



OGTC / OGIC Merger

The
Oil & Gas
Technology
Centre

Your Innovation Partner





Net Zero Roadmap

The OGTC opened a Net Zero Solution Centre in Sept 2019 with support from 11 industry partners, including BP, Shell, Equinor, Aker Solutions, Ineos etc. The Net Zero Solution Centre is focused on two complementary programmes to deliver the industry's aspiration for a Net Zero North Sea and ultimately, delivering services globally which contribute to the larger net zero goal.



Working across the energy sector to be part of the solution

Figure 1 - Low Carbon Energy Transition programme.

OGTC's proposal to support the Net Zero is based on two complementary programmes:

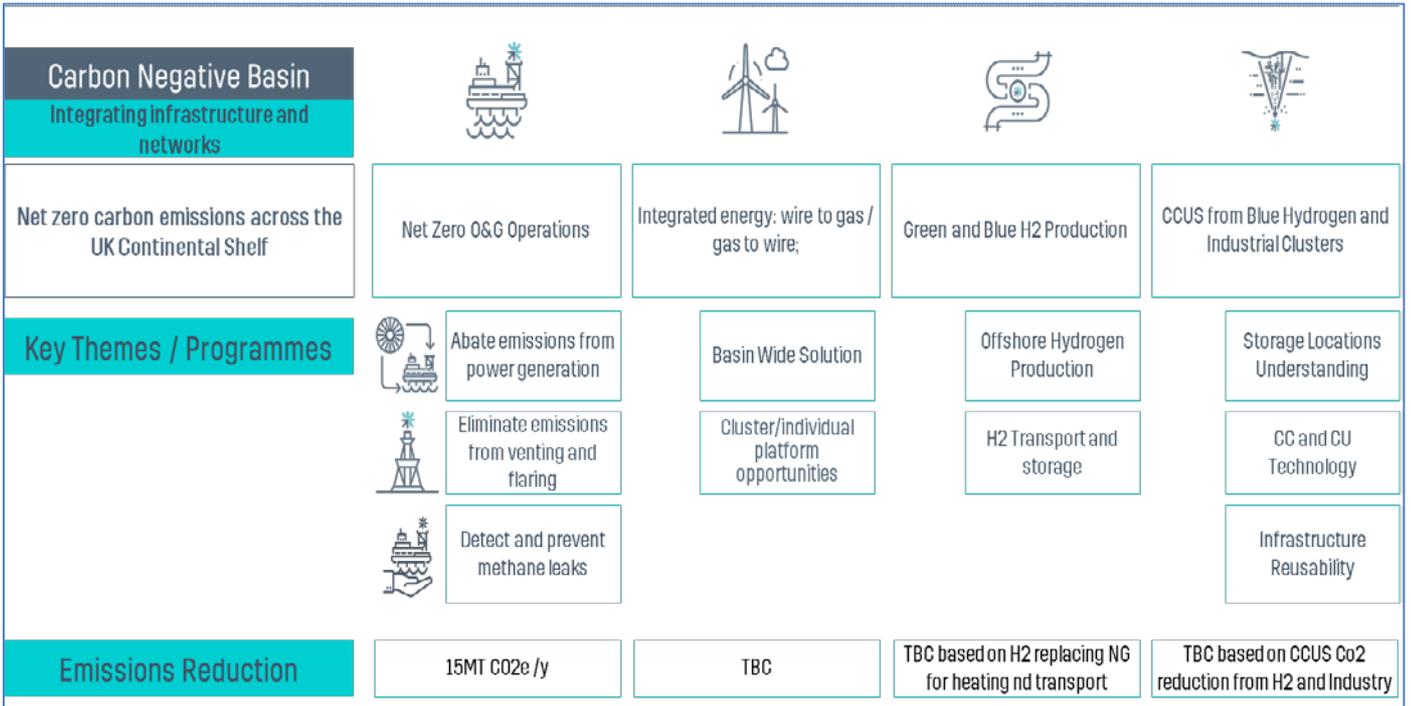
1. *A Cleaner Oil & Gas Production Industry*: focused on developing and deploying technology solutions to lower the overall carbon footprint of current Industry operations, including emissions resulting from flaring and gas turbine operations (accounting for 3% of total UK GHG emissions), mitigation of activity and waste generation.
2. *Net-zero emission across UKCS basin*: focused on integrating Oil & Gas production, offshore renewables, hydrogen production and CCS (including CO₂ storage from industrial clusters), enabled by the reuse and repurpose of existing infrastructure, leveraging the overall energy system.

Based on workshops with industry, a roadmap of activity has been developed and projects related to this roadmap are currently being developed. The initial focus within the OGTC is on developing a strong portfolio of projects across the roadmap. However due to limited resources, the team will focus on the higher TRL activity initially.

The potential merge of the OGIC team and associated project funds would allow the OGTC to provide a greater focus on the early TRL and basic fundamental research that is required to unlock the potential of some of the other elements of the Net Zero Roadmap, including but exclusively around alternate carbon capture technology, reservoir simulation for carbon storage, materials challenges for hydrogen repurposing of existing facilities, alternate technology for hydrogen generation, battery modelling and fundamental materials research to unlock the decommissioning challenge of composites.

