

Promote Geothermal District Heating Systems in Europe

GeoDH Training Sessione sulla geotermia

Manuale per l'utilizzo della mappa web del progetto GeoDH

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Presentato da:

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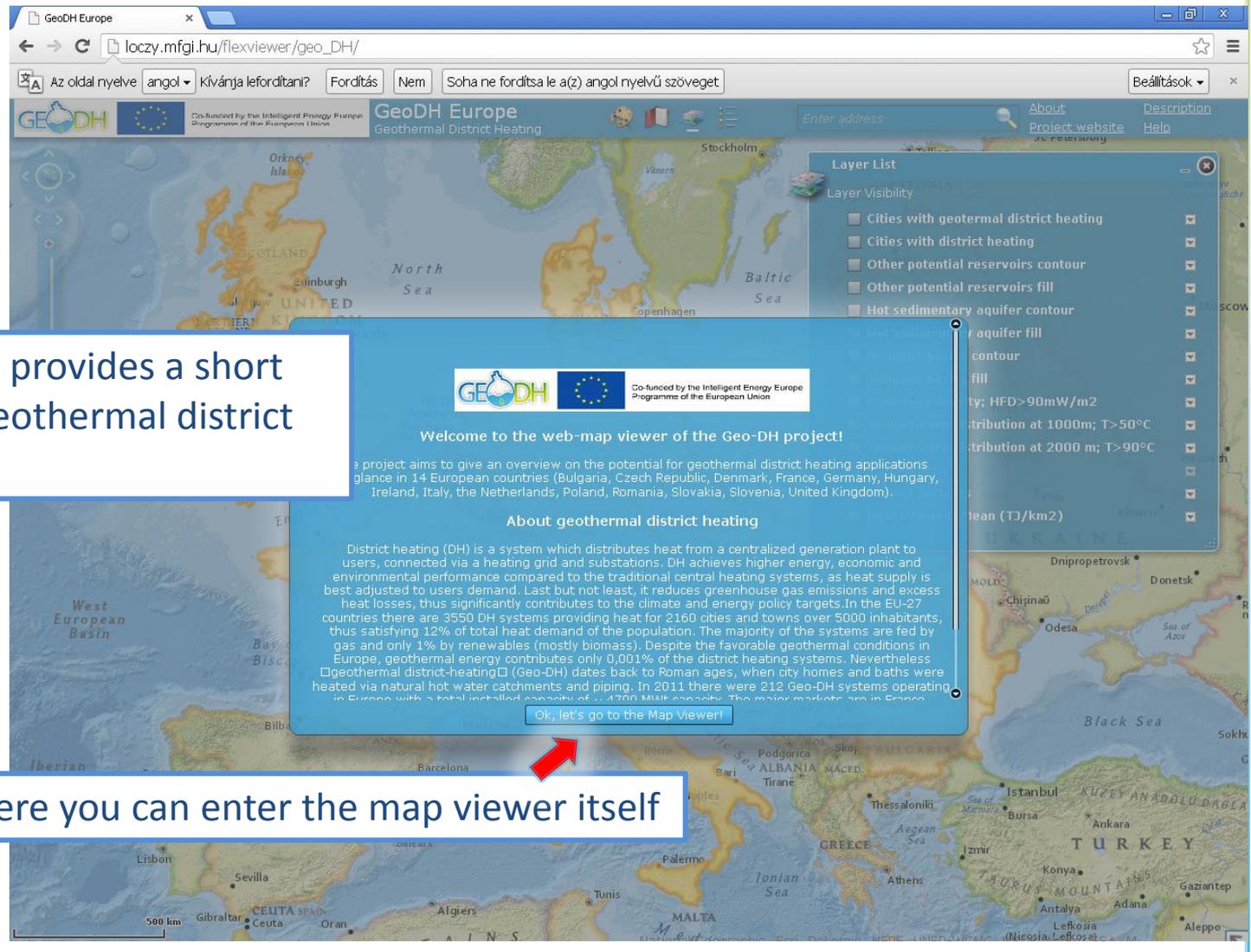


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Programme of the European Union



The aim of the web-map viewer is to provide a European scale overview on the deep geothermal potential of the partner countries combining with the existing heat demand in an interactive way, thus showing best potential areas for future geo-DH developments.

The viewer is available at: loczy.mfgi.hu/flexviewer/geo_DH



The opening page provides a short information on geothermal district heating.

