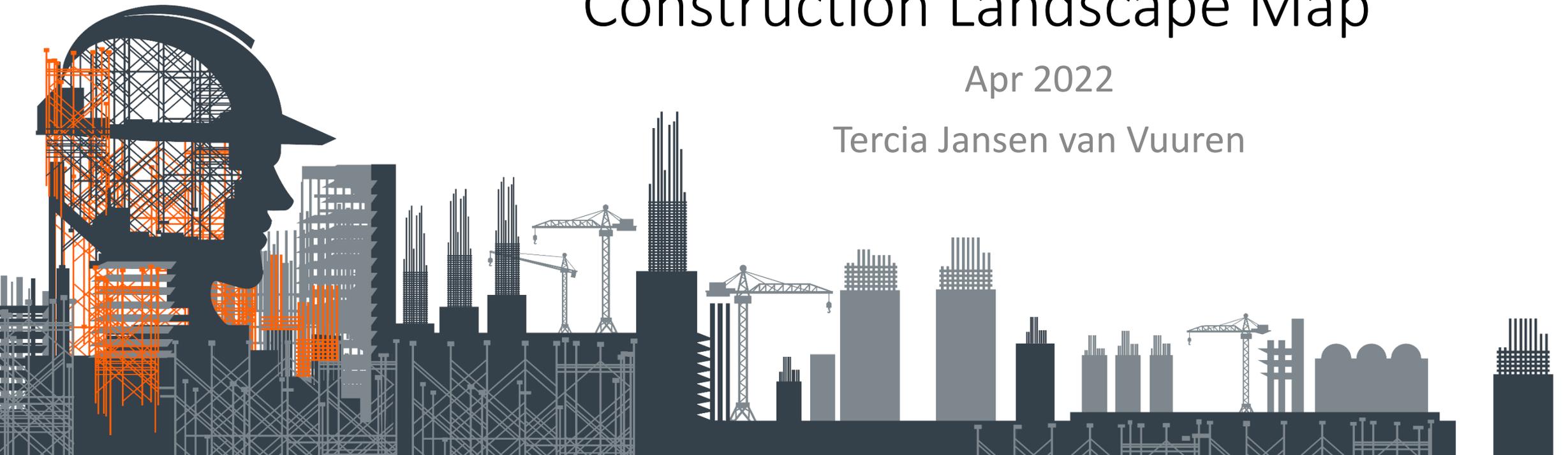


TRANSFORMING CONSTRUCTION

# A guide to using the 'Decarbonising Construction Landscape Map'

Apr 2022

Tercia Jansen van Vuuren





This guide has been produced to help users to understand how to navigate the landscape map and find information that is useful or relevant to them.

Please read the Map Overview and Map Description for more information about the content of the landscape map and how it has been generated.



The project overview gives a brief introduction to the landscape map, highlighting the purpose behind creating it.

Please note the information about copyright licence.

PROJECT OVERVIEW

## Decarbonising construction - Industry landscape map v1

As the construction industry rises to the challenge of transitioning to net zero, it has become increasingly overwhelming to keep track of the many initiatives, action groups and resources that are striving to decarbonise the built environment. This landscape map provides a visual representation of many of the main groups with information about who they are and what they are doing to reduce carbon in the construction industry.



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LAING O'ROURKE CENTRE  
*for* CONSTRUCTION ENGINEERING  
*and* TECHNOLOGY



This is the landing page of the landscape map

General

The challenge of decarbonising construction is being addressed in a variety of ways by many organisations. This landscape map is a visual representation of many of the groups, institutions and initiatives that are active in the transitioning the construction industry to net zero. The purpose of this map is to provide an overview of activities and direct users to organisations or information that may be useful in their own learning or journey to decarbonising construction.

For this map, 'construction' includes the full spectrum of buildings and infrastructure across the lifecycle of the project, from strategic planning to end-of-life, including assessment of existing assets and refurbishment/retrofit. Some organisations on this map address very specific aspects, such as operational energy in buildings, or domestic retrofit, whilst others address a range of aspects. To explore the topics/themes that constitute decarbonising construction, have a look at this mindmap and read this article.

Decarbonising construction - Industry landscape map v1 Industry Landscape Overview of organisations TERCIAJVV

Search

Select how to display map elements and connections

Show reports Hide reports Show affiliate connections Hide affiliate connections

Connect by tags (incl. reports) Connect by tags (excl. reports)

Select tags to display

Legend

- Professional Institution
- Industry group
- Industry Initiative
- Strategic/Advisory organisation
- Trade body
- Government
- Academia
- Charity
- Champion scheme/commitment scheme
- Community of practice/Forum
- Working Group/ Workstream/Taskforce
- Project/Programme
- Report
- Affiliate connection

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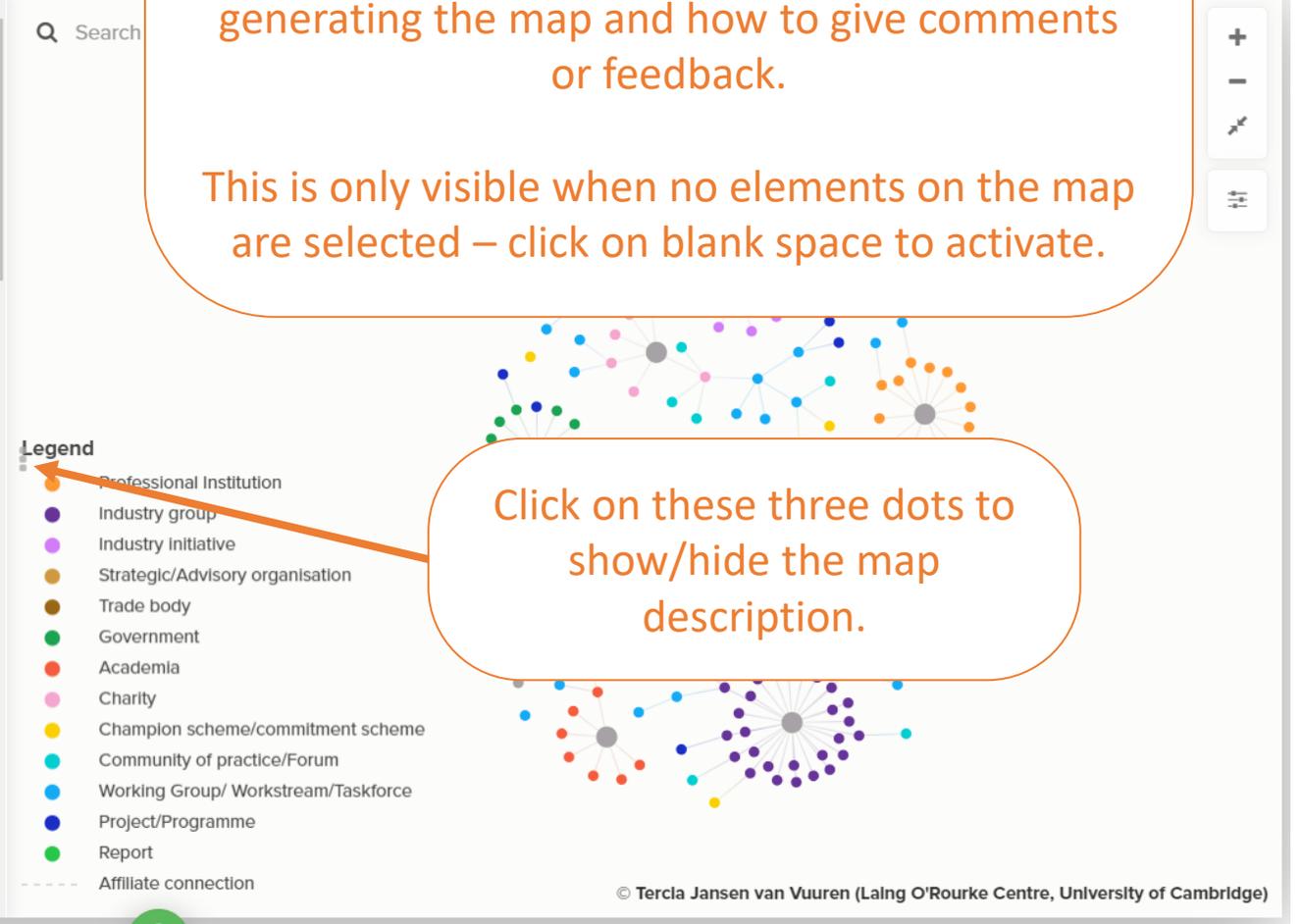
Decarbonising construction - Industry landscape map v1

