# ABERDEEN CITY **REGION DEAL**

ANNUAL REPORT APRIL 2023 - MARCH 2024

## **ABERDEEN CITY REGION DEAL:** Powering Tomorrow's World

BERDEEN







**#ABZdeal** 

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#### THE DEAL 2016

The Deal is the Agreement between the UK Government and the Scottish Government with Aberdeen City Council, Aberdeenshire Council and Opportunity North East (ONE) on a city region deal. It follows the signing of a "Heads of Terms" Agreement in January 2016 by the Secretary of State for Scotland; the Cabinet Secretary for Infrastructure, Investment and Cities; the Leader of Aberdeen City Council; one of the Co-Leaders of Aberdeenshire Council; and the Chair of ONE.

## FOREWORD



#### **Cllr lan Yuill**

Chairperson of the ACRD Joint Committee and Co-Leader of Aberdeen City Council It is my pleasure to introduce the Aberdeen City Region Deal Annual Progress Report for April 2023 to March 2024. This report provides an overview of the progress made in the implementation of the Aberdeen City Region Deal, a partnership between the UK Government, the Scottish Government, Aberdeen City Council, Aberdeenshire Council, and Opportunity North East (ONE).

The report outlines the key achievements and milestones of the various projects and initiatives supported by the Deal, including the ONE BioHub and Aberdeen South Harbour opening, and continues progress made in the innovation, transport, and digital themed projects. It also provides a financial statement and details on the governance and accountability of the Deal.

The Aberdeen City Region Deal represents a significant investment in the future of the region, with the aim of driving economic growth, creating jobs, and supporting the transition to a net-zero economy. The progress made to date is a testament to the hard work and dedication of all those involved in the implementation of the Deal.

I hope that this report provides valuable insights into the progress made and the exciting developments to come. On behalf of the Deal partners, I would like to thank our project partners and stakeholders and the businesses within our key industry sectors across the city and region for their continued support. In addition I would like to thank all the Joint Committee members and Anne Stirling for her service as Chair from 2023-24.



#### **Cllr Anne Stirling**

Vice Chairperson of the ACRD Joint Committee and Deputy Leader of Aberdeenshire Council It is a privilege to be involved in one of the longest established deals in Scotland, and to have seen demonstrable progress year-on-year in Deal investment and programmes. This year alone we have seen projects come to completion this year, seen projects literally get off the ground and seen the expansion of networks and connectivity.

To be pushing ahead with Deal projects valued at £1bn, in partnership across Aberdeenshire Council, Aberdeen City Council, Opportunity North East, the UK and Scottish Governments as well as other partners including Port of Aberdeen and Nestrans shows that our deal lives up to what it was intended to, real public and private sector partnerships in the interests of the wider Deal area. Since it began the partnership ambitions have always remained the same: to provide the conditions for enterprise and businesses to invest and innovate, to access new markets, to maintain and grow the region's skilled workforce and provide work opportunities.

Those will continue to be our focus, working together in the coming year in areas where we can affect collective change. It is sometimes feared that Deal investments can be quite abstract, but the progress contain in this annual report shows without doubt that our deal investment is making a practical, real-world difference to the City Region Deal area.



Sir Ian Wood KT GBE Chair, Opportunity North East Opportunity North East (ONE) leads action and investment to diversify northeast Scotland's economy, focusing on innovation-led entrepreneurship in key growth sectors.

Over the past eight years, the private-sector-led economic development model has challenged, inspired, and defined ambition in digital tech, food, drink and agriculture, life sciences and adventure tourism.

ONE has boosted the entrepreneurial environment with its funding and resources, built a team of specialists to support startups and scaling businesses with entrepreneurship, innovation, leadership, and market development, and worked with partners and co-funders to develop transformational projects and secure significant growth resources.

Today, ONE continues to strengthen and build the entrepreneurial ecosystem and equip founders and business leaders with the insights, knowledge, skills and tools to create and scale innovation-led businesses.

The Aberdeen City Region Deal provided capital funding from the Scottish Government and UK Government to create innovation hubs as purpose-built homes to support sector growth ambitions: ONE BioHub for life sciences and ONE SeedPod for food and drink manufacturing and production.

ONE BioHub opened in August 2023, providing much-needed laboratory, office, and collaboration spaces. It is home to tailored programmes, connections to expert networks, and mentoring for founders developed and delivered by ONE and partners. It welcomed its first anchor tenant in July 2024.

ONE SeedPod is in its main construction phase and will open in 2025. It will provide in-demand commercial manufacturing and innovation space with the ONE team delivering comprehensive sector support.

ONE is committed to maximising the long-term impacts of these projects, including working with partners to secure new resources, funding, and investment to drive economic diversification and growth.

# REGIONAL ECONOMIC STRATEGY AND ABERDEEN CITY REGION DEAL

In the last decade, the North East\* economy has faced significant challenges due to successive oil price shocks, the global pandemic, EU Exit and other external supply chain shocks. During this time new policy developments have emerged particularly in the energy sector, supported by funding from the Scottish Government and UK Government. These include offshore renewables under the Innovation and Targeted Oil & Gas (INTOG) and ScotWind licensing rounds, carbon capture, utilisation and storage and green hydrogen production.

The refreshed **Regional Economic Strategy** approved in 2024 provides both an economic strategy for the region and a blueprint for sustainable economic growth that governments, local government, employers, the private sector and partner organisations can draw on as responses are developed across a number of priorities for the region.

Our vision is for a regional economy that enables us to thrive. It is leading a just energy transition, diversifying our economy, enabling entrepreneurship and innovation, and delivering a wellbeing economy for our people – a post fossil-fuel future.

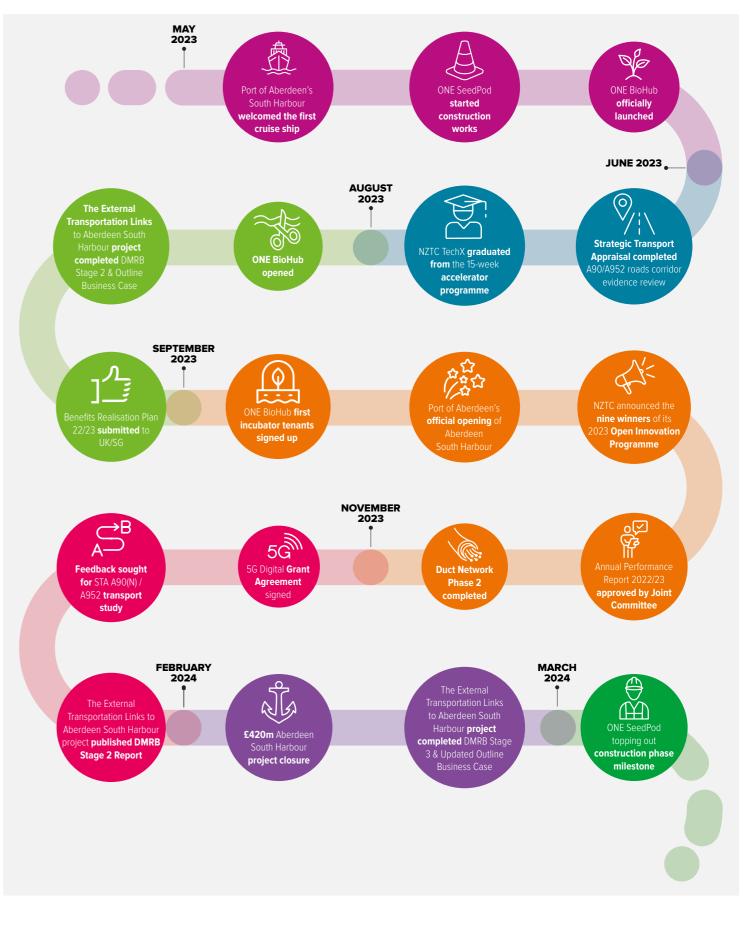
By 2035, our economy will be leading the transition to and production of future energy solutions, new green energy and will be diversifying through growth in our digital technology, food and drink, tourism, life sciences and creative sectors.

The 10-year Aberdeen City Region Deal is one key policy programme to help realise this economic vision. Aberdeen City Council, Aberdeenshire Council and Opportunity North East, UK Government and Scottish Government are working together to address the challenges of growth and diversification by capitalising on the substantial economic opportunities in the region.

\* Geographic definition

For the purposes of the analysis, the North East refers to the Aberdeen City Council and Aberdeenshire Council local authority areas.

# ABERDEEN CITY REGION DEAL 2023/24 KEY SUMMARY



# ABERDEEN CITY REGION DEAL **GEOGRAPHICAL OVERVIEW**

The North East has a track record as one of the most investable, productive and entrepreneurial economies in the UK, with high levels of business start-up, research and development, exports and disposable income. This Aberdeen City Region Deal map shows where the projects and National Centres (delivered via Net Zero Technology Centre) are located across the region. Digital Connectivity and Strategic Transport Appraisal projects span across the region.





