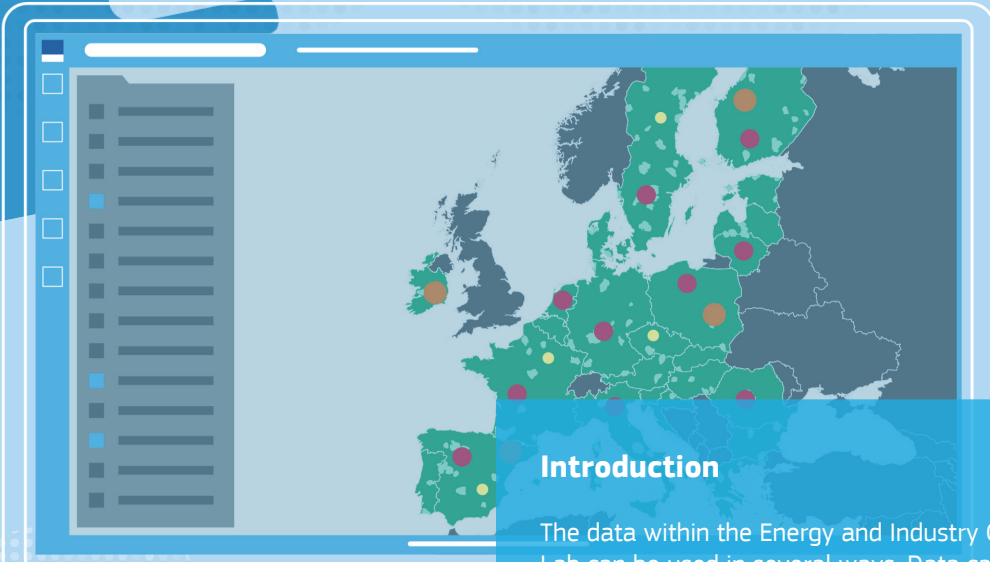
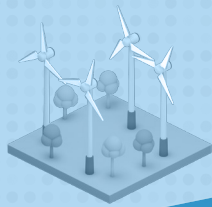
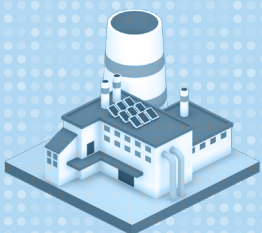


# Energy and Industry Geography Lab Using Data Tutorial



## Introduction

The data within the Energy and Industry Geography Lab can be used in several ways. Data can be filtered, sorted and exported and maps can be shared in various formats. These functions are split out over a number of widgets. The functionality of the Selection, Filter, Export, Share and Attribute Table Widgets are discussed here.



## Selection Widget

The selection widget allows you to select data on the map. When the **'Select'** button is dark green, click and drag on the map to make a selection of data. To add to an existing selection, hold Shift while dragging. To remove from a selection, hold Ctrl while dragging. The selection shape can be changed from rectangle to circle or point by pressing the dropdown arrow on the select button. To clear a selection press the **'Clear'** button.

Data can only be selected when the layer it belongs to is visible. Use the checkboxes next to the visible layers to make these layers "selectable", or uncheck any layer you want excluded from your selection.

After making a selection, you can use the **'...'** options menu of the layer containing the selection to zoom or pan to the selected data. You can also view simple statistics for the selected data, such as sum, minimum, maximum and average values, by choosing **'Statistics...'** from the **'...'** options menu. The **'...'** options menu also allows you to view the selected data in its raw format in the Attribute Table. Please refer to the Attribute Table section for more information.

Energy and Industry Geography Lab Mapping Europe's Energy Future

LAYERS LEGEND SELECT FILTER

Select

Select Clear

Layer

- Select by point
- Select by rectangle
- Select by circle

Hydrogen production (1000 m3 per day) pe... ..

Potential CO2 storage daughter units 0 ...

Potential CO2 storage units 0 ...

Potential geological CO2 storage formations ...

Ports (Eurostat GISCO) 0 ...

Airports (Eurostat GISCO) 0 ...

Waterways (Eurostat GISCO) 0 ...

