

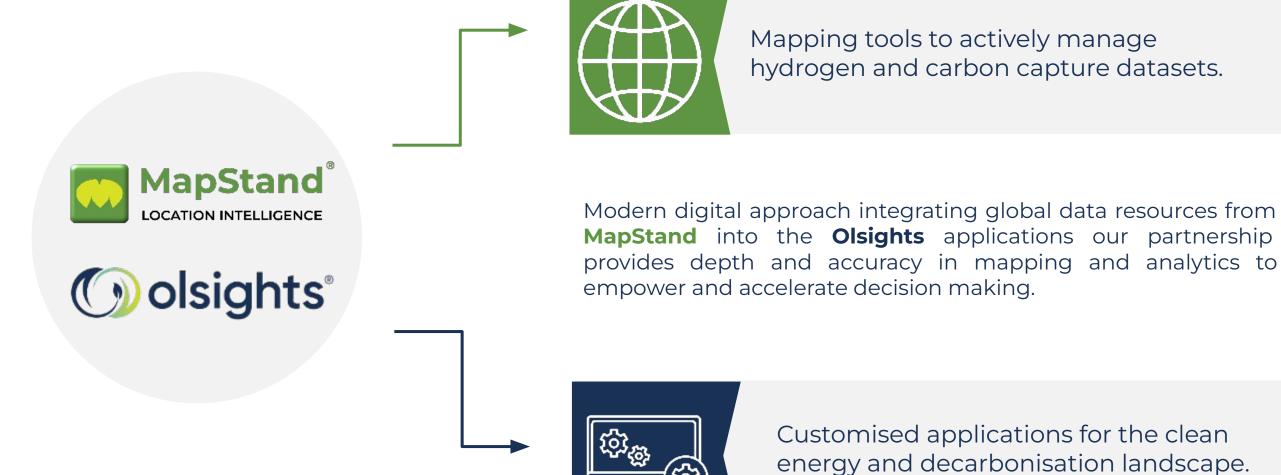
CCUS VALUE CHAIN INSIGHTS

A MapStand & Olsights Joint Solution

April 2024

MapStand & Olsights

A collaboration delivering global energy insights in an ever-changing landscape.



MapStand a specialist in mapping global energy infrastructure.

Geospatial data on power generation and transmission, upstream, midstream, and downstream decarbonisation, including emerging hydrogen and CCUS technologies.

Olsights is a clean energy & decarbonisation visualisation and application developer

Creating tools to equip energy decision makers with essential insights to understand and assess the impact of decarbonisation projects to accelerate the energy transition.

Integrated Energy Infrastructure

Created by **Olsights** using **MapStand** datasets The Olsights Eye is a unique visual spatial analytic app to enable informed decisions that accelerates decision making for energy transition and decarbonisation projects.



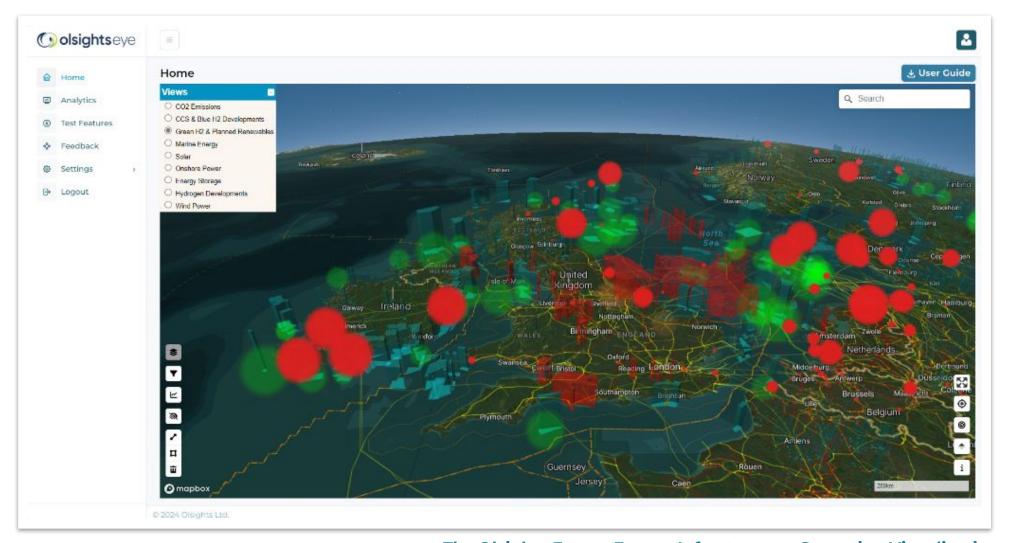
Benefits

- Multiple opportunity/ scenario screening
- Interconnected energy systems
- Whole system analysis
- Global datasets, dynamically updated
- Competitor project analysis
- Accelerates project decision making



Features

- Mapping visualisations of energy supply chains
- CO₂ emission characterisation
- Heat maps & cluster analysis
- Geographical lasso aggregation
- Gas, terminals & power infrastructure analysis
- CSV downloads



The <u>Olsights Eye</u> an Energy Infrastructure Screening Visualisation











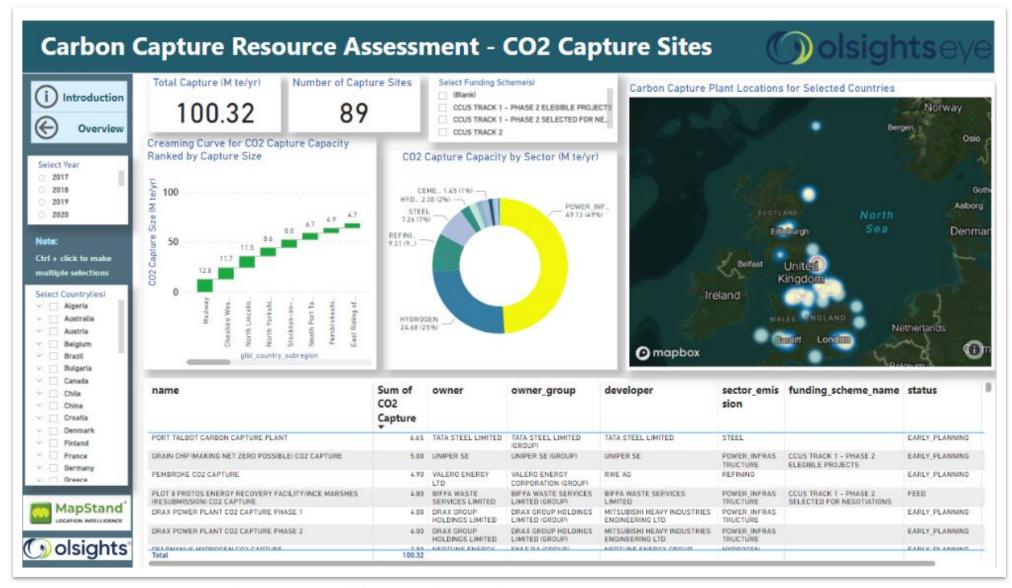






Detailed Energy Insights Dashboards

Dynamic assessment dashboards created by **Olsights** using **MapStand** datasets allow multiple project scenario comparison to identify strategic opportunities.





Benefits

- Multiple scenario screening
- Customisable to your needs
- Interactive cross referencing by relationship
- Global datasets
- Dynamically updated
- Zoom into specific area of interest



Features

- Site locations
- Development capacity
- Demand vs Capacity
- Development Pipelines
- CO2 emissions by industry
- Filter by Government subsidy support

CCUS Landscape, analysis of opportunities and risks Insights Dashboard















Energy Project Economics

Unit cost analysis tools allow screening of multiple project scenarios from source to transmission.

Cost Indicator Screening Interactive calculators and analytics to quickly review and compare summary project and unit costs: Opportunity Screening Validation against alternatives Verification CCS Capture Readiness Levels - Lifecycle Cost Overview

In Dev. - Lifecycle Economic Simulator



Development lifecycle 'flight simulator' for predicting project outcomes and impact of changing variables, showing:

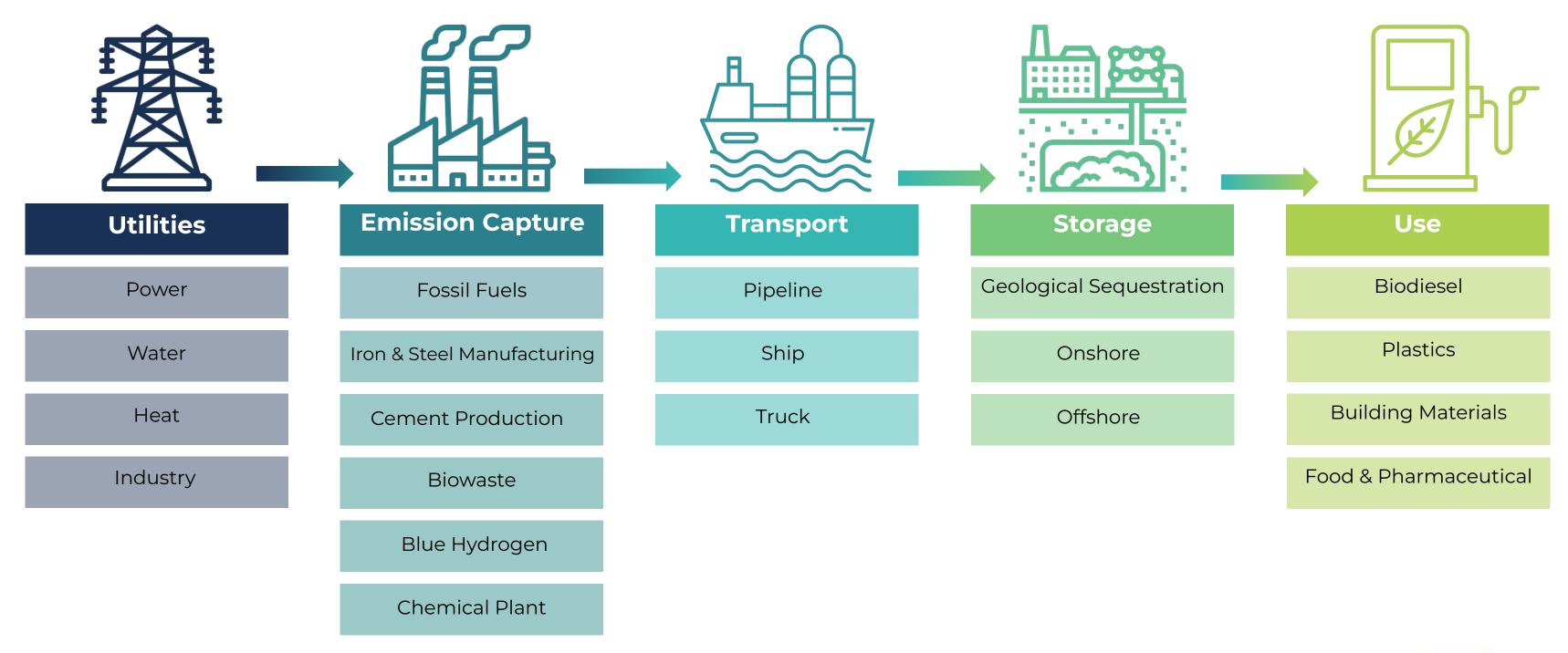
- Discounted economic Indicators
- Energy efficiency
- Discounted carbon Indicators (in development)
- Selection of technology/ cost datasets
- Unit conversion (rates, costs)
- Option for modelling risked & probabilistic ranges





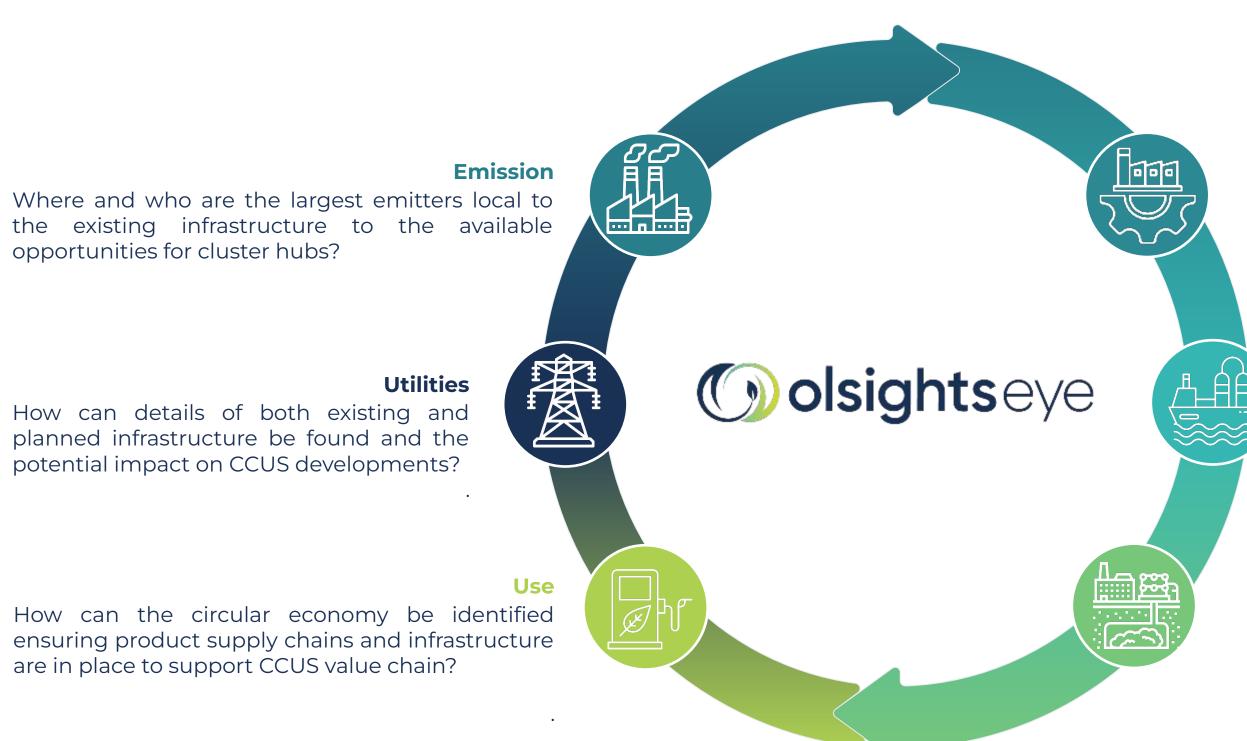
CCUS Overview

Carbon Capture, Utilisation and Storage is sited as a vital solution in the transition to net zero. **Olsights** and **MapStand** offer solutions that cover the full CCUS value chain.



Emission > Capture > Transport > Storage > Use

How is this chain connected and who are the key players?



Capture

What industries and activities are creating this large intensity of emissions. What technology providers are working in the area and systems are most appropriate to be deployed in the area?

Transport

What is the existing and planned CO₂ transportation infrastructure that is available to the scheme, who owns and operates this infrastructure and what partnerships are already in place?

Storage

What are the properties of the storage hubs & accumulations, future planned capacity available and transportation network, information on existing and planned infrastructure, owners and operators, licence agreements?





CO, Clusters & CCUS Projects

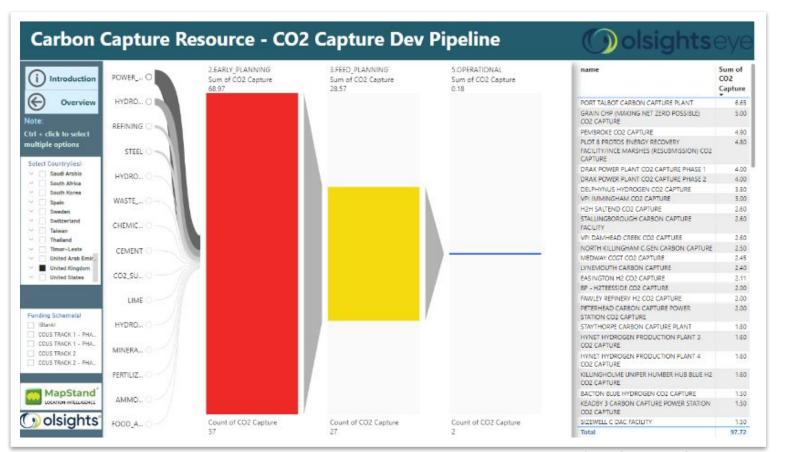
Where and who are the largest emitters local to the existing infrastructure to the available opportunities for cluster hubs?

Olsights and **MapStand** provide a global overview of CCUS cluster dynamics and active stakeholders, highlighting key changes, opportunities and risk.

- ✓ Global database for Cluster hubs and ongoing projects
- ✔ Project screening, verification and validation
- Stakeholder partnership opportunities
- | Home | Land | Market | Land | Land

CO, Cluster Heat Map (UK)

- Existing and planned key stakeholders, infrastructure, license agreements, and capacity
- ✔ Project sequencing and timelines
- Overview of keys risks and opportunities to projects and cluster hubs



CCUS Development Pipeline Insight (UK)



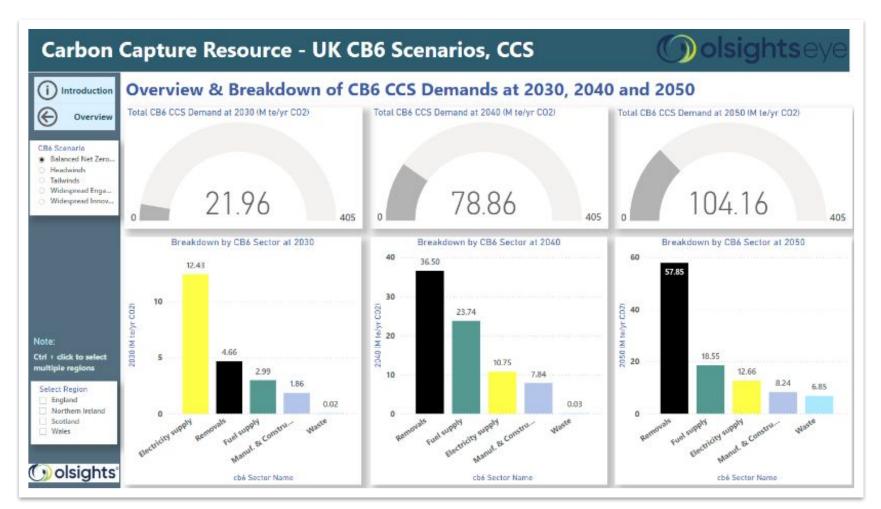


CCUS Funding & Policy

Which developments have secured funding scheme support, and how do cluster hub plans compare with national policy targets?

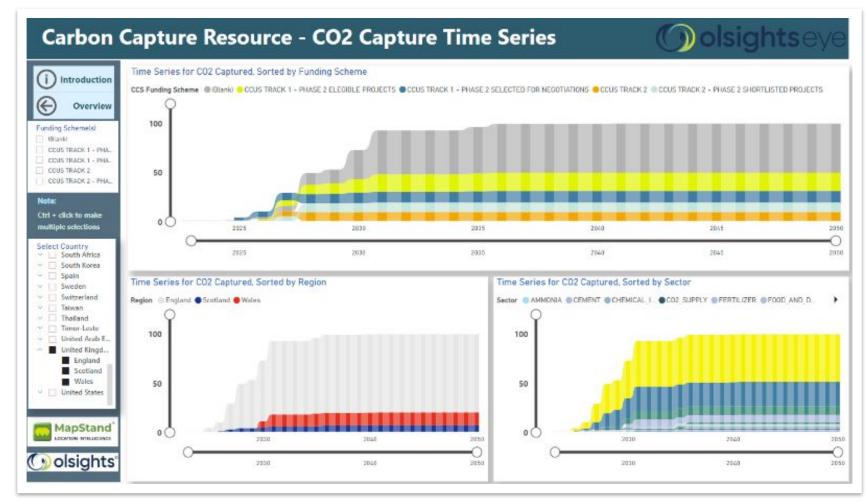
Olsights using MapStand datasets can provide regional and national overviews of capture & transport development funding status and exploration of net zero policy targets, highlighting shortfall opportunities & oversupply risks.

✓ Exploration of net zero policy CCUS capacity targets, with associated sector breakdown



CCUS UK CB6 Scenario Insights Dashboard

✓ Understanding of build-up of capture & transport capacity over time with support from different funding schemes.



CO₂ Predicted Rates Insights Dashboard

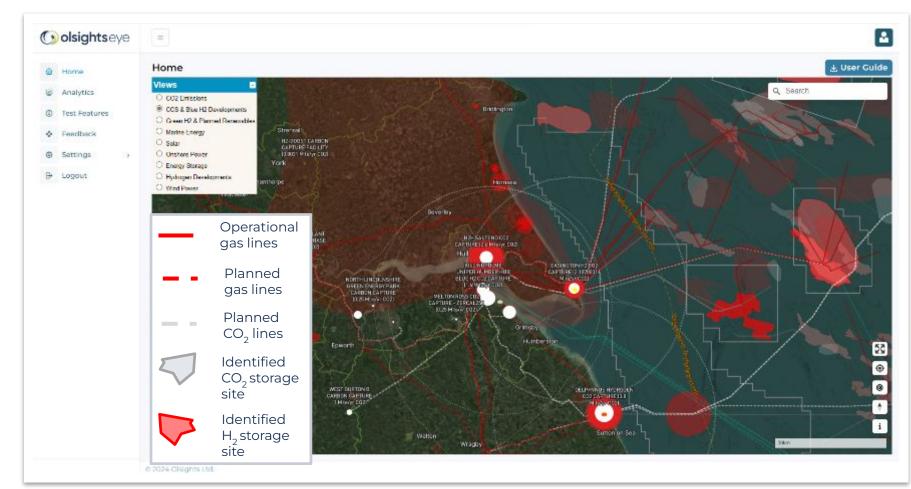


CO₂ Storage Hub Locations

Where are the storage hubs for CO2 Captured and how is it transported?

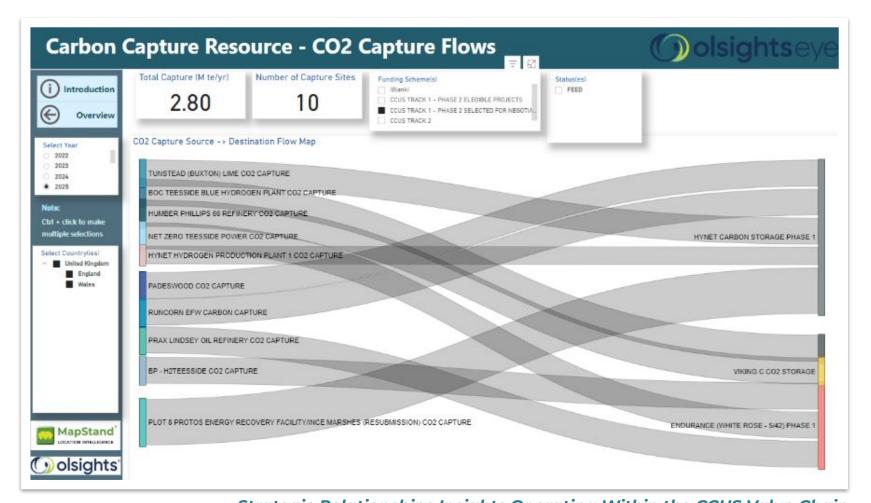
Olsights using **MapStand** detailed mapping visualisations show areas identified as potential CO_2 or H_2 storage locations

- ✓ Global database of saline aquifers, salt marshes and depleted fields identified as potential CO₂ or H₂ storage locations
- ✓ Field capacities
- ✓ Information on existing and planned infrastructure
- Owners and operators, licence agreements.



Visualisation of Interconnectivity of Identified Storage Hubs and Transportation Lines

- ✓ Global database of operational & planned CO₂ pipelines; line size, capacity, operator
- Global database of operation & planned gas pipelines
- ✓ Identification of planned CO₂ storage site and infrastructure connecting capture site to storage



Strategic Relationships Insights Operating Within the CCUS Value Chain.





How will our data and insights help?

Olsights and MapStand deliver:

- ✓ Live data feed to allow adjustments to business case due to market landscape changing.
- ✓ Integrated data allows us to visually represent hubs and tie in opportunities local to hubs.
- ✓ Collaboration information on developers, technology providers and storage operators to identify partnership opportunities.
- ✔ Ready-made and bespoke dashboards and visualisation builds to answer specific questions with the relevant data to clearly identify opportunities.

Who we work with

We work with all project developers and decision makers who are looking for a deeper understanding of how all energy technologies connect and the potential impact of developments.



































Sign up today

Premium Subscription to the Olsights Eye gives you access to:

- ✔ Ready to use dashboards for global insights include:
 - Hydrogen Developments
 - CCUS Developments
 - Wind Developments
 - Solar Developments
 - New dashboards frequently added and can be quickly customised to specific areas of interest or project need
- ✓ Digital mapping datasets & APIs
- ✓ Training
- ✓ Customer Support



"I am delighted to be working with Olsights to bring intuitive analytics and insights to a wide range of customers across energy. Olsights agile approach puts the customer first, delivering bespoke solutions that bring our global datasets to life and enable new insights to support decision making in CCS, H₂ and Renewable Energy."

Contact us for more information or to arrange a demo:

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MapStand: www.mapstand.com

Francis Cram | CEO

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"MapStand is a snug fit with our culture and purpose – and co-creating will allow us to offer next-level global location intelligence and high-velocity agile deployment. "Our first iteration of a whole-world visualisation app using MapStand data has enabled customers to ask new questions of cluster evolution, work towards clarity and test new innovative use cases. With some of these now proven, I can't wait to take this to the next level of integration and visual insight""!"





