

### What is the Hotmaps toolbox?

Heating and cooling in residential and industrial sectors accounts for half of the EU's energy consumption, but more than 80% of this energy is still generated from fossil fuels. Meanwhile, heat losses are also significantly high. This sector needs to be transformed!

Hotmaps is a website, which allows you to provide within 5 minutes a first estimation of heating and cooling demand in your region and the potentials of local renewable energy to cover this demand. By using more detailed data, thanks to its calculation modules, you can elaborate comprehensive heating and cooling strategies.

What we offer is an open source online software that supports planning processes of the energy sector on the local level in a transparent manner, thanks to:

- a starting data set,
- customisations of the software for your specific needs,
- training and support services.

We applied and demonstrated the values of Hotmaps in seven pilot areas. The software was developed by leading research institutions across Europe together with cities. <u>Go on the website</u> and discover your city's climate neutral energy future.

## What is the "Hotmaps follower" training you will get?

In the Hotmaps follower training you will learn to apply the Hotmaps database and toolbox for developing scenarios for future heating and cooling in your region. The training guides you through the Hotmaps toolchain and you will set up scenarios for a selected region in five steps:

- 1. Mapping of heat demand and resource potentials
- 2. Calculation of decentral heat supply costs
- 3. Calculation of district heating supply costs
- 4. Calculation of district heating distribution costs
- 5. Setting up of consistent scenarios for the region

The training will start with a **preparatory webinar** (Mon 27<sup>th</sup> April 2020, 10:00 – 11:00):

- 1. Detailed explanation of the training programme and guiding materials
- 2. Link to short clips to watch before answering the questionnaire by end of the week

Intensive training days (Mon 4<sup>th</sup> May – Mon 11<sup>th</sup> May 2020):

- 1. Performance of the Hotmaps 5 step process for generating scenarios of future heating and cooling for a selected region one exercise (of around 1 2 hours) for each step
- 2. Explanation and guide through the exercises in 3 intro/wrap up sessions (one session for all participants)



- 3. Optional Q&A / support slots each day for meeting with the trainers (several meeting rooms with one trainer each)
- 4. Flexible structure to perform exercises in between
- 5. Deadline for uploading the filled training materials until Monday 11<sup>th</sup> 4 PM

Wrap up and final remarks (Tue  $12^{th}$  May 15:00 - 16:30)

- 1. Joint discussion of the learnings of the process
- 2. Feedback to the training

The following figures show the detailed schedule of the Hotmaps e-training.

Not Hotmaps- related	Webinar - explanation session of exercises (E1-5)	Participants perform exercises on their own (1-2h/exercise)	Optional Support session	Deadline
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Week 1/3	eLearning - training agenda				
Hotmaps Training concept	Monday 27/04	Tuesday 28/04	Wednesday 29/04	Thursday 30/04	Friday 01/05
09:00-09:30					
09:30-10:00					
10:00-10:30	"Preparatory"				
10:30-11:00	webinar: Welcome and introduction				
11:00-11:30					
11:30-12:00					
Lunch / break					
13:00-13:30					
13:30-14:00					
14:00-14:30					
14:30-15:00					
15:00-15:30					
15:30-16:00					Deadline 16:00:
16:00-16:30					Questionnaire, data



Week 2 / 3	eLearning - training agenda				
Hotmaps Training concept	Monday 04/05	Tuesday 05/05	Wednesday 06/05	Thursday 07/05	Friday 08/05
09:00-09:30	Intro: E1/2	o: E1/2 Exercise 1/2 Wrap up: E 1/2 Intro: E 3/4		5 . 2/4	
09:30-10:00			Exercise 3/4		
10:00-10:30	Exercise 1/2	Commont		Support	Exercise 5 / additional runs
10:30-11:00		Support			
11:00-11:30		Eversise 1/2	Exercise 3/4	Exercise 3/4	
11:30-12:00		Exercise 1/2			
Lunch / break					
13:00-13:30	5 . 4/2	Eversise 1/2	Exercise 3/4	Exercise 3/4	
13:30-14:00	Exercise 1/2	Exercise 1/2 Exercise	Exercise 3/4	5/4 Exercise 5/4	
14:00-14:30	Comment	Cupport	Cupport	Cupport	
14:30-15:00	Support	Support	Support	Support	Exercise 5 / additional runs
15:00-15:30	Exercise 1/2			Wrap up: E 3/4 Intro: E 5	
15:30-16:00		Exercise 1/2	Exercise 3/4		
16:00-16:30					

Week3/3	eLearning - training agenda				
Hotmaps Training concept	Monday 11/05	Tuesday 12/05	Wednesday 13/05	Thursday 14/05	Friday 15/05
09:00-09:30	Exercise 5 / additional runs				
09:30-10:00					
10:00-10:30	Support				
10:30-11:00					
11:00-11:30	Exercise 5 / additional runs				
11:30-12:00					
Lunch / break					
13:00-13:30					
13:30-14:00	Exercise 5 / additional runs  DEADLINE FOR UPLOAD: 16:00				
14:00-14:30					
14:30-15:00					
15:00-15:30					
15:30-16:00		FOR Wrap up E 5 and final remarks			
16:00-16:30					



## What are the benefits of the "Hotmaps follower" training?

- 1. You will be trained for free!
- 2. You will learn how to develop heating and cooling scenarios for one area, which will allow you to develop comparable scenarios for your city/area of interest, using your own datasets.
- 3. You will receive a **training certificate**, if you have filled out the questionnaire at the end of the 1<sup>st</sup> week and uploaded the filled training materials at the end of the intensive training days.
- 4. You will be one of the first to learn how to use Hotmaps (software, default EU-28 datasets etc. ...).
- 5. Your trainer will be available at pre-defined **support slots throughout the intensive training** days. The trainers will then be available for question and additional support.

#### Requirements for participating in the training

- 1. If you work for a local, regional and or national authority that is responsible for heating and cooling topics or if you are a planner or consultant in this field, the training is made for you.
- 2. You should have an overview of technical characteristics of heating and cooling supply and demand systems. Furthermore, you should be used to work with data and calculations on the computer.
- 3. You should be available to follow the introductory and wrap up sessions and have time to perform the exercises in between (around 1-2 hours per exercise).

# Registration for the training

Please register using this link.

# Any question?

Contact: Marcus Hummel, e-think, <a href="https://hummel@e-think.ac.at">hummel@e-think.ac.at</a>, +43/(0)670/7015799



### The Hotmaps project

The EU-funded project Hotmaps aims at designing a toolbox to support public authorities, energy agencies and urban planners in strategic heating and cooling planning on local, regional and national levels, and in line with EU policies.

In addition to guidelines and handbooks on how to carry out strategic heating and cooling (H&C) planning, Hotmaps will provide an Heating & Cooling planning software that is

- User-driven: developed in close collaboration with 7 European pilot areas.
- Open source: the developed tool and all related modules will run without requiring any other commercial tool or software. Use of and access to Source Code is subject to Open Source License.
- **EU-28 compatible**: the tool will be applicable for cities in all 28 EU Member States

#### The consortium behind

#### Scientific partners





















#### Pilot areas for developing and testing the tool

















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