Unlocking finance for net-zero technology

Ian Cogswell, member of the Financing Technology to Net Zero UK group, looks at the key factors impeding financing and deployment of new technology in oil and gas

Attracting capital to finance the projects and technologies needed to realise the UK's 2050 net-zero emissions goals will require coordinated action across the public and private sectors. Financing Technology to Net Zero UK is assessing the challenges of financing and deploying new technology, and has identified the key factors limiting development and commercialisation of new technologies.

Five barriers to financing net-zero innovation

1. Hesitancy of operators to provide equity for the development of the newest technologies

On the UK Continental Shelf, international energy organisations have made progress toward reducing their carbon footprint, with numerous carbon capture, utilisation and storage, plus blue and green hydrogen projects, under development. However, the risk-averse nature of oil and gas operators is slowing new technology deployment. Operators are usually the ideal partner to foster development of these technologies, as they can leverage their engineering excellence and industry expertise to unlock potential opportunities that the developer (on their own) cannot.

2. The assumption that someone else is solving the problem

The notion that if the technology is good enough, it will be developed, can lead to the abandonment of the commercialisation of enabling technologies – not because they are not the right solutions, but because the developer has run out of money.

3. Mismatch between type of capital needed and type available

It is not a question of the *amount* of capital available, but the *mix* of capital (for example debt, equity, grants) and whether its allocation is efficient and impactful.

Conventional debt financing can rarely support new technology development, as it requires proof that the technology works before funds are released. The pool of private equity willing to take this risk is negligible; as a result, many technologies that have shown promise and hold huge potential have been left stranded.

4. Ongoing shift to sustainable assets and ESG considerations in the financial sector

Banks are under significant pressure to stop supporting the fossil fuel sector, but fossil fuel organisations will be critical to developing net-zero technologies. The financial sector needs to create a path for helping oil and gas companies with their energy transition.

5. Disconnect between stakeholders

Energy transition success hinges on collective efforts of several stakeholders, including government, technology developers, operators and financiers. However, these parties often have different interests and goals. They also hold different views about what their role is in bringing new technologies to market.

Delivering net zero

The financing challenges for the deployment of new clean technology are significant. The Net Zero Technology Centre (formerly OGTC) estimates that creating an integrated North Sea energy system will require investment of around £430bn. But investment is needed now to develop and accelerate deployment of the crucial technologies, including offshore electrification, methane leak detection and flaring mitigation, that are required to make net-zero a reality.

Following the same approach that government, investors, and the private sector have always adopted will almost certainly fail. A drastic culture change is needed to turn this around and frame investment discussions around what must be done to work back from a net-zero world in 2050, not towards it. ●

By **Ian Cogswell**, Member of Financing Technology to Net Zero UK, Senior Adviser at Portland Advisers and Co-founder of CCC Training

The EIC is proud to be a member of Financing Technology to Net Zero UK

The group is a multi-organisational network of industry experts who have come together to develop a white paper that assesses the challenges associated with financing and deploying technology and provides solutions that can be adapted by financial institutions and technology providers alike.

IMAGE: ISTOCK