



ENER
MAPS

OS FAIR 2021 LIGHTNING TALKS

EMPOWERING THE ENERGY TRANSITION THROUGH
FAIR AND OPEN DATA WITH ENERMAPS



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CREM



The EnerMaps project has received funding from the European Union's Horizon 2020 research and innovation programme under [grant agreement N°884161](#)

 [EnerMaps.eu](https://enermaps.eu)



EMPOWERING YOUR ENERGY TRANSITION!

THROUGH THE INCREASE OF **FAIR** ENERGY DATA:

- **FINDABLE**
- **ACCESSIBLE**
- **INTEROPERABLE**
- **REUSABLE**





ENERMAPS SORTS OUT THE INFORMATION



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WHO CAN USE ENERMAPS?

- Energy research
- Public administration
- Energy planners, utilities managers and consultants
- Policy decision makers
- Data providers



ENERMAPS – THE CONSORTIUM



REVOLVE



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OBJECTIVES

- 1 **Centralise** energy datasets
- 2 **Improve** the accessibility of scientific datasets
- 3 **Ensure** the quality of the datasets
- 4 **Facilitate** using EnerMaps tool through action-learning techniques





ENER
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ENERMAPS DATA MANAGEMENT TOOL DEMONSTRATION

Cédric Serugendo, Crem

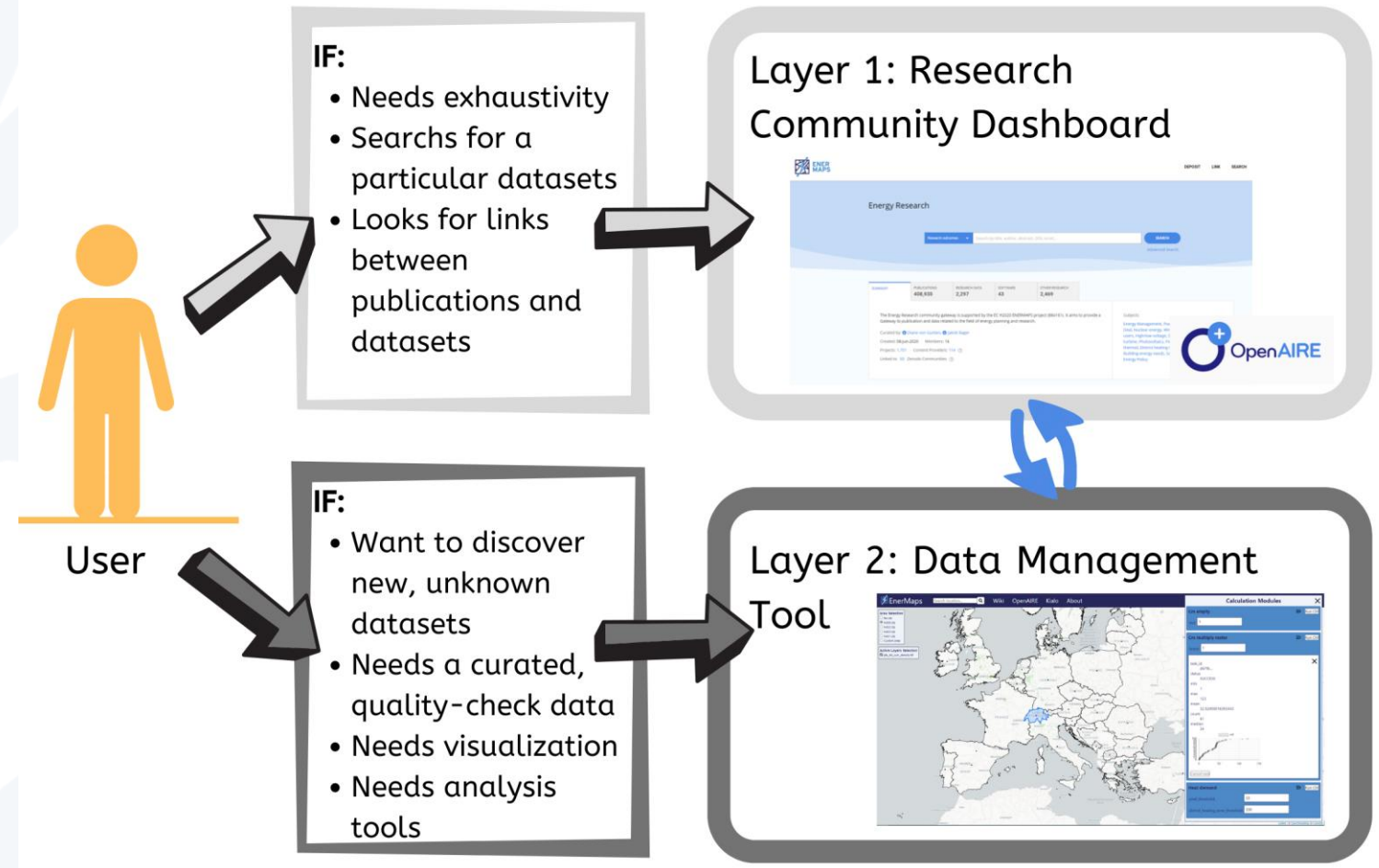


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OUR CONCEPT



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Research outcomes ▾

Search by title, author, abstract, DOI, orcid...