#### INNOVATION THEME PROJECTS

- Net Zero Technology Centre, Queens Road, Aberdeen
- ONE BioHub, Foresterhill Campus, Aberdeen
- ONE SeedPod, Craibstone, Aberdeen
- Aberdeen South Harbour, Aberdeen
- National Decommissioning Centre, Newburgh, Aberdeenshire
- National Subsea Centre, Dyce, Aberdeen

#### DIGITAL THEME PROJECTS

- City Network Extension, Aberdeen
- Full Fibre Infrastructure, Aberdeen and Aberdeenshire
- Duct Network, Aberdeen
- Port of Aberdeen 5G, Aberdeen
- Huntly 5G, Aberdeenshire
- ONE 5G Pop Up Network, Aberdeen and Aberdeenshire

#### **+** TRANSPORT THEME PROJECTS

- Strategic Transport Appraisal (STA), Aberdeen and Aberdeenshire
- STA A90(N) / A952 Ellon to Peterhead & Fraserburgh, Aberdeenshire
- STA A952 Wellington Road, Aberdeen
- STA Craiginches Rail Freight, Aberdeen
- STA ASAM Strategic Tests, Aberdeen and Aberdeenshire
- STA Live Labs Demonstrators: a) **Regional Hydrogen Fuelling Facilities**, Aberdeenshire b) Transport Mobility Hubs, Aberdeen and Aberdeenshire
- External Transportation Links to Aberdeen South Harbour, Aberdeen

• STA - Aberdeen Rapid Transit/Bus Corridors, Aberdeen and Aberdeenshire



# ABERDEEN CITY REGION DEAL FINANCIAL STATEMENT

The only Deal signed to date with a significant Private Investment of 59% which has grown to 66%



The Deal is now worth **£1.013 billion** (excluding MOU) of which 87% of the 31 March 2024



### ABERDEEN CITY REGION DEAL PROGRAMME PROFILE

	UK Government	Scottish Government	Councils	Regional Partners	Total
	(£'000s)	(£'000s)	(£'000s)	(£'000s)	(£'000s)
INNOVATION THEME					
Net Zero Technology Centre	£90,000	£90,000	£0	£238,345	£418,345
ONE BioHub	£10,000	£10,000	£0	£19,995	£39,995
ONE SeedPod	£5,000	£5,000	£0	£16,626	£26,626
Aberdeen South Harbour	£0	£0	£11,000	£409,107	£420,107
DIGITAL THEME	DIGITAL THEME				
Digital projects	£5,000	£5,000	£7,000	£59,000	£76,000
TRANSPORT THEME	TRANSPORT THEME				
Strategic Transport Appraisal projects	£2,500	£2,500	£2,000	£O	£7,000
External Transportation Links to Aberdeen South Harbour	£12,500	£12,500	£O	£O	£25,000
Total	£125,000	£125,000	£20,000	£743,073	£1,013,073

In addition to the Aberdeen City Region Deal Funding, the Scottish Government as part of a Memorandum of Agreement (MoU), announced a further £254 million of funding.

- The Transport Theme was allocated £224 million additional investment to improve connectivity to and within the North East of Scotland.
- £20 million Infrastructure Funding was allocated, intended to release sites of strategic importance and provide certainty on the £130 million affordable housing supply grant.
- The Digital Theme received £10 million.

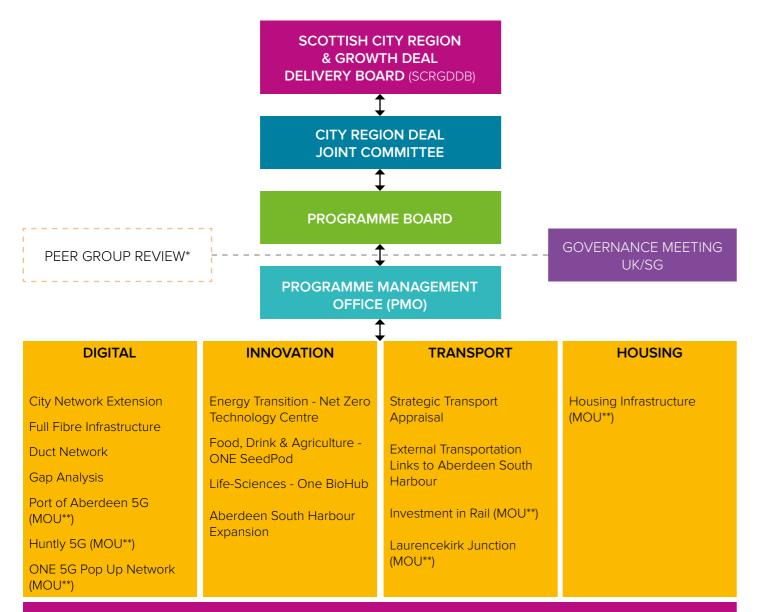
In 2018, City Fibre and Vodafone announced a £40 million investment to make Aberdeen a Gigabit City through a Fibre to the Premises (FTTP) Programme. In 2022, City Fibre announced an additional investment of £19 million to roll out gigabit connectivity, bringing the total private investment to £59million, an increase of £44 million compared to the Deal's original £15 million budget for private contributions.

The Deal is growing from £826.2 million to £1.013 billion primarily due to an increase in private sector contributions for the innovation and digital theme projects. The funding that has been secured by the projects are committed beyond March 2026.



# ABERDEEN CITY REGION DEAL **GOVERNANCE AND ACCOUNTABILITY**

The Aberdeen City Region Deal Governance Structure reflects the links between the City Region Deal and Housing Infrastructure fund under a separate Memorandum of Understanding with the Scottish Government.



#### Aberdeen City Region Deal Stakeholders

\*As required to develop Business Cases \*\*MOU - Memorandum of Understanding

#### JOINT COMMITTEE

The Joint Committee drives and governs the implementation of the City Region Deal programme and its links to the Regional Economic Strategy. It works to maximise the economic benefits of the Deal. It is made up of three Aberdeen City Council Councillors, three Aberdeenshire Council Councillors and three Opportunity North East Board Members.

The clerking of the Aberdeen City Region Deal Joint Committee is shared between Aberdeen City Council and Aberdeenshire Council.

- Aberdeen City Council Joint Committee website
- Aberdeenshire Council Joint Committee website

#### **PROGRAMME MANAGEMENT OFFICE (PMO)**

The PMO reports directly to a Programme Board which oversees the operations of the Deal, and a formal Review is held between the Programme Board and United Kingdom and Scottish Governments annually known as the Annual Conversation.

The reporting schedule is set out in the Annual Grant Offer Letter by the United Kingdom and Scottish Governments and includes:

- A monthly report and meeting to discuss the financial spend and forecast
- A quarterly report and meeting to discuss the finance, milestones, benefits, risks & issues
- A quarterly update and meeting to discuss communications
- Checkpoint reviews for each project

Annually the PMO provides:

- An Annual report
- An updated implementation Plan
- An updated Benefits Realisation Plan

The PMO is also part of a wider City & Growth Deals United Kingdom PMO group that meets regularly.

#### **AUDIT**

The Programme is subject to internal audit every two years as required by the Grant Offer Letter and has taken part in audits by Audit Scotland relating to the Deal externally. The findings, recommendations and progress on follow up actions are reported to the Joint Committee.

#### **REGIONAL PARTNERS**

The Digital and Transport Themes have working groups which oversee and drive forward the projects. Aberdeen South Harbour, Net Zero Technology Centre, ONE BioHub and ONE SeedPod are each governed by their own Board.



# ABERDEEN CITY REGION DEAL 2023/2024 BENEFITS REALISATION UPDATE

In February 2023, Joint Committee approved the <u>Aberdeen City Region Deal Benefits Realisation Plan (BRP)</u>. The BRP sets out a framework for measuring and capturing progress on delivery against the Deal's objectives. It highlights the direct, indirect, and causal linkages between/within investments, provides accountability to partners, funders, and beneficiaries, and helps to develop the evidence base to inform future investments.

#### ABERDEEN CITY REGION DEAL ECONOMIC IMPACT IN THE REGION

- The only Deal signed to date with a significant Private Investment
- The Deal approved 10 Business cases
- The Deal delivered Community Benefits on City Deal sites

#### IN 2023/24

- →£150m GVA generated from CRD projects
- ightarrow Around 600 new jobs created and a further 1,000 jobs safeguarded
- → Around 500 Construction jobs that pay at least the Real Living Wage

#### TO DATE

- → Over £310m GVA generated from CRD projects
- →Over £320m GVA from construction employment
- $\rightarrow$  Over 1,300 new jobs created and a further 1,900 jobs safeguarded
- $\rightarrow$  Over 1,000 Construction jobs that pay at least the Real Living Wage
- →68 apprenticeships employed
- →450 training and employment opportunities delivered

This is a significant contribution to the region's GVA of around  $\pounds$ 16 billion and the total employment in the region of around 270,000.

