

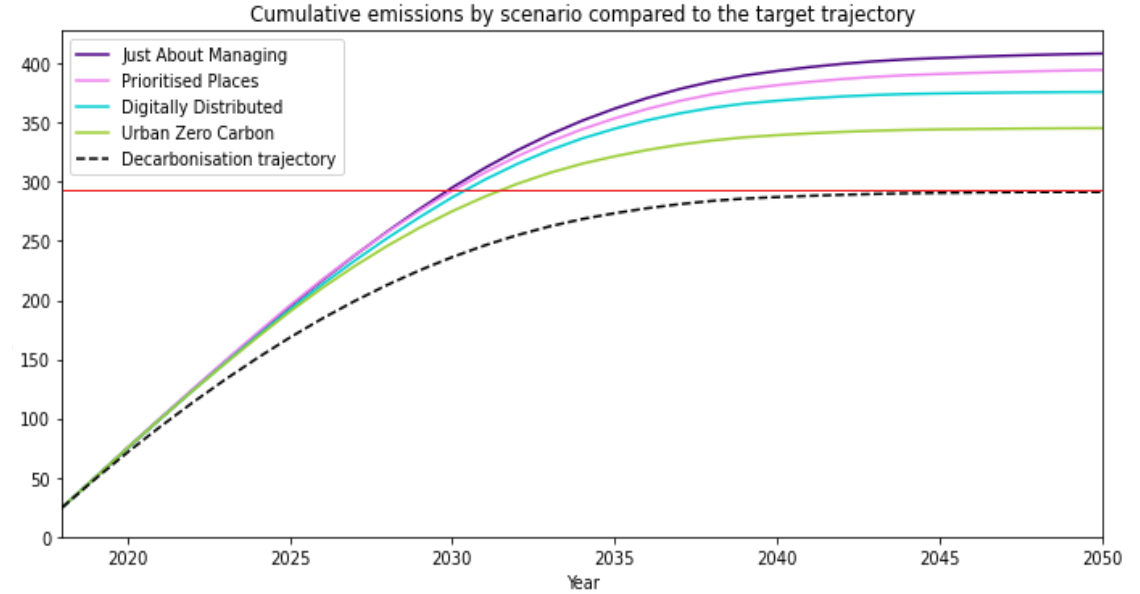
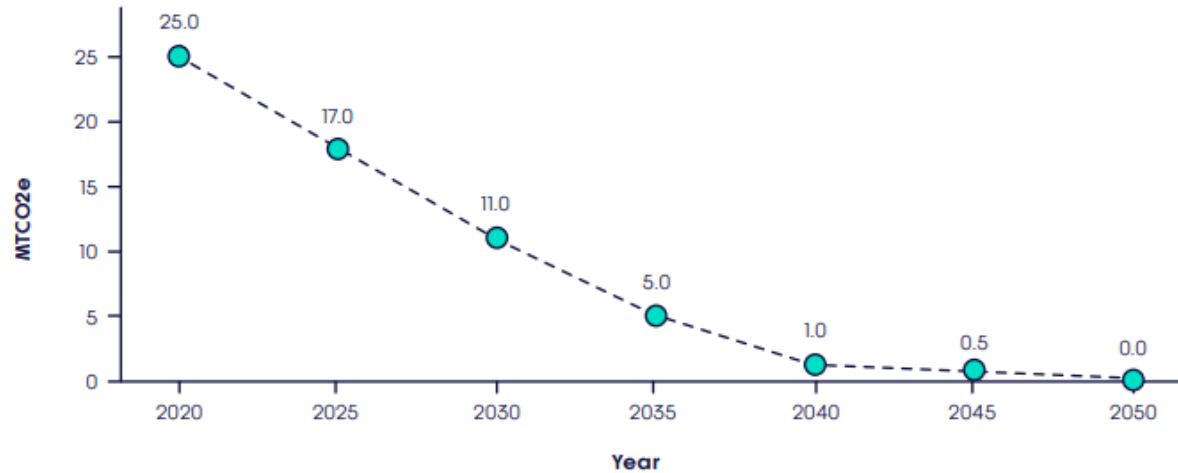
North of England Hydrogen Mobility Visualiser

