



# **Security of Supply for Vulnerable Customers (SSVC): User Guide**

**Authored: Adam Honnywill**

**Reviewed: John McHugh**

**Issue 1**

**26/06/23**



# 1 Overview

This guide shall provide a walkthrough of the set up and features of the Security of Supply for Vulnerable Customers (SSVC) software, such that a user may manage assets in preparation for real scenarios and simulate theoretical scenarios.

The SSVC software includes the following pages:

- Home – where a dashboard overview of SSVC is presented
- Scenarios – where different scenarios can be simulated, to evaluate SSVC preparedness
- Stock information – where response items can be managed
- PSR categories – where Priority Service Register (PSR) categories can be managed in their relation to SSVC
- Depots – where response item depots can be managed
- Admin – where datasets can be imported into the SSVC software

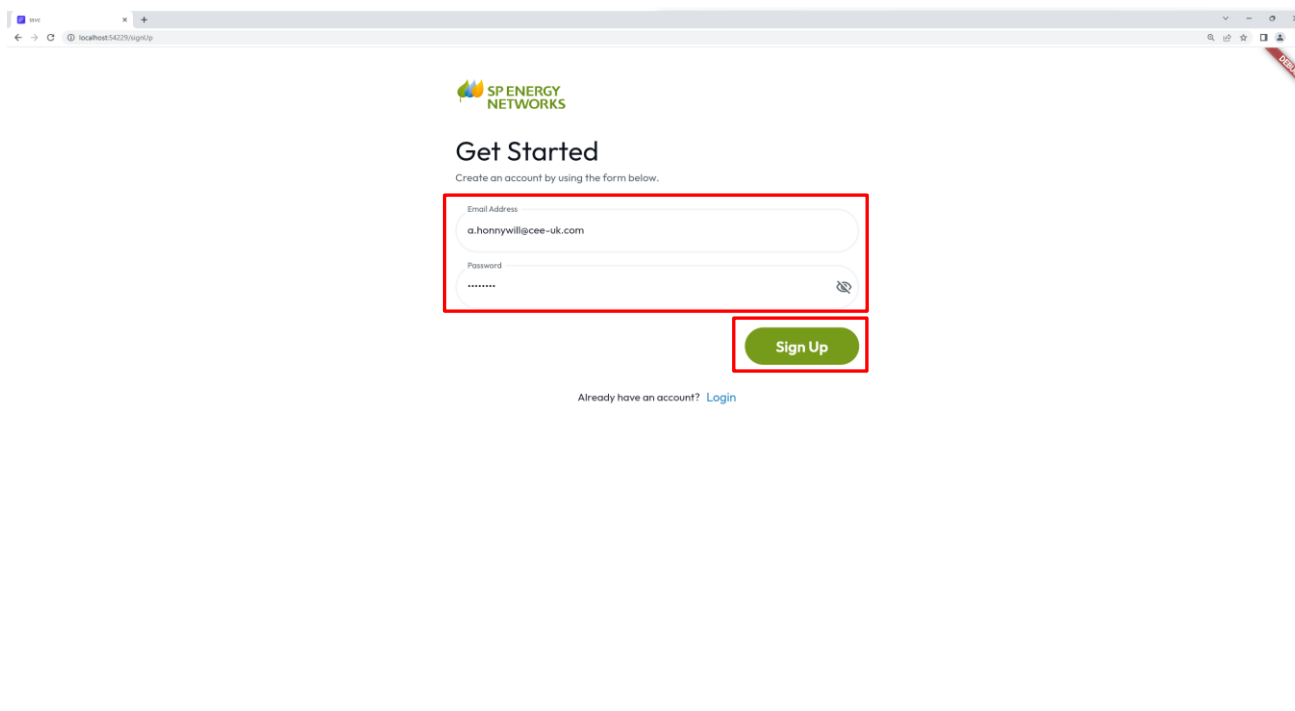
Through this guide, screen elements which can be interacted with are outlined in red.

## 2 Set Up and Log In

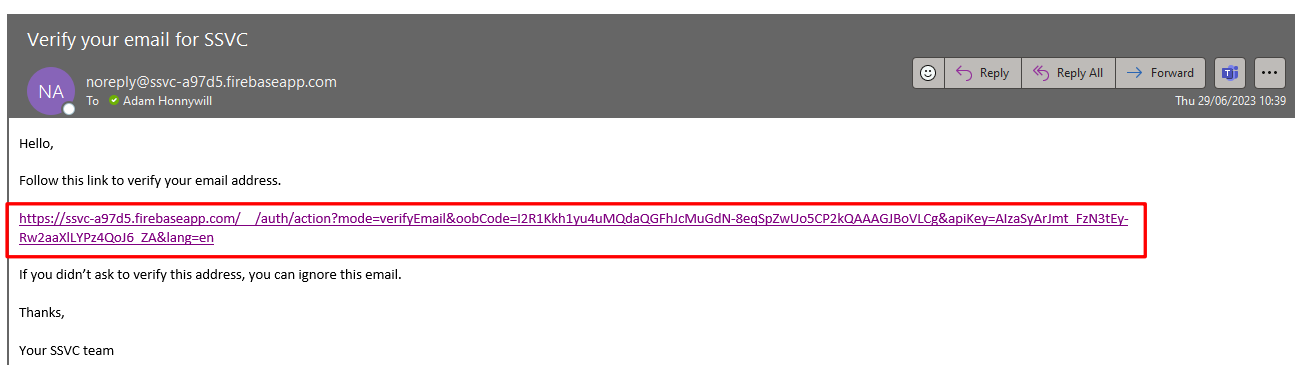
When using SSVC software for the first time, a log in page will be presented. To register an account, **Click on 'Create Account'**.

The screenshot shows a web browser window displaying the SP Energy Networks login page. The page has a white background with the SP Energy Networks logo at the top. Below the logo, it says 'Welcome Back!' and 'Use the form below to access your account.' There are two input fields: 'Email Address' and 'Password'. The 'Password' field has a toggle icon for visibility. Below the 'Email Address' field is a link for 'Forgot Password?'. To the right of the 'Email Address' field is a green 'Sign In' button. At the bottom, there is a link for 'Don't have an account?' which is highlighted with a red box and labeled 'Create Account'.

Next, **register for an account with your email and a password.**



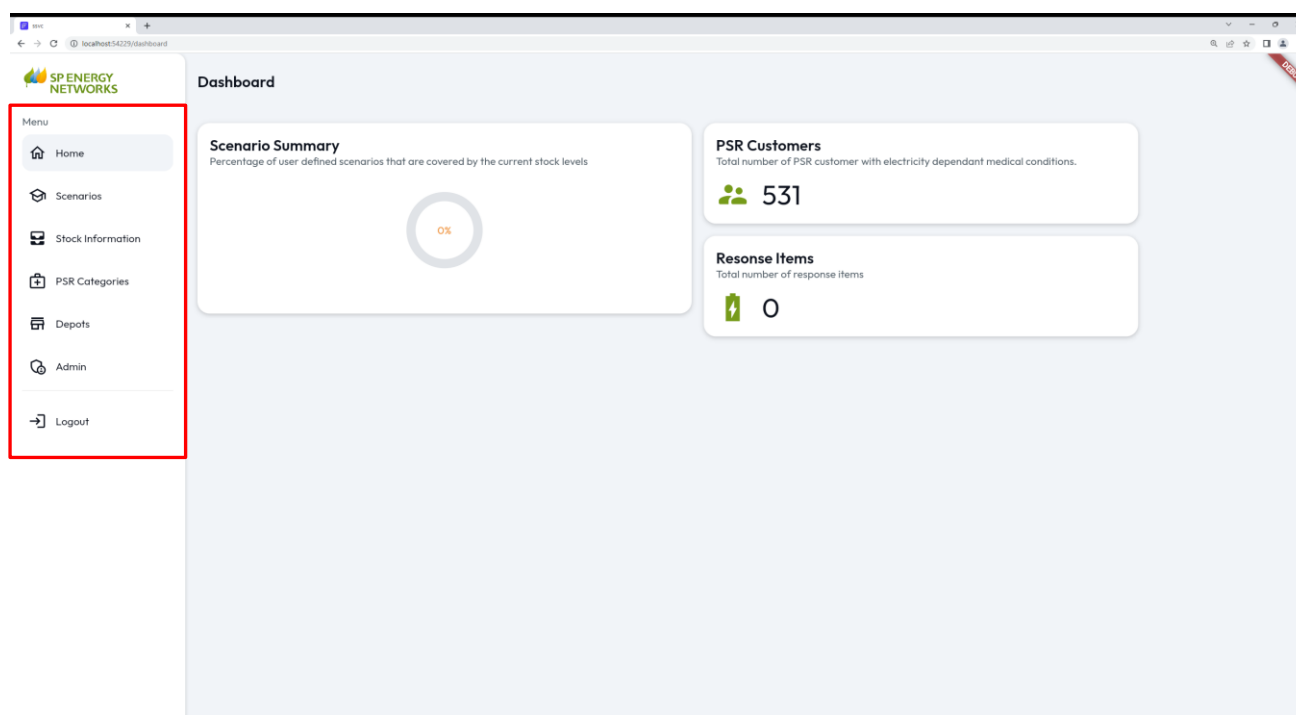
This will send an email to your inbox, where you should **click on a link for verification**.