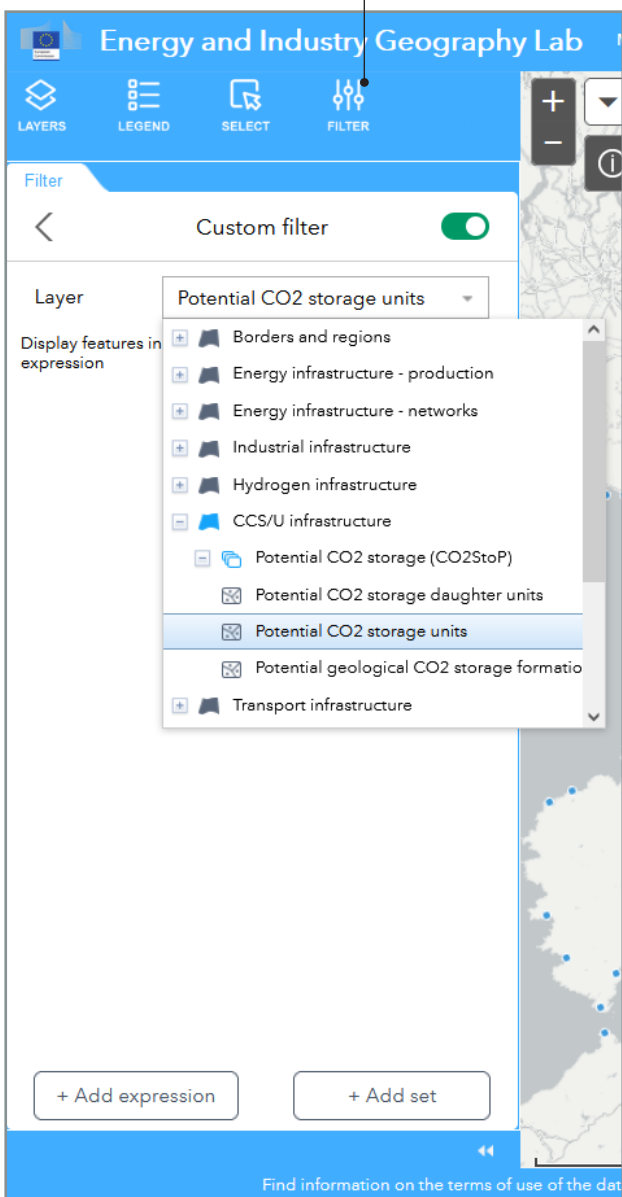
100km


Find information on the terms of use of the data layers [here](#).

## Filter Widget

The filter widget allows you to create and edit a custom filter. This filter can be applied to one data layer at a time. Filters can be applied to a layer regardless of their visibility on the map. Only one custom filter can be active at one time.

To create a filter, press the **“Create Filter”** button. This will open the filter creation screen where you can  toggle whether the filter is active. Start by selecting the layer you want to filter from the dropdown menu. Once a layer is selected you can add a filter criterion by pressing **“+ Add expression”** on the bottom of the window.



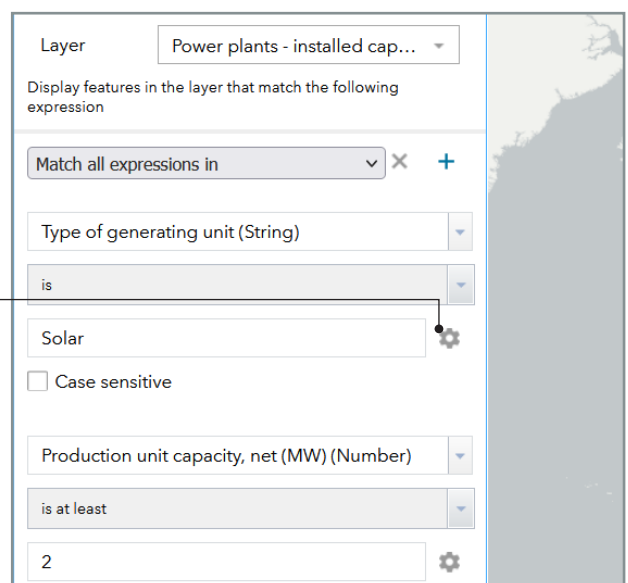
Each expression consists of three fields: the data selection dropdown, the comparison dropdown and the value field. Use the data selection dropdown to select one of the data fields within the current data layer that you wish to filter on. Select how to compare this data to the value field using the comparison dropdown. Please note that different comparison methods are available for numbers and strings of text. Finally, set the value field to the value you want to compare to. You can use the  cogwheel next to the value field to select different kinds of values:

**“Value”** allows you to manually write a value in the field.

**“Field”** allows you to select another data field from the same entry, given that it is the same type of data.

**“Unique”** allows you to select one of the unique values available within the current data selection.

When multiple expressions are added to a filter, a dropdown menu appears on top of the filter. Here you can check whether filter results should match all expressions in order to be drawn, or just any one expression. The same behaviour can be achieved by adding a set of expressions using **“+ Add set”**. Sets of expressions function the same as multiple single expression, except that the set is evaluated as a set and can be combined with other expressions or sets. For example, you can use two sets to filter a powerplant layer to show solar power plants and windfarms with a production larger than 2 MegaWatts.

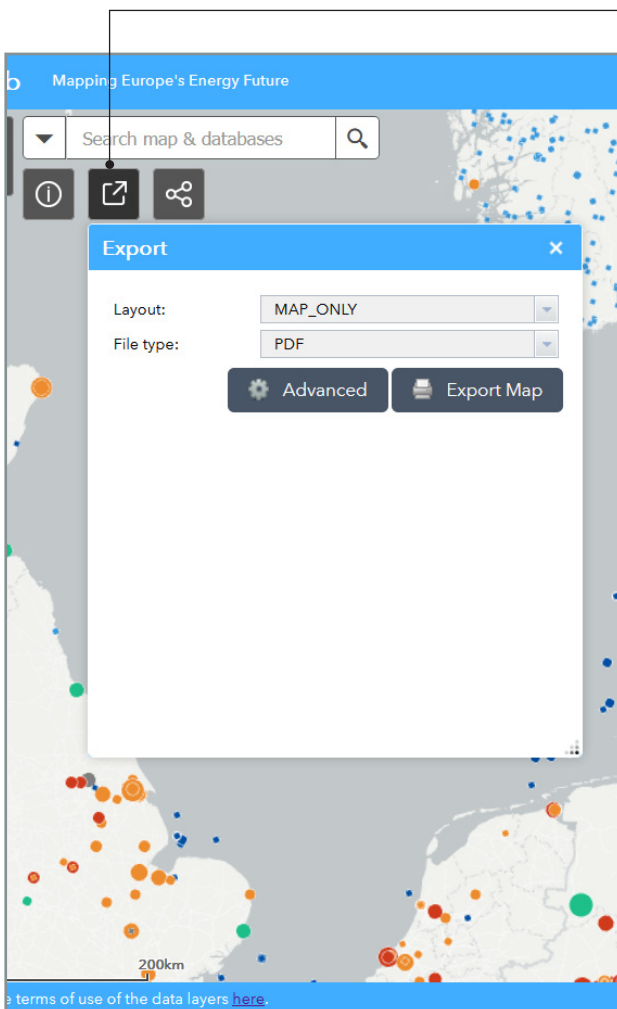


## Export Widget

The Export widget takes your current map view and exports it to an image or document file. To create an image, select one of the preconfigured layouts and a file type from their respective dropdown menus. The layout determines whether the generated map has a title, scalebar, timestamp and/or legend. To export only the current map view, select **MAP ONLY** as the layout.


After selecting the correct layout and filetype, press "Export Map" to create your map. Once the widget is finished rendering the image, click the image title to open it. To save the image, right click on the image and select **"Save as"**.