Hydrogen Transport Conference – 10th
December 2024



TfN's Decarbonisation Trajectory

Figure 2: TfN's Decarbonisation Trajectory



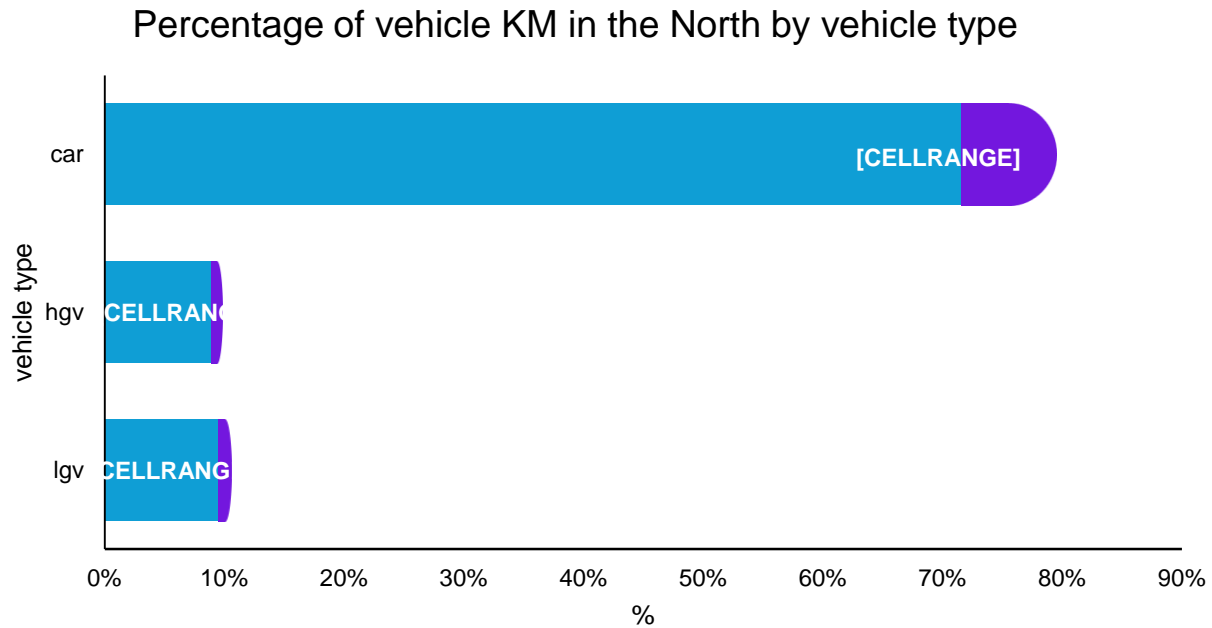
56% reduction in emissions from 2018 to 2030

Close to zero by 2045

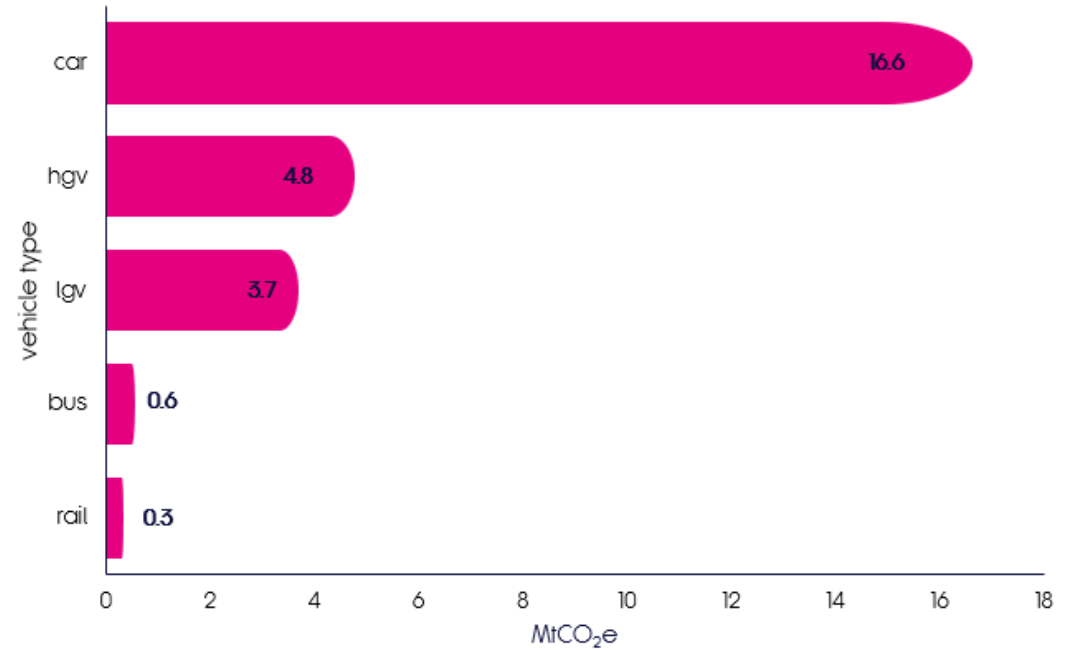
96% reduction in emissions from 2018 to 2040

A total carbon budget of approximately 300 mega-tonnes of CO₂e

Provisional Carbon Baseline Figures (2023)



Emmissions by vehicle type (MtCO₂e)



Approximately 5 million tonnes of CO₂(e) emissions every year in the North from HGVs in the North

Bus and rail add less than 1 million tonnes combined

Decarbonising bus and rail is less important than making sure they run efficiently, reliably and where and when we need them to..will ZEVs ultimately help us achieve this?