Now you may return to SSVC and **enter your login details to the sign in page**.

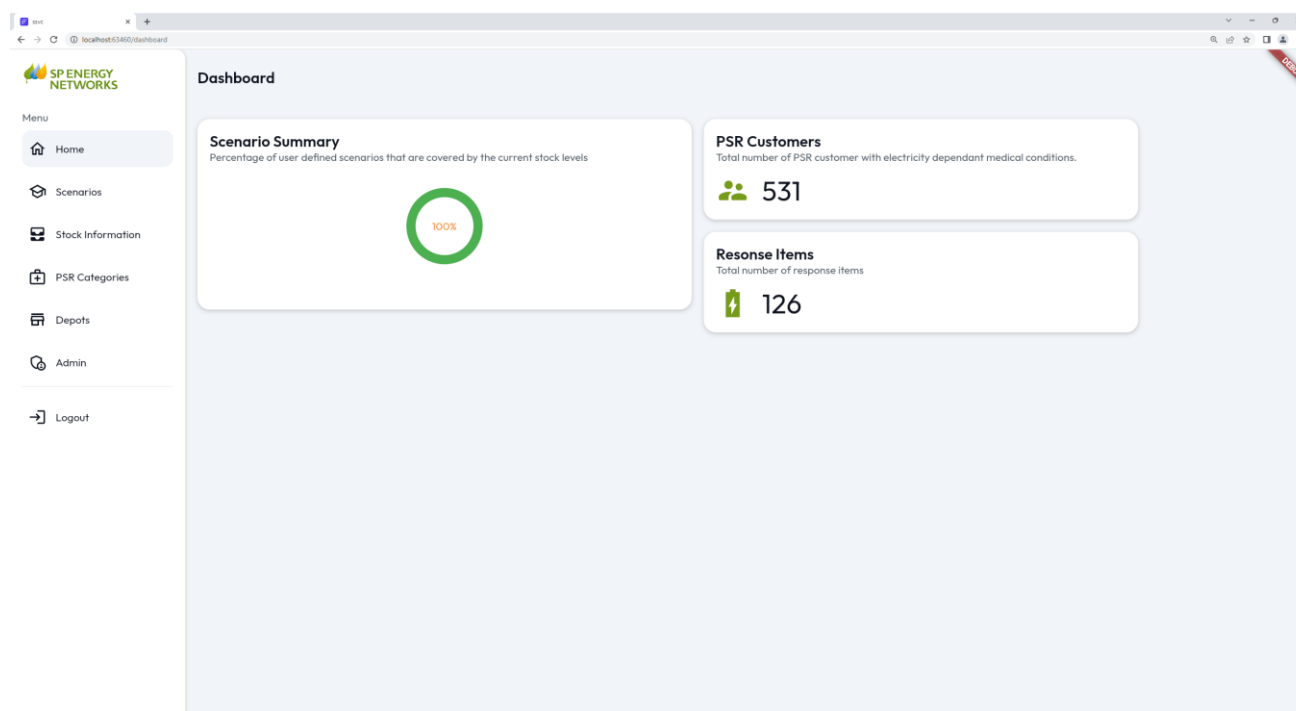
## 3 General Navigation

Once logged in, all SSVC sections are always accessible from each other via a **click on the sidebar on the left**.



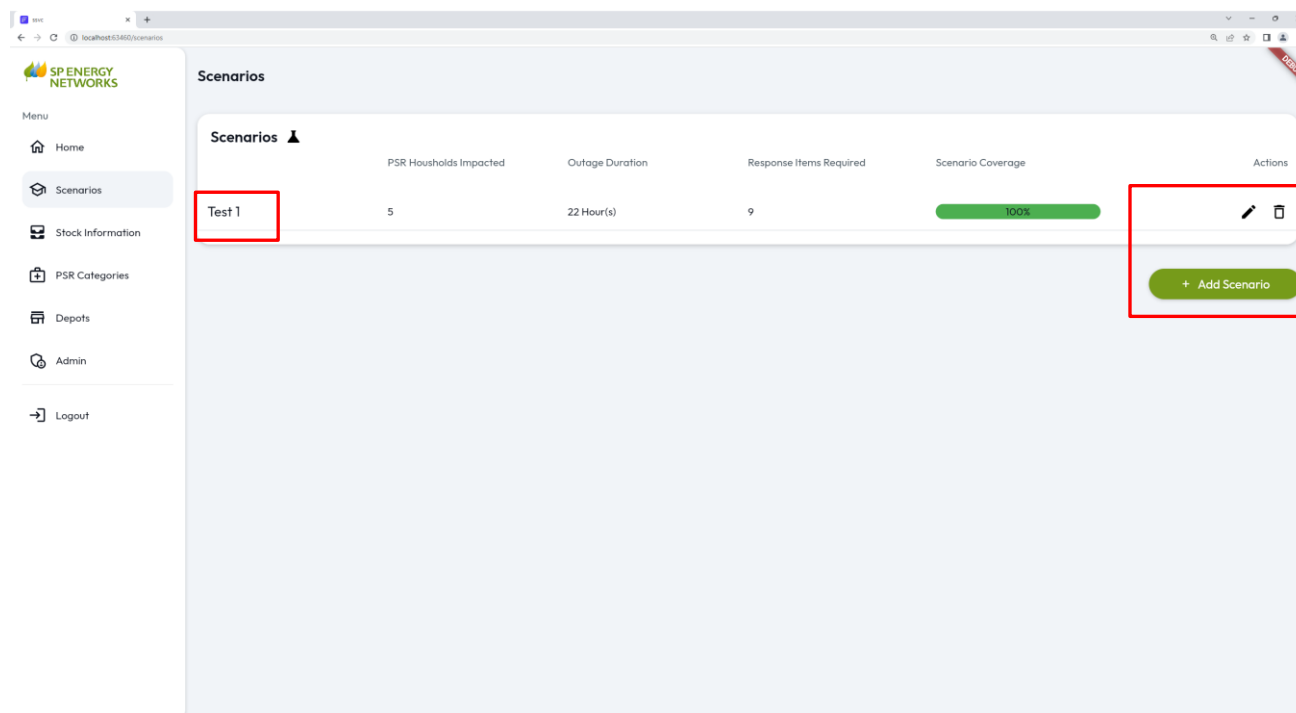
## 4 Home

The home dashboard is an overview of the current status of SSVC: it includes the number of PSR customers who are medically dependent on electricity and therefor eligible for SSVC; the number of response items for SSVC; and a Scenario Summary, with the percentage of user defined scenarios that are covered by the stock levels.