It should be noted that in addition to the GVA and jobs figures above there are a range of wider economic benefits not included in these figures. These include:

- i) The Net Zero Technology Centre support of GVA and jobs in the energy sector across the UK. Forecasts based upon the GVA impact of current and future commercialised technologies developed from NZTC activity and the NZTC National Centres suggests that NZTC will have a further GVA impact of £10bn-17bn by 2036 across the UK supporting around 100,000-170,000 jobs across that period.
- ii) The wider economic impact of the Aberdeen South Harbour (and the ongoing external transport links project) in enabling economic activity supporting in particular activity around energy transition and tourism from cruise ship visitors.
- iii) The positive economic impact of digital connectivity projects on the population impacted.

There will also be additional GVA and employment impacts from future projects not yet completed. These include the construction impacts of ONE Seedpod and the economic impacts of start-ups in both ONE Biohub and ONE Seedpod.

Both the economic impact from these wider economic benefits and from future projects gives us confidence that we will reach both the overall Deal targets of £260m GVA per annum and the 3,300 total new jobs created by 2026. For more information see the Aberdeen City Region Deal Benefits Dashboard.

#### WHAT'S NEXT

An Interim Evaluation to assess the delivery of the Aberdeen City Region Deal projects to date is planned from Autumn 2024 until Spring 2025. This work will also include a fuller discussion of progress to date and forecasts against the Deal economic targets as well as a further analysis of the wider economic benefits and future projects identified above.

# ABERDEEN CITY REGION DEAL INNOVATION, TRANSPORT AND DIGITAL THEMED PROJECT PROGRESS UPDATE

REGION DEAL ANNUAL REPORT 2022/23

# 1. NET ZERO TECHNOLOGY CENTRE

Net Zero Technology Centre (NZTC) works with industry, government and academia driving technology innovation to accelerate the energy transition to net zero. The Centre does this by co-investing with industry to fund and develop technology projects, working in partnership with pioneering technology developers; supporting clean energy start-ups through their annual TechX accelerator programme; collaborating with partners across the world. Through its Net Zero Technology Services business, they also provide clients with insights and foresights on current and emerging technologies, helping them navigate and accelerate their journeys to net zero and make the right technology investment decisions.

Technology focus areas:

- Industrial emissions reduction
- Renewables power and energy storage
- Hydrogen & alternative fuels
- Carbon capture utilisation & storage
- Digital and data integration
- Smart assets
- Robotics & autonomous systems

#### FUNDING PARTNERS AND GOVERNANCE

In 2023 NZTC welcomed its new CEO, Myrtle Dawes, and new Board Chair Peter Mather. There is more information about <u>Net Zero Technology Centre Leadership Team and Board on the NZTC website.</u>

#### **RECOGNISED FOR COLLABORATIVE INNOVATION**

#### COLLABORATE TO INNOVATE (CTI) AWARDS

NZTC was shortlisted in The Engineer's 2023 Collaborate To Innovate (CTI) Awards, recognising projects that address some of the biggest engineering challenges the industry faces at present.

Under the category of 'Energy & Environment', NZTC along with project partners was recognised for two key projects:

- Liquid Organic Hydrogen Carriers for Hydrogen Transport from Scotland to Rotterdam (LHyTS)
- Renewables for Subsea Power

To find out more about the two projects visit the NZTC website.

#### **OFFSHORE ACHIEVEMENT AWARDS 2024**

Under the category of Collaboration, NZTC was shortlisted for the Hydrogen Backbone Link (HBL) project, which saw collaborative partners come together to explore and validate the concept of an all-new hydrogen pipeline from Scotland to Europe, using Germany as a case study, giving recognition to the UK in supporting European growth.

NZTC continued to address global challenges, shining a light on local solutions at key events including COP28 in Dubai, All Energy in Glasgow, and Offshore Europe in Aberdeen.

NZTC inspired progress through their research and thought leadership with the launch of several reports, amongst these were Hydrogen Backbone Link, Technology Without Borders, and Advancing Remote Operations all of which highlight technology and market maturity, gaps, and opportunities.





#### DEVELOPING AND DEPLOYING TECHNOLOGY

This year, to find the next big breakthroughs, NZTC launched their 2023 Open Innovation Programme, held a call for field trial ready technology in the areas of Corrosion Under Insulation (CUI), and a call to find innovative solutions to improve electrolyser efficiency.

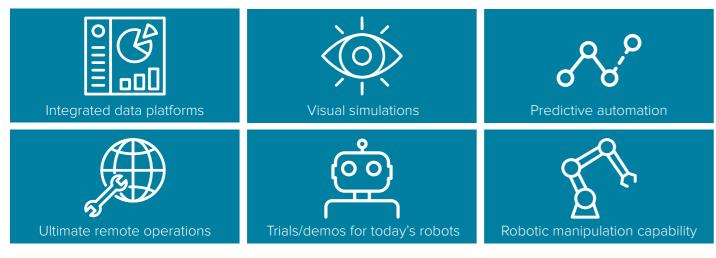
#### **OPEN INNOVATION PROGRAMME 2023**

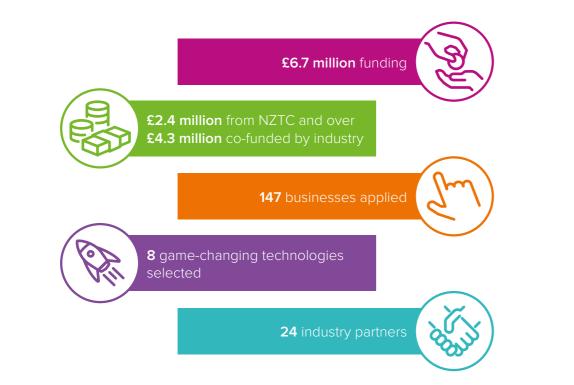
NZTC 2023 Open Innovation Programme call for technologies focused on developing and deploying data and digital technologies, including robotics, that aim to reduce offshore emissions, and accelerate clean energy production, to enable delivery of the UK's net zero ambitions.

Global businesses were given the opportunity to apply for up to £500K NZTC funding, with the potential of additional match funding from industry to support their technology development and deployment projects.

It was a key requirement that projects would support the transition towards net zero with an obligation of trialling and deploying technology within the UK continental shelf. As well as funding, the projects also gained access to data, facilities, and technical expertise from industry.

#### Six technology focus areas have been identified for the funding competition:





"We had a fantastic response to our latest call for ideas and the competition was strong, which demonstrates the appetite for developing net zero focused technologies. By harnessing the power of real-time data collection, analysis, and predictive modelling, robotics, and artificial intelligence the energy industry can access unique insights, make smarter decisions, reduce emissions and enhance safety. These technologies will accelerate progress towards net zero and facilitate the energy transition." **Rebecca Allison, Chief Operations Officer, Net Zero Technology Centre.** 

"I welcome this progress supporting cutting-edge technology which will help Scotland reach net zero by 2045. These innovative projects can help us create an economy which is fair, green, and growing." Neil Gray, former Cabinet Secretary for Wellbeing Economy, Fair Work and Energy, Scottish Government.

"This will play an important part in securing the future prosperity of our energy sector and achieving our net zero goals."

Lord Malcolm Offord, Parliamentary Under-Secretary of State for Scotland.

#### ACCELERATING INNOVATIVE CORROSION UNDER INSULATION (CUI) SOLUTIONS

Net Zero Technology Centre call for field trial-ready technology in the areas of Corrosion Under Insulation detection and monitoring offered developers the chance to test their technology in a real-world environment under the <u>Non-Intrusive Inspection Field Trial Accelerator (NIIFTA) collaboration</u>.

#### VIDEO HIGHLIGHTS

The asset integrity technologies selected will provide solutions to improve safety, efficiency and compliance. Find out more about Asset Integrity on the NZTC Youtube channel.

The selected technologies will be given the opportunity to field trial their equipment on an onshore terminal operated by one of the NIIFTA members, enabling demonstration of capability and further testing and development.

## THE SELECTED TECHNOLOGIES WERE: Subtera:

Subtera's novel CUI and moisture detection method utilises its patented passive sub-terahertz sensing technology platform. The technology's direct measurement approach is unique, measuring photons being naturally radiated from corroded metal and moisture.

#### Fluves:

Fluves CUI-CONTROL is a unique method to monitor CUI with a non-intrusive installation process that does not require the cladding to be removed. The CUI-CONTROL system monitors 24/7 for early signs of moisture ingress in the insulation with an accuracy of half a meter.

