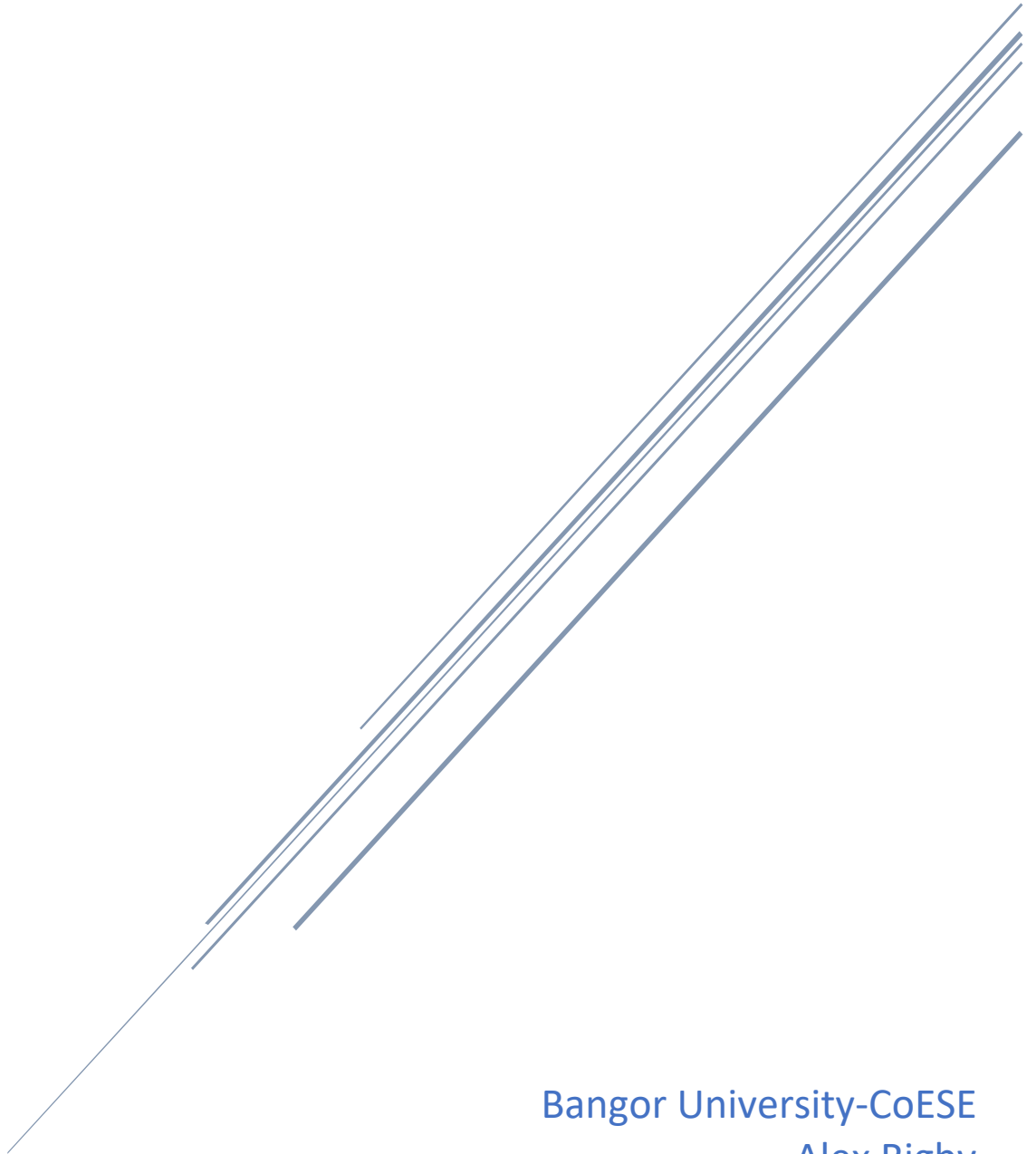


# Dŵr Uisce Visualization Tool

Help Documentation



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Dŵr Uisce

Energy Recovery in Water Services  
Adennill Ynni yn y Diwydiant Dŵr



PRIFYSGOL  
BANGOR  
UNIVERSITY

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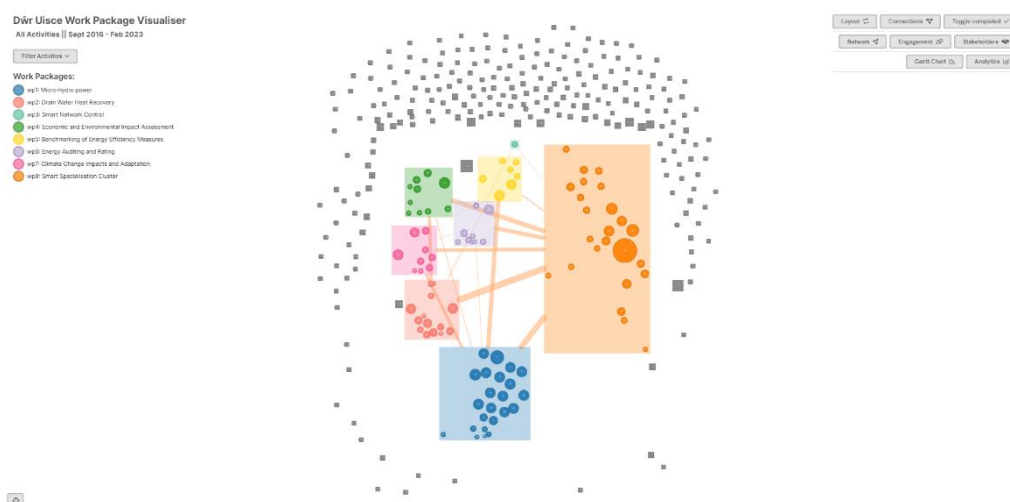
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## 1. Main controls

The main control buttons are to the top right of the view, hover your cursor over the buttons for a description of what each does.

1. Layout – refreshes the view by re-shuffling the graph elements
2. Connections – cycles connection styles between work package, activity, and none
3. Toggle completed – indicates completed activities by increasing their transparency
4. Network – opens the selected nodes [network view](#)
5. Engagement – toggles [external stakeholder engagement ranking](#)