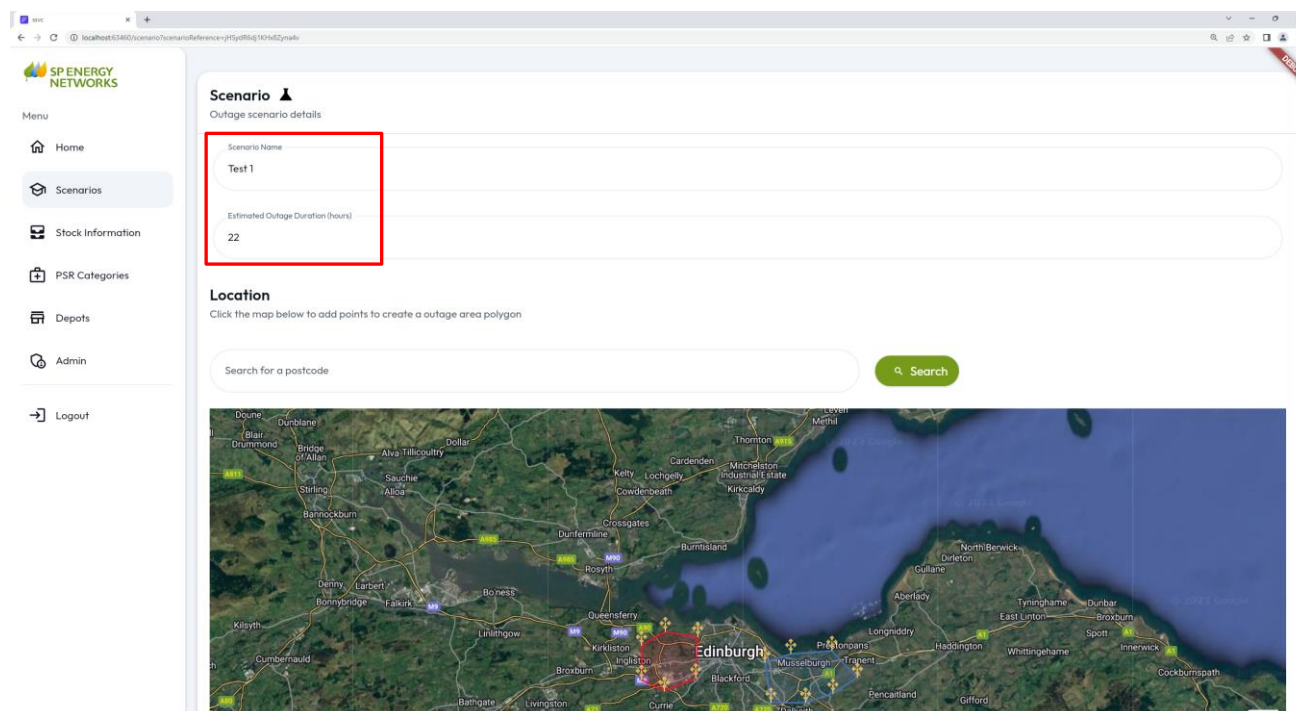
## 5 Scenarios

The scenarios page contains scenarios that can be used to simulate outages to predict the effectiveness of SSVC. The page shows the PSR households impacted, the outage duration, the response time To create a scenario, **click on '+ Add Scenario'**. To edit a scenario, **click on the name or pencil icon** in the row of the relevant scenario. To delete a scenario, **click on the bin icon**.



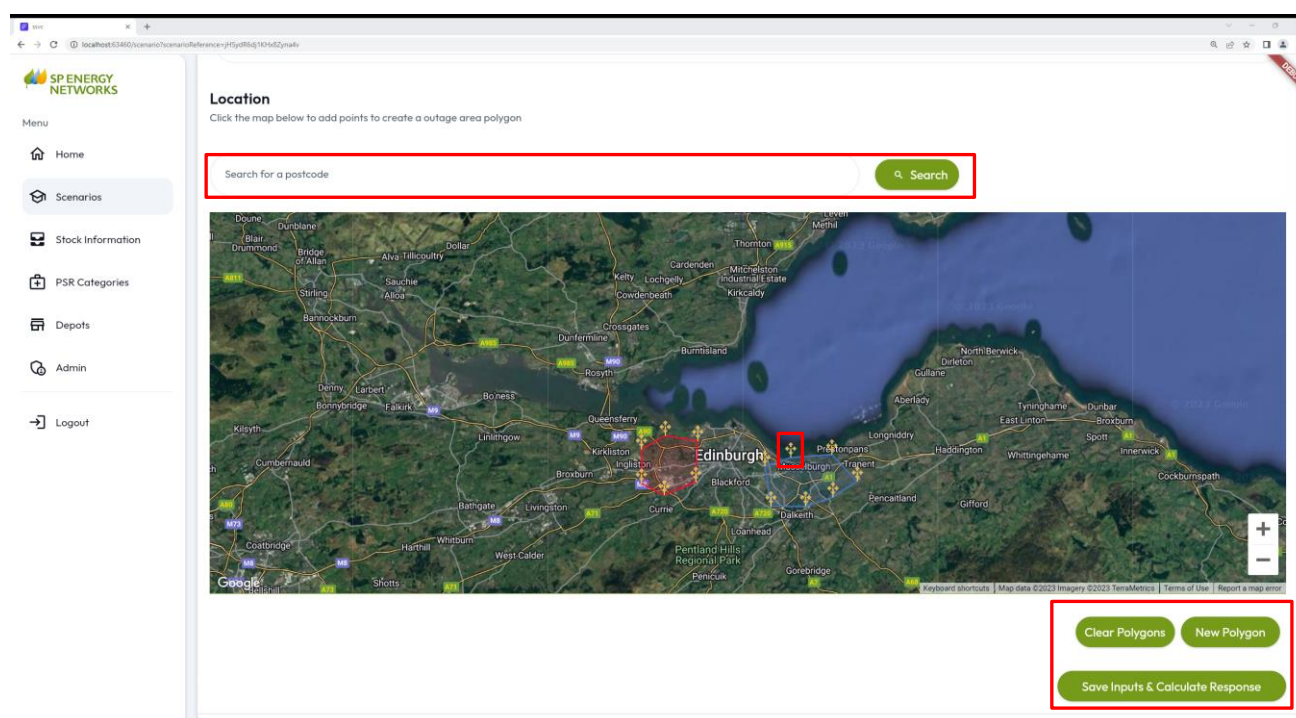
Inside a scenario, different aspects can be modified.

- The name and estimated outage duration are boxes which you can **click and type** in to edit.

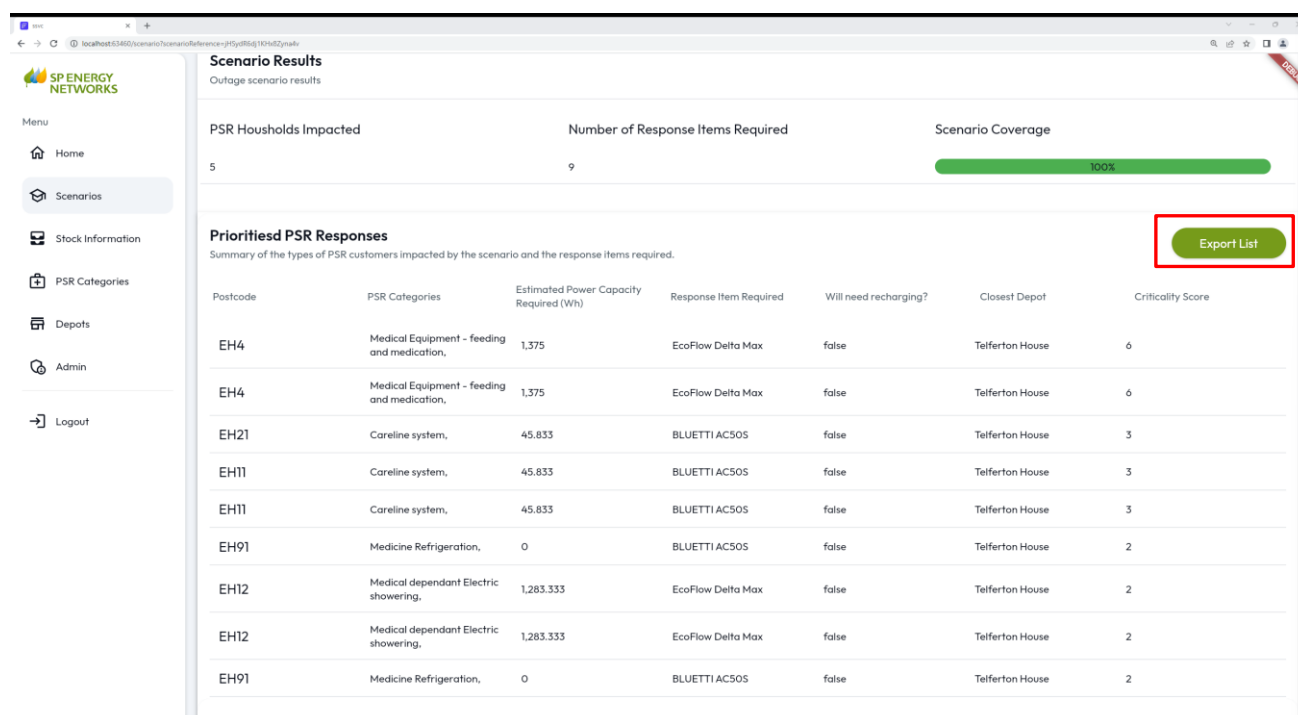


- The outage location(s) can be created through an interactive map. To draw an outage area, **click on the 'New Polygon' button and then click on the map to add vertices to an outage area polygon.**
- To modify an area, **click and drag orange vertex markers.**
- To remove a marker, **click on the marker you want to remove.**
- To clear all polygons, **click 'Clear Polygons'.** To move the centre of the map, **click and drag anywhere but a marker or enter a postcode and click 'Search'.**