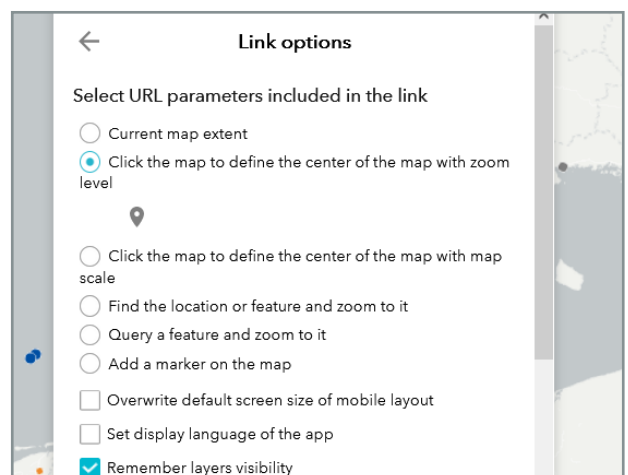
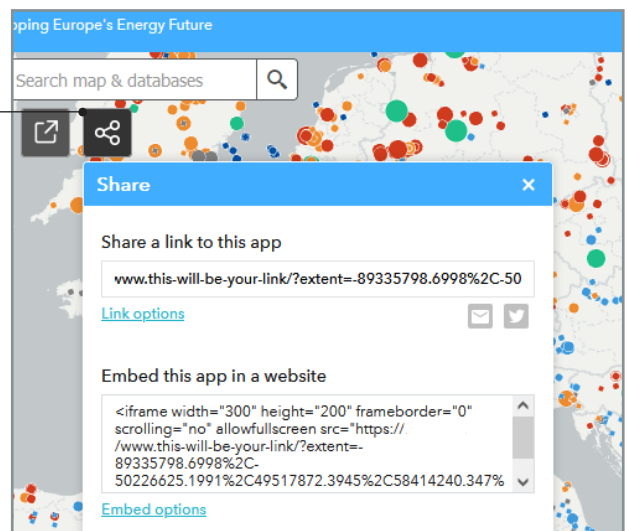
Settings such as the size of the map in pixels, image DPI and scale units can be changed in the **"Advanced"** menu. For more information on these settings, check out the detailed documentation [here](#).





## Share Widget

The share widget allows you to create links for sharing the application through email and social media or embedding the application within a website or blog. Please be aware that recipients of these links might not be able to access the application when they have no login for the platform.

You can change what information is sent along as part of the link. By default only the current map extent is shared. To change this, click on **"Link Options"**. Here you'll find several different options for defining the map view. Apart from the default option "Current map extent", these view options allow you to highlight a specific place of feature on the map. Click on the  marker to select a specific point on the map. If you want to share your view with specific data layers enabled, make sure the **"Remember layers visibility"** checkbox is checked.