But the air quality benefits can be really significant

Updating our Pathway – work in progress

		2025	2030	2035	2040	2045	2050
zero emissions share of sales	Cars	28%	80%	100%	100%	100%	100%
	Vans	28%	80%	100%	100%	100%	100%
	Artic HGV	0	25%	50%	100%	100%	100%
	Rigid HGV	0	25%	100%	100%	100%	100%
Public transport CO2 reduction on baseline	Bus	25%	50%	75%	100%	100%	100%
	Rail	0	25%	50%	50%	75%	100%

TfN's proposed Fair and Prosperous Transition pathway – work in progress – and these are only the ZEV rows!

North of England Hydrogen Mobility Visualiser

Maps the possible hydrogen demand from heavy duty transport uses

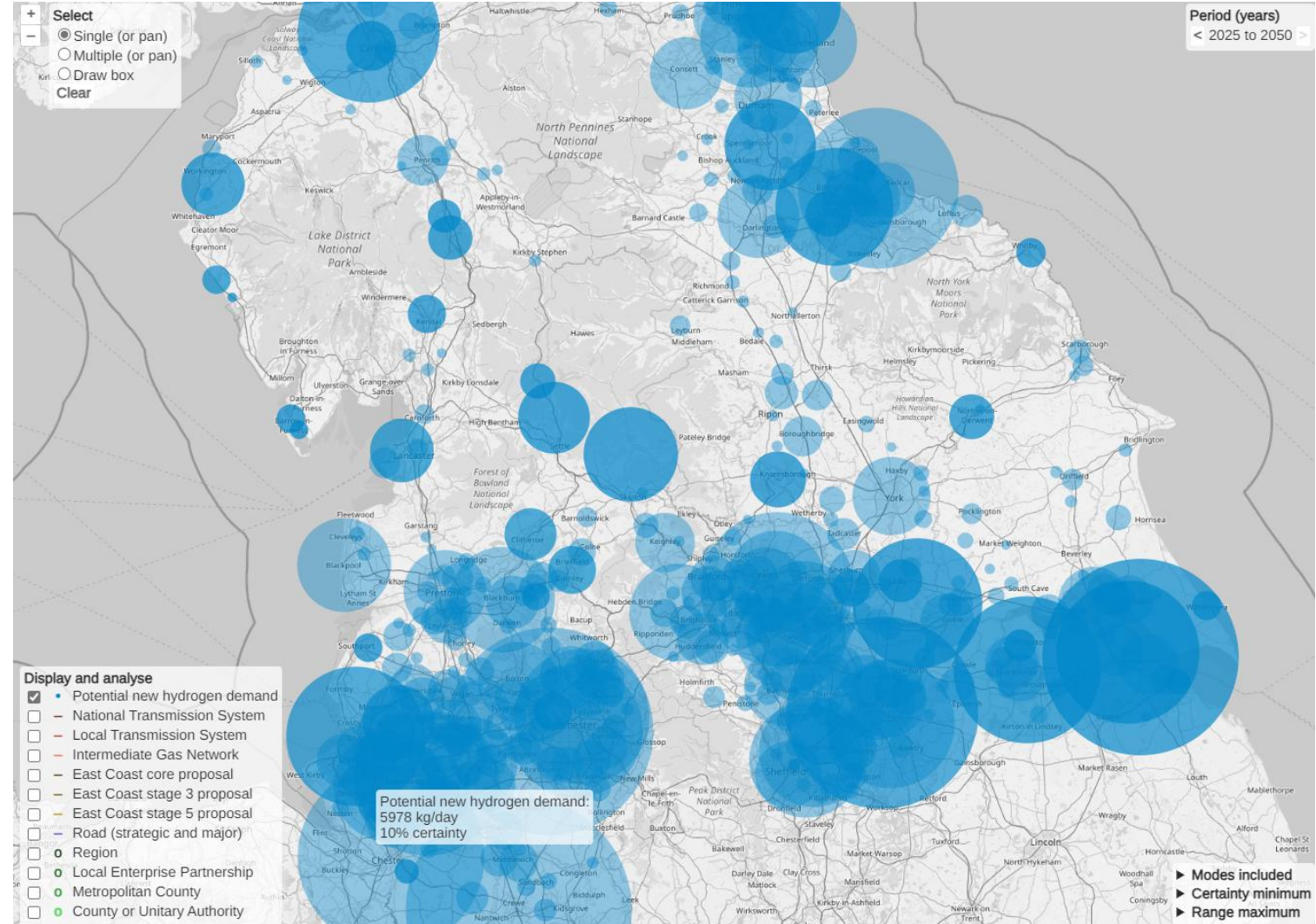
Utilises TfN's analytical frameworks

Aggregates into clusters to highlight those areas of greatest potential

For use by local authorities, hydrogen supply and distribution and transport operators