**Click 'Save Inputs & Calculate Results'** to see the scenario results below.



The scenario results include the number of PSR households impacted, the response items therefore required and the coverage percentage given nearby depot stock levels. A list of electrically dependent PSR registrants is ranked by their criticality score, along with the response item that they require for their power capacity required. To download the list, **click the 'Export List' button.** The scenario coverage percentage is based on all batteries in stock rather than those at the closest depot (as it is assumed some sharing between depots can occur).



**Scenario Results**  
Outage scenario results

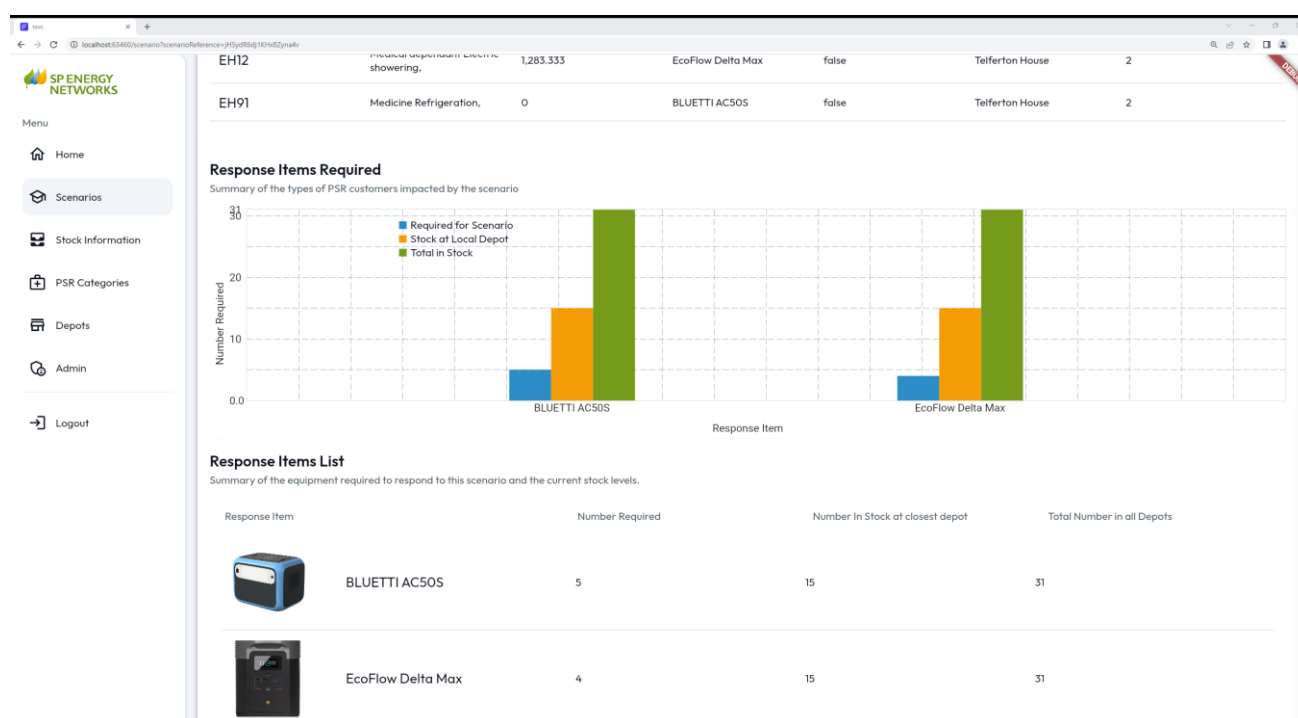
PSR Housholds Impacted: 5      Number of Response Items Required: 9      Scenario Coverage: 100%

**Priorities PSR Responses**  
Summary of the types of PSR customers impacted by the scenario and the response items required.

Postcode	PSR Categories	Estimated Power Capacity Required (Wh)	Response Item Required	Will need recharging?	Closest Depot	Criticality Score
EH4	Medical Equipment - feeding and medication,	1,375	EcoFlow Delta Max	false	Telferton House	6
EH4	Medical Equipment - feeding and medication,	1,375	EcoFlow Delta Max	false	Telferton House	6
EH21	Careline system,	45.833	BLUETTI AC50S	false	Telferton House	3
EH11	Careline system,	45.833	BLUETTI AC50S	false	Telferton House	3
EH11	Careline system,	45.833	BLUETTI AC50S	false	Telferton House	3
EH91	Medicine Refrigeration,	0	BLUETTI AC50S	false	Telferton House	2
EH12	Medical dependant Electric showering,	1,283.333	EcoFlow Delta Max	false	Telferton House	2
EH12	Medical dependant Electric showering,	1,283.333	EcoFlow Delta Max	false	Telferton House	2
EH91	Medicine Refrigeration,	0	BLUETTI AC50S	false	Telferton House	2

[Export List](#)

Further below the results include information on the response items required, aggregated from the PSR list. A bar chart and table shows the availability of total and local stock of the items.





**Response Items Required**  
Summary of the types of PSR customers impacted by the scenario

Number Required

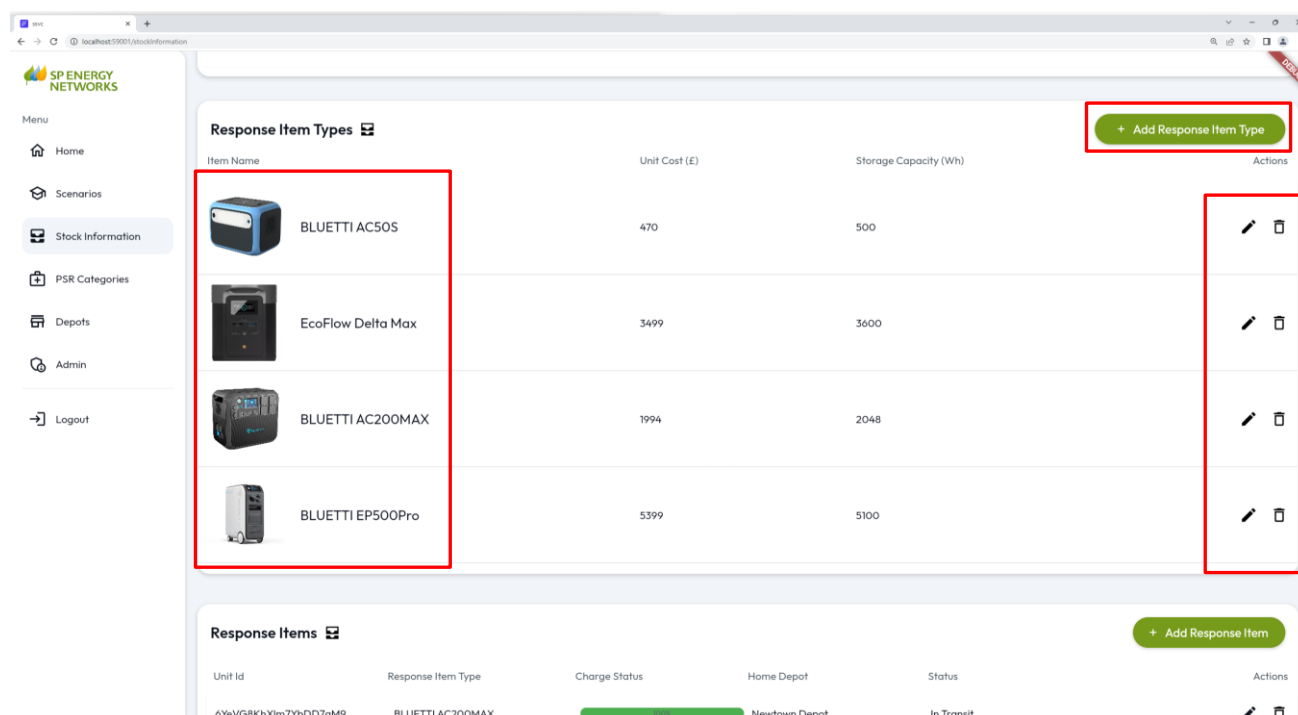
Response Item

**Response Items List**  
Summary of the equipment required to respond to this scenario and the current stock levels.













Response Item	Number Required	Number In Stock at closest depot	Total Number in all Depots
 BLUETTI AC50S	5	15	31
 EcoFlow Delta Max	4	15	31

## 6 Stock Information



The stock information page contains the response item types and individual units. To add an item type, click on **'+ Add Response Item'**. To delete a an item type, click on the **bin icon**. To edit a model (e.g., a battery), click on their **picture or the pencil icon**.



