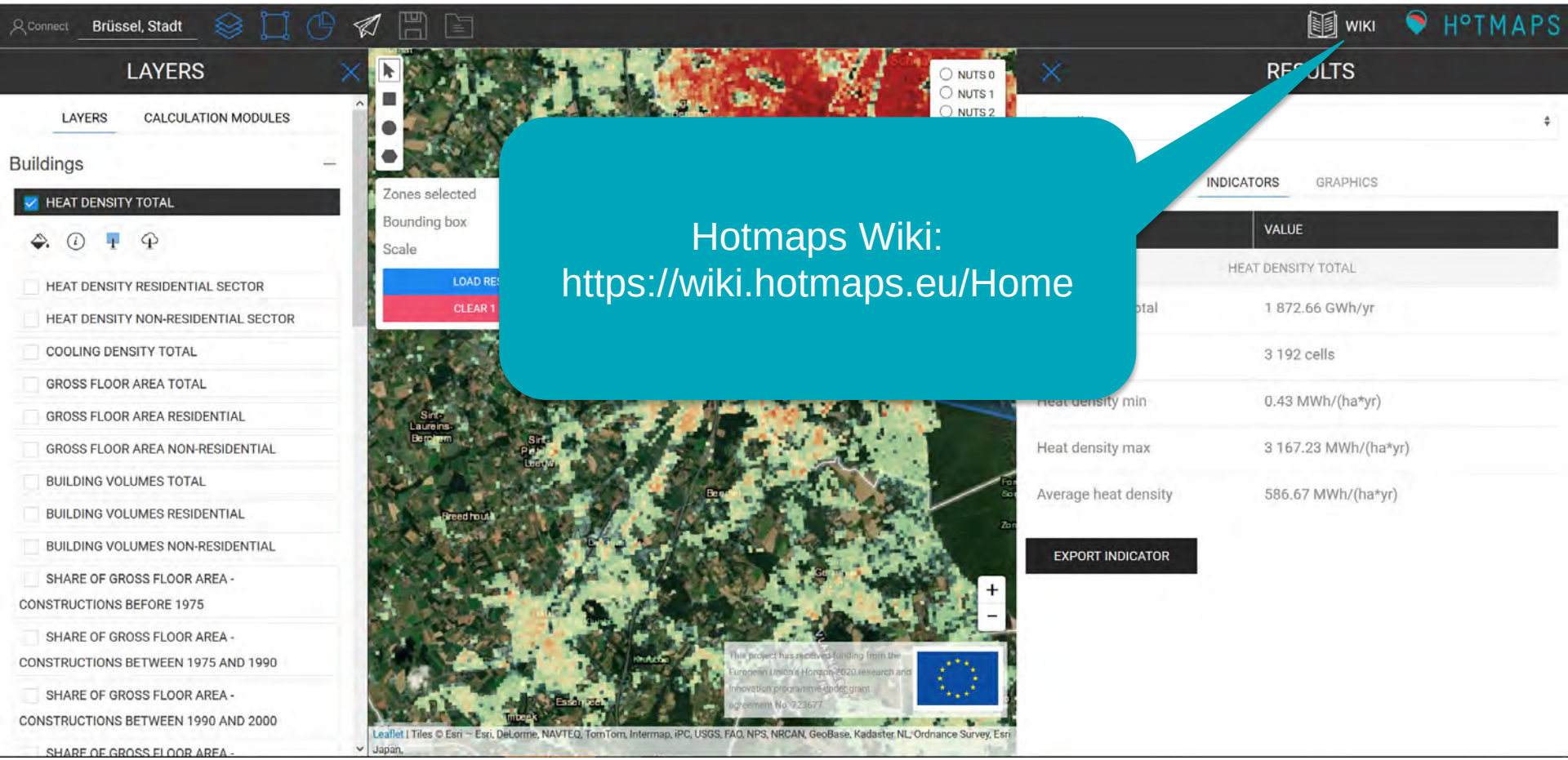
Explore much more ...