By clicking here you can enter the map viewer itself

By clicking on HELP, you get an easy overview on the use

The screenshot shows the GeoDH Europe web application interface. At the top, there is a navigation bar with the logo, a search bar, and a 'Help' button circled in red. The main area is a map of Europe with various layers overlaid. A 'Layer List' panel is open on the right, showing a list of layers with checkboxes. A 'City Information' panel is open over a city, displaying details like 'Annual Energy: 3,05 TJ/y' and 'Capacity: 0,71 MWth'. A 'Zoom' slider is visible on the left side of the map. Several callout boxes provide instructions on how to use these features.

Click on widget icons to draw and measure, to bookmark extent or to view layer legend

Enter city name to search city

Use the slider to adjust zoom level, and the hand tool drag the map

Click on points to get information about cities

These links give additional information about layers and the project itself

By clicking on the checkboxes layers can be turned on and off

Additional layers settings can be found by clicking to the triangle mark

OK

By clicking on OK, you can close the help

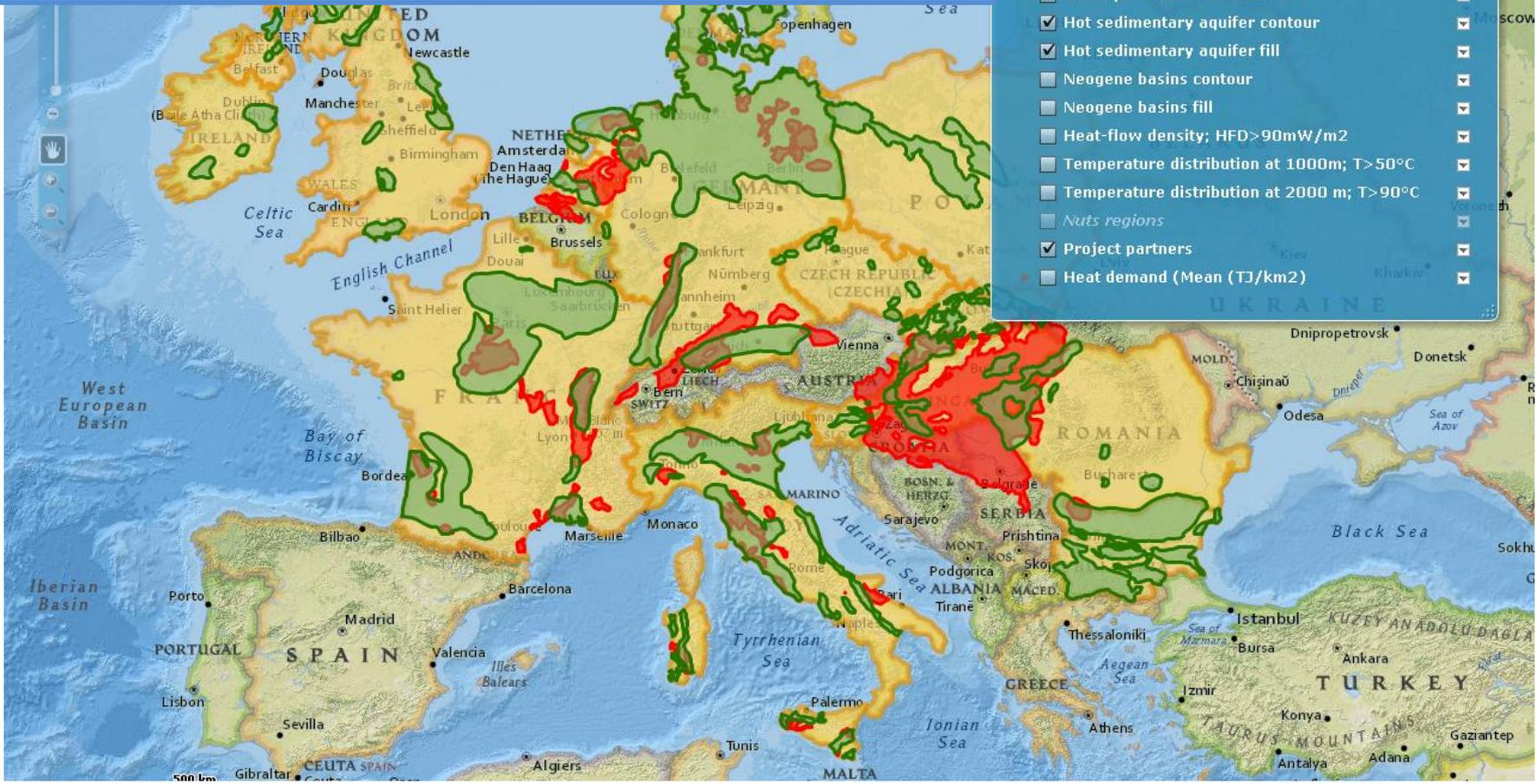
By clicking on selected checkboxes, layers can be turned on/off – e.g. shows areas where hot sedimentary aquifers (red) and other types of potential reservoirs (green) exists. These represent areas with best potential from the resource side.