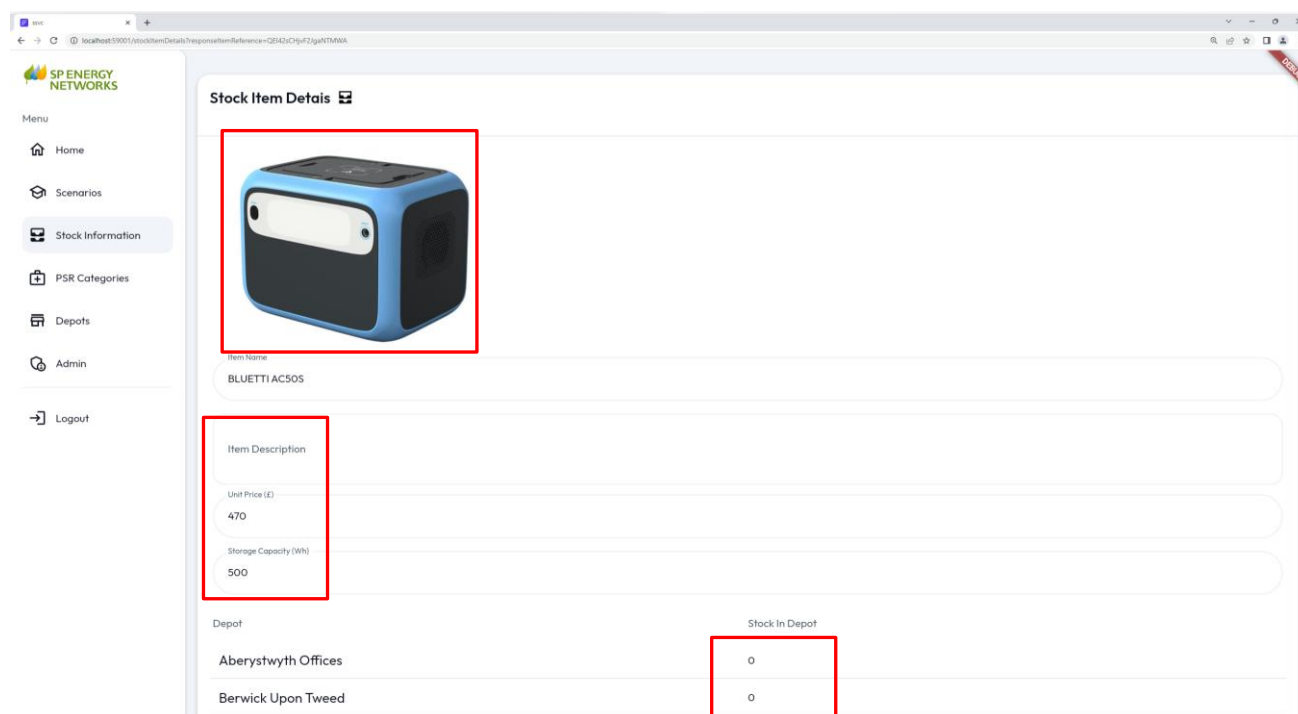
**Response Item Types**

Item Name	Unit Cost (£)	Storage Capacity (Wh)	Actions
 BLUETTI AC50S	470	500	 
 EcoFlow Delta Max	3499	3600	 
 BLUETTI AC200MAX	1994	2048	 
 BLUETTI EP500Pro	5399	5100	 


**Response Items**

Unit Id	Response Item Type	Charge Status	Home Depot	Status	Actions
6YeVG8KhXlm7YbDD7qM9	BLUETTI AC200MAX	<div></div>	Newtown Depot	In Transit	 

From this screen, their name, capacity and price can be edited as well as their stock in each depot. To edit, **click on the property**. To save changes, **click 'Save Changes'** at the bottom of the screen.



**Stock Item Details**



Item Name: BLUETTI AC50S

Item Description:

Unit Price (£): 470

Storage Capacity (Wh): 500

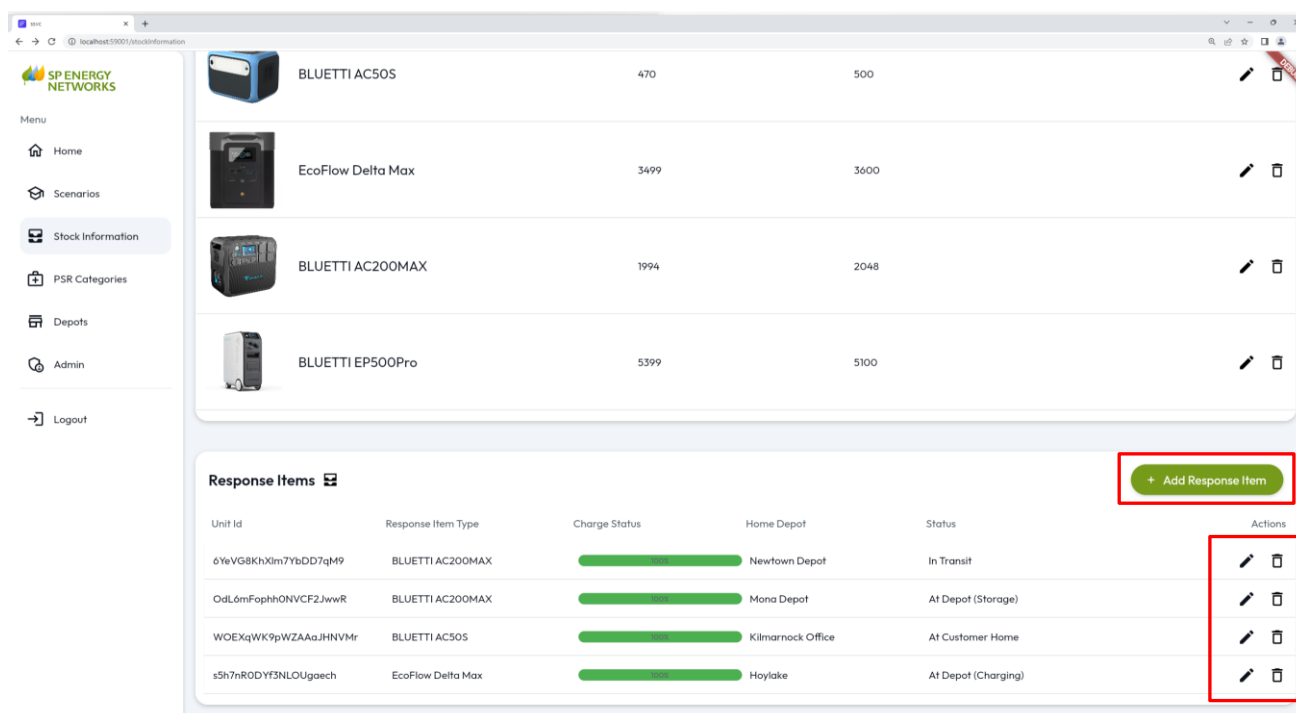
Depot:

Stock In Depot:

Aberystwyth Offices	<input type="text" value="0"/>
Berwick Upon Tweed	<input type="text" value="0"/>

Back on the stock information page, below the item types are individual items. The items include an ID number, a type (e.g., a model of battery), a status (e.g., charge level), their home depot and current location. To add an item, **click 'Add Response Item'**. To delete an item, **click the bin icon**. To edit the properties of an item, **click on the pencil icon**.