6. Gantt chart – opens the [Gantt chart panel](#)
7. Analytics – opens the [analytics panel](#)

## 2. Node-link diagram (default view)



The node-link diagram provides an overview of the project. The 3 main components of the diagram are:

1. Work packages (coloured boxes)
  - Colour legend on the left
  - Linked to one another by weighted line
2. Activities (coloured circles)
  - Contained within the work packages
  - Weighted by number of connections to other activities
3. External stakeholders (grey squares)
  - Not contained with work package
  - Weighted by number of connections to activities

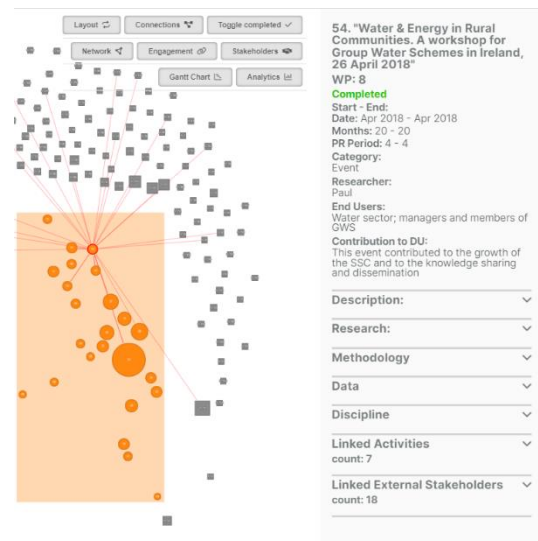
You may move any of the graphical elements to improve your view.

## 2.1 Meta panel

Selecting a graphical element (activity, work package or stakeholder) will highlight its connections in red and open its corresponding meta panel.

The panel displays information regarding the selected element.