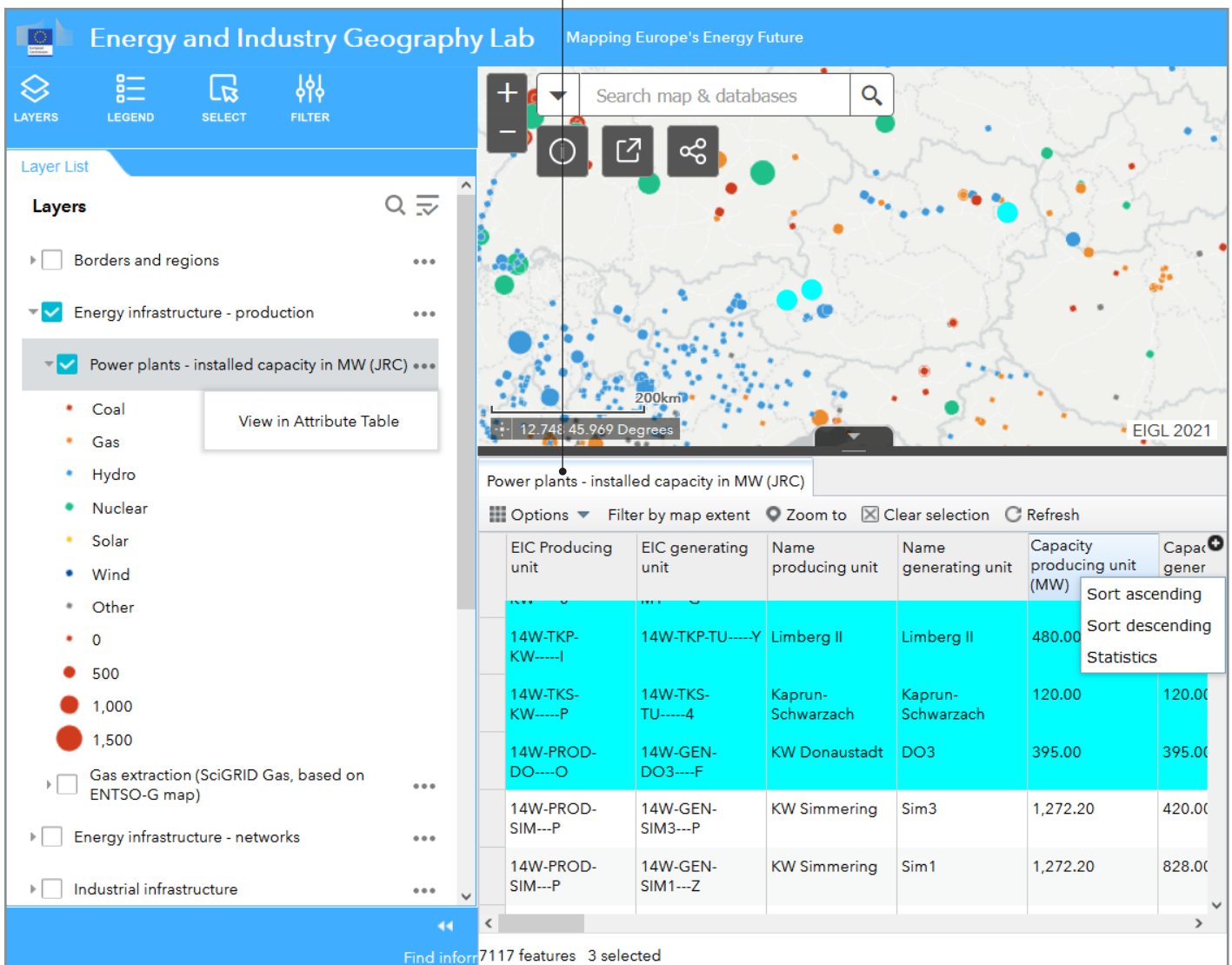
## Attribute Table

The Attribute Table widget displays a tabular view of the data within a data layer. To access the attribute table for a specific layer, go to that layer in the Layer widget, press the  layer options menu and select **“View in Attribute Table”**. This will open the Attribute Table widget with a tab containing the data of the selected layer. Use the  arrow at the top of the Attribute Table to minimize the widget.

Each row in the Attribute Table is a feature on the map, each column is a data field associated to that feature. If the **“Filter by map extent”** option is active, only the rows of features currently within the map view are shown in the Attribute Table.

You can sort the data by clicking on the column name and selecting **“Sort ascending”** or **“Sort Descending”**. For numerical values, you can easily obtain statistical information such as sum, average and standard deviation by clicking on the column name and selecting **“Statistics”**.

To select a row, click on the  grey selection handle in front of the row. Selected rows show up light blue both in the Attribute Table and on the map. To select multiple individual rows, hold Ctrl and click the selection handles. To select multiple rows at once, select the first row, hold Shift and press the last row. Click the **“Zoom to”** button to move the map to show all selected features.



The screenshot shows the Energy and Industry Geography Lab interface. The main map displays power plant locations across Europe, with a search bar and navigation controls. The Layer List on the left shows the selected layer: "Power plants - installed capacity in MW (JRC)". A "View in Attribute Table" button is visible next to this layer. The Attribute Table below the map displays the following data:

EIC Producing unit	EIC generating unit	Name producing unit	Name generating unit	Capacity producing unit (MW)	Capacity generating unit (MW)
14W-TKP-KW-----I	14W-TKP-TU-----Y	Limberg II	Limberg II	480.00	480.00
14W-TKS-KW-----P	14W-TKS-TU-----4	Kaprun-Schwarzach	Kaprun-Schwarzach	120.00	120.00
14W-PROD-DO-----O	14W-GEN-DO3-----F	KW Donaustadt	DO3	395.00	395.00
14W-PROD-SIM---P	14W-GEN-SIM3---P	KW Simmering	Sim3	1,272.20	420.00
14W-PROD-SIM---P	14W-GEN-SIM1---Z	KW Simmering	Sim1	1,272.20	828.00

The interface also shows a search bar, a legend, and a layer list. The Attribute Table includes options for "Filter by map extent", "Zoom to", "Clear selection", and "Refresh". A status bar at the bottom indicates "Find information 7117 features 3 selected".