Beállítások

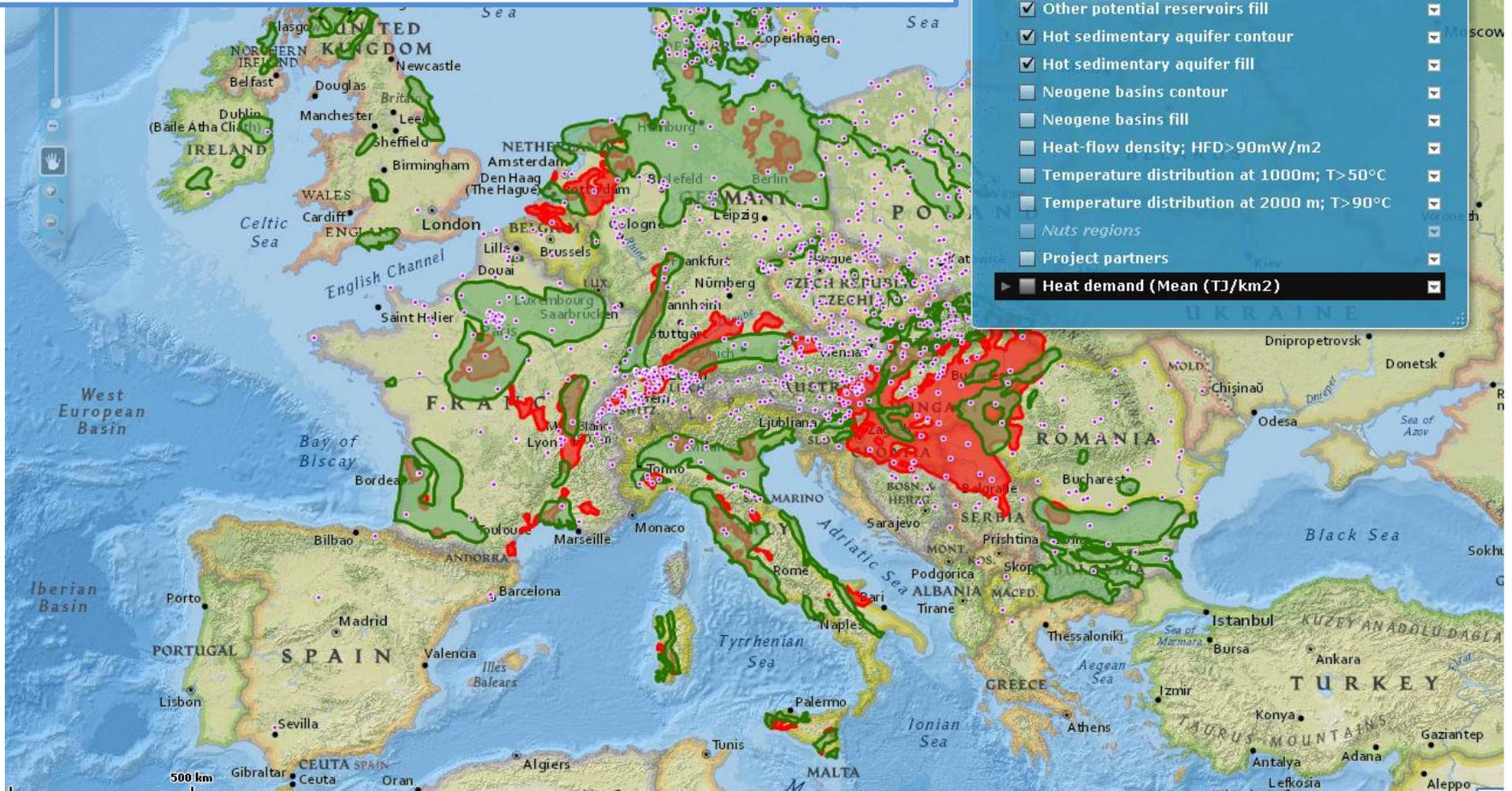
Layer List

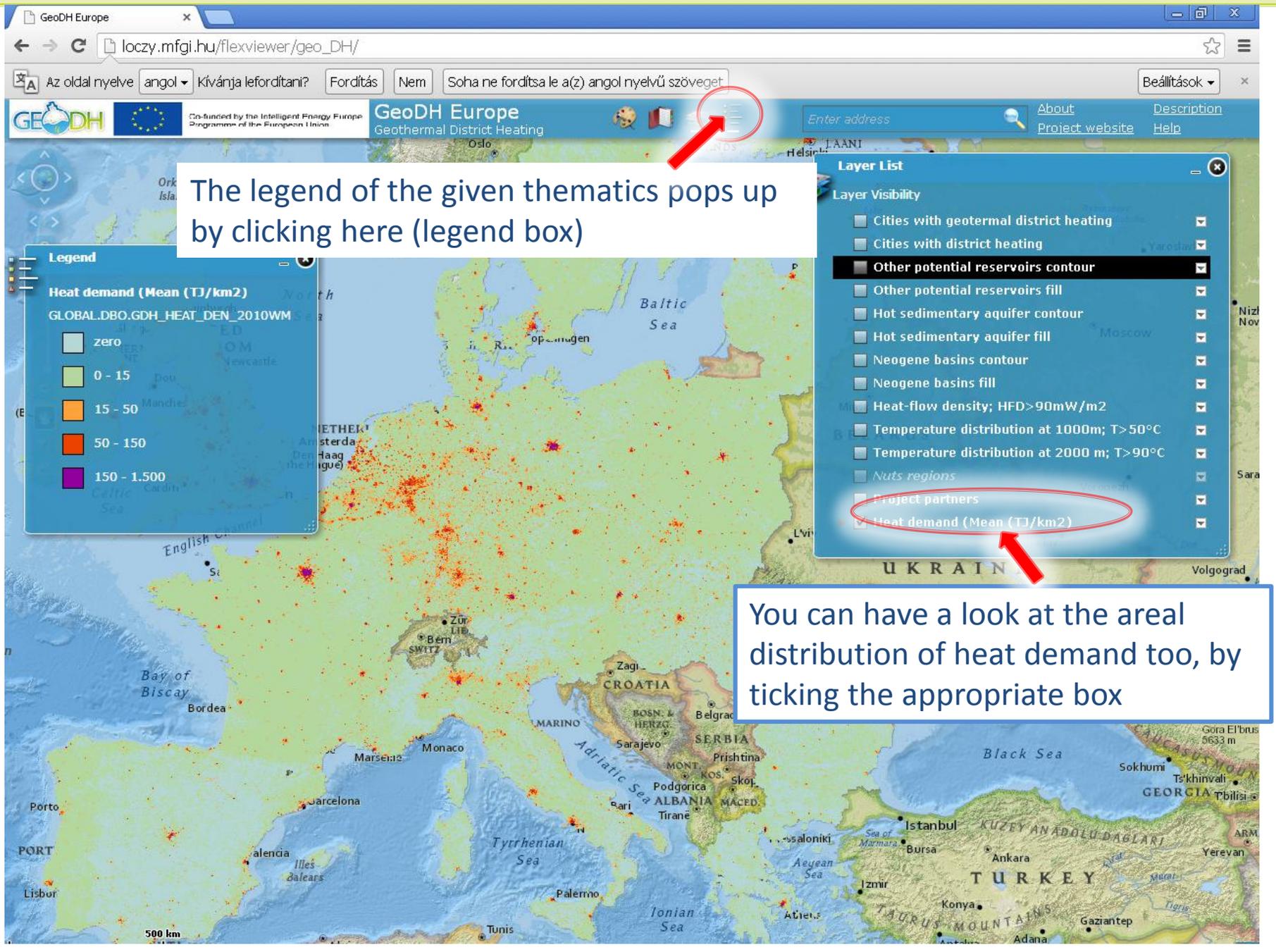
Layer Visibility

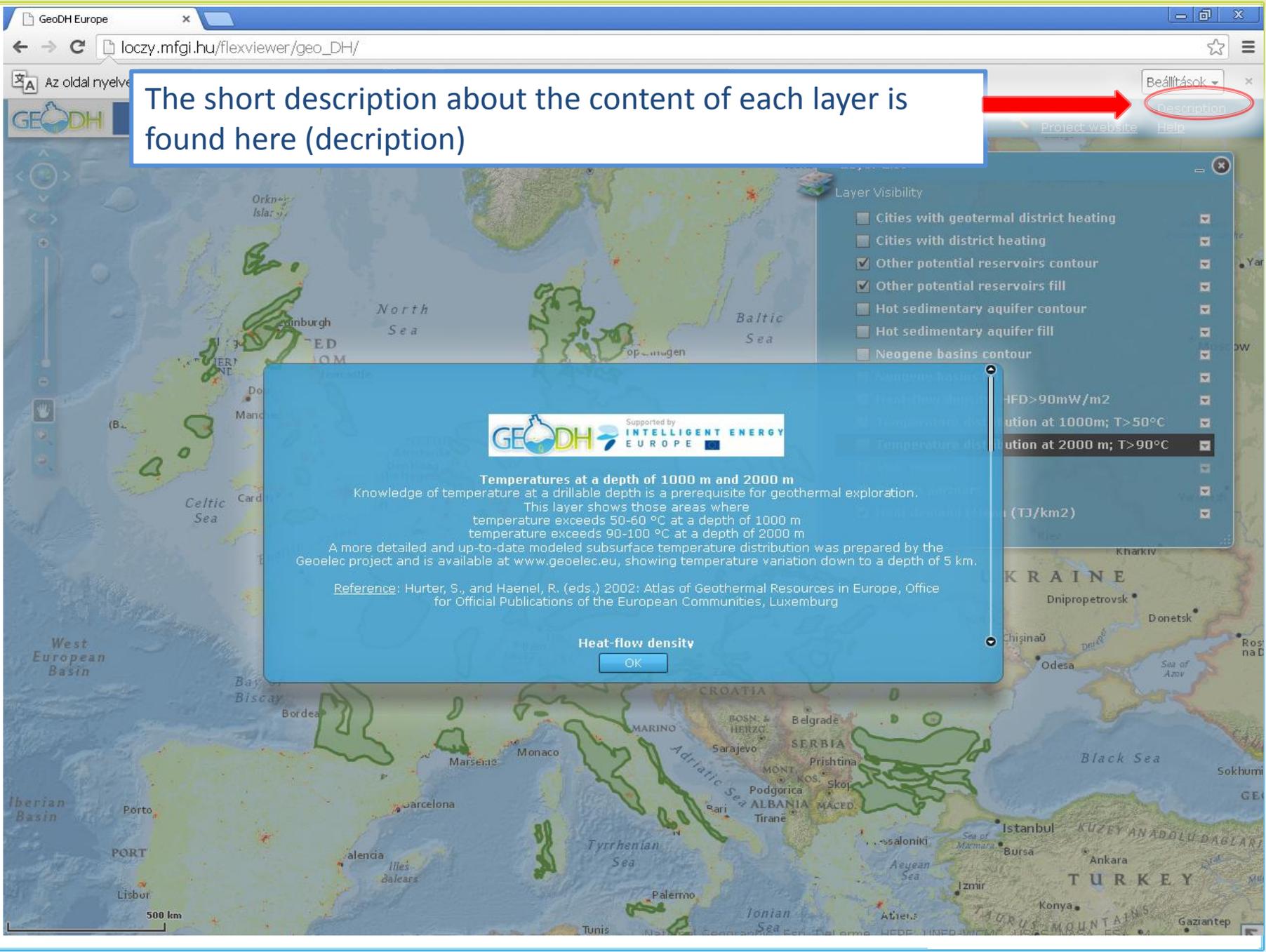
- Cities with geothermal district heating
- Cities with district heating
- Other potential reservoirs contour
- Other potential reservoirs fill
- Hot sedimentary aquifer contour
- Hot sedimentary aquifer fill
- Neogene basins contour
- Neogene basins fill
- Heat-flow density; HFD>90mW/m2
- Temperature distribution at 1000m; T>50°C
- Temperature distribution at 2000 m; T>90°C
- Nuts regions
- Project partners
- Heat demand (Mean (TJ/km2))



By clicking on „cities with district heating”, little purple dots show where district heating already exists. Where these overlap with areas of good geothermal potential (red or green areas), there is a real opportunity for future geo-DH developments.