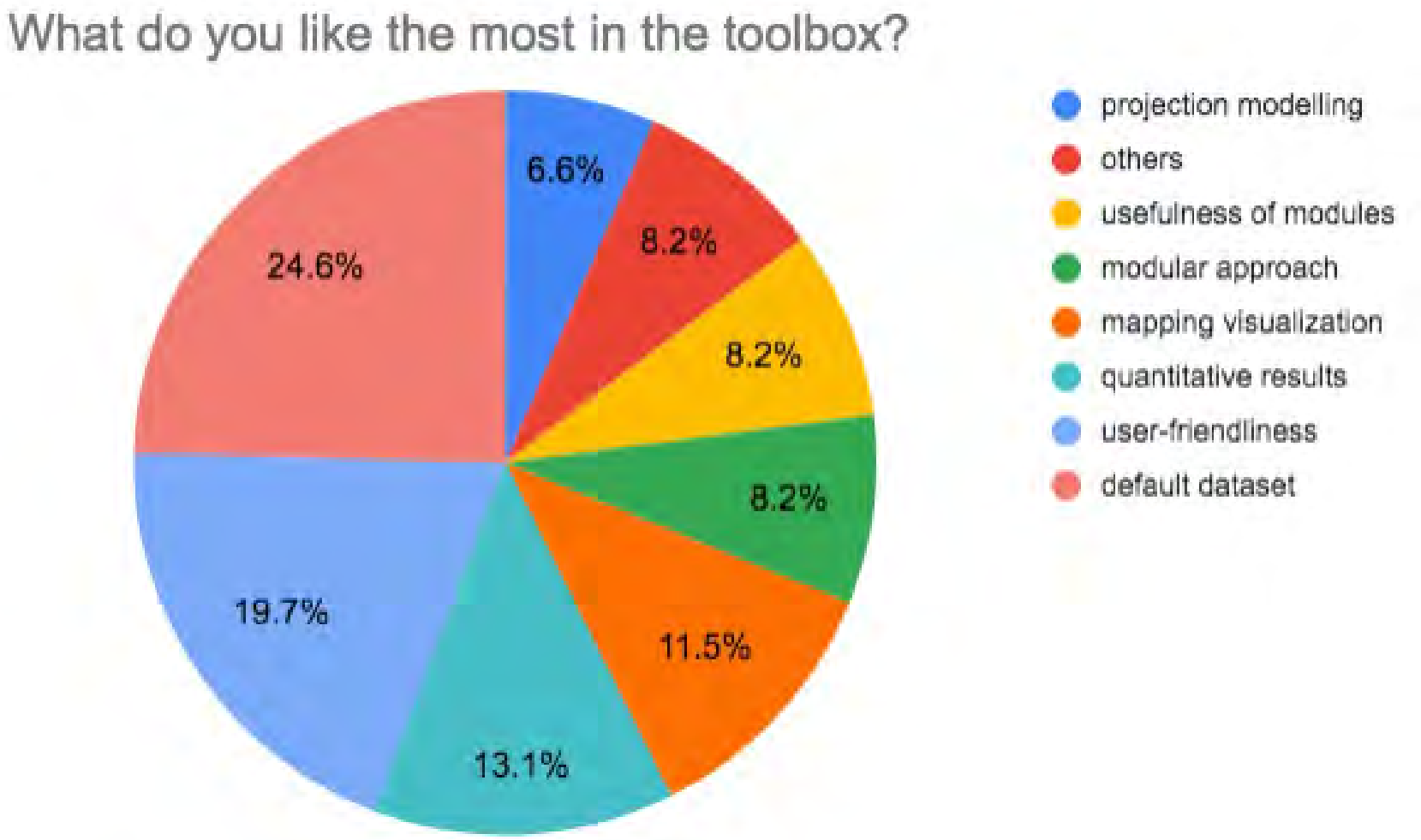
Scenario Toolchain Hotmaps



Need help? Hotmaps Wiki!



What Hotmaps trainees like most …



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Contact

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