"Reducing CUI is essential for the offshore industry to achieve net zero emissions and maintain high levels of safety, and such trials can help identify and facilitate the technologies that will help us achieve this." David Cameron, Programme Manager – Industry Collab & New Projects, Net Zero Technology Centre.

#### PROJECTS PROPELLING THE ENERGY TRANSITION

As well as supporting individual technology developers, Net Zero Technology Centre also applies their expertise and thought leadership to research and feasibility projects, as well as joint innovation programmes. Below is just a small selection of the projects that are making significant strides:

#### WELL DECOMMISSIONING COLLABORATION INITIATIVE

The United Kingdom Continental Shelf (UKCS) is forecast to have a total of 2,102 wells decommissioned between 2022 and 2031, at a cost of more than £20 billion over the next decade.

Technology best practice and innovation have a key role in helping operators reduce the cost of well plug and abandonment (P&A) and deliver CO2-compatible techniques.

The Well Decommissioning Collaboration Initiative facilitates risk and cost-sharing among organisations confronting similar challenges, minimising the gap between technology developers and end users. It is accelerating the testing, validation, and gualification in multi-operator collaboration field trials of solutions that provide alternative barrier materials to cement. It also focuses on enabling and verification technologies that allow for rigless P&A to be possible.

The initiative aims to fund up to five technologies per year, supporting a minimum of three field trials for each, with the goal to have a minimum of six technologies successfully qualified and adopted by 2025.

Partners include North Sea Transition Authority (NSTA), Technology Leadership Board, OEUK, Repsol, Conoco, Petrobras, Total and Harbour Energy.

#### HYDROGEN BACKBONE LINK (HBL)

The HBL project aims to connect Scotland to the European Hydrogen Backbone to create export opportunities for green hydrogen and hydrogen technologies.

Phase 1 of the project demonstrated the technical feasibility and commercial viability of what could be one of the most critical pieces of infrastructure required to enable Europe to reach net zero. It proposed a new pipeline directly from either Shetland's Sullom Voe Terminal or Orkney's Flotta Terminal to Europe, using Emden in Germany as a study case.



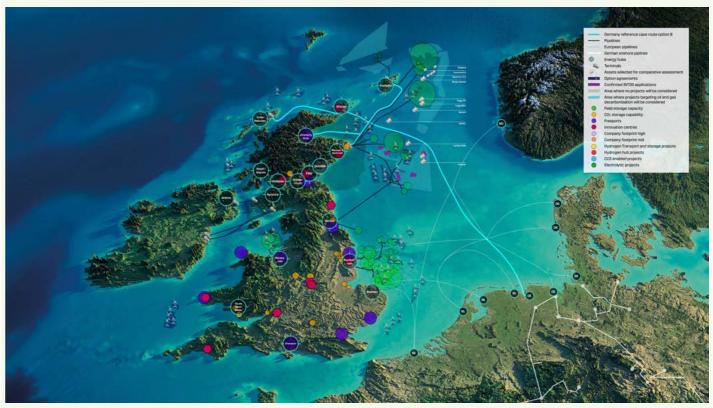


700 new jobs initially, enabling 300,000 green economy jobs by 2045

Scotland could meet up to 10% of Europe's projected hydrogen import demand by the mid-2030s



The HBL Project continues to Phase 2 with the goal of connecting Scotland to Europe by the 2030s.



"The Scottish Government recognises the importance of developing hydrogen pipelines to unlock Scotland's export potential. We want to work collaboratively with partners across Europe to advance infrastructure which ensures security of supply in Europe and positions the North Sea as a centre for low-cost hydrogen production.

"The Scottish Government supports the Hydrogen Backbone Link project because it gives valuable insight into the viability of repurposing or developing new pipelines. This can help us understand any barriers where government support is required to unlock investment and realise Scotland's export potential." Neil Gray, former Cabinet Secretary for Wellbeing Economy, Fair Work and Energy, Scottish Government.

#### SMART-DAC

Removing carbon from the atmosphere to either store permanently underground or to utilise in the generation of carbon neutral products is considered a necessity if we are to achieve our net zero ambitions. NZTC is working with DAC technology developer CO2CirculAir to develop their novel direct air capture technology, SMART-DAC.

The novel solution captures  $CO_2$  directly from air by utilising natural airflow, avoiding using energy-intensive air blowers, while harnessing renewable energy to power the absorbent regeneration process - making it a zero emissions solution for  $CO_2$  capture. 2023 saw a significant milestone in the acceleration of the technology with the construction of the pilot plant in Larne, Northern Ireland. In September 2023, SMART-DAC successfully demonstrated the capture of CO<sub>2</sub>, one of the first projects to demonstrate CO<sub>2</sub> capture from the atmosphere in the UK, and is expected to capture at least 100 tonnes of CO<sub>2</sub> from the air every year. Built on a modular design, the scale-up of a commercial plant to capture at least 50kt of  $CO_2$  a year is expected by 2030. This would be big enough to combine with green hydrogen to manufacture green methanol, which can be used as a shipping fuel, or possibly other synthetic fuels.





#### LIQUID ORGANIC HYDROGEN CARRIERS (LOHC):

The LHyTS project investigated the feasibility of a pilot trial for transporting hydrogen from Scotland to Rotterdam. The project analysed critical infrastructure and technology requirements; the logistics of loading, transporting, and storing Toluene (TOL) and Methylcyclohexane (MCH); and preparing the hydrogen for end users. Two potential export terminals in Scotland were considered (St Fergus and Sullom Voe Terminal) with the import location being Koole Terminals in the Port of Rotterdam.

The project outlined two pilot trial scales: a small-scale scenario resulting in the export of 40,100 tonnes of hydrogen per year by 2027, and a large-scale scenario corresponding to 250,500 tonnes of hydrogen per year by 2031. Scotland has the potential to become a net exporter of hydrogen by 2045 and this project paves the way forward in making transporting hydrogen at scale a reality.

Phase three has been recommended by engineering contractor ERM and NZTC. This would include further stakeholder engagement with for example potential hydrogen off-takers on the destination side (Europe) and potential shipping operators who would own/operate the LOHC carrier vessels. and project funding applications.

### **TECHNOLOGY WITHOUT BORDERS**

In December 2023, along with six international Research and Technology Organisations, NZTC launched its Technology Without Borders initiative, bridging the net zero energy transition gap between nations in the Global North and South.

Announced during COP28 this initiative embodies a 'just and inclusive' ethos to tackle emissions reduction and will facilitate technology transfer, local adaptation and deployment, support knowledge and capacity building of local technical expertise, while strengthening supply chains.

To find out more information visit the news page on the NZTC website.

"COP28 must listen to the voices of the Global South and those affected most by climate change. That is why we welcome the launch of the Technology Without Borders initiative, which follows the Scottish Government's £90 million Aberdeen City Region Deal investment in the Centre.

"Their work is vital to helping address the injustice at the heart of climate change by supporting those communities which are suffering the most but have done the least to cause the climate emergency." Mairi McAllan, former Cabinet Secretary for Transport, Net Zero and Just Transition, Scottish Government

"We must all do our part to ensure developing nations are not bearing the brunt of climate disruption.

"Technology Without Borders is a fantastic initiative that will deliver innovative and affordable solutions through information sharing to help secure the future prosperity of the energy sector and achieve our much-needed net zero goals. I encourage all partners to consider joining the programme.

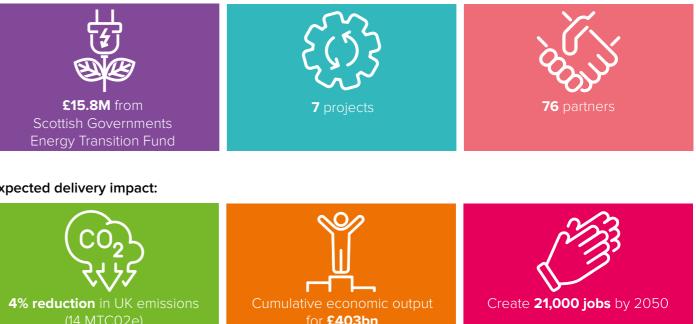
"The UK Government is investing £90 million in the Net Zero Technology Centre to support sustainable economic growth in North East Scotland, as part of our more than £2.7 billion investment to level up across Scotland."

Lord Malcolm Offord, Parliamentary Under-Secretary of State for Scotland



### NET ZERO TECHNOLOGY TRANSITION PROGRAMME: TWO YEARS ON

NZTC's Net Zero Technology Transition Programme (NZTTP) is driving the development of key technologies for green growth in Scotland and the UK, to create jobs, attract investment and help establish a world-class net zero supply chain.



#### Expected delivery impact:



#### **VIDEO HIGHLIGHTS**

Two years on from inception, the seven projects involved in this program have brought measurable contribution to net zero transition. Find out more about the Net Zero Technology Transition Programme (NZTTP) on the NZTC YouTube channel.