Recognises high levels of uncertainty

Multi-system co-operation



<https://ngn-tfn-h2-vis.ermapps.com/>

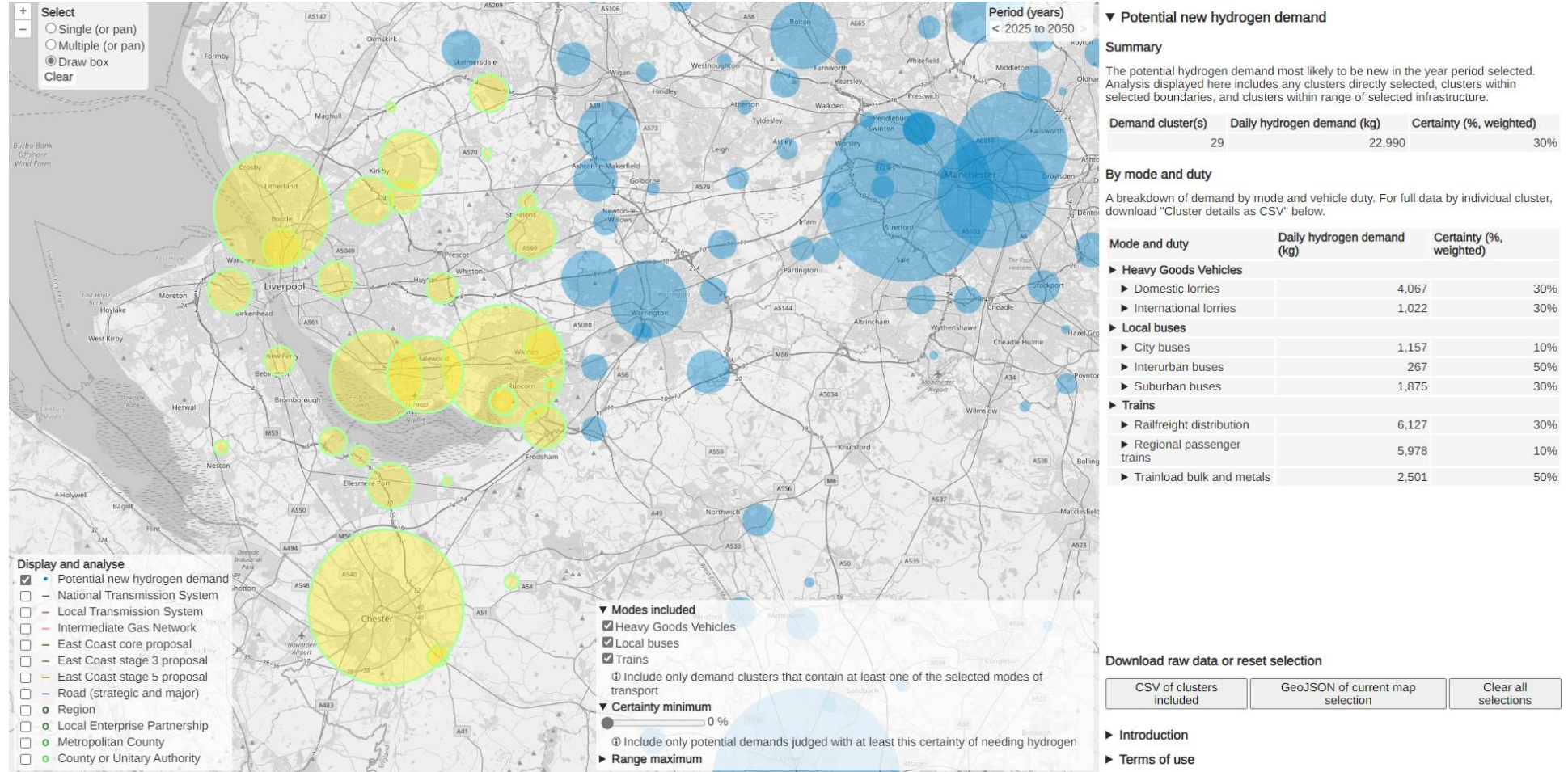


North of England Hydrogen Mobility Visualiser

Draw boxes around areas of interest

Filter by mode and certainty levels

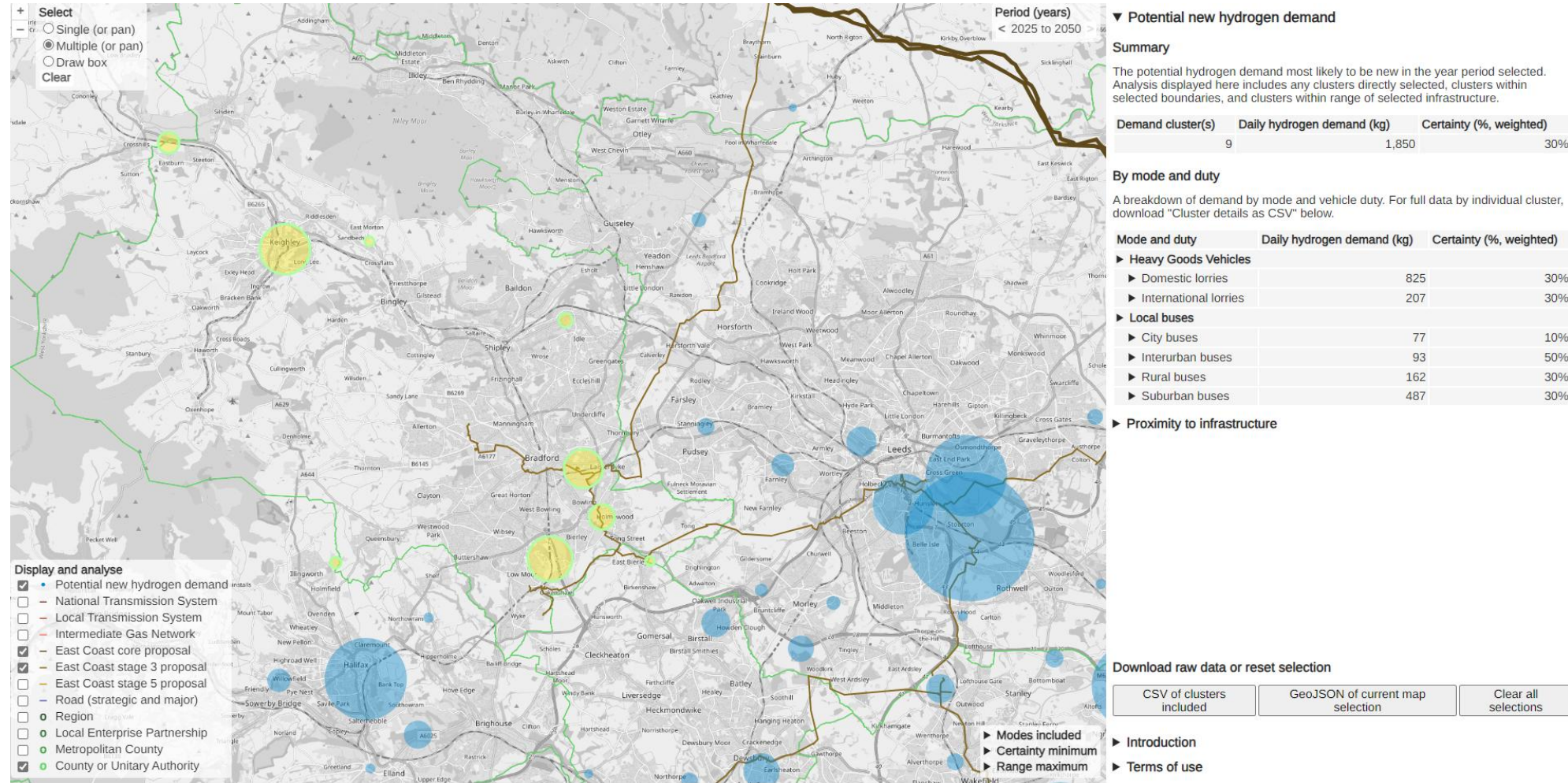
Possible daily demand by mode by 2050



North of England Hydrogen Mobility Visualiser

Highlight multiple features of interest

Apply infrastructure features and administrative boundaries



North of England Hydrogen Mobility Visualiser

Understand possible demand in proximity to selected infrastructure (e.g. planned hydrogen pipelines).