The short description about the content of each layer is found here (decription)

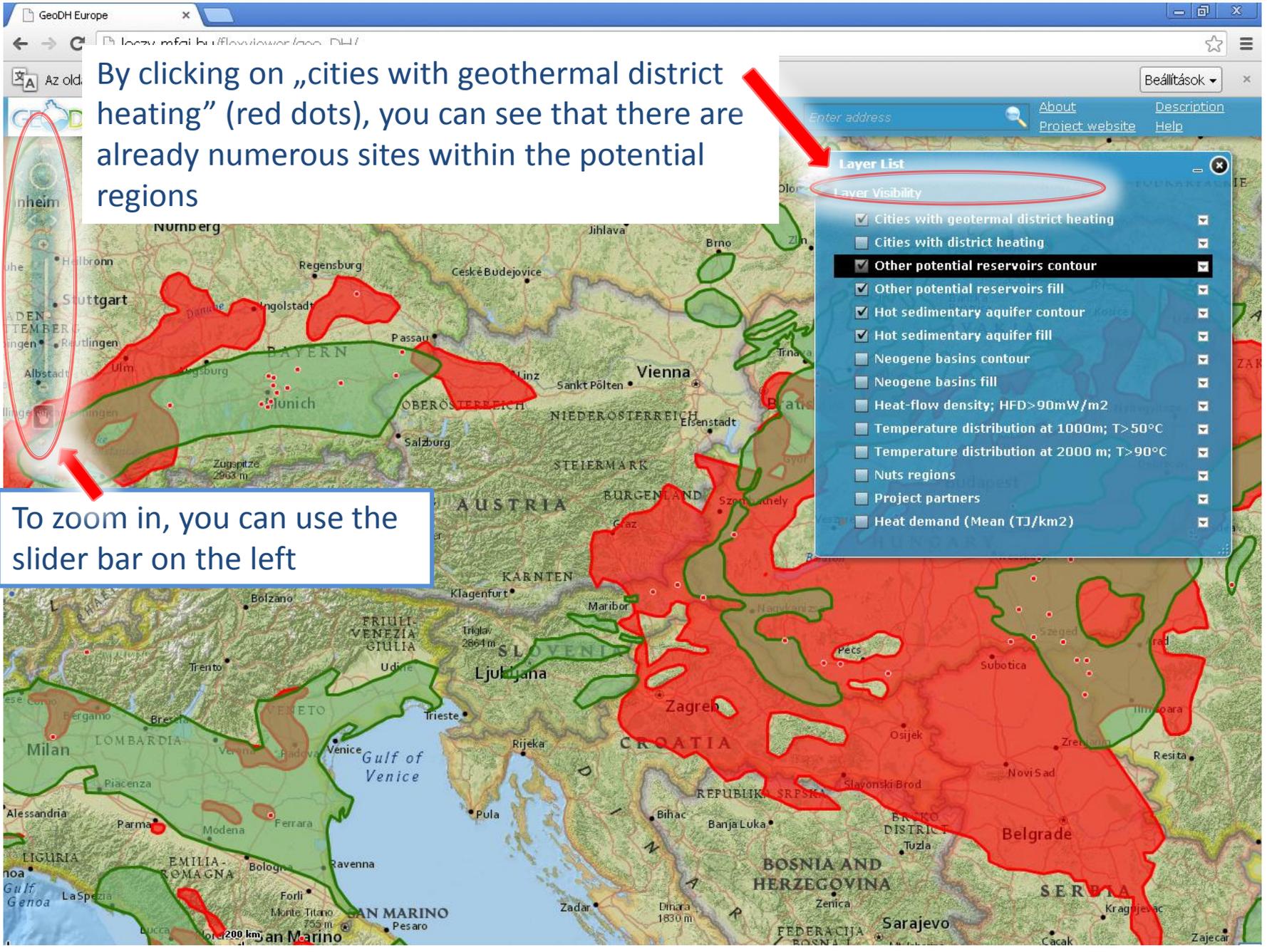
Beállítások
Description
Project website
Help

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Temperatures at a depth of 1000 m and 2000 m
Knowledge of temperature at a drillable depth is a prerequisite for geothermal exploration. This layer shows those areas where temperature exceeds 50-60 °C at a depth of 1000 m and temperature exceeds 90-100 °C at a depth of 2000 m. A more detailed and up-to-date modeled subsurface temperature distribution was prepared by the Goeolec project and is available at www.goeolec.eu, showing temperature variation down to a depth of 5 km.

Reference: Hurter, S., and Haenel, R. (eds.) 2002: Atlas of Geothermal Resources in Europe, Office for Official Publications of the European Communities, Luxembourg

Heat-flow density
OK



By clicking on „cities with geothermal district heating” (red dots), you can see that there are already numerous sites within the potential regions

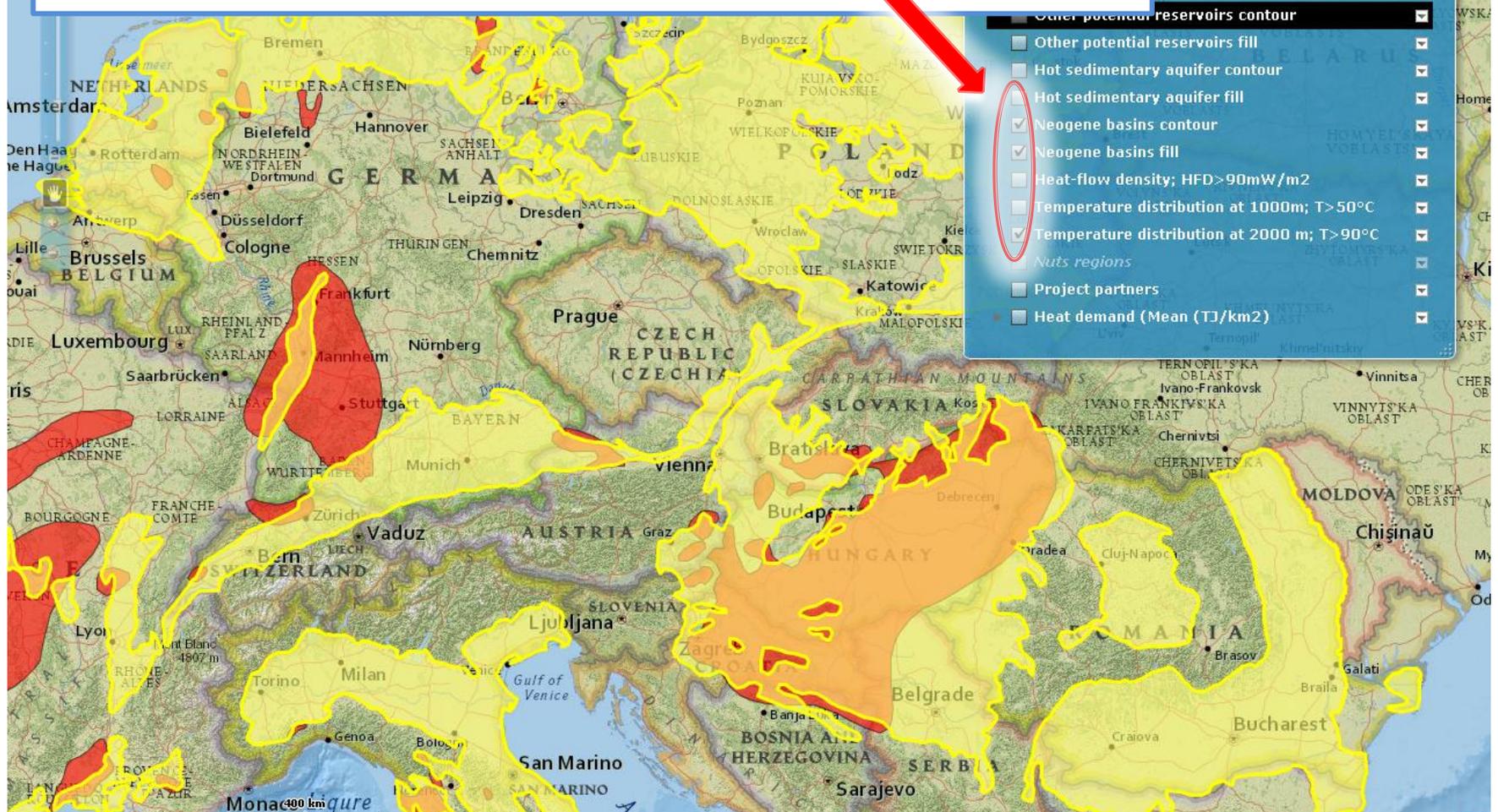
To zoom in, you can use the slider bar on the left