**Menu**

- Home
- Scenarios
- Stock Information
- PSR Categories
- Depots
- Admin
- Logout

Device	470	500	
BLUETTI AC50S			
EcoFlow Delta Max	3499	3600	
BLUETTI AC200MAX	1994	2048	
BLUETTI EP500Pro	5399	5100	

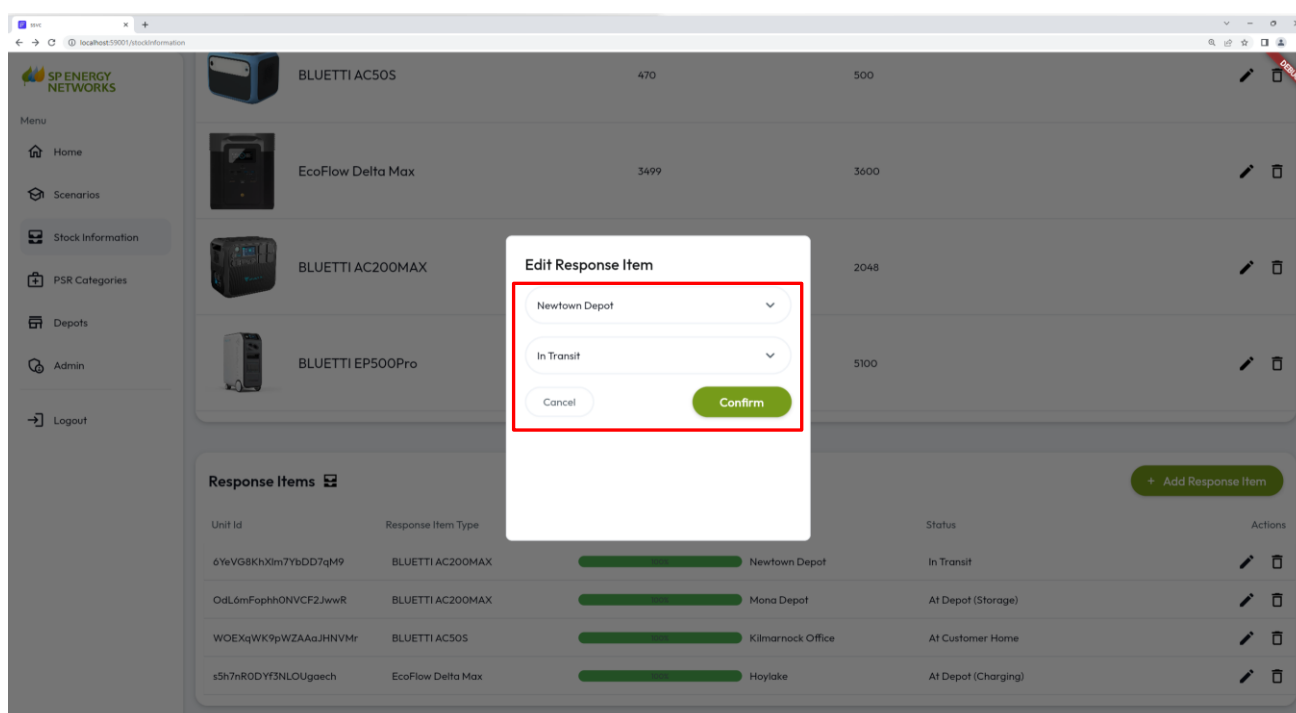
**Response Items**

Unit Id	Response Item Type	Charge Status	Home Depot	Status	Actions
6YeVG8KhXlm7YbDD7qM9	BLUETTI AC200MAX	<div></div>	Newtown Depot	In Transit	
OdL6mFophhONVCF2JwwR	BLUETTI AC200MAX	<div></div>	Mona Depot	At Depot (Storage)	
WOEXqWK9pWZAaJHNVMr	BLUETTI AC50S	<div></div>	Kilmarnock Office	At Customer Home	
s5h7nR0DYf3NLOUgaech	EcoFlow Delta Max	<div></div>	Hoylake	At Depot (Charging)	

**Response Items**

[+ Add Response Item](#)

When editing an item, a pop up will appear. Click on a property to change it and then 'confirm' or cancel.



**Menu**

- Home
- Scenarios
- Stock Information
- PSR Categories
- Depots
- Admin
- Logout

Device	470	500	
BLUETTI AC50S			
EcoFlow Delta Max	3499	3600	
BLUETTI AC200MAX	1994	2048	
BLUETTI EP500Pro	5399	5100	

**Edit Response Item**

Newtown Depot

In Transit

Cancel Confirm

**Response Items**

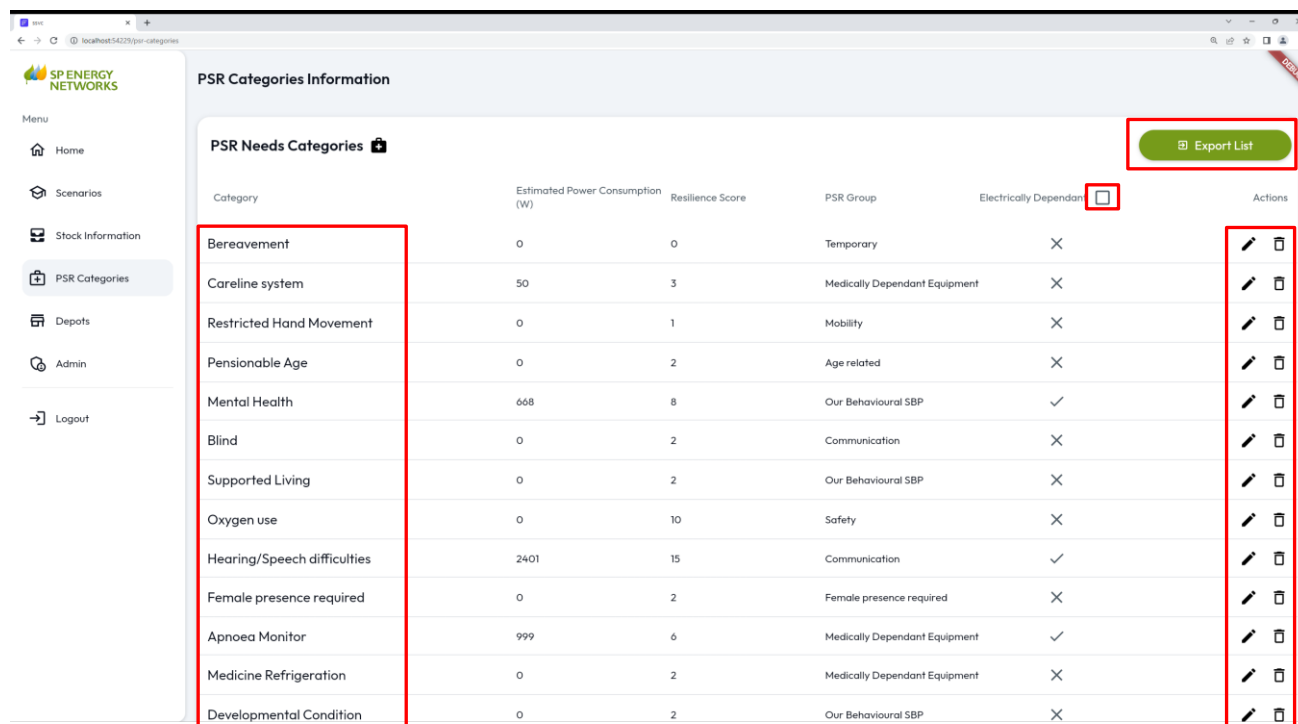
[+ Add Response Item](#)

Unit Id	Response Item Type	Charge Status	Home Depot	Status	Actions
6YeVG8KhXlm7YbDD7qM9	BLUETTI AC200MAX	<div></div>	Newtown Depot	In Transit	
OdL6mFophhONVCF2JwwR	BLUETTI AC200MAX	<div></div>	Mona Depot	At Depot (Storage)	
WOEXqWK9pWZAaJHNVMr	BLUETTI AC50S	<div></div>	Kilmarnock Office	At Customer Home	
s5h7nR0DYf3NLOUgaech	EcoFlow Delta Max	<div></div>	Hoylake	At Depot (Charging)	