The challenge of decarbonising construction is being addressed in a variety of ways by many organisations. This landscape map is a visual representation of many of the groups, institutions and initiatives that are active in the transitioning the construction industry to net zero. The purpose of this map is to provide an overview of activities and direct users to organisations or information that may be useful in their own learning or journey to decarbonising construction.

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This is the description of the landscape map, including information about the process behind generating the map and how to give comments or feedback.

This is only visible when no elements on the map are selected – click on blank space to activate.



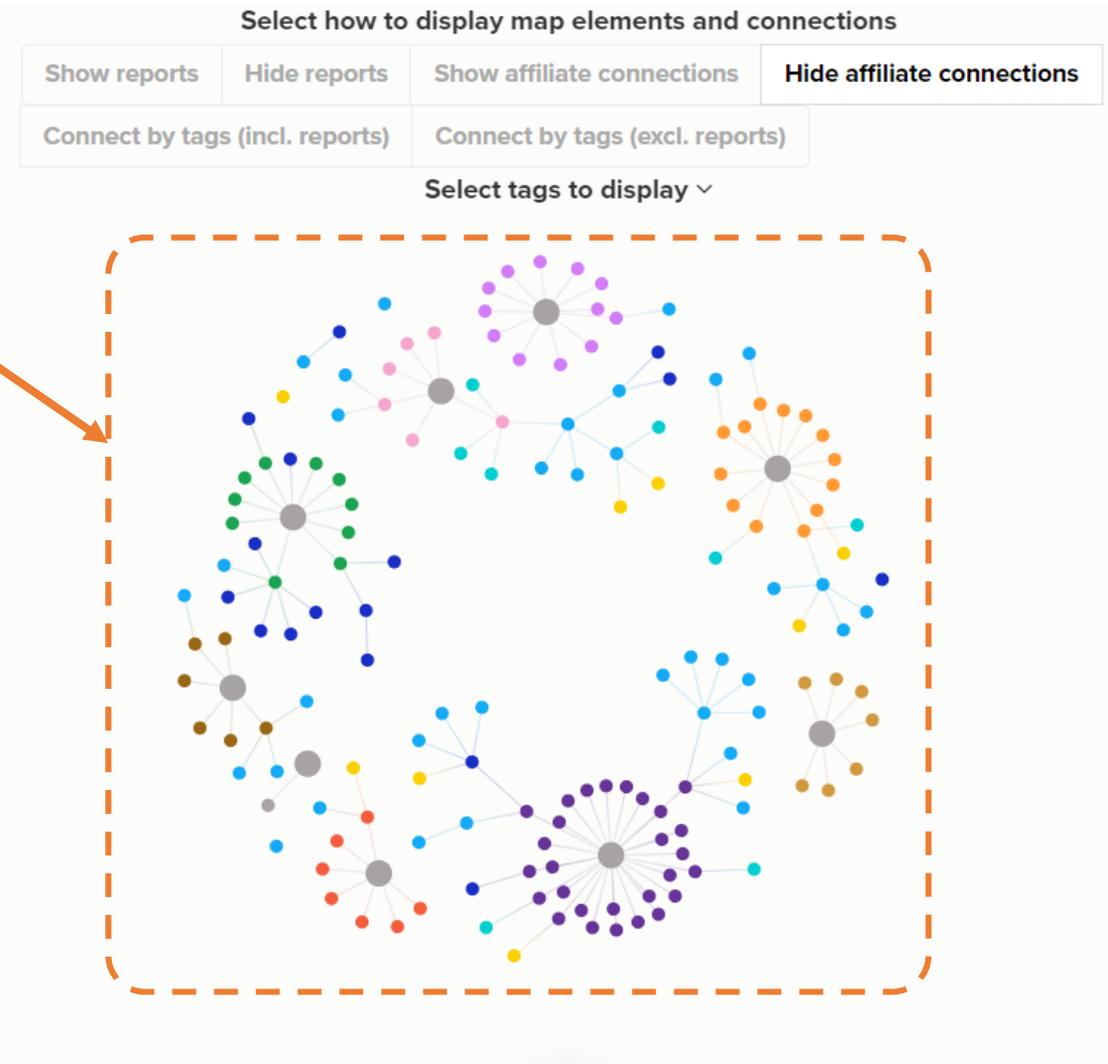
Click on these three dots to show/hide the map description.



This is the visualisation of the organisations included on the landscape map. Each coloured circle is an element and represents an organization according to the legend.

By default, these are grouped according to organization type. Relevant sub-groups/workstreams are shown connected to the main organization.

- Industry Initiative
- Strategic/Advisory organisation
- Trade body
- Government
- Academia
- Charity
- Champion scheme/commitment scheme
- Community of practice/Forum
- Working Group/ Workstream/Taskforce
- Project/Programme
- Report
- Affiliate connection





Q Search

Select how to display map elements and connections

Show reports	Hide reports	Show affiliate connections	Hide affiliate connections
Connect by tags (incl. reports)		Connect by tags (excl. reports)	

Select tags to display ▾

These buttons allow you to customize which elements and connections to display on the map

**Legend**

- Professional Institution
- Industry group
- Industry Initiative
- Strategic/Advisory organisation
- Trade body
- Government
- Academia
- Charity
- Champion scheme/commitment scheme
- Community of practice/Forum
- Working Group/ Workstream/Taskforce
- Project/Programme
- Report
- Affiliate connection



Use these buttons to zoom out, zoom in, or 'zoom to fit' (that will fit the selected contents to the screen)

Search: Planning Institute RTPI

Select how to display map elements and connections

Show reports Hide reports Show affiliate connections Hide affiliate connections

Connect by tags (incl. reports) Connect by tags (excl. reports)

Select tags to display

Chartered Institute of Procurement and Supply CIPS

Royal Institute of British Architects RIBA

ice Institution of Civil Engineers ICE

RIBA 2030 Climate Challenge

Sustainability Leadership Team

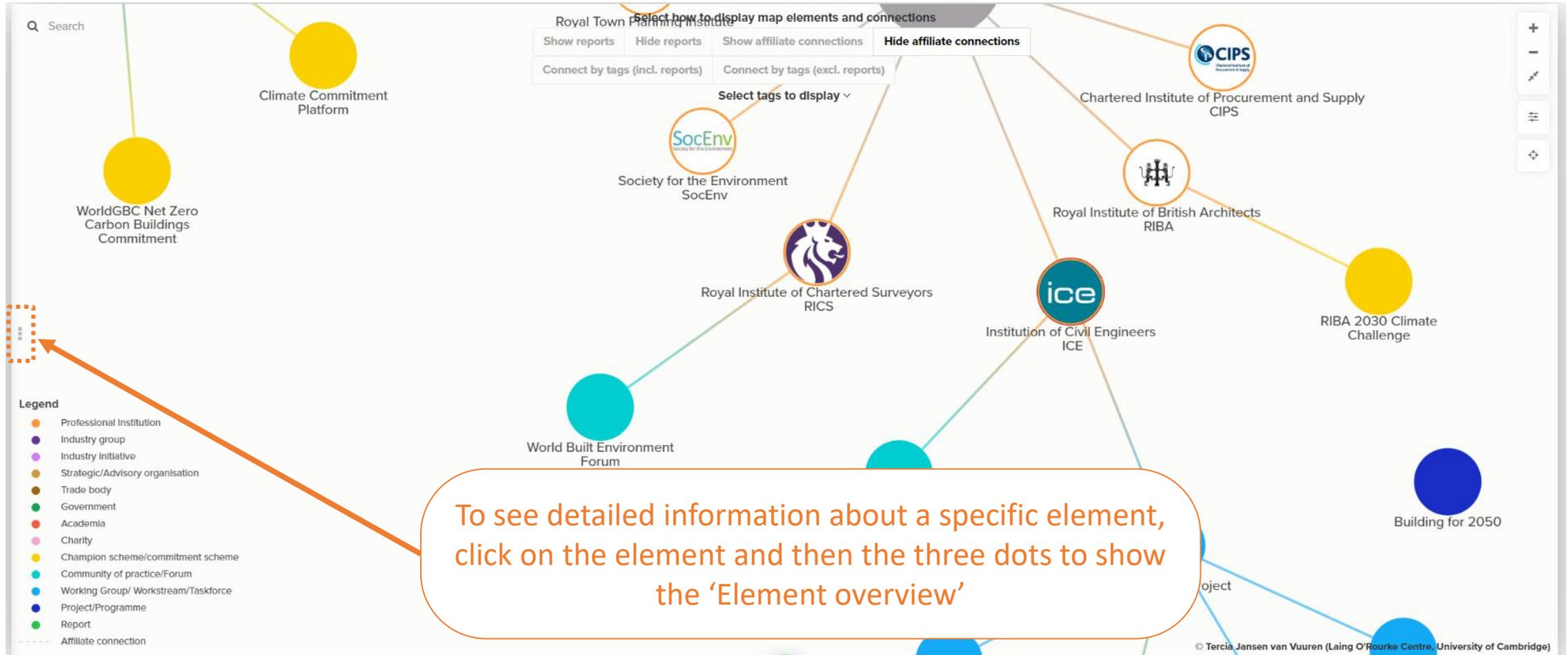
The Carbon Project

Building for 2050

Legend

- Professional Institution
- Industry group
- World Built Environment Forum
- Industry initiative
- Strategic Advisory organisation
- Trade body
- Government
- Academia
- Charity
- Champion scheme/commitment scheme
- Community of practice/Forum
- Working Group/ Workstream/Taskforce
- Project/Programme
- Report
- Affiliate connection

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The screenshot shows a knowledge graph interface for the Institution of Civil Engineers (ICE). The central node is 'Institution of Civil Engineers ICE'. It is connected to several other nodes: 'Society for the Environment SocEnv', 'Royal Institute of British Architects RIBA', 'Chartered Institute of Procurement and Supply CIPS', 'RIBA 2030 Climate Challenge', 'The Carbon Project', and 'Building for 2050'. A legend indicates that blue circles represent 'Trade body'. The interface includes search filters like 'Connect by tags (incl. reports)', 'Connect by tags (excl. reports)', and 'Select tags to display'. A text box on the left provides a description of ICE and its work on decarbonising construction. A table below the text lists the acronym 'ICE' and the website 'ice.org.uk'. The interface also features a map of elements and connections, a legend, and a copyright notice for Tercia Jansen van Vuuren (Laing O'Rourke Centre, University of Cambridge).

**Element name**

**Element type**

**Overview of the organization and work relating to decarbonising construction**

**Tags**

**Additional information fields, such as acronym, website, links to knowledge databases, or publication type depending on element type.**

**Institution of Civil Engineers**  
PROFESSIONAL INSTITUTION  
Imported

The Institution of Civil Engineers (ICE) is a professional membership body for civil engineers. "We help the industry learn and share our knowledge, so we can maintain the natural and built environment. We also promote the essential contribution that civil engineers make to society worldwide." (source)

**Brief Description of work related to carbon**

The ICE has setup 'The Carbon Project: Towards Net Zero for Infrastructure' to galvanise action around net zero. This has three workstreams (Measurement; Capability building; Systems-level reductions) and produces resources such as blogposts and papers.

ACRONYM	ICE
WEBSITE	<a href="http://ice.org.uk/">ice.org.uk/</a>

#industry-landscape/institution-of-civil-engineers

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### Institution of Civil Engineers

PROFESSIONAL INSTITUTION



Imported

The Institution of Civil Engineers (ICE) is a professional membership body for civil engineers. "We help the industry learn and share our knowledge, so we can maintain the natural and built environment. We also promote the essential contribution that civil engineers make to society worldwide." (source)

### Brief Description of work related to carbon

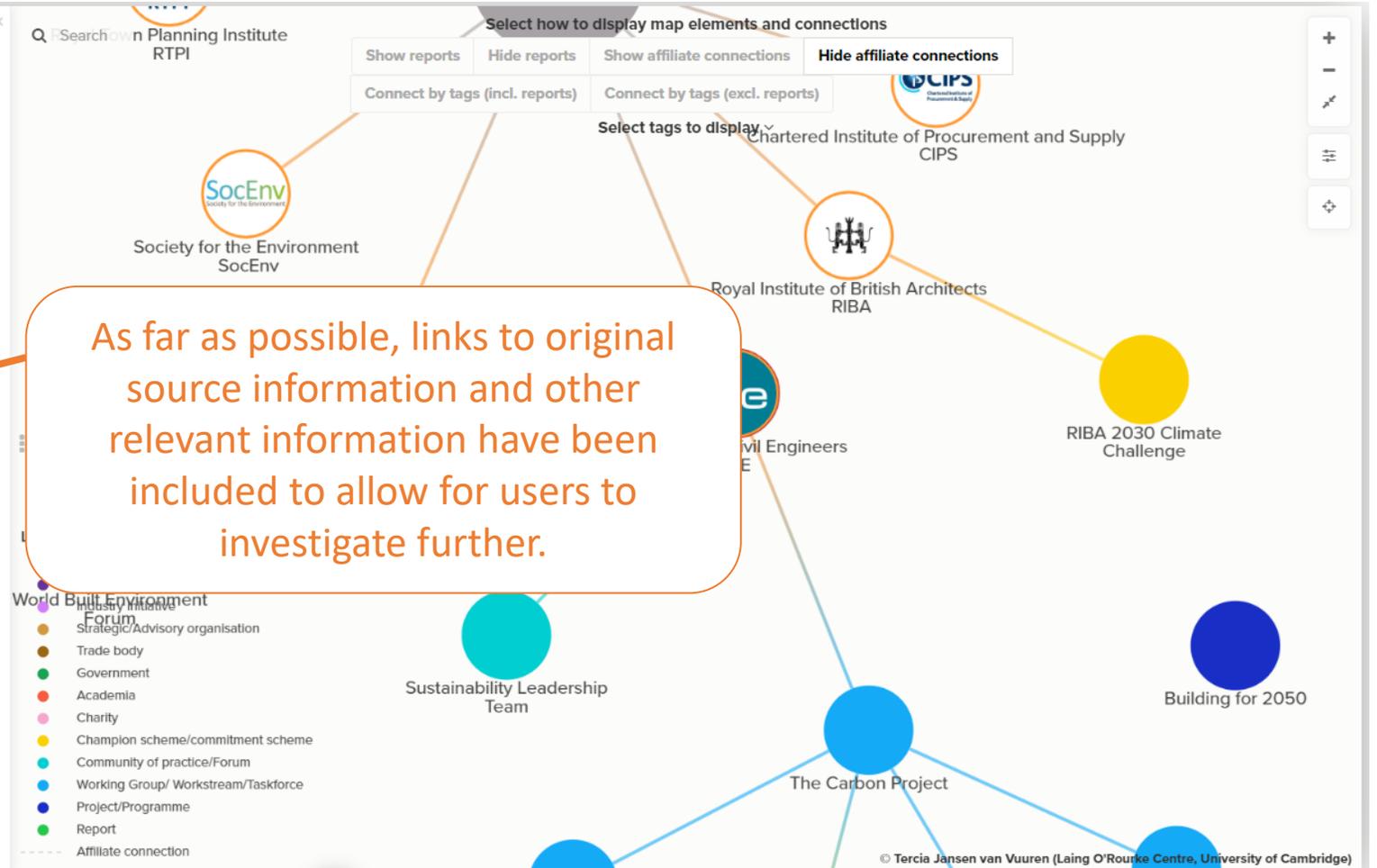
The ICE has setup 'The Carbon Project: Towards Net Zero for Infrastructure' to galvanise action around net zero. This has three workstreams (Measurement; Capability building; Systems-level reductions) and produces resources such as blogposts and papers.

Infrastructure

ACRONYM ICE

WEBSITE [ice.org.uk/](http://ice.org.uk/)

#industry-landscape/institution-of-civil-engineers



As far as possible, links to original source information and other relevant information have been included to allow for users to investigate further.



### Institution of Civil Engineers



PROFESSIONAL INSTITUTION

Imported

The Institution of Civil Engineers (ICE) is a professional membership body for civil engineers. "We help the industry learn and share our knowledge, so we can maintain the natural and built environment. We also promote the essential contribution that civil engineers make to society worldwide." (source)

### Brief Description of work related to carbon

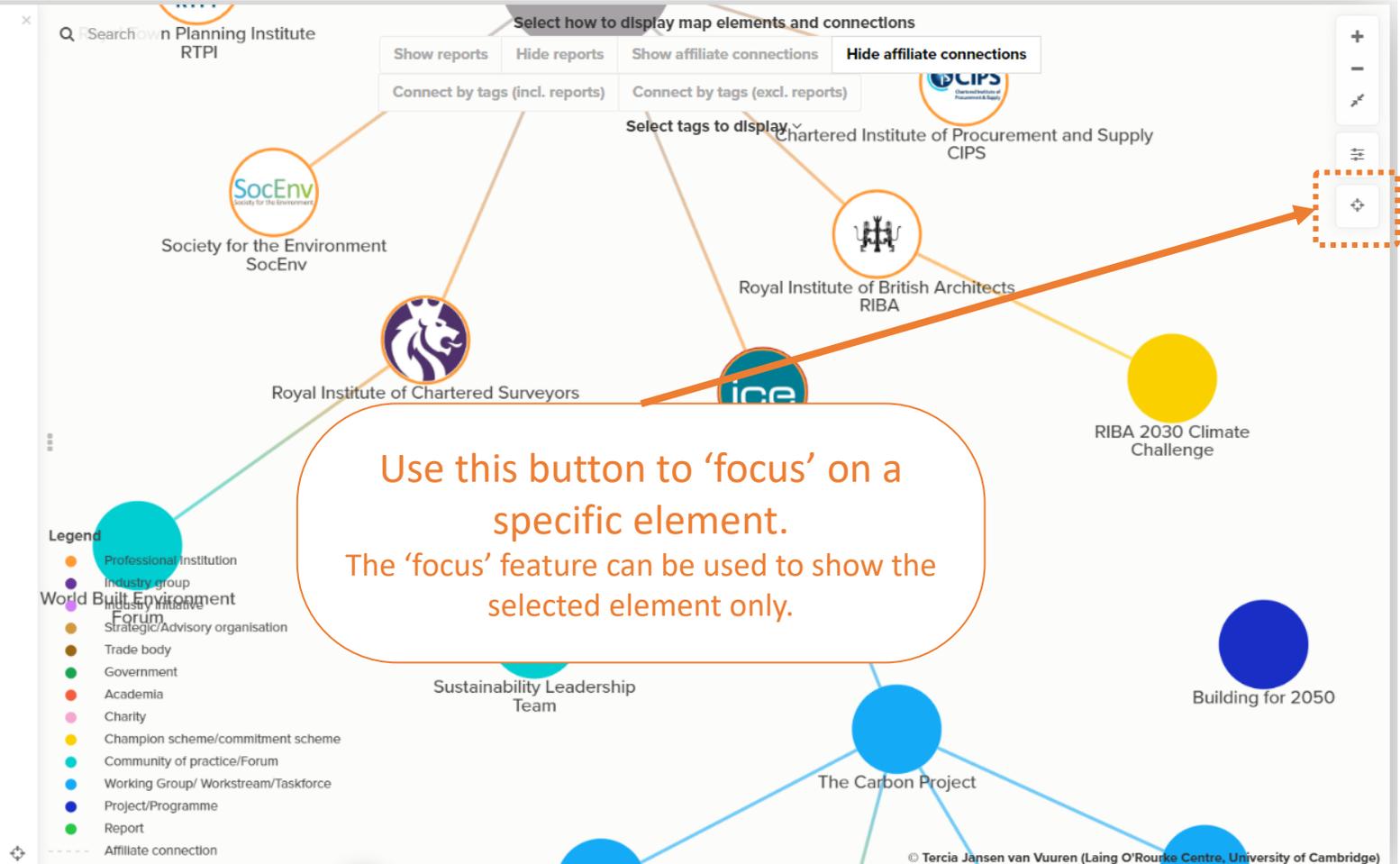
The ICE has setup 'The Carbon Project: Towards Net Zero for Infrastructure' to galvanise action around net zero. This has three workstreams (Measurement; Capability building; Systems-level reductions) and produces resources such as blogposts and papers.

Infrastructure

ACRONYM ICE

WEBSITE [ice.org.uk/](http://ice.org.uk/)

#industry-landscape/institution-of-civil-engineers





The arrows above and below the focus button can be used to expand or contract the focus, showing elements connected to the selected element.