### ACCELERATING THE NEXT GENERATION OF CLEAN ENERGY START-UPS

"TechX continues to welcome start-ups with promising solutions, that can propel the adoption of clean and affordable energy. These are the companies of the future, poised to reshape the energy landscape and help lead us towards net zero."

Mark Anderson, Chief Acceleration Officer & TechX Director

The latest cohort launched in February 2024 attracted over 220 applications, spanning 45 countries. These 12 trailblazing start-ups are advancing new solutions across low-carbon hydrogen, alternative fuels, carbon capture and storage, renewable power, digitalisation and decarbonised industrial heat.

The programme transforms inspiring potential into ground-breaking reality, through grant funding, dedicated mentorship and unrivalled access to industry and investors.

The programme maintains steadfast support from TechX's global strategic partners, ADNOC, bp, ConocoPhillips and Equinor, with ConocoPhillips joining in February 2024, broadening the opportunities for our start-ups to thrive and flourish. TechX's strategic partners are complemented by support from professional services partner, Accenture.



#### Find out more about TechX Cohort 6 and selected start-ups by visiting the NZTC website.

TechX boasts 53 alumni who continue to scale, both technologically and commercially, securing further funding and investment, with an accelerated path to market entry.



over **£84M** in equity since currently raising another £58M



Pioneers provided work for at least 175 employees and contractors in

#### ENERGY INCUBATION AND SCALE-UP HUB (EISH)

TechX alumni will benefit from the recently announced Energy Incubation and Scale-up Hub (EISH), which will form a key part of Aberdeen's Energy Transition Zone, and is due to open in 2025.

As a delivery partner, NZTC will offer support to the start-up tenants of the hub, which will foster an environment for engagement and collaboration with peers, SMEs, universities, and investors to collectively accelerate the transition to net zero.

This additional growth offering solidifies NZTC's commitment to supporting entrepreneurs and in building a thriving clean energy ecosystem in the North East of Scotland and beyond.

#### **GROWING TECHNOLOGY SERVICES**

In October 2022, NZTC launched their suite of Net Zero Technology Services (NZTS), providing companies with unparalleled insight and foresight on current and emerging technologies to help them decarbonise their business and make the right technology investment decisions.

Following the launch of the Technology Roadmapping and Technology Due Diligence services in 2022, NZTS launched their Horizon Scanning service in February 2023.

Horizon Scanning delivers regular, unique bespoke insights to organisations on emerging technologies, industry trends, global projects, and policy. NZTS expert-led Horizon Scanning service helps futureproof businesses and provide better understanding of the developing technology landscape, to support diversification strategies and planning.

#### **SUSTAINABILITY**

NZTC is committed to contributing to the UN Sustainable Development Goals (SDGs). The Centre does this through their own operations, and through their Technology Services advisory offering for our clients. The contribution through their own operations impacts eight SDGs and the contribution through their advisory services impacts four SDGs. The NZTC greatest external area of impact is on SDG 7 Affordable & Clean Energy and SDG 13 Climate Action.

NZTC has a target to reduce its scope 1-3 greenhouse gas emissions by 50% by 2025, against a 2019 baseline, and to be a net zero organisation by the end of 2030. The 2019 baseline is 106 tonnes CO2e, for the calendar year 2019. In 2024, NZTC moved to calculating its emissions data by financial year, to align with other reporting done by the organisation, though the Centre 2025 and 2030 targets remain unchanged.

#### INCLUSIVE ECONOMIC GROWTH

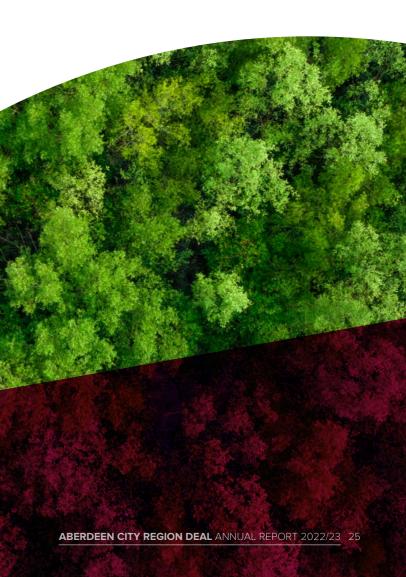
#### INSPIRING THE NEXT GENERATION

Through collaborations with industry partners, regional organisations, schools, and universities, NZTC actively promotes STEM subjects to young people while showcasing the exciting and dynamic opportunities available in the energy industry.



"Empowering the next generation of innovators is not just a commitment; it's a catalyst for transformation. NZTC is dedicated to fostering brilliance in the energy industry, nurturing talent for the future workforce which will help lead us to net zero."

Kirsty Robertson, Head of HR, Net Zero Technology Centre



# A. NATIONAL DECOMMISSIONING CENTRE (NDC)

The National Decommissioning Centre is a partnership between NZTC, the University of Aberdeen and the energy industry. It is a global leader in research and development (R&D) working with the industry to deliver cost and emissions reductions, improve environmental outcomes, transform approaches to provide sustainable decommissioning and accelerate the energy transition. To find out more about the NDC's projects with industry view the National Decommissioning Centre Video.



#### NATIONAL DECOMISSIONG CENTRE REGIONAL IMPACT

Working across the oil and gas, nuclear and renewables sectors the NDC adds value and creates competitive advantage by linking industry demand with academic capability and skills. The centre builds on the worldleading expertise at the University of Aberdeen in areas such as decommissioning technologies, predictive modelling, environmental assessment and the economics and regulatory aspects of decommissioning.

The NDC collaborates nationally and globally with universities, R&D institutions, and innovation centres active in decommissioning and energy transition including organisations in Australia, Canada, Norway and Thailand, and partners with fishing, marine, safety and environment organisations.

The centre has strengthened its R&D capabilities by investing in state-of-the-art facilities, such as a marine simulator, high power fibre laser (15kW) and a well plugging and abandonment (P&A) barrier qualification test chamber. Other facilities include high specification engineering laboratories, a large hangar space for the design and development of decommissioning technology, and a suite of environmental commercial testing facilities.

"The underwater laser cutting project brings many benefits when compared with conventional cutting methods including vastly reducing the time and cost to perform decommissioning activities. The technology development and cutting trials to date give us confidence that we can deliver significant improvements on cutting performance and therefore energy efficiency when compared to some current techniques deployed in offshore and nuclear decommissioning."

Craig Baxter, Decommissioning Technical Manager, Claxton, speaks about partnering the NDC on the underwater laser cutting project. Feb 24.

#### HEADLINE ACHIEVEMENTS IN THE PAST YEAR

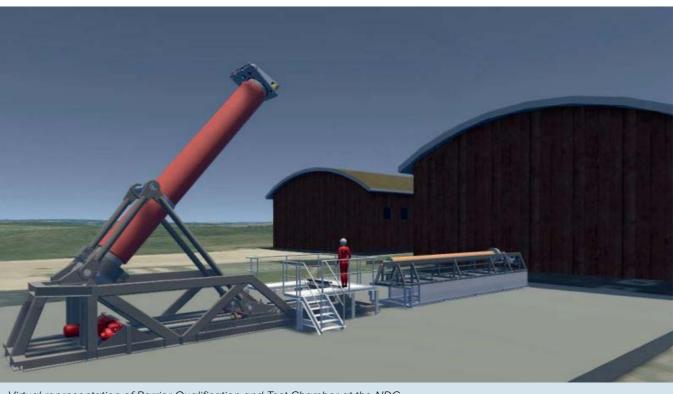
- NDC Nuclear Decommissioning Authority (NDA) partnership expanded with additional funding, supporting interdisciplinary and cross sector R&D and innovation delivery.
- NDC's Chevron partnership extended to 2026 with expanded work scopes and additional funding.
- Simulator used to de-risk 4 innovative technologies for offshore floating wind and deliver team expanded.
- £130k industry funding secured to test underwater laser cutting system for the nuclear decommissioning market.
- Invited onto the European EoLO HUB's advisory board for wind turbine blade decommissioning.
- 6 PhD studentship projects completed including 2 Chevron projects.
- Project on floating offshore wind supported by NDC shortlisted as a finalist in the 2023 Ventus Awards, the offshore wind industry's highest level of professional recognition.

"We are tasked with decommissioning the UK's oldest nuclear sites safely, securely, sustainably and cost effectively. The real strength in the NDA – NDC partnership is that there are numerous areas where we can collaborate to help us achieve this. It has been a resounding success since it was launched with several key outcomes already achieved including providing impartial insights to regulators, government, stakeholders, and advisory groups."

Heather Barton, Cross-Industry Learning Manager at the NDA, speaks about the benefits of collaborating with the NDC. Jan 24.