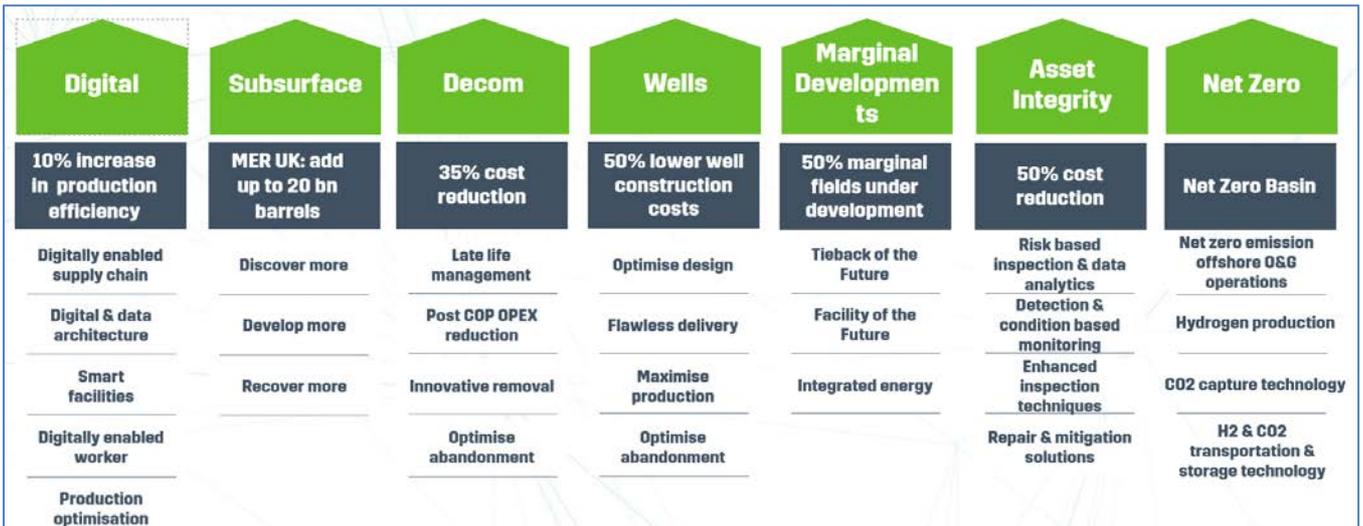


The key building blocks of the roadmap look like:



Net Zero Roadmap Building Blocks

In addition, the OGTC has comprehensive roadmaps in its other 6 solution centres and we believe there are opportunities for Net Zero focused early TRL activity in all of those roadmaps.



OGTC Solution Centre Roadmap Building Blocks.

As a result, OGIC will become part of the OGTC Solution Centre team, and will specifically focus on Net Zero activities that:

- Develop new university / industry projects that address areas in the OGTC technology roadmaps that have been receiving relatively less attention.
- Will use the funding provided by SFC / SE / SG to provide grant support to these projects where they are delivered by a Scottish University.



- Develop projects that support SME's to develop TRL3-6 technology.
- OGIC will support the OGTC team in developing new collaborative projects – multi-company initiatives that seek third-party funding to deliver energy transition at pace

Proposed Milestones & KPIs

Milestone	KPI
OGTC / OGIC Merger Agreement drafted	Complete by 31 st Jan 2020
Forward business case presented to OGTC Board	Presented 5 th Feb 2020
Completion of Merger	Complete 31 st Mar 2020
Transfer and relocation of OGIC Staff (as appropriate)	Complete 31 st Mar 2020
Feeder Solution Centre established	Complete 30 th June 2020
Alignment of processes to OGTC ways of working	Complete 30 th June 2020
First projects identified - feasibility studies, project scoping and identification of partners underway as appropriate	1st call issued by July 2020 or 1st DPA being negotiated by Jul 2020
Identify projects that link to the Solution Centre Road maps and have at least 6 projects identified / in flight that aim to spend £1m in total each year (incl staff and overhead)	2 projects in negotiation by Sept 2020 2 additional projects in negotiation by Nov 2020 2 Final projects in negotiation by Dec 2020 Of which at least 2 Projects fully signed up and active by Dec 2020
Identify a further 6 projects per year at £1m investment (incl staff and overhead)	3 more signed and in execution by Feb 2021 3 more in negotiation by June 2021 8 Active Projects signed and operational within 18 months 1 Active (&/or closed) Projects by Dec 31st 2021 22 Active (&/or closed) projects by Dec 31st 2022
Identify match funding opportunities that 100% match OGTC Investment levels	At least £1M in match funding attracted related to the feeder projects annually
Invest in projects that generate between £250m and £500m GVA over a 10 year return period	Target >£250M GVA calculated in potential value for the 22 projects targeted for feeder funding
Become a partner of choice for early TRL research on Net Zero topics with Scottish Universities	Develop a strong portfolio across Scottish Universities - speaking at min 2 university events a year