## 7 PSR Categories

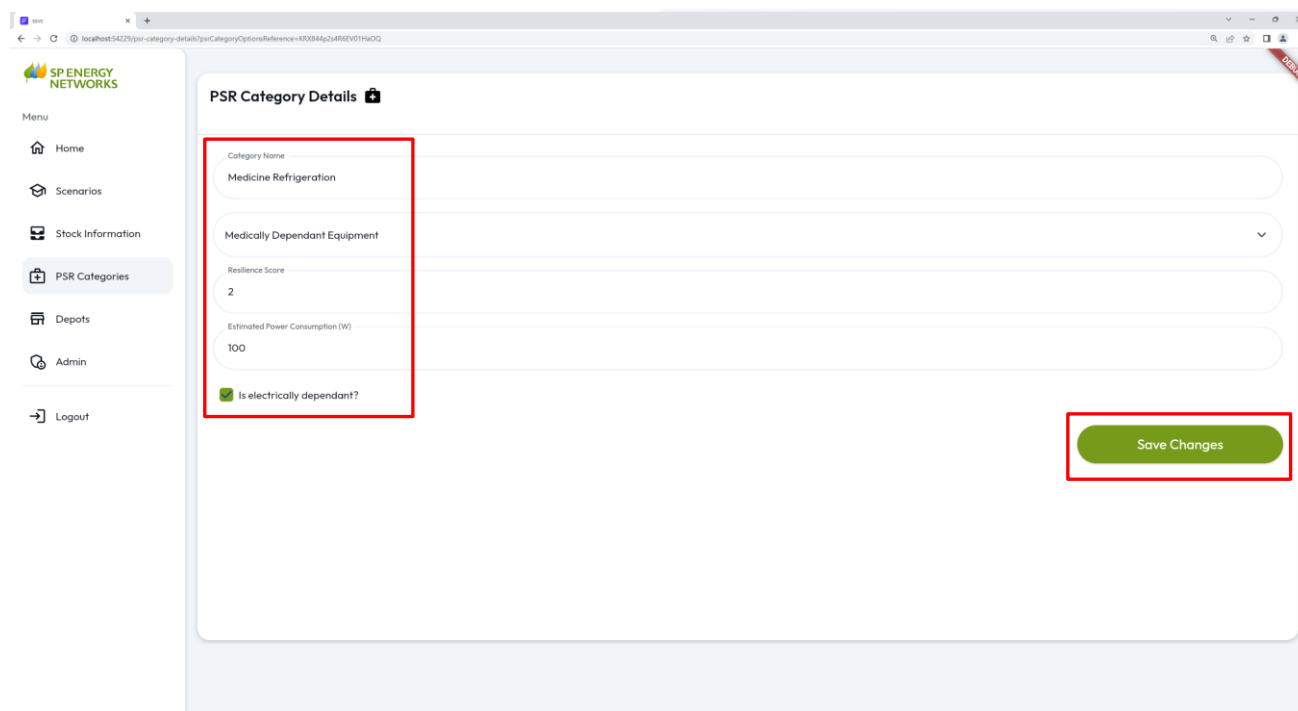
The PSR Categories page contains the database of categories that PSR customers may be registered as. This is where the power requirements of the different devices can be entered, as well as the resilience score and flag for if the category is electrically dependent. To filter the list for electrically

dependent reasons, **click the electrically dependent tick box**. To export the data, **click 'Export List'**. To modify data, **click the category name or the pencil icon**. To delete a category, **click on the bin icon**.



Category	Estimated Power Consumption (W)	Resilience Score	PSR Group	Electrically Dependent	Actions
Bereavement	0	0	Temporary	<input type="checkbox"/>	
Careline system	50	3	Medically Dependant Equipment	<input type="checkbox"/>	
Restricted Hand Movement	0	1	Mobility	<input type="checkbox"/>	
Pensionable Age	0	2	Age related	<input type="checkbox"/>	
Mental Health	668	8	Our Behavioural SBP	<input checked="" type="checkbox"/>	
Blind	0	2	Communication	<input type="checkbox"/>	
Supported Living	0	2	Our Behavioural SBP	<input type="checkbox"/>	
Oxygen use	0	10	Safety	<input type="checkbox"/>	
Hearing/Speech difficulties	2401	15	Communication	<input checked="" type="checkbox"/>	
Female presence required	0	2	Female presence required	<input type="checkbox"/>	
Apnoea Monitor	999	6	Medically Dependant Equipment	<input checked="" type="checkbox"/>	
Medicine Refrigeration	0	2	Medically Dependant Equipment	<input type="checkbox"/>	
Developmental Condition	0	2	Our Behavioural SBP	<input type="checkbox"/>	

When editing a category, you can **click on the name, associated medical equipment, reliance score and estimated power consumption** and **electrical dependency** to update them. To save the changes, **click 'Save Changes'**.



Category Name  
Medicine Refrigeration

Medically Dependant Equipment  
▼

Resilience Score  
2

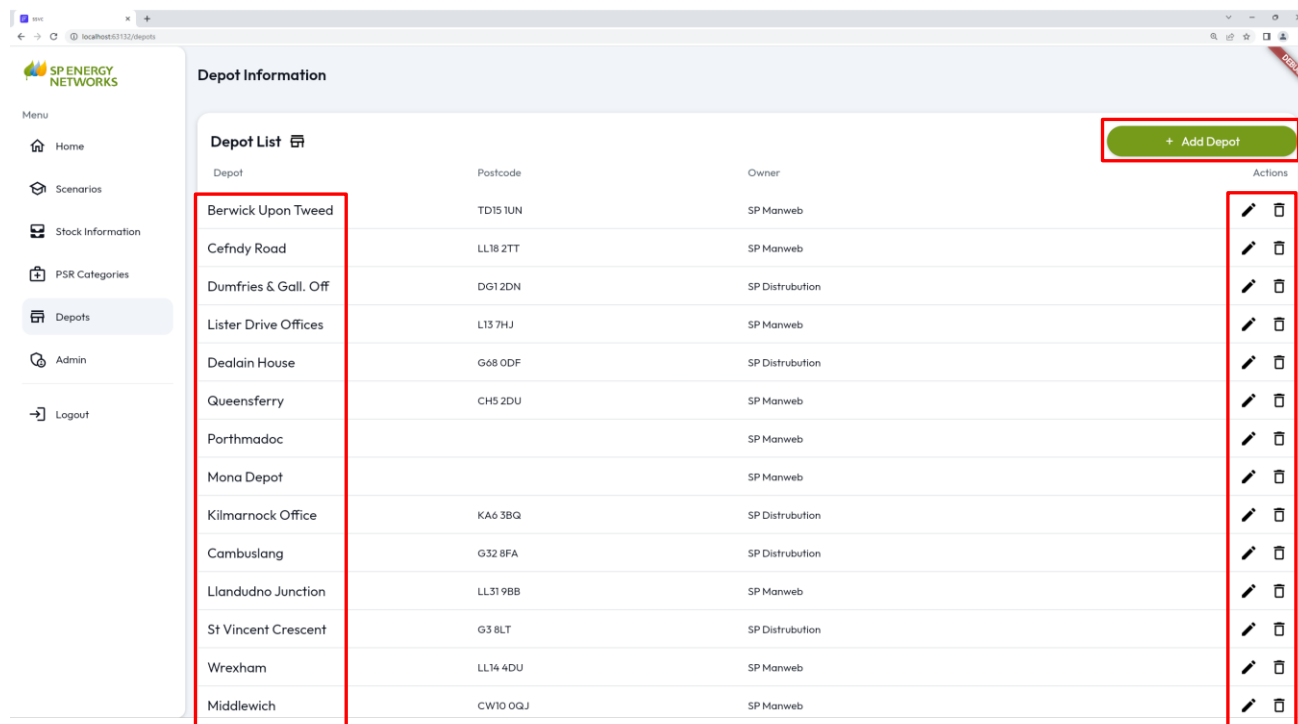
Estimated Power Consumption (W)  
100





























☒ Is electrically dependent?