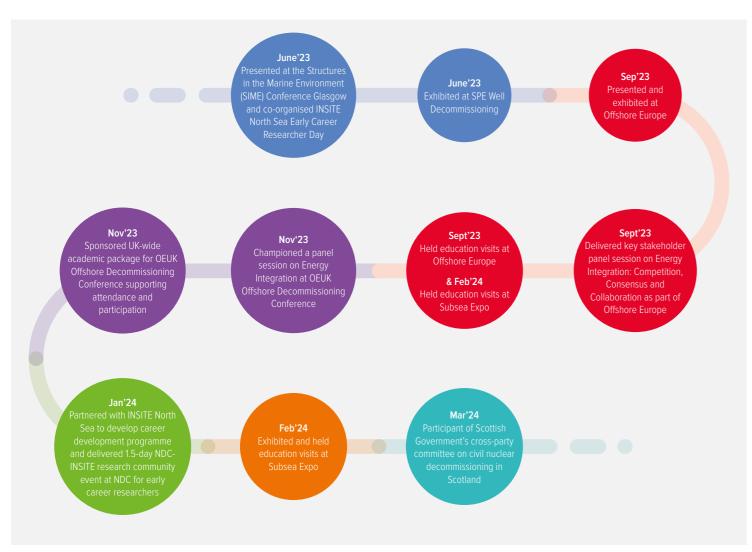
#### NEXT KEY MILESTONES

- Launch Barrier Qualification Test Chamber to trial alternative well plugging and abandonment technologies in realistic well conditions (available Q2 25).
- Underwater Laser Cutting system further offshore trials with project partners (Q2 25).
- On going development of laser technology for nuclear decommissioning.
- First oil and gas decommissioning scenario project utilising full simulator capabilities.



Virtual representation of Barrier Qualification and Test Chamber at the NDC

#### NATIONAL DECOMMISSIONING CENTRE TIMELINE OF KEY EVENTS





NDC OE23 panel session on Energy Integration





Economic Impact of Nuclear Decommissioning in Scotland

ND1



Report on economic impact of nuclear decommissioning in Scotland provided to cross-party committee

# B. NATIONAL SUBSEA CENTRE (NSC)

The National Subsea Centre (NSC) is a multi-million-pound Centre of Excellence for subsea research and technology development, delivered through partnership between Robert Gordon University (RGU) and Net Zero Technology Centre (NZTC), through the Aberdeen City Region Deal (ACRD).



The NSC aims to develop smart digital and engineering technologies to enable a faster, more cost-effective and sustainable transition to a net zero energy basin, locally in the North Sea and globally in energy environments. Find out more by watching the National Subsea Centre Introduction Video.





The NSC is harnessing NZTC's extensive industry network alongside the University's academic expertise, research capability and facilities to establish a world-class research and development centre.

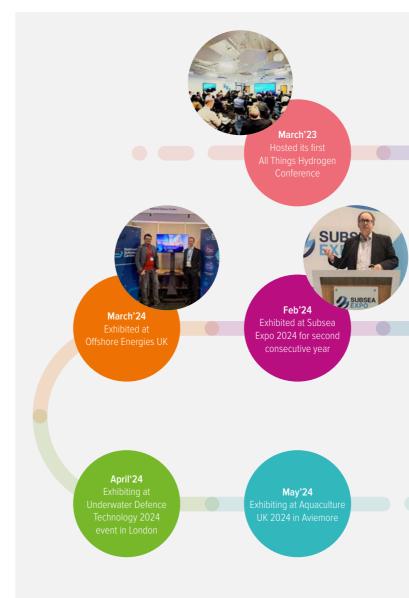
The centre's interaction with industry, government and the net zero funding ecosphere allows the team to identify important challenges then define smart technology roadmaps to address these and deliver high value solutions. By bringing together eager problem solvers, world class facilities and novel engagement with a host of stakeholders, the NSC's technical capabilities are ever growing.

The challenges addressed by smart technologies often recur across multiple industries, meaning that solutions often have cross-industry transferability. The development of smart subsea and marine technologies can be accelerated by importing and adapting relevant solutions from other industries, or by developing cross-industry solutions to common challenges with diverse partner consortia: Energy (Renewables and Oil & Gas), Defence, Aquaculture, Transport & Logistic Networks, Oceanographic & Scientific.

#### NATIONAL SUBSEA CENTRE REGIONAL IMPACT

The National Subsea Centre (NSC) has contributed over £3M towards research addressing key challenges faced by industry, using smart technologies to accelerate the energy transition. The four NSC research programmes: Transparent Ocean, Integrated Energy, Net Zero Operations and Cyber-Physical Systems are creating new and unique capabilities in underwater machine vision, cheaper, faster, cleaner and de-carbonised offshore energy industry, future energy infrastructure designs and robust and reliable autonomous offshore operations. The NSC has established a strong local and international network with industry, government and academia and is playing its part in the coordinated interdisciplinary effort to address the pressing problems of the energy transition.

#### NATIONAL SUBSEA CENTRE TIMELINE OF KEY EVENTS





# May'23

June'23

#### Jan'24

Zero Technologies

ABERDEEN CITY REGION DEAL ANNU

## 2. ONE BIOHUB

# INNOVATION HUB IS HEART OF THE REGION'S ENTREPRENEURIAL LIFE SCIENCES ECOSYSTEM



ONE BioHub is the region's new focal point for life sciences growth

North East Scotland is putting entrepreneurship at the heart of its distinctive life sciences cluster to accelerate the commercialisation of research and innovation and the sector's growth.

The region is home to world-class enterprises tackling modern epidemics, from neurodegenerative diseases and infectious diseases to cancer, diabetes and cardiovascular diseases. The businesses share a strong entrepreneurial drive, take novel research from the laboratory bench to commercialisation and attract significant investment.

The industry's ambition is to double the size of the life sciences cluster in Aberdeen as part of the region's economic diversification.

ONE BioHub, which opened in August 2023 on the city's Foresterhill Health Campus, is the new focal point for action and investment led by Opportunity North East (ONE) with partners to put the sector at the heart of the future economy.

ONE BioHub has significantly enhanced the region's entrepreneurial ecosystem. It offers laboratory, office and collaboration spaces for innovative start-ups, spinouts and scaling businesses, tailored programmes and connections to expert networks and mentoring for life sciences entrepreneurs and founders to enable them to commercialise new therapies, treatments, technology and solutions for health and wellbeing. Since opening, ONE BioHub has hosted national industry trade bodies, international investors, and sector programmes to inspire the next generation of entrepreneurs and founders from within the region's universities and support startup and scaling businesses with best-in-class entrepreneurial education and mentoring. Over 2,000 members of the region's commercial, research, academic, and clinical life sciences community have used the hub.

Commercial discussions are advancing with several potential tenants for bespoke fit-out space within the hub.

### SUMMIT HIGHLIGHTS GROWTH POTENTIAL OF REGIONAL CLUSTERS



In March 2024, the third life sciences summit staged by The Times and ONE in Aberdeen focussed on commercialising research and innovation and entrepreneurial growth in the sector

At the 2024 Times & Sunday Times Scotland and ONE Scottish life sciences summit in Aberdeen, business leaders, funders, investors, industry experts, and influencers emphasised the sector's growth opportunity. They also highlighted the challenge of successfully commercialising world-class research and innovation and consistently raised access to scale-up funding as a critical issue.

The event at the end of March, previously held in 2020 and 2022, is established as an important forum for life sciences commercialisation. It attracted a capacity audience of almost 200 delegates and 40 speakers who shared their experiences and insights on creating and growing high-value life sciences businesses, securing investment and translating research and innovation into products and solutions in the market to produce real-world impacts.

Opening the summit, Dr Deborah O'Neil, chair of the ONE life sciences board and founder and CEO of **NovaBiotics, said:** "This region had the vision to build on its life sciences strengths—a cluster of ambitious companies, strong research assets, and talented people—and put the sector at the heart of its future economy. We have created what we said we would: incubation and grow-on space, labs, and offices, along with meeting, event, and collaboration spaces where our community of entrepreneurs and founders, researchers and innovators, clinicians and practitioners come together to share, learn, innovate, and grow. ONE BioHub is the focal point for our growth ambitions and the entrepreneurial ecosystem we are building."

"What I love about ONE is that they're challenging government and the private sector with the question, "Why can't we do what we've already done for one sector?'," he said. "Aberdeen is a global centre for the oil sector, so why can't it also become a global centre for life sciences? It's a great question, and I can't come up with a reason why it can't."

Sinclair Dunlop, managing partner at Epidarex Capital, praised ONE for its work to diversify the north east's economy beyond oil and gas.

