

Quick view – What's new?

During 2024 we have listened to stakeholders and improved our SPT Heatmaps...

We have...

Improved User Experience

Increased Visibility of Substation Capacity

Included Contracted SPT Demand

The screenshot shows the SPT Heatmap interface with several callouts:

- Area selection tool to filter by custom area:** A red box highlights a tool icon in the top left of the map.
- Options to hide/ view datasets and change basemaps:** A red box highlights a dropdown menu in the top right of the map.
- Additional search and filter features:** A green box highlights the left-hand sidebar containing search and filter options.
- ECR Projects Visible In Detail:** A green box highlights the legend on the right side of the map.

The interface includes a sidebar with the following sections:

- SPT Demand Projects:** Select contract status to view.
- Demand Project Search:** Select "SPT Demand Projects" to filter.
- Distribution Substation RAG:** None, GSP, Windfarm.
- Export Capacity RAG:** AMBER (20-50%), GREEN (>50%), RED (<20%).
- GSP Selector:** Hide/ Show GSP's.
- Built Substation Connections:** Filter Generators by Built Substati...
- TEC Generator Substation Search:** Search Generators by Substation(s).
- ECR Search:** Search for Distribution Conn...

The map displays various data points and lines, with a 2 km scale bar at the bottom left. The right-hand panel shows summary statistics:

Transmission Connected	OMW	Increase/Decrease	450MW
Cumulative Total Capacity	450MW	Demand Projects	104MW

The legend includes:

- Transmission Demand:** Import (MW) with color-coded circles for >4,000, 3,000, 2,000, 1,000, and <250.
- Distribution Generation:** BESS, Engine (combustion / reciprocating), Hydro - Pumped, Hydro - Run of river, Other, Solar, Turbine - Gas (CCGT) / OCGT, Wind - Onshore.
- Grid Supply Points:** Total Export Capacity Remaining with color-coded diamonds for >50%, 20-50%, and <20%.

Initial view, TEC Filters and Dashboard navigation.

TEC Filters

Filters the transmission generation connections by status it's TEC Register status.

Filters the transmission generation connections by the generator type.

Can be used to more precisely filter generators based on specific combinations after a type is filtered.

Date filter removes all sites outside the selected scope of dates.

Can be used to search for a specific/ combination of sites to isolate their location on the map.

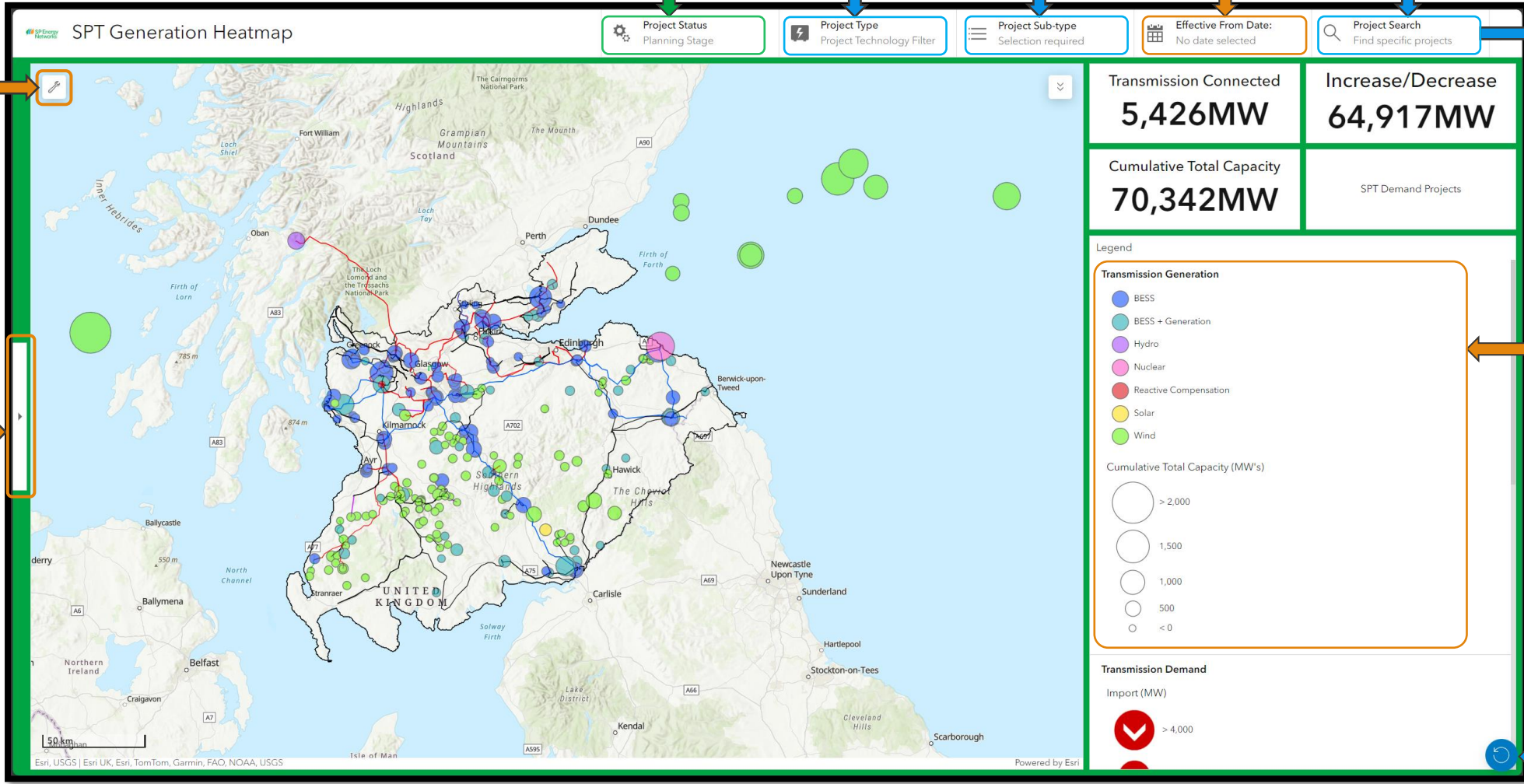
The Area selection tool can be used in a square, radial or freeform lasso selection modes. Highlighting an area will change indicator values and can be used in combination with the "Project Search" and "Substation Search" filters to remove all sites outside of the selected area.