Layer List

Layer Visibility

- Cities with geothermal district heating
- Cities with district heating
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- Other potential reservoirs fill
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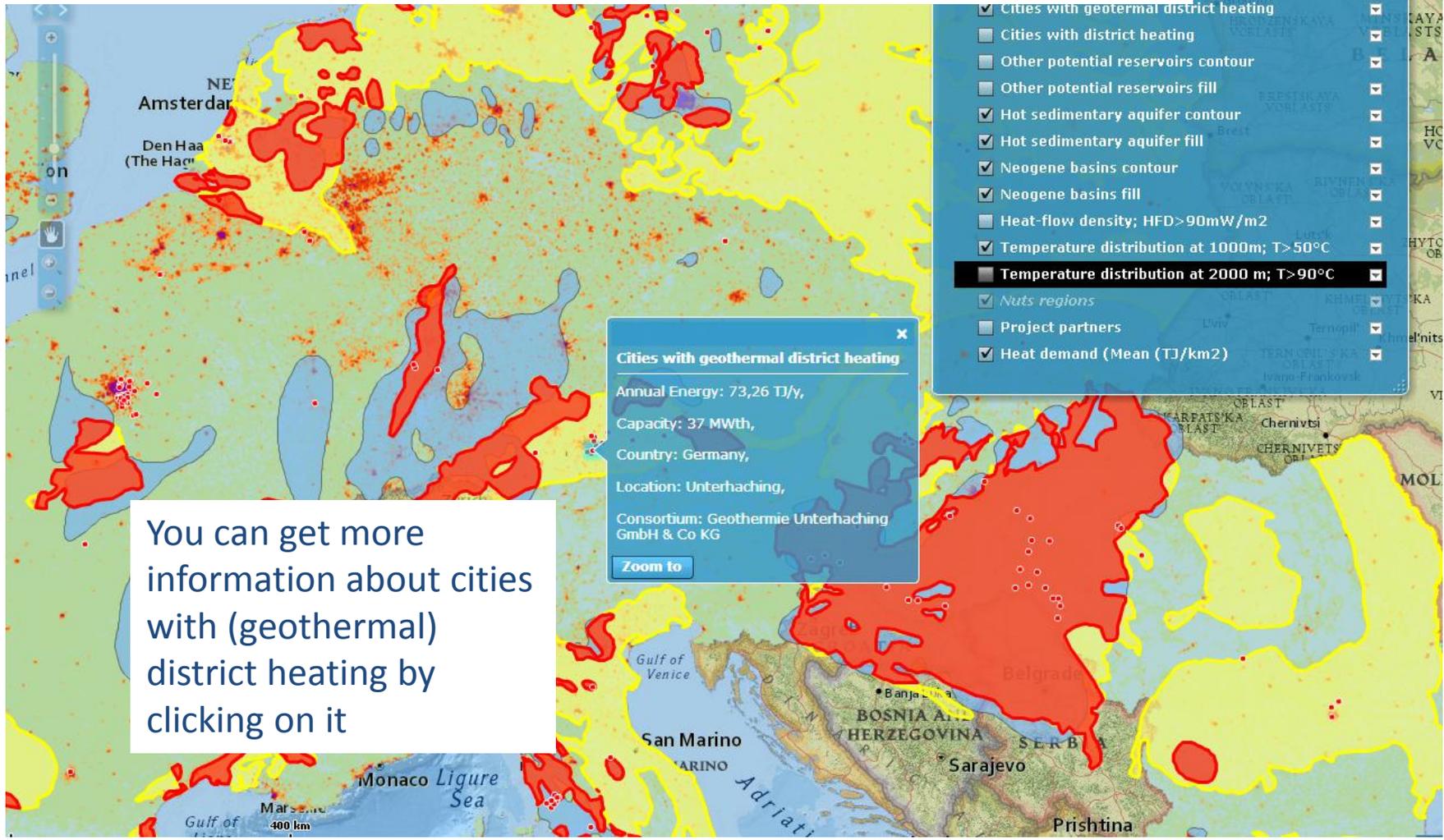
If you are interested more in details, you can make various queries by combining different layers, i.e. to know more about the hot sedimentary aquifers, click on areas of Neogene basins (yellow) that can be combined with areas, where temperature exceeds 90 C at a depth of 2000 m (red)



There is a wide range of different options to know more about geothermal district heating: potential areas both from resource and demand side by combining different layers. You can always check their content at the description

Beállítások

About Description
Project website Help



You can get more information about cities with (geothermal) district heating by clicking on it