#### ENTREPRENEURS, TENANTS AND USERS HAIL ONE BIOHUB IMPACT

Dr Ayham Alnabulsi is co-founder and CTO of EpitoGenX. Its EpitoGen® and AI EpitoPrediktTM technologies come together to create a powerful game-changing platform that will transform diagnostics, vaccine design, biotherapeutics, and antibody development. With the support of Innova Medical Group Inc, the company aims to provide accurate, simple, accessible, and affordable point-of-care testing systems. Previously, Ayham cofounded and led Vertebrate Antibodies and AiBiologics. He has extensive knowledge in medical genetics, immunology and mathematics, and he is a co-inventor of the game-changer EpitoGen technology.

Dr Soumya Palliyil is the Head of Scottish Biologics Facility at the University of Aberdeen, where she leads a team of scientists and PhD students developing therapeutic and diagnostic monoclonal antibodies in the areas of Alzheimer's disease, Gram-negative bacterial infections, fungal infections, chronic liver diseases and most recently COVID-19. She is also co-founder of BrlgID Biologics, which is developing next generation antibodybased drugs with the assistance of an innovative drug discovery platform that identifies specific fungal targets.

Both share a common mission to translate innovation into meaningful real-world impact and see scientific entrepreneurship as the most effective path to achieve this.

Ayham Alnabulsi said: "The dynamic support available in Aberdeen is a catalyst for life sciences start-ups to commercialise research and innovation. It's crucial to acknowledge the individuality of each journey but we are fortunate to have a very collaborative life sciences ecosystem in the region, which supports people throughout their entrepreneurial journey.

"My team and I possess a complementary skill set, allowing us to build on each other's expertise. Additionally, the significance of networking cannot be overstated. Participating in ONE BioHub's monthly meetups and the ONE life sciences network has expanded my professional connections and has opened up new commercial opportunities that will enable the growth of EpitogenX."

Soumya Palliyil said: "Being part of ONE Life Sciences accelerator program kick-started my entrepreneurial journey. It equipped me with the right methods and tools for customer discovery, value proposition models, and understanding decision-makers. The opening of ONE BioHub is really exciting for north east Scotland, and has already presented me with valuable opportunities including the chance to pitch and network with a substantial group of global investors brought to Scotland by Scottish Development International in November."

ONE BioHub welcomed Genomes.io as its first co-working tenant. Genomes.io is a secure DNA data storage and sharing application that allows users to sequence, store and commercialise their genomic data and enables biotech organisations to access genomic data equitably.

Aldo de Pape, Founder at Genomes.io said: "Locating at ONE BioHub aligned with our goals to establish ourselves in the ecosystem and grow the company. Being based at ONE BioHub allows collaboration with the life science ecosystem, and the support and opportunities from ONE enable us to accelerate our business. The co-working space itself provides a vibrant and inviting atmosphere, featuring smaller meeting rooms for private discussions. I admire the ambition of ONE BioHub and the role it takes in ensuring that the biotech industry has a significant and growing voice in Scotland and the UK. The biotech and life sciences community here is impressive whilst remaining collaborative and open."

#### **VIDEO HIGHLIGHTS**

Andy Porter is Professor in Medical Biotechnology at the University of Aberdeen, a serial life sciences entrepreneur and a director of several Scottish biotechnology companies. In this interview, he explains the difference that ONE BioHub will make to the life sciences cluster in the region and the people turning research and innovation into new solutions for health challenges. The video can be viewed on the ONE BioHub YouTube channel.

### PARTNERS CELEBRATE LANDMARK PROJECT FOR SECTOR





In May 2023, following the completion of the new build and ahead of final commissioning works, the project partners formally launched ONE BioHub to the industry and stakeholders.



#### **VIDEO HIGHLIGHTS**

You can watch highlights from the launch event in this film: ONE BioHub Launch Event

Sir Ian Wood, chair of ONE, said: "ONE BioHub will be the transformational place in the north east of Scotland for the entrepreneurial life sciences community and growth sector to meet, share, learn, start up, innovate and grow. It will be a new game-changing technology and business cluster in Aberdeen, accelerating life sciences commercialisation, translating research into solutions in the market, improving health and wellbeing, creating high-growth businesses and high-value jobs, and harnessing the potential of science, technology and innovation to diversify the economy. This adds an exciting new business dimension to our economy."

Deborah O'Neil said: "The region is home to world-class research and innovation in the University of Aberdeen, Robert Gordon University and NHS Grampian, a thriving community of 2,500 life scientists and a cluster of dynamic biotech, medtech and healthtech businesses. ONE BioHub will make more of all these strengths, assets and talented people. It will inspire the next generation of bio-entrepreneurs to commercialise innovation in the city, solve health challenges and create lasting economic value."

Minister for Small Business, Innovation, Tourism and Trade, Scottish Government, Richard Lochhead said: "ONE BioHub will be a tremendous asset for the north east and the whole of Scotland. It will allow the already thriving life sciences cluster in the region to continue growing, innovating and succeeding."

Lord Malcolm Offord, Parliamentary Under-Secretary of State for Scotland said: "This fantastic ONE BioHub facility is an important new platform for the region's life sciences industries, and I have no doubt that it will rapidly forge an international reputation for excellence. The products developed here will improve lives, and reduce pain and suffering worldwide, while the companies based here will bring high quality jobs and investment to the local community."

Neil Francis, Scottish Enterprise's Managing Director for Major Projects, said: "Projects such as the ONE BioHub, bringing together our innovators, entrepreneurs and big thinkers in one place, are crucial to the success of Scotland's future economy. As Aberdeen transitions to the growth sectors of the future, ONE BioHub will be at the heart of its ambitions to become a leading life sciences destination."

Professor George Boyne, Principal and Vice-Chancellor of the University of Aberdeen, said: "ONE Biohub recognises the leading life sciences research expertise we have here at the University of Aberdeen and across the region and will help nurture that expertise and take it closer to market which in turn will contribute to health, wellbeing and prosperity. The University of Aberdeen is enhancing its support for commercialisation of research and we are excited by the role that ONE Biohub can play in accelerating our impact on the life sciences sector."

Alison Evison, Chair of NHS Grampian, said: "We are delighted that our partners in innovation will be here on the Foresterhill Campus. This cements our commitment to exploring new and innovative ideas with industry and life sciences within our healthcare systems."

#### ICONIC BUILDING DESIGN DRIVEN BY PURPOSE

ONE BioHub is an iconic addition to Aberdeen's innovation landscape. Its striking design is informed by its purpose of driving commercialisation and entrepreneurial growth.

BDP (Building Design Partnership Ltd) designed the building and Robertson Construction was the main contractor for ONE BioHub.





Christoph Ackermann, Principal, BDP commented: "The ONE team has a strong appreciation of the importance of collaboration and understanding of how the right environment can facilitate knowledge clusters and accelerate innovation. ONE BioHub is the built manifestation of our client's mission to drive transformational change to diversify the North East economy. The design and layout of the building enables and encourages research in the life science sector to co-locate and to collaborate on the Foresterhill Health Campus. The fully electric building supports life science innovation, economic development and the drive to net zero."

#### **VIDEO HIGHLIGHTS**

In this interview, Christoph Ackermann, Architect & Principal at BDP, discusses the process that led to ONE BioHub's distinctive design.

Elliot Robertson, Chief Executive Officer, Robertson Group, said: "ONE BioHub has been used to inspire and expand knowledge since its inception and will continue to be a place of collaboration with the potential to address global health challenges, whilst creating employment and opportunity."

#### **VIDEO HIGHLIGHTS**

In this interview, Alistair Broadley, Operations Manager at Robertson Construction reflects on the journey of turning a concept into reality.

#### FUNDING PARTNERS AND GOVERNANCE

ONE BioHub includes £20 million of capital funding from the UK Government and Scottish Government through the Aberdeen City Region Deal. ONE has committed up to £3.6 million of funding to deliver ONE BioHub's objectives and Scottish Enterprise contributed £2 million. The project was developed by the ONE Life Sciences sector board, which includes life sciences business leaders, the University of Aberdeen, Robert Gordon University, and NHS Grampian.

ONE created a not-for-profit company, BioAberdeen Limited with an industry board, to deliver the capital project and for the ongoing operation of ONE BioHub.

#### FOOD MANUFACTURING INNOVATION HUB MARKS CONSTRUCTION MILESTONE

The new ONE SeedPod industry innovation hub for the North East's £2.4 billion food manufacturing sector marked a major construction milestone in March 2024.

The project partners celebrated the "topping out", or highest point, of the new build on the outskirts of Aberdeen.

ONE SeedPod is a key industry innovation project supported by the Aberdeen City Region Deal to drive growth in the food and drink sector and support economic diversification.

ONE SeedPod will offer a range of benefits to ambitious businesses. It provides a platform to scale production in food-grade manufacturing units, develop new products and processes in the new product development kitchen and pilot plant, and showcase their products online and in person in the demonstration kitchen. It also offers a vibrant community for entrepreneurs, founders, and business leaders to connect and access tailored support to accelerate growth. The overview video is available on the ONE SeedPod YouTube channel.

The 30,000-square-foot new building is in its main construction phase and is scheduled to open in 2025.

Opportunity North East (ONE) is leading and co-funding the project, with substantial funding from the UK Government, Scottish Government, Scottish Enterprise, and the Just Transition Fund. Scotland's Rural College (SRUC) is the strategic partner, providing the serviced site for ONE SeedPod on its Craibstone Campus.

Sir lan Wood, chair of ONE, said: "The Aberdeen City Region Deal was the first of its kind with a vision to diversify our economy by investing in key sector innovation and growth. Food and drink is this region's biggest industry after energy, employing 22,000 people, and the UK's largest manufacturing sector. ONE and the project partners are investing in the growth potential of new and established businesses. We celebrate a milestone in the build today and look ahead to ONE SeedPod becoming the focal point for practical growth support to the sector."

David Kilshaw chairs Food Hub (NES) Ltd, the not-for-profit created to develop the capital project. He said: "ONE SeedPod is a unique home for the entrepreneurial ecosystem that provides ambitious businesses with commercial facilities, sector expertise, growth support and industry connections under one roof. It is where businesses will scale production, develop new products and processes, and showcase their products. The region's ambitious community of entrepreneurs, founders and business leaders will meet and share ideas and inspiration, and access tailored support to accelerate growth and create new, high-skill jobs."

The project partners highlighted the significance of ONE SeedPod to the sector and to diversifying the region's economy.







The project partners marked the "topping out" of ONE SeedPod in March 2024

UK Government Minister for Scotland John Lamont said: "It was a pleasure to visit ONE SeedPod to mark this significant milestone on the journey to levelling up the region and Scotland more broadly. I can't wait to see the food and drink innovation hub up and running as it will help boost the local and national economy. The UK Government is backing the facility with £5 million investment - part of our £125 million commitment to the Aberdeen City Region Deal. In total we are investing more than £3 billion to level up across Scotland."

Scottish Government Energy, Just Transition and Fair Work Minister Gillian Martin said: "The food and drink industry is a major contributor to our economy, including rural and island communities, with £15 billion turnover and supporting around 129,000 jobs. This is another major step towards completion of a centre for innovation in the north east and across Scotland. More than £8 million Scottish Government funding through our Just Transition Fund and the City Deal will help growth and create jobs. This development of demonstration kitchens, food manufacturing units and collaboration spaces can support one of our most important sectors and build a fair, green and growing economy."





Adrian Gillespie, Chief Executive of Scottish Enterprise, said: "This is a welcome milestone in the development of ONE SeedPod, which will provide the ecosystem, infrastructure and expertise to maximise opportunities for Scotland's top international export sector – food and drink. Creating and nurturing more innovative Scottish start-ups and scale-ups is vital to achieving the economic transformation we are targeting."

**Professor Jamie Newbold, Provost & Deputy Principal of Scotland's Rural College (SRUC), said:** "The North East of Scotland has long had a thriving local food and drink sector and we are delighted to be working with Opportunity North East on ONE SeedPod. We are excited to mark the next stage in its development and look forward to working with ONE and other businesses to grow the size and value of the region's food and drink sector."

### SUPPORTING A KEY GROWTH SECTOR

North East Scotland's food and drink sector has a national impact and a crucial role to play in the region's economic diversification. It currently provides more than 22,000 jobs. The region's industry ambition is to grow at 5% annually by leading in premium product and market development, high-value manufacturing and high-skill jobs, and innovation-driven productivity and sustainability.

Key figures in the sector welcomed the progress of ONE SeedPod.

**Bill Dean, Managing Director of Dean's of Huntly, said:** "ONE Seedpod will be another key milestone within the food and drink sector here in the north east. Our region has been a leading light for the industry for many decades. The ONE Seedpod Innovation hub will play vital part in encouraging collaboration and growing an exceptional and innovative food and drink sector here in our region."

**Stuart Common, Managing Director of Mackie's of Scotland, said:** "There's a huge number of amazing food and drink businesses in the north east. Whether they're just starting out or looking to grow and scale, the ONE SeedPod promises to provide vital support and facilities to support all sorts of food and drink companies. From kitchen spaces to industry advice, ONE SeedPod's practical support will help set food and drink manufacturers up for success, helping the industry continue to fly the flag for Scotland and the region. Development work never stops at food and drink businesses. ONE SeedPod will be an asset for all those development teams able to use it, whether they are looking to tweak their existing products, to find production efficiencies or to come up with the next new thing."

#### SUMMIT PUTS SECTOR'S GROWTH IN SPOTLIGHT





The Future of Food and Drink Summit was a national platform to share the region's growth ambition and ONE SeedPod's role in supporting entrepreneurship and innovation

Brand leaders and industry experts shared their experiences and insights on enabling start-ups to scale faster, aligning ambitious businesses with supportive investors, product innovation, advanced manufacturing, and the next mega-trends at the Future of Food & Drink Summit in Aberdeen in November 2023.

The summit, co-created by The Times & Sunday Times Scotland and ONE, was a forum to inspire ambition, focus on sector growth and share the region's industry vision, action and investment with an influential national audience of entrepreneurs, investors and innovators.

Held at P&J Live, the event showcased ONE SeedPod's role in accelerating growth and innovation in food and drink manufacturing to more than 200 industry professionals from across the UK and enabled new industry connections to be made.



The summit speakers included Giles Brook, CEO of WhiteSpace Ventures, and a renowned serial start-up CEO, entrepreneur, and investor who has been a leading factor behind the success of flagship challenger brands including Innocent, BEAR, Vita Coco, Bio & Me, and Pip & Nut. He said:

"What's happening here in Scotland today, working with Opportunity North East, gives a platform for the region to be a leading force in food evolution."

# CONSTRUCTION PHASE DELIVERS ECONOMIC IMPACTS AND COMMUNITY BENEFITS

The construction of ONE SeedPod started in summer 2023 and Robertson Construction Eastern is the main contractor. The main construction phase is scheduled to be completed in late 2024. The project will then move into its fit-out and commissioning phases before launch and opening in 2025.

The build-phase has had a significant economic impact and the contractor is committed to enhancing local communities where it works.

By the end of March 2024, the project had supported 416 construction jobs.

The site team has delivered Construction Careers Information, Advice & Guidance (CCIAG) events, supported primary and secondary school curriculum activities and volunteered 110 hours to support local community projects and charitable organisations.

Elliot Robertson, Chief Executive Officer, Robertson Group, said: "As the strategic partner of choice in the delivery of ONE SeedPod, Robertson fully supports the steps being taken in the diversification and transformation of the Aberdeen city region economy. The quality of the building is a reflection of the high reputation that the area has for its food and drink sector and will become a focal point for innovation and creativity. With over 22,000 people regionally employed in the sector, there's a great wealth of experience and knowledge that will benefit the aspirations of ONE as it continues its important role in securing an alternative economic future for Aberdeen and Aberdeenshire."

### FUNDING PARTNERS AND GOVERNANCE

ONE SeedPod includes £10 million of capital funding provided jointly by the UK Government and Scottish Government via the Aberdeen City Region Deal (ACRD). ONE has committed £5.4 million of funding towards the delivery of ONE SeedPod's objectives and set up not-for-profit Food Hub (NES) Limited with an industry board to take the project forward.

Scotland's Rural College (SRUC) is the strategic delivery partner and is providing the serviced site for ONE SeedPod on its Craibstone campus outside Aberdeen.

The Scottish Government's Just Transition Fund is providing  $\pounds$ 3.1 million for the project and Scottish Enterprise  $\pounds$ 2 million.



# ABERDEEN SOUTH HARBOUR EXPANSION

#### PORT OF ABERDEEN'S TRANSFORMATIONAL £420 MILLION EXPANSION PROJECT IS NOW FULLY OPERATIONAL



Aberdeen South Harbour officially opened in September 2023 and the expanded port now offers its customers and port users 7.6km of quayside, making it Scotland's largest berthage port.

South Harbour adds an additional 1.5km of deepwater berths (up to a maximum of 15m depth) to the port estate and can accommodate ships up to 300m in length, a significant increase to the port's previous capability of 165m. It also has extensive heavy-lift zones, and 125,000m2 of flexible laydown space with expansive project areas.



Her Royal Highness The Princess Royal officially opened South Harbour on Friday 22 September 2023 marking the completion of the UK's largest marine infrastructure project.

During the event, The Princes Royal engaged with a wide range of people who helped take Aberdeen South Harbour from concept to completion, as well as representatives from the private, public and third sectors.

#### **VIDEO HIGHLIGHTS**

#### Aberdