

# Southampton/Solent Decarbonisation Cluster - Update

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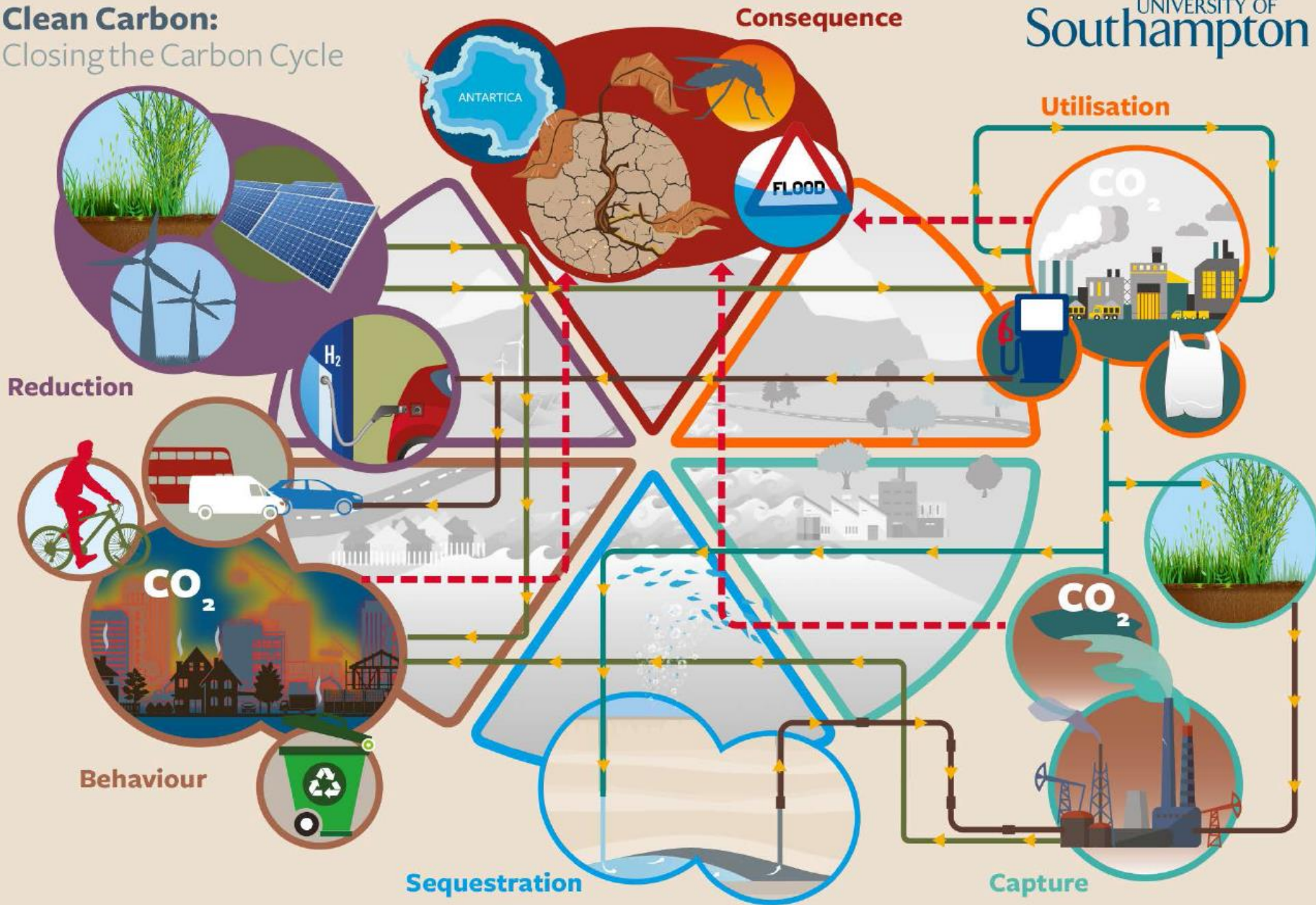
**IDRIC**

UK Carbon Capture and Storage Research Centre – Spring Web Series

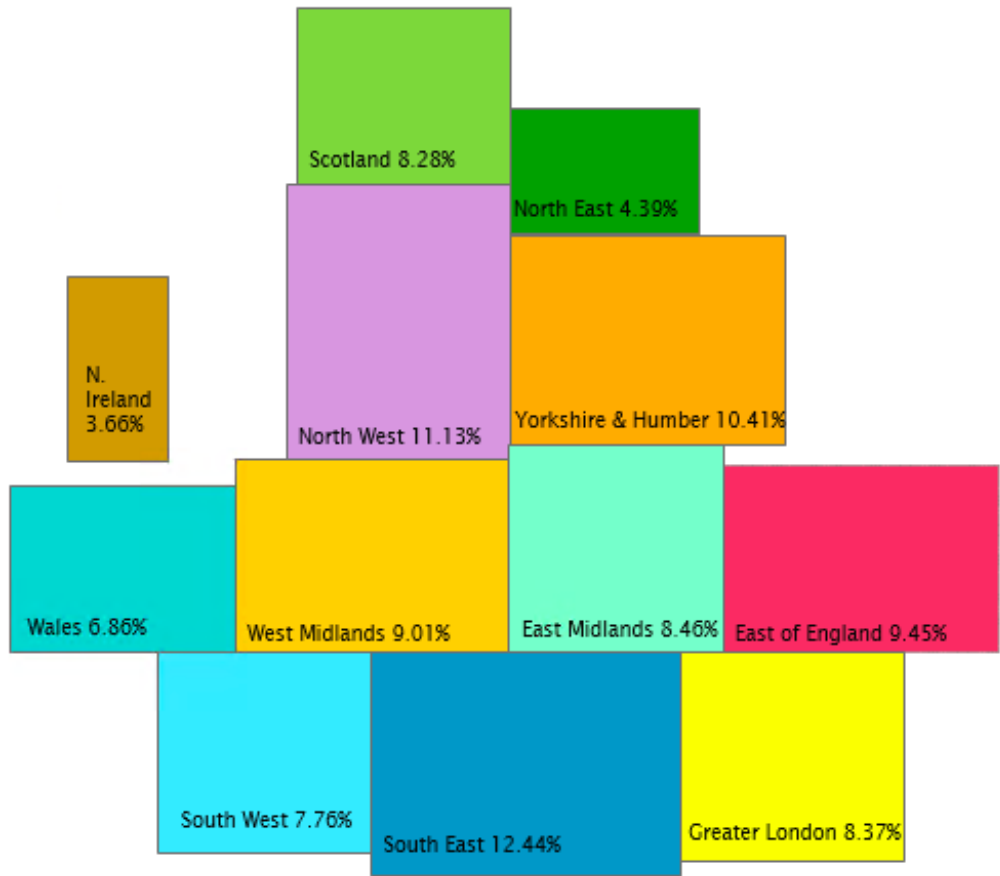
1<sup>st</sup> July, 2020



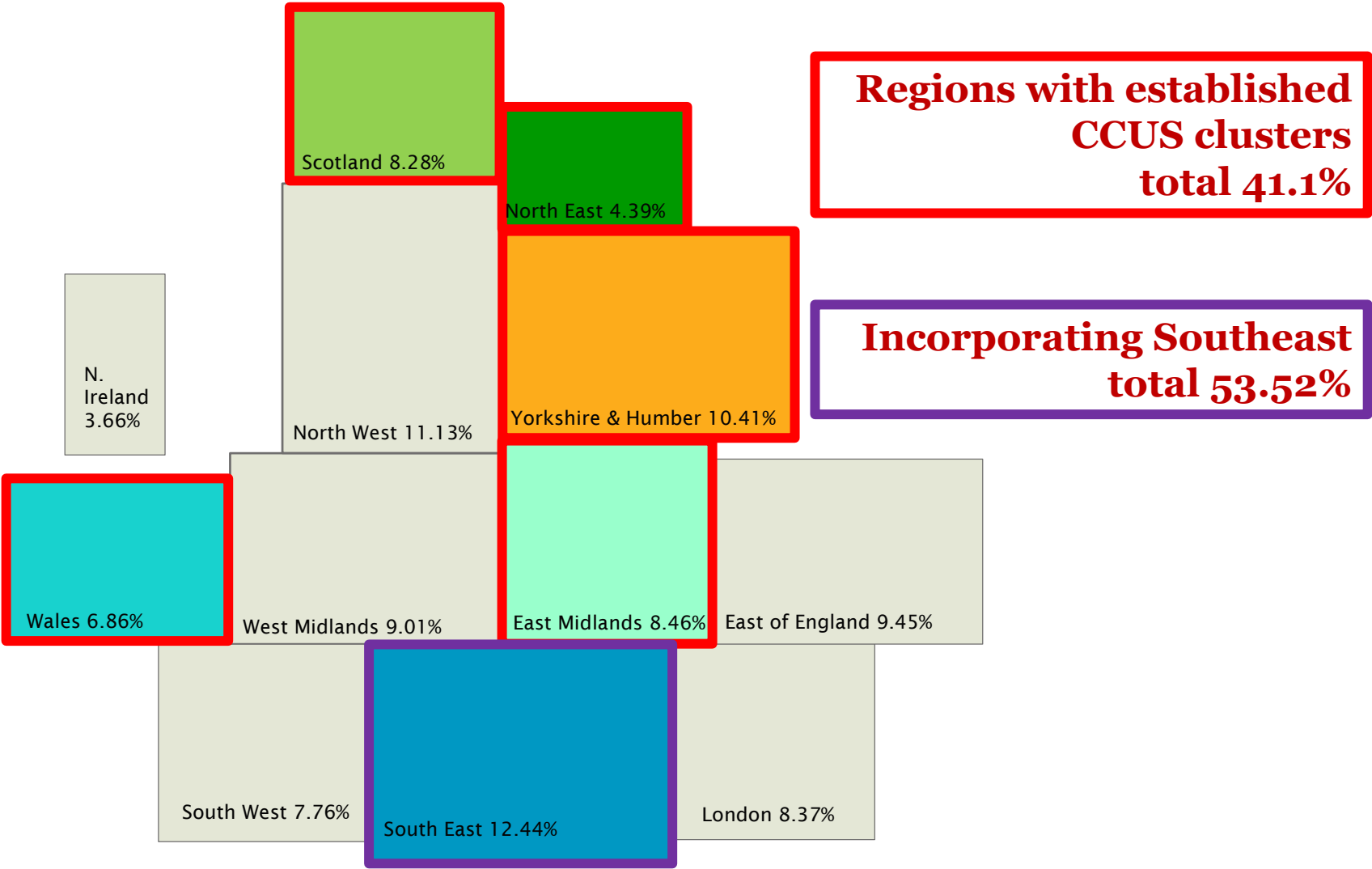
**Clean Carbon:**  
Closing the Carbon Cycle



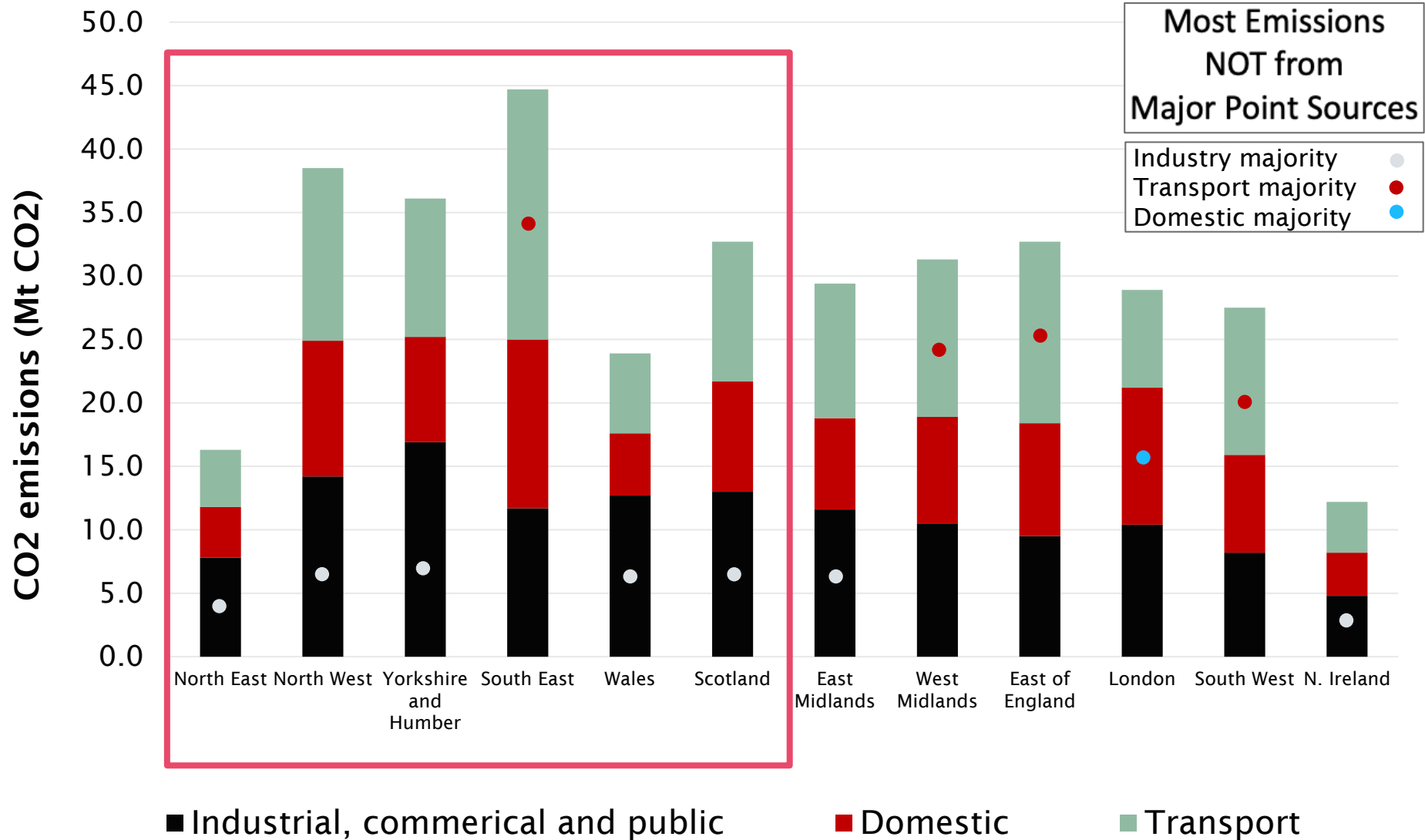
# UK CO<sub>2</sub> emissions breakdown by region in 2018



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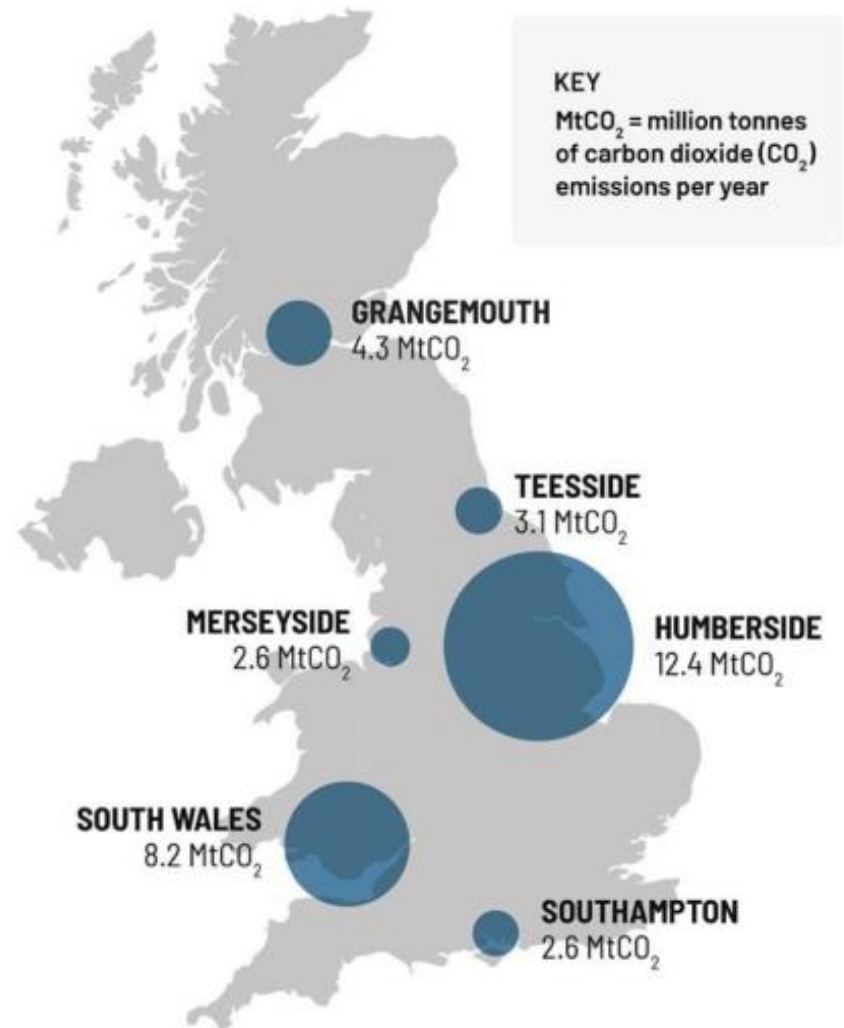


# UK CO<sub>2</sub> emissions breakdown by sector in 2018



# Industrial Decarbonisation Research and Innovation Center

- Led by Professor Mercedes Maroto-Valer at Heriot Watt;
- part of the £170m Industrial Decarbonisation challenge, delivered through the Industrial Strategy Challenge Fund (ISCF) by UKRI
- challenge-led research and transformative innovation;
- work closely with the UK 6 major industrial clusters;
- conduct a series of consultation and engagement events;
- the delivery phase starts in September - £20m funding until 2024;





# State-of-the-nation: ECOFYS report 2017

## Southampton

### Key Strengths

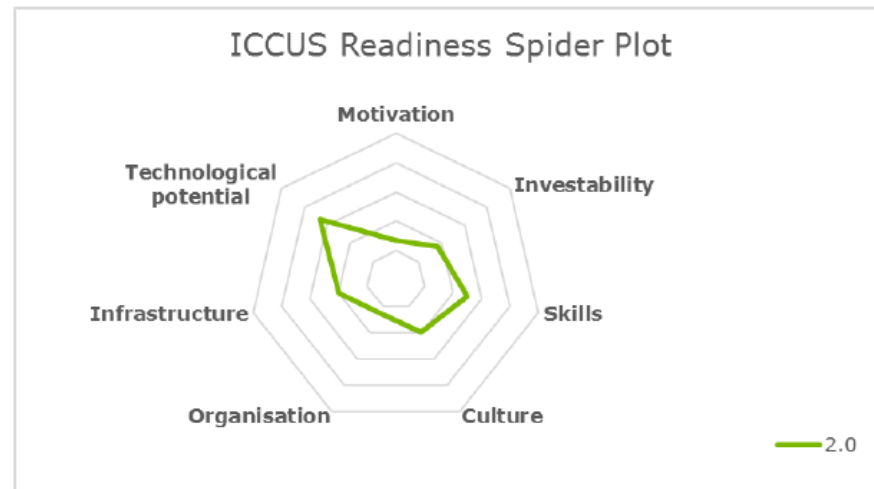
Fawley's parent company Exxon has significant CCS expertise in-house.

### Points of improvement

Contacting various local stakeholders indicates there is little to no interest in ICCUS in the region.

Even though there is key CCS knowledge available through the University of Southampton, Ecofys is not aware of any connection with the Fawley refinery.

Distance to any offshore storage location is larger compared to other clusters, rendering tie-in more complex and costly.



Dimension	Score
Motivation	1.3
Investability	1.8
Skills	2.5
Culture	2.0
Organisation	1.3
Infrastructure	2.0
Technological potential	3.3
Overall Score:	2.0

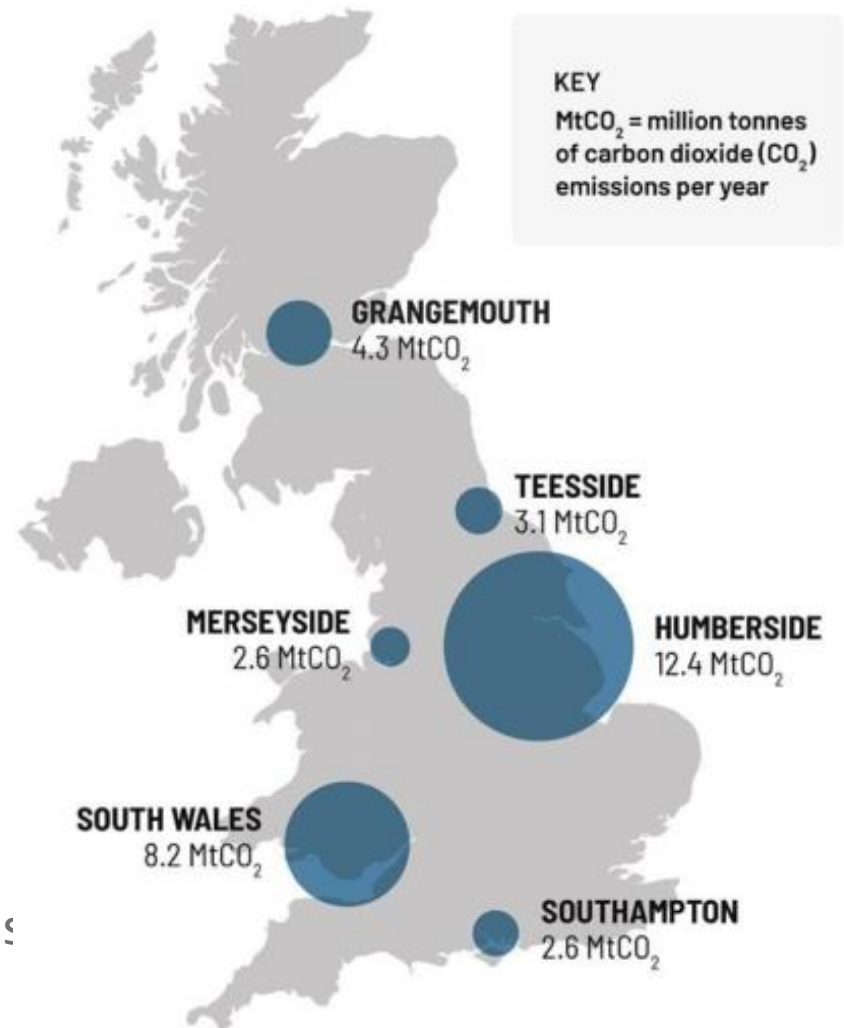
# IDRIC Southampton/Solent Cluster

## Cluster Differences:

- Few major CO<sub>2</sub> point sources
- Few suitable CO<sub>2</sub> storage opportunities
- Not (yet) well organized for carbon capture, utilization and storage (CCUS)

## Cluster Potential:

- Storage, Transfer and Shipping of CO<sub>2</sub>
- Capture and efficiencies of small/medium-sized industries
- BECCS – “negative” carbon emissions





# Solent Point Sources – NOT ALL!!



# ETI UK Storage Appraisal Project

## 2009-2011

### Potential for local saline aquifers

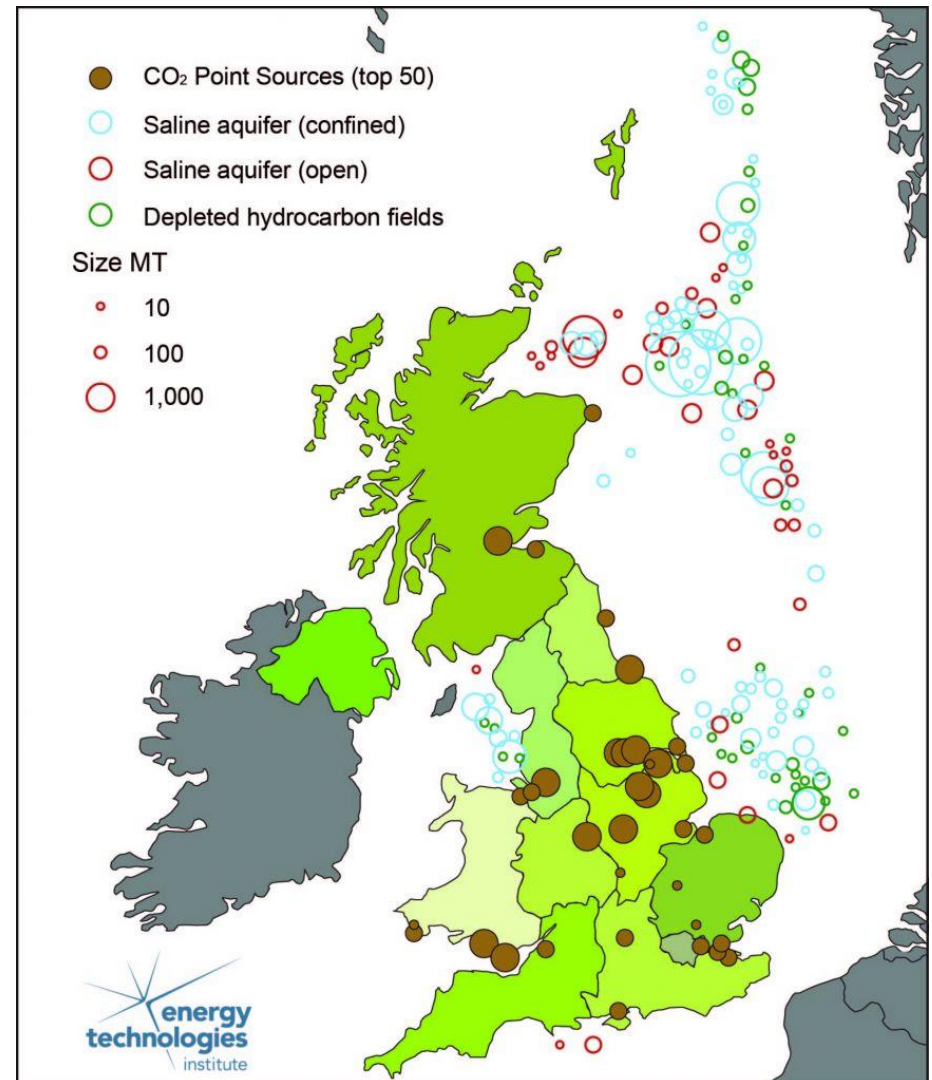
*Portland Gas Storage Project (PGSP), Dorset*

- **2008:** Granted planning permission for a 10 million tonnes CO<sub>2</sub> storage facility and associated infrastructure in saline aquifers.
- **2012:** Application submitted to the CCS Commercialisation Programme (CCSCP) – unfortunately unsuccessful

*St. Alban's Head in Dorset*

- potential to store over 500 million tonnes of CO<sub>2</sub>

### Potential for shipping?



<https://www.eti.co.uk/programmes/carbon-capture-storage/uk-storage-appraisal-project>



# Triple Helix Partnership Delivering Clean Growth since 2012







# Greentech support for SMEs

Access to Funding Streams



Business Support



Events

**CLEAN GROWTH  
INNOVATION  
2 DAY WORKSHOP**

Engagement with Academia



Access to (Inter)national Networks



**Clean  
Growth<sup>UK</sup>**

# What do SMEs need and what do they offer?

Money/Contracts/Talent/Partners

Innovations to Corporate Led Challenges

Flexible/Agile/Responsive

Collaborate in Larger Bids

Access to (Inter)national Networks



**CLEAN GROWTH  
INNOVATION  
2 DAY WORKSHOP**



**Clean  
Growth<sup>UK</sup>**



Help where it's needed for 350+ Members:

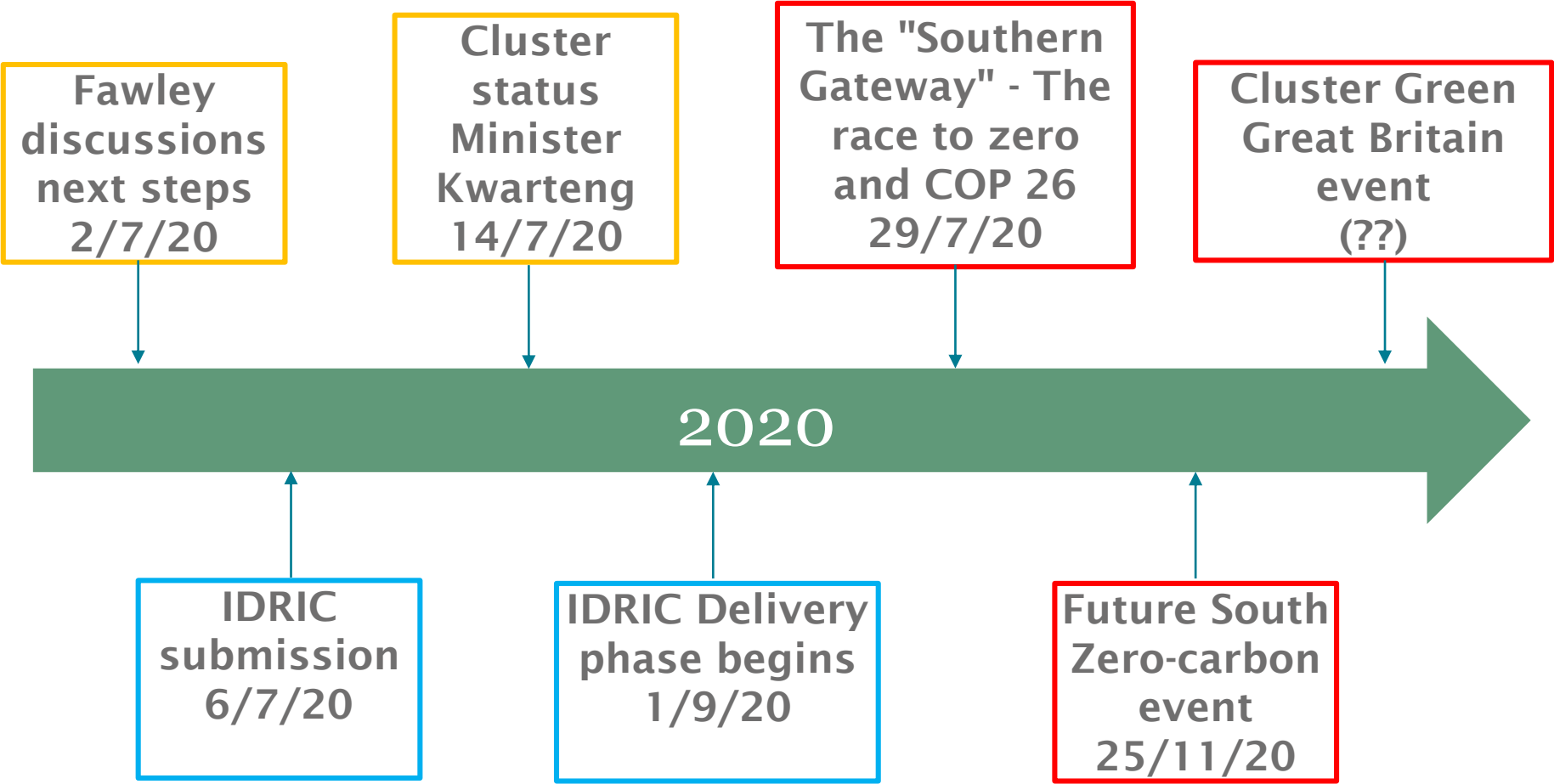


DW PLASTICS LTD

Plastic extrusion design & manufacture  
Established in 1980



# Next steps for Southampton/Solent



# Thank you for listening

## Any questions?

UK Carbon Capture and Storage Research Centre – Spring Web Series

6<sup>th</sup> July, 2020

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