Clear the focus to return to the full map view.

How to display map elements and connections

Show affiliate connections Hide affiliate connections

Connect by tags (excl. reports)

Select tags to display ▾

Professional Institutions

ice  
Institution of Civil Engineers  
ICE

Sustainability Leadership Team

The Carbon Project

**Legend**

- Professional Institution
- Industry group
- Industry Initiative
- Strategic/Advisory organisation
- Trade body
- Government
- Academia
- Charity
- Champion scheme/commitment scheme
- Community of practice/Forum
- Working Group/ Workstream/Taskforce
- Project/Programme
- Report
- Affiliate connection

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### Changing the way the map displays elements and connections

Buttons along the top can be used to change which elements and connections are shown on the map, and the way the elements are grouped.

Show/Hide reports: toggle to display the reports that have been included on the landscape map and are linked to organisations shown. This is not a comprehensive library of all publications by all the organisations, just a selection of relevant reports/publications.

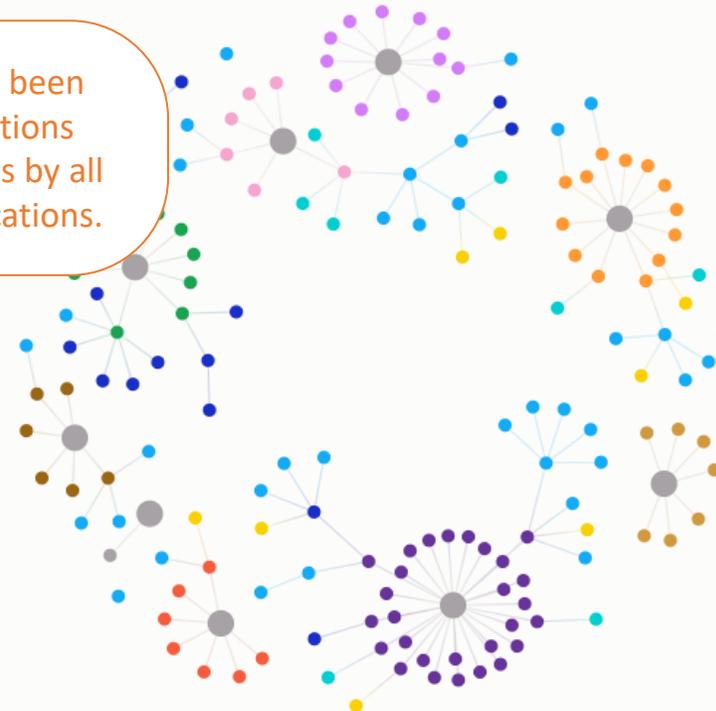
#### Legend

- Professional Institution
- Industry group
- Industry Initiative
- Strategic/Advisory organisation
- Trade body
- Government
- Academia
- Charity
- Champion scheme/commitment scheme
- Community of practice/Forum
- Working Group/ Workstream/Taskforce
- Project/Programme
- Report
- Affiliate connection

Select how to display map elements and connections

Show reports	Hide reports	Show affiliate connections	Hide affiliate connections
Connect by tags (incl. reports)		Connect by tags (excl. reports)	

Select tags to display ▾





### Changing the way the map displays elements and connections

Show/Hide affiliate connections: will display the secondary links between organisations, groups, and/or reports. These could illustrate partnership relationships, support for work conducted or other relationships.

Q Search

Select how to display map elements and connections

Show reports	Hide reports	Show affiliate connections	Hide affiliate connections
Connect by tags (incl. reports)	Connect by tags (excl. reports)		

Select tags to display ▾

**Legend**

- Professional Institution
- Industry group
- Industry Initiative
- Strategic/Advisory organisation
- Trade body
- Government
- Academia
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- Champion scheme/commitment scheme
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- Working Group/ Workstream/Taskforce
- Project/Programme
- Report
- Affiliate connection



### Changing the way the map displays elements and connections

Connect by tags (incl./excl. reports): instead of showing the elements connected by their type and relationship to each other, show the elements connected by tag, or topics within the decarbonising construction

Q Search

Select how to display map elements and connections

Show reports	Hide reports	Show affiliate connections	Hide affiliate connections
Connect by tags (incl. reports)		Connect by tags (excl. reports)	

Select tags to display ▾

**Legend**

- Professional Institution
- Industry group
- Industry Initiative
- Strategic/Advisory organisation
- Trade body
- Government
- Academia
- Charity
- Champion scheme/commitment scheme
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- Project/Programme
- Report
- Affiliate connection



Using 'tags' to navigate the map  
OPTION 1

'Tags' have been added to elements to help find relevant information depending on what aspect users may be interested in. There are several ways that the tags can be used.

**Institution of Civil Engineers**  
PROFESSIONAL INSTITUTION  
Imported

The Institution of Civil Engineers (ICE) is a professional membership body for civil engineers. "We help the industry learn and share our knowledge, so we can maintain the natural and built environment. We also promote the essential contribution that civil engineers make to society worldwide." ([source](#))

**Brief Description of work related to carbon**

The ICE has setup ['The Carbon Project: Towards Net Zero for Infrastructure'](#) to galvanise action around net zero. This has three workstreams (Measurement; Capability building; Systems-level reductions) and produces resources such as blogposts and papers.

Infrastructure

ACRONYM ICE  
WEBSITE [ice.org.uk/](http://ice.org.uk/)

#industry-landscape/institution-of-civil-engineers

Connect by tags (incl. reports) | Connect by tags (excl. reports)

Select tags to display

SocEnv  
Society for the Environment  
SocEnv

Royal Institute of Chartered Surveyors  
RICS

ice

Royal Institute of British Architects  
RIBA

Chartered Institute of Procurement and Supply  
CIPS

RIBA 2030 Climate Challenge

Building for 2050

The Carbon Project

Sustainability Leadership Team

- Government
- Academia
- Charity
- Champion scheme/commitment scheme
- Community of practice/Forum
- Working Group/ Workstream/Taskforce
- Project/Programme
- Report
- Affiliate connection

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From the main map view, select an element, and bring up the 'Element overview'. Select which tag you are interested in, then click the focus button.



### Using 'tags' to navigate the map OPTION 1

### Multiple Selections

**25** elements ✕

Edit   Connect   Export

Infrastructure

Select a field to edit
▼

Q Search
Select how to display map elements and connections

Show reports
Hide reports
Show affiliate connections
Hide affiliate connections

Connect by tags (incl. reports)
Connect by tags (excl. reports)

Select tags to display ▼

Legend

- Professional Institution
- Industry group
- Industry initiative
- Strategic/Advisory organisation
- Trade body
- Government
- Academia
- Charity
- Champion scheme/commitment scheme
- Community of practice/Forum
- Working Group/ Workstream/Taskforce
- Project/Programme
- Report
- Affiliate connection