Double click on any white area to de-select the element.



## 2.2 External stakeholder engagement ranking

Each external stakeholder's engagement with an activity is scored on a level from 1 - 4. The framework for stakeholder engagement level was adapted from Utrecht University's 'Transdisciplinary Field Guide'.

**Level 1 (Inform)** – Information is provided to the external stakeholder

**Level 2 (Consult)** – The external stakeholder provides information

**Level 3 (Share)** – There is a flow of information to and from the external stakeholder

**Level 4 (Co-create)** – The external stakeholder works as an equal designer and contributor

Pressing the 'Engagement' button turns on the external stakeholder engagement ranking. You will see each stakeholder has a colour from yellow to red indicating the engagement ranking.

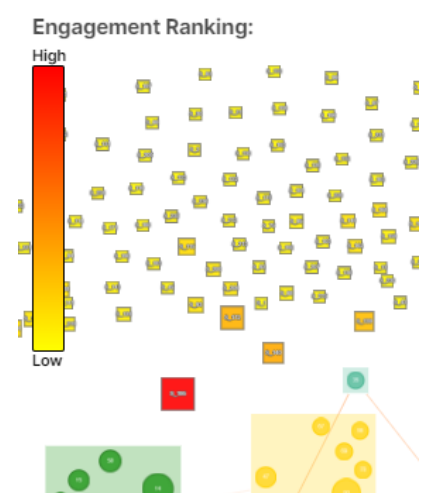
The ranking is calculated as the sum of the number connections of each engagement level multiplied by that engagement level.

A stakeholder with:

- 2 connections at engagement level 1
- 1 connection at level 2
- 4 at level 3
- 1 at level 4

Would have a ranking of:

$$(2*1) + (1*2) + (4*3) + (1*4) = 20$$

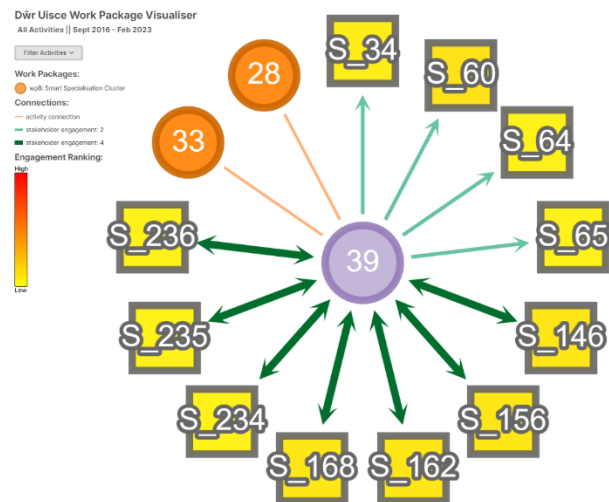


## 2.3 Network view

Pressing the “Network” button **with an activity or stakeholder selected** displays the selected elements immediate network (i.e., each element it is connected to).

You will see that stakeholder connections are indicated in the legend on the left with the arrow direction indicating flow of information.

Pressing the “Network” button again will close the network view.



## 3. Gantt chart

Pressing the “Gantt chart” button opens a Gantt chart of the project.

Each activity is represented by a Gant chart item. Hovering your cursor over the item will display its full activity name.

Like on the Node-link diagram, activities on the Gantt chart can be selected opening their meta panel.