The sidebar menu can be opened to access GSP and Demand data, and additional filter options.

Can also be used in combination with the area selection tool (top left of map) to filter the map to only show objects within the selected area.

The project sites are coloured based on their registered generation type, and the size of circle is proportional to the size of the connection in MW's.

Refresh button can fully reset the map to its default values and view.



The map will initialise showing transmission generation connections, with total connected, increase/ decrease and cumulative total capacity indicators active. GSP capacity and demand site visibility can be activated in the sidebar. For Distribution connections, zoom in on the map or use the sidebar ECR search filter.

Sidebar Filters and Map Layers

The RAG status of GSP's and Windfarm sites can be activated using the "Distribution Substation RAG" buttons, and subsequently filtered to any combination of RAG status using the "Export Capacity RAG" buttons. The "GSP Selector" menu can be used to filter any substation which have a RAG status available.

Demand projects can be enabled using the dropdown menu. Once enabled, specific demand projects can be searched and filtered using the below "Demand Project Search" dropdown menu.

The "layers" tool can be used to hide and show datasets on the map. This is particularly useful if you are only interested in seeing one dataset, and wish to hide others. For example, the map is currently "hiding" the Transmission Generation Connections to get a clear view of GSP export statuses and their surrounding embedded generators.

This dropdown layers menu can also be used to change the basemap e.g. Topographic, Streets, Satellite image, etc

The "Built Substation Connections" filter can be used to isolate a specified substation, and only show transmission and distribution connections related to the selected site.

The TEC Generator Substation search is an alternative way to look for transmission generator connections.

For distribution level connections, you can use the ECR search bar to find 11kV-33kV connected projects.

The ECR is now connected to the dashboard and become visible when you zoom in. The sites follow a similar colour scheme to that of the transmission generators, with a compressed generator type list.

When enabled, the RAG status of GSP/ Windfarm Export can be shown.

Substations appear as small diamonds related to their voltage level.

Transmission lines show their operating voltage.

SPT Generation Heatmap

Project Status: Planning Stage | Project Type: Project Technology Filter | Project Subtype: Selection required | Effective From Date: No date selected | Project Search: Find specific projects

Transmission Connected 5,426MW	Increase/Decrease 64,917MW
Cumulative Total Capacity 70,342MW	SPT Demand Projects

Legend

Distribution Generation

- ▲ BESS
- ▲ Engine (combustion / reciprocating)
- ▲ Hydro - Pumped
- ▲ Hydro - Run of river
- ▲ Other
- ▲ Solar
- ▲ Turbine - Gas (CCGT) / (OCGT)
- ▲ Wind - Onshore

Grid Supply Point's

Total Export Capacity Remaining

- ◆ >50%
- ◆ 20-50%
- ◆ <20%

All Substations

- ◆ 400
- ◆ 275
- ◆ 132
- ◆ 33

SPT Circuits

- 400,000
- 275,000
- 132,000

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