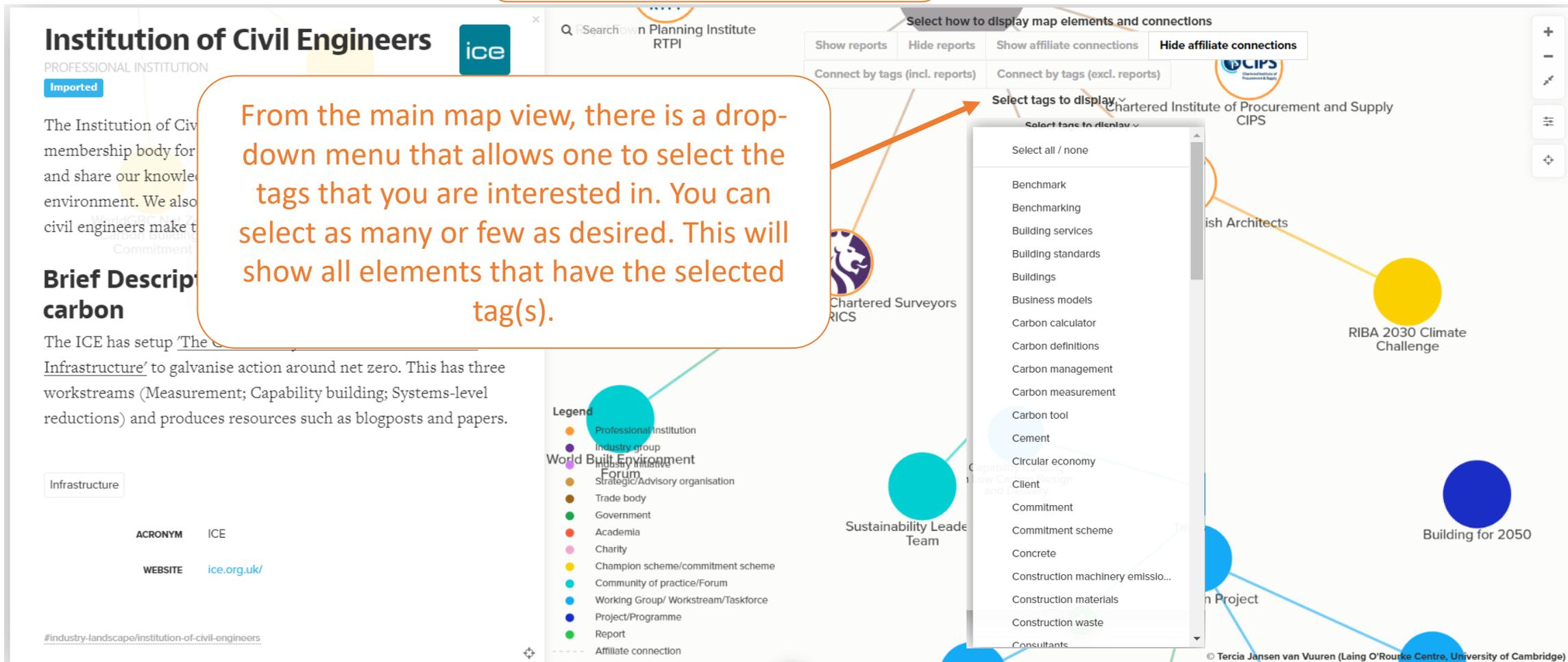
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This will show all elements that have the selected tag. In this case, 25 elements have the tag 'Infrastructure'

Connections between elements are not visible in this view. Clear the focus to return to the full map view.

### Another way to use tags:

From the main map view, there is a drop-down menu that allows one to select the tags that you are interested in. You can select as many or few as desired. This will show all elements that have the selected tag(s).



**Institution of Civil Engineers**  
PROFESSIONAL INSTITUTION  
Imported

The Institution of Civil Engineers is a membership body for civil engineers and share our knowledge and experience in the built environment. We also provide a platform for civil engineers to make their voices heard.

**Brief Description**  
**carbon**

The ICE has setup 'The Carbon Building Infrastructure' to galvanise action around net zero. This has three workstreams (Measurement; Capability building; Systems-level reductions) and produces resources such as blogposts and papers.

Infrastructure

ACRONYM ICE  
WEBSITE [ice.org.uk/](http://ice.org.uk/)

#industry-landscape/institution-of-civil-engineers

**Legend**

- Professional Institution
- Industry group
- World Built Environment Forum
- Industry Initiative
- Strategic/Advisory organisation
- Trade body
- Government
- Academia
- Charity
- Champion scheme/commitment scheme
- Community of practice/Forum
- Working Group/ Workstream/Taskforce
- Project/Programme
- Report
- Affiliate connection

Select how to display map elements and connections

Show reports Hide reports Show affiliate connections Hide affiliate connections

Connect by tags (incl. reports) Connect by tags (excl. reports)

Select tags to display

Select tags to display

- Select all / none
- Benchmark
- Benchmarking
- Building services
- Building standards
- Buildings
- Business models
- Carbon calculator
- Carbon definitions
- Carbon management
- Carbon measurement
- Carbon tool
- Cement
- Circular economy
- Client
- Commitment
- Commitment scheme
- Concrete
- Construction machinery emissio...
- Construction materials
- Construction waste
- Consultants

Chartered Institute of Procurement and Supply CIPS

Chartered Surveyors RICS

RIBA 2030 Climate Challenge

Building for 2050

Sustainability Leadership Team

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### Using 'tags' to navigate the map OPTION 2

Again, this will show all elements that have the selected tag. In this case, 25 elements have the tag 'Infrastructure'.

Select as many tags to view as desired.

Search

Select how to display map elements and connections

Show reports Hide reports Show affiliate connections Hide affiliate connections

Connect by tags (incl. reports) Connect by tags (excl. reports)

Infrastructure

Legend

- Professional Institution
- Industry group
- Industry initiative
- Strategic/Advisory organisation
- Trade body
- Government
- Academia
- Charity
- Champion scheme/commitment scheme
- Community of practice/Forum
- Working Group/ Workstream/Taskforce
- Project/Programme
- Report
- Affiliate connection

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To return to the full map view, go back to the drop-down menu and click 'Select all/none'. Make sure that **none** of the tags are selected to ensure that all connections become visible again.

Another way to use tags:

## Institution of Civil Engineers

PROFESSIONAL INSTITUTION

**Imported**

The Institution of Civil Engineers (ICE) is a professional membership body for civil engineers. "We help the industry learn and share our knowledge, so we can maintain the natural and built environment. We also promote the essential contribution that civil engineers make to society worldwide." (source)