SEARCH

Advanced Search

SUMMARY

PUBLICATIONS

1,031,475

RESEARCH DATA

13,843

SOFTWARE

151

OTHER RESEARCH

49,230

FEATURED DATASETS

38

EnerMaps Open Data Management Tool aims to **improve data management** and **accessibility** in the field of **energy research** for the **renewable energy industry**.

EnerMaps' tool accelerates and facilitates the energy transition offering a qualitative and user-friendly digital platform to the energy professionals.

The project is based on the **FAIR data principle** which requires data to be **Findable, Accessible, Interoperable** and **Reusable**.

EnerMaps project coordinates and enriches existing energy databases to promote **trans-disciplinary research** and to develop partnerships between researchers and the energy professionals.

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Website: <https://enermaps.eu/>

Subjects

[geothermal energy](#), [clean energy](#), [Power2gas](#), [climate finance data](#), [Nuclear energy](#), [SECAP](#), [Wind energy](#), [Power2X](#), [sustainable energy](#), [energy consumption](#), [gross floor area](#), [Photovoltaics](#), [climate change](#), [Energy data](#), [building efficiency](#), [SEAP](#), [Building energy needs](#), [sustainability](#), [Thermal energy](#), [electrical supply](#)





Research outcomes ▼ photovoltaic power × SEARCH
Advanced search

Filters

Energy Research × Open Access

Access Mode (1) Clear

Open Access (7,499)

Result Types (4)

Publications
 Research data
 Software
 Other research products

Year range

- ▶

[THIS YEAR](#) | [LAST 5 YEARS](#) | [LAST 10 YEARS](#)

Funder (19)

European Commission (291)
 National Science Foundation (42)
 Natural Sciences and Engin... (28)
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Results per page: **10** ▼ Sort by: **Relevance** ▼ [Download Results](#)

7,499 RESEARCH OUTCOMES, PAGE 1 OF 750 1 2 3 4 5 >

Research Data . 2019
Northern Hemisphere Horizontal Photovoltaic Power Output Data for 12 Sites
OPEN ACCESS
Authors: Williams, Jada; Wagner, Torrey;
Persistent Identifiers
DOI: [10.17632/hfhwmn8w24.5](https://doi.org/10.17632/hfhwmn8w24.5) [10.17632/hfhwmn8w24.4](https://doi.org/10.17632/hfhwmn8w24.4)
This dataset accompanies the paper "Machine Learning Modeling of Horizontal Photovoltaics Using Weather and Location Data" submitted to the Journal of Renewable Energy. This file contains power output from horizontal photovoltaic panels located at 12 Northern hemisphere...
[+ Add to ORCID](#)

Research Data . 2019
Data for: The Effect of Pollutants on Leakage Current and Power Degradation of Photovoltaic Modules
OPEN ACCESS
Authors: wang, ning





Research outcomes ▾ Search by title, author, abstract, DOI, orcid... **SEARCH**
Advanced Search

SUMMARY	PUBLICATIONS 1,031,475	RESEARCH DATA 13,843	SOFTWARE 151	OTHER RESEARCH 49,230	FEATURED DATASETS 38
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Featured Datasets

Here are listed some of the most important energy datasets as selected by energy experts.
Check them if you want to easily explore and visualize the European energy landscape, using only well-known datasets which you can trust.



Research Data . 2021
Electricity Production Capacity
[OPEN ACCESS](#)
Authors: Electricity Map;
Publisher: Electricity Map
Installed electricity production capacity per country.