Save Changes

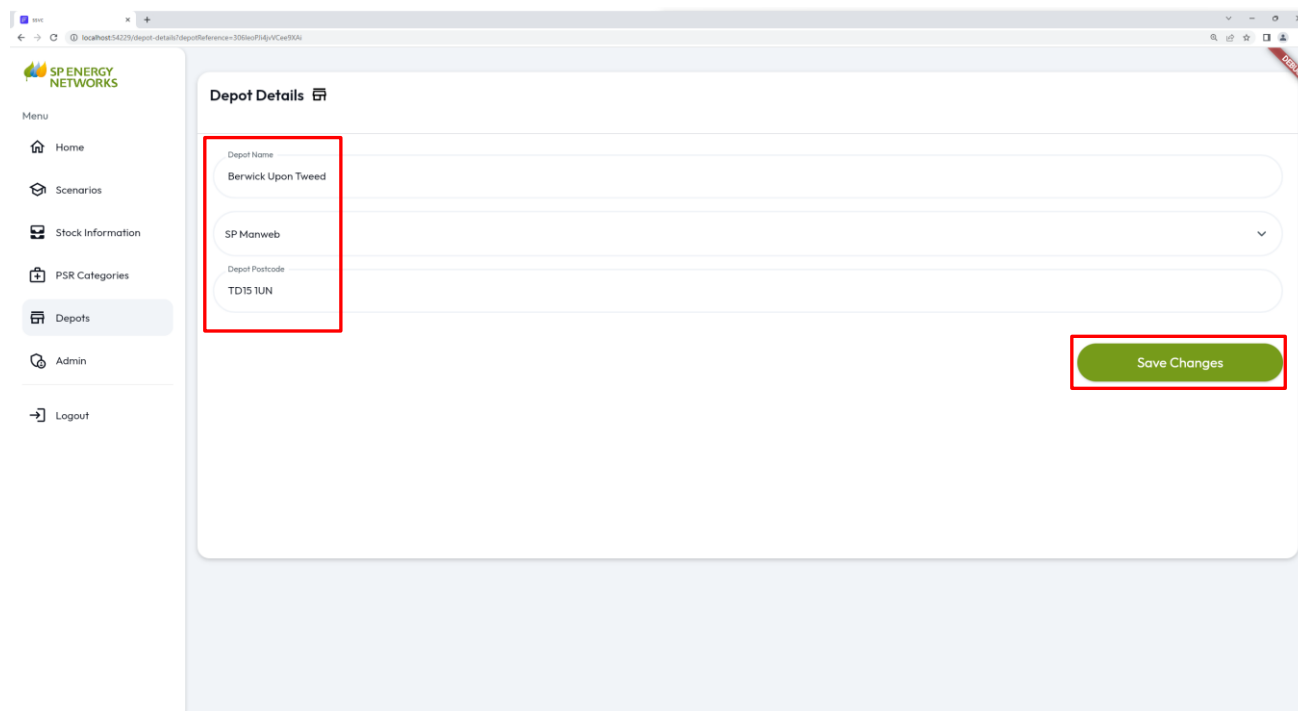
## 8 Depots

The depot page lists the names, postcodes and owners of the depots. To add a To edit a depot, **click on the name or pencil icon**. To delete a depot, **click on the bin icon**.



Depot	Postcode	Owner	Actions
Berwick Upon Tweed	TD15 1UN	SP Manweb	 
Cefndy Road	LL18 2TT	SP Manweb	 
Dumfries & Gall. Off	DG1 2DN	SP Distrubution	 
Lister Drive Offices	L13 7HJ	SP Manweb	 
Dealain House	G68 0DF	SP Distrubution	 
Queensferry	CH5 2DU	SP Manweb	 
Porthmadoc		SP Manweb	 
Mona Depot		SP Manweb	 
Kilmarnock Office	KA6 3BQ	SP Distrubution	 
Cambuslang	G32 8FA	SP Distrubution	 
Llandudno Junction	LL31 9BB	SP Manweb	 
St Vincent Crescent	G3 8LT	SP Distrubution	 
Wrexham	LL14 4DU	SP Manweb	 
Middlewich	CW10 0GJ	SP Manweb	 

When adding or editing a depot you can **click on the name, owner and postcode** to update them. To save the changes, **click 'Save Changes'**.



Depot Name  
Berwick Upon Tweed

SP Manweb

Depot Postcode  
TD15 1UN

Save Changes

## 9 Admin

The admin page is where datasets can be imported into the SSSC software so that they can be used in scenario planning. To upload a PSR dataset or stock information as a .csv format, first **copy the data into the template** (Note: examples are fake data).

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	Network	Category1	Category2	Category3	Category4	Category5	Category6	Category7	Category8	Category9	Postcode	Latitude	Longitude	Address 1	Address 2	First Name	Last Name
2	SPEN	Nebuliser	Apnoea M	Medicine	Refrigeration						DD1	56.4618	-2.97736				
3	SPEN	Heart & L	Careline s	Medical Equipment	- feeding and medication						DD5	56.4797	-2.86337				
4	SPEN	Kidney Dis	Medical dependant	Electric showering							DD6	56.4366	-2.92816				
5	SPEN	Ventilator	Stair Lift, Hoist,	Elect bed							DG1	55.0733	-3.58566				

	A	B	C	D	E	F	G
1	Response	Home Dep	Status	Latitude	Longitude	Charging %	Is Available
2	BLUETTI A	Aberystw	Repair Re	56.4618	-2.97736	0.29	FALSE
3	EcoFlow C	Berwick U	Repair Re	56.4797	-2.86337	0.27	FALSE
4	BLUETTI A	Bonnybric	Repair Re	56.4366	-2.92816	0.02	FALSE
5	BLUETTI E	Caernarfo	Repair Re	55.0733	-3.58566	0.63	FALSE
6	BLUETTI A	Cambusla	Repair Re	55.321	-3.43921	0.16	FALSE
7	EcoFlow C	Cefndy Rc	Repair Re	55.1146	-3.3407	0.1	FALSE
8	BLUETTI A	Dealain H	Repair Re	54.9897	-3.25136	0.11	FALSE
9	BLUETTI E	Dumfries	Repair Re	55.1744	-3.03233	0.32	FALSE
10	BLUETTI A	Galashiels	Repair Re	55.0801	-2.98763	0.79	FALSE
11	EcoFlow C	Glenrothe	Repair Re	55.0654	-3.65697	0.24	FALSE
12	BLUETTI A	Hoylake	Repair Re	55.2369	-3.79898	0.95	FALSE
13	BLUETTI E	Kilmarnoc	Repair Re	55.3752	-3.95486	0.98	FALSE
14	BLUETTI A	Lister Driv	Repair Re	54.9215	-3.81294	0.6	FALSE
15	EcoFlow C	Llandudnc	Repair Re	54.8372	-4.05552	0.13	FALSE
16	BLUETTI A	Middlewix	Repair Re	54.966	-4.00826	0.21	FALSE
17	BLUETTI E	Mona Dep	Repair Re	54.8748	-4.514	0.13	FALSE
18	BLUETTI A	Newtown	Repair Re	54.8783	-5.02299	0.43	FALSE
19	EcoFlow C	Porthmad	Repair Re	55.9523	-3.19207	0.74	FALSE
20	BLUETTI A	Prenton C	Repair Re	55.9216	-3.21082	0	FALSE
21	BLUETTI E	Queensfe	Repair Re	55.9334	-3.25136	0.92	FALSE
22	BLUETTI A	St Vincent	Repair Re	55.9412	-3.27459	0.09	FALSE
23	EcoFlow C	Stranraer	Repair Re	55.9086	-3.24252	0.99	FALSE
24	BLUETTI A	Telferton	Repair Re	55.9117	-3.28064	0.83	FALSE
25	BLUETTI E	Wrexham	Repair Re	55.9471	-3.11305	0.95	FALSE
26	BLUETTI A	Aberystw	Repair Re	55.9238	-3.15102	0.12	FALSE
27	EcoFlow C	Berwick U	At Depot	55.9061	-3.14339	0.2	TRUE
28	BLUETTI A	Bonnybric	At Depot	55.8766	-3.12173	0.23	TRUE
29	BLUETTI E	Caernarfo	At Depot	55.8725	-3.10481	0.39	TRUE
30	BLUETTI A	Cambusla	At Depot	55.9532	-3.20047	0.94	TRUE

To download the templates, **click on the download icons**. To then import the completed template .csv, **click the 'Import' buttons**. A file explorer pop up window will then allow you to select the file. To delete the data from SSSC, **click on the 'Clear' buttons**.