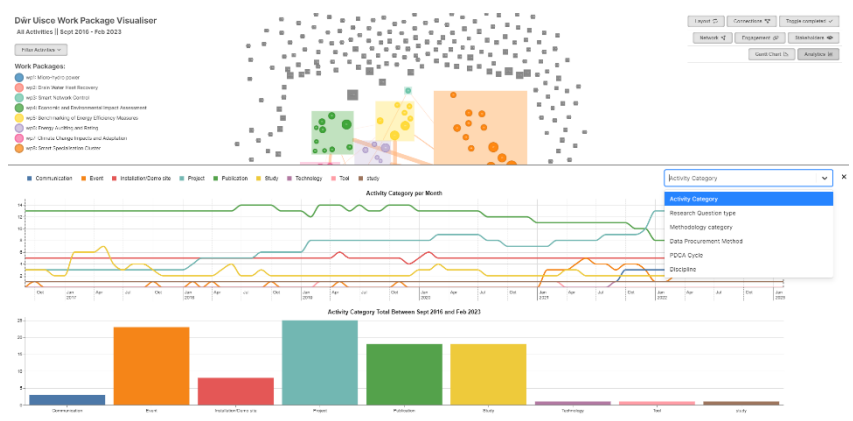
## 4. Analytics Panel

Pressing the “Analytics” button opens the analytics charts.

A dataset field can be selected from the drop-down menu on the right.

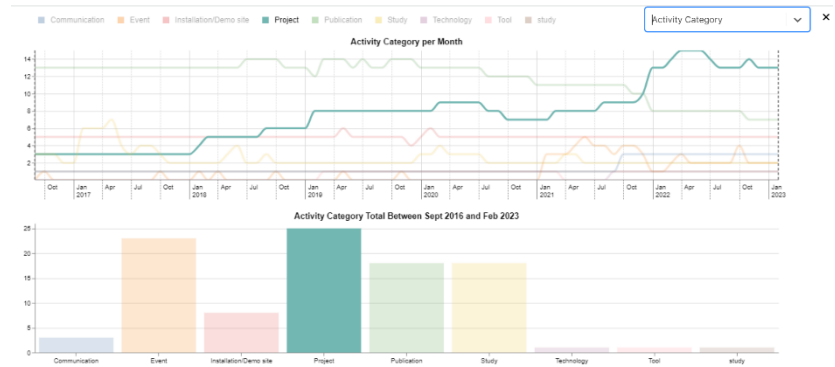
**Top chart:** displays the structure of activities per month in relation to the chosen dataset field.

**Bottom chart:** displays the total number of activities over the current timespan in relation to the chosen dataset field.



Pressing one of the field options in the legend along the top will highlight that option.

Multiple option can be highlighted by holding down SHIFT on your keyboard and pressing legend items.



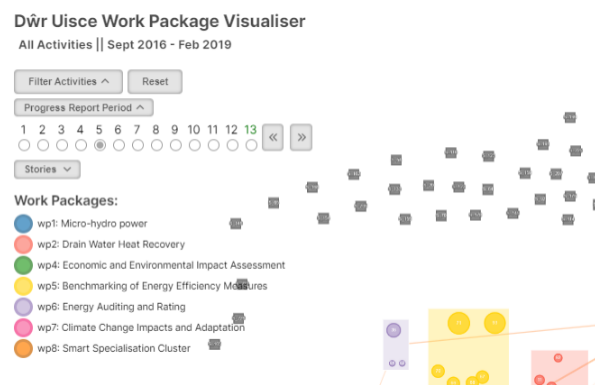
## 5. Filtering activities

Pressing the “Filter Activities” button in the top left of the default view will open the filter options.

Filtering the dataset creates a subset of the dataset. When a filter is selected all the visualisation tools features will use this subset. Once a subset is selected the default view can be achieved by clicking the “Reset” button in the top left.

### 5.1 Filter by progress report period

View snapshots of the project during each progress report period by selecting a progress report period radio button or by using the arrow buttons.



## 5.2 Filtering by story

Either select a predefined project story from the list or click “Custom Story” to define your own story.

Enter name for your story in the text box (pressing the ‘+’ button or hitting ENTER to confirm it).

Select a dataset field to filter by from the drop-down menu (pressing the ‘+’ button or hitting ENTER to confirm your selection).

Select all field values that apply to your filter from the value dropdown menu (pressing the ‘+’ button or hitting ENTER to confirm them).

Press “**Generate Story**” when you are happy with your filter.

Your newly defined story will appear in the list above.

Select the story to view it.

Press the down arrow to display the filter field and values, press the ‘Trash Can’ to delete the custom story.

### Dŵr Uisce Work Package Visualiser

All Activities || Sept 2016 - Feb 2023