### Brief Description of work related to carbon

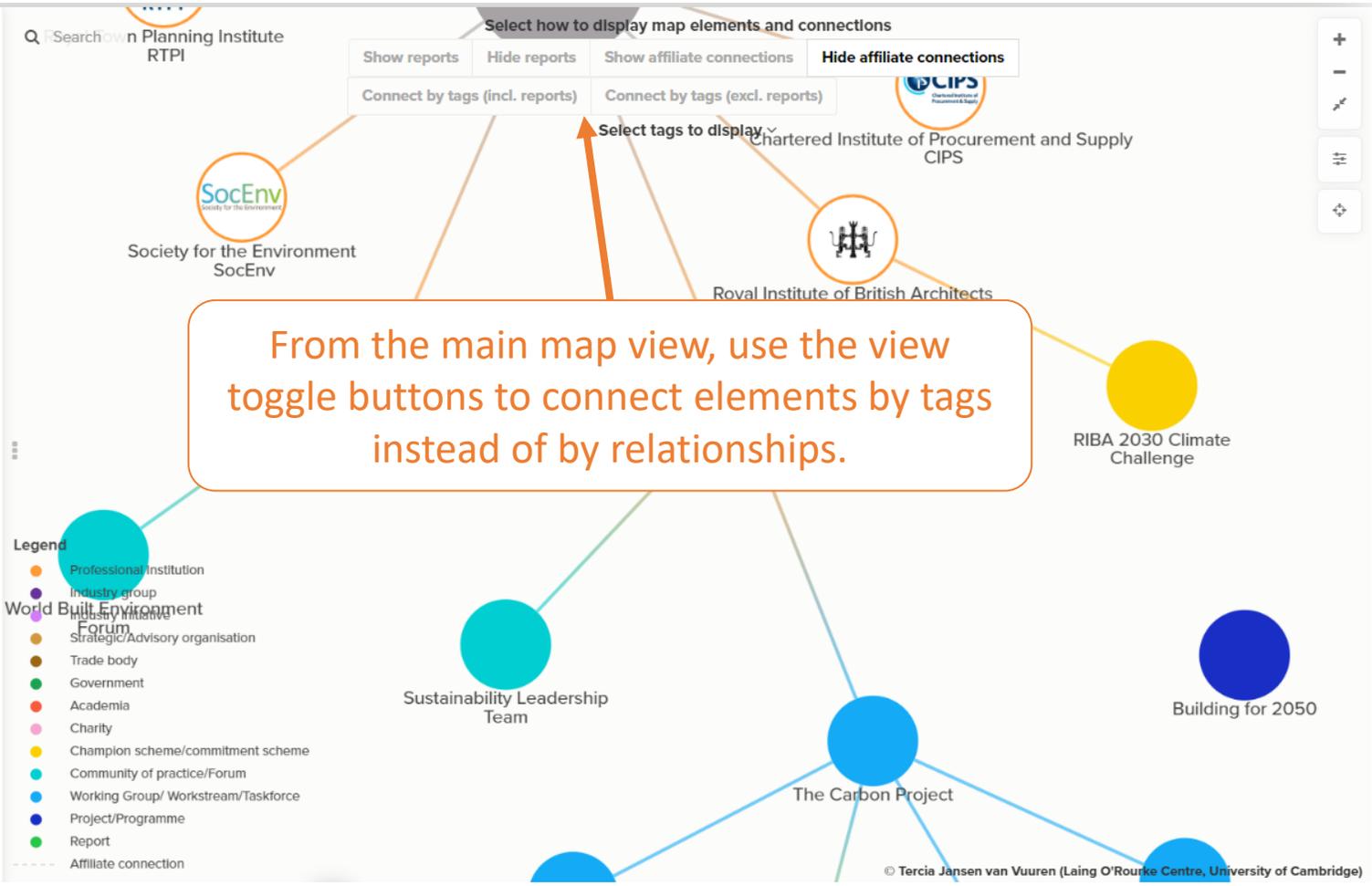
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Infrastructure

ACRONYM ICE

WEBSITE [ice.org.uk/](http://ice.org.uk/)

#industry-landscape/institution-of-civil-engineers



Select how to display map elements and connections

Show reports Hide reports Show affiliate connections Hide affiliate connections

Connect by tags (incl. reports) Connect by tags (excl. reports)

Select tags to display

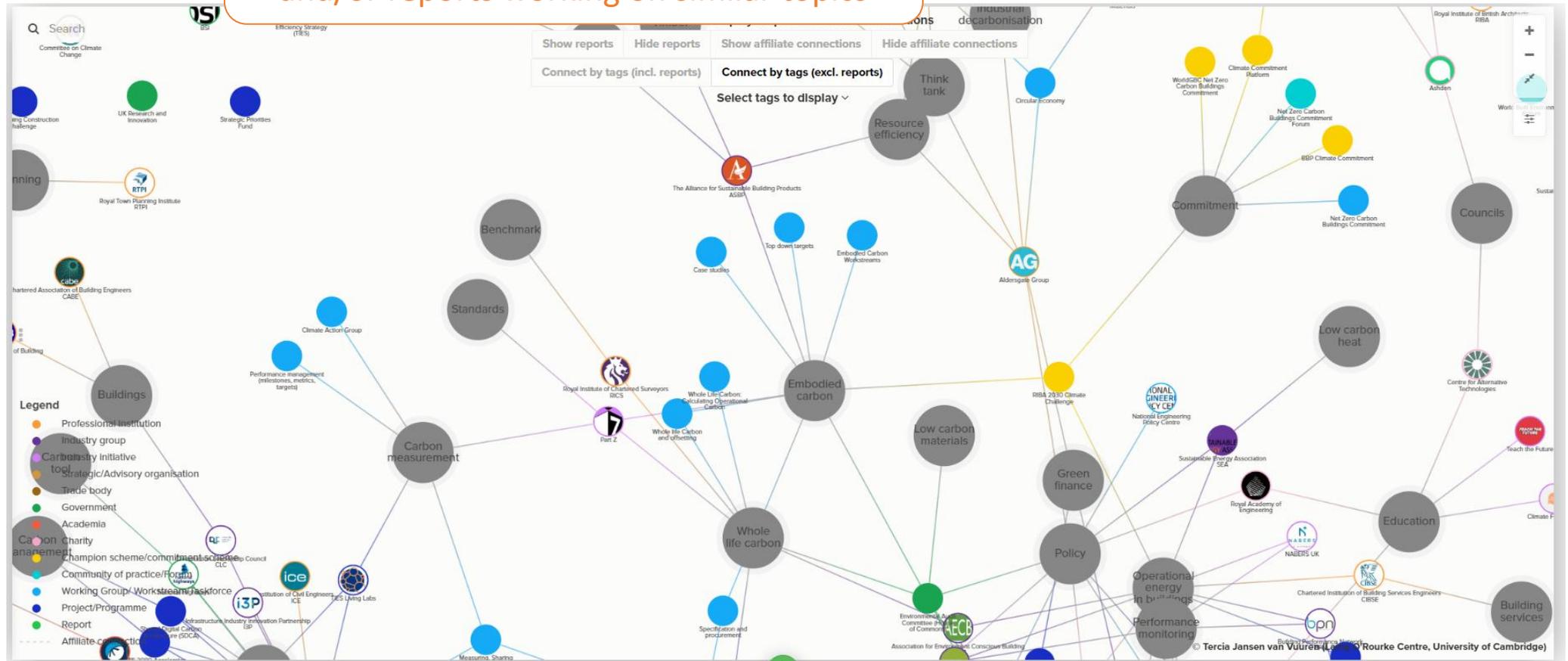
From the main map view, use the view toggle buttons to connect elements by tags instead of by relationships.



Using 'tags' to navigate the map

OPTION 3

Elements are now connected by their 'tags', allowing you to see other organisations and/or reports working on similar topics





To allow for exploration of publications and reports on decarbonising construction, a separate 'map view' has been created that shows only the reports and publications that are included on the landscape map (organisations are hidden).



The challenge of decarbonising construction is being addressed in a variety of ways by many organisations. This landscape map is a visual representation of many of the groups, institutions and initiatives that are active in the transitioning the construction industry to net zero. The purpose of this map is to provide an overview of activities and direct users to organisations or information that may be useful in their own learning or journey to decarbonising construction.

For this map, 'construction' includes the full spectrum of buildings and infrastructure across the lifecycle of the project, from strategic planning to end-of-life, including assessment of existing assets and refurbishment/retrofit. Some organisations on this map address very specific aspects, such as operational energy in buildings, or domestic retrofit, whilst others address a range of aspects. To explore the topics/themes that constitute decarbonising construction, have a look at this mindmap and read this article.