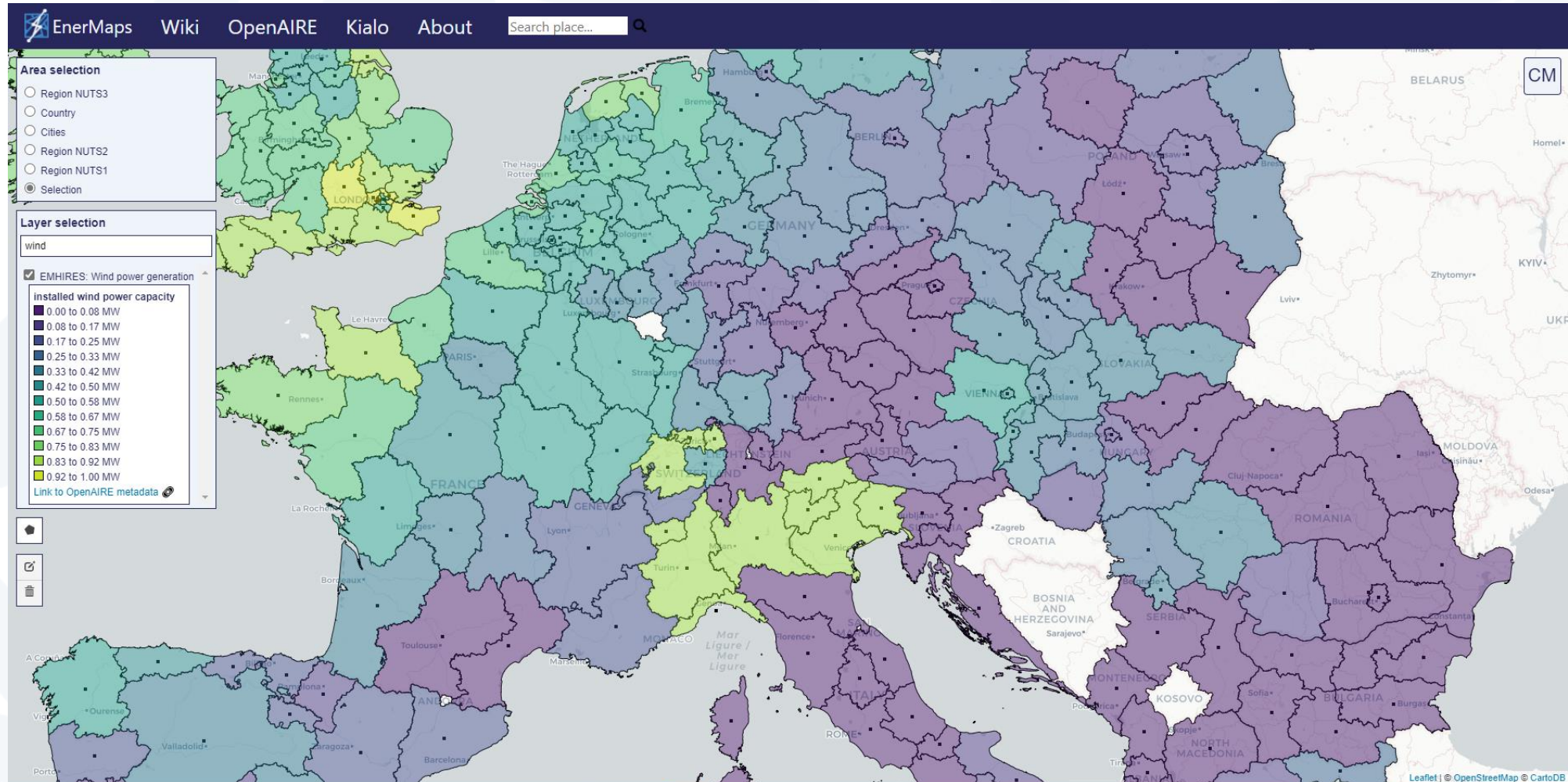


Research Data . 2021
Eurostat: Local Administrative Units Population
[OPEN ACCESS](#)





DATA MANAGEMENT TOOL



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DATA MANAGEMENT TOOL



Area selection

- Region NUTS3
- Country
- Cities
- Region NUTS2
- Region NUTS1
- Selection

Layer selection

heat demand

- 2197.19 to 2511.07 MWh/ha (MWh/10.000 m²)
- 2511.07 to 2824.96 MWh/ha (MWh/10.000 m²)
- 2824.96 to 3138.84 MWh/ha (MWh/10.000 m²)
- 3138.84 to 3452.73 MWh/ha (MWh/10.000 m²)
- 3452.73 to 3766.61 MWh/ha (MWh/10.000 m²)
- [Link to OpenAIRE metadata](#)

Calculation Modules

Multiply raster Run CM

factor: 1

District heating potential Run CM

Heat demand in hectare (MWh/ha): 500

Heat demand in a DH zone (GWh/year): 30

task_id 84e21...

status SUCCESS

Total district heating potential (GWh) 3002.94

Total heat demand (GWh) 4484.08

Potential share of district heating from total demand in selected zone (%) 66.97

Areas potentials (GWh)

Zone	Potential (GWh)
Zone 1	~1000
Zone 2	~1000
Zone 3	~1000
Zone 4	~1000
Zone 5	~1000
Zone 6	~1000

Cm empty Run CM

factor: 1



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THANK YOU VERY MUCH FOR YOUR ATTENTION

Follow our project



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