Please note the following:

- The primary focus is on carbon reduction and climate change mitigation in the built environment and does not include other aspects of sustainability in the built environment, such as nature based solutions, biodiversity health and well-being, community and so

**Decarbonising construction - Industry landscape map v1**

Industry Landscape ▾ Overview of organisations ▾

Overview of organisations  
Reports  
+ NEW VIEW

Select how to display map elements and connections

Show reports Hide reports Show affiliate connections Hide affiliate connections

Connect by tags (incl. reports) Connect by tags (excl. reports)

Select tags to display ▾

**To access this view, click on the drop-down arrow at the top of the screen, next to 'Overview of organisations'.  
Select 'Reports'**

**Legend**

- Professional Institution
- Industry group
- Industry initiative
- Strategic/Advisory organisation
- Trade body
- Government
- Academia
- Charity
- Champion scheme/commitment scheme
- Community of practice/Forum
- Working Group/ Workstream/Taskforce
- Project/Programme
- Report
- Affiliate connection

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Decarbonising construction - Industry landscape map v1 Industry Landscape Reports

Search

Group by Tags Group by Publication type

The challenge of decarbonising construction is being addressed in a variety of ways by many... is a visual representation... and initiatives that are... construction industry to... provide an overview of... organisations or inform... learning or journey to d...

For this map, 'construct... buildings and infrastructure... from strategic planning to end-of-life, including assessment of existing assets and refurbishment/retrofit. Some organisations on this map address very specific aspects, such as operational energy in buildings, or domestic retrofit, whilst others address a range of aspects. To explore the topics/themes that constitute decarbonising construction, have a look at this mindmap and read this article.

Please note the following:

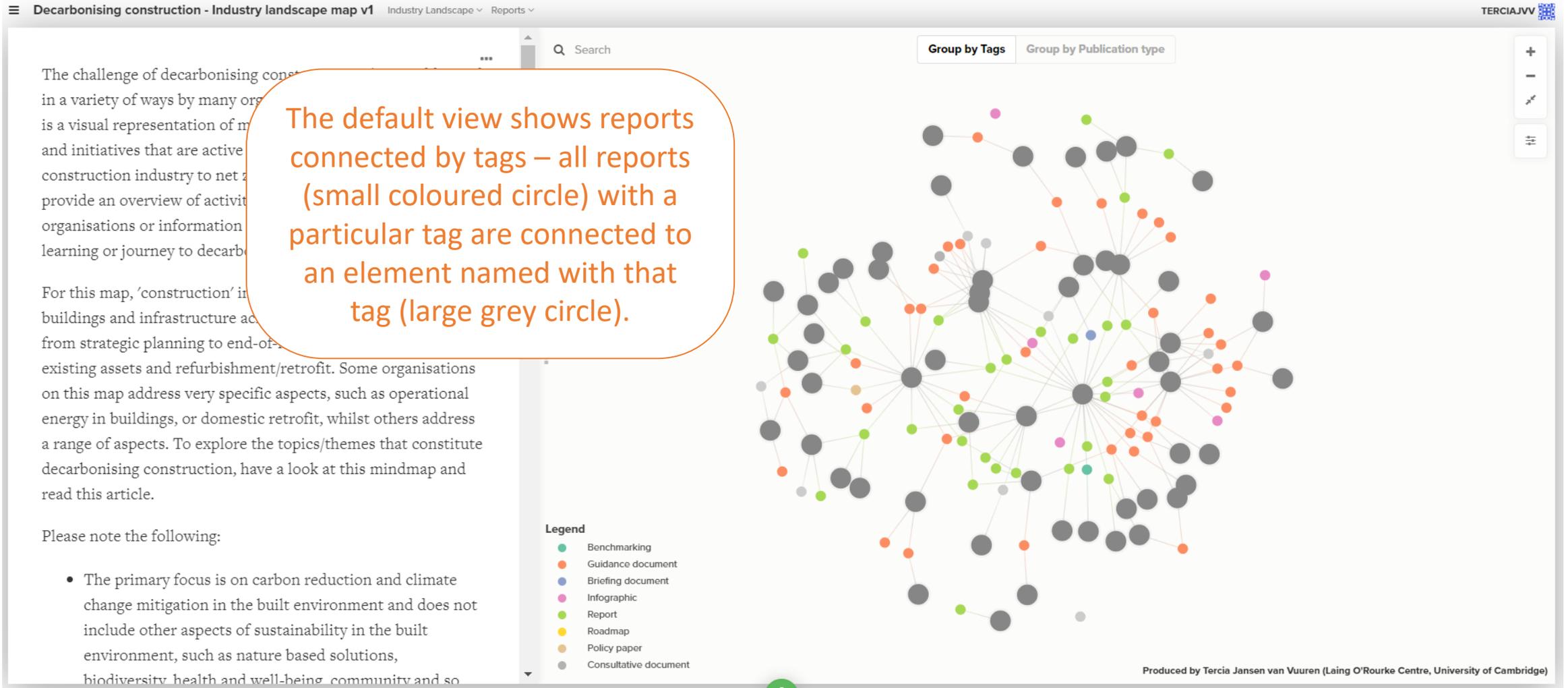
- The primary focus is on carbon reduction and climate change mitigation in the built environment and does not include other aspects of sustainability in the built environment, such as nature based solutions, biodiversity health and well-being, community and so

**Legend**

- Benchmarking
- Guidance document
- Briefing document
- Infographic
- Report
- Roadmap
- Policy paper
- Consultative document

This will display the 'Reports' view of the map. Each coloured circle represents a report or publication with the type coloured according to the legend.

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Decarbonising construction - Industry landscape map v1 Industry Landscape Reports

### Embodied carbon

TAG Imported

#industry-landscape/reports/embo

Search

Group by Tags Group by Publication type

Use the focus feature to explore specific subjects and see the relationships to other topics/tags.

Legend

- Benchmarking
- Guidance document
- Briefing document
- Infographic
- Report
- Roadmap
- Policy paper
- Consultative document

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Decarbonising construction - Industry landscape map v1

Industry Landscape Reports

Search

Group by Tags Group by Publication type

The challenge of decarbonising construction is being addressed in a variety of ways by many organisations. This landscape map is a visual representation of many of the groups, institutions and initiatives that are active in the construction industry to net zero. It provides an overview of activities, organisations or information that are active in the learning or journey to decarbonisation.

For this map, 'construction' includes buildings and infrastructure across the lifecycle from strategic planning to end-of-life, including assessment of existing assets and refurbishment/retrofit. Some organisations on this map address very specific aspects, such as operational energy in buildings, or domestic retrofit, whilst others address a range of aspects. To explore the topics/themes that constitute decarbonising construction, have a look at this mindmap and read this article.

Please note the following:

- The primary focus is on carbon reduction and climate change mitigation in the built environment and does not include other aspects of sustainability in the built environment, such as nature based solutions, biodiversity, health and well-being, community and so on.

**Legend**

- Benchmarking
- Guidance document
- Briefing document
- Infographic
- Report
- Roadmap
- Policy paper
- Consultative document

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**The reports can also be connected by the type of document or publication using the buttons along the top.**

For more information, please contact  
the Laing O'Rourke Centre:  
[comms@construction.cam.ac.uk](mailto:comms@construction.cam.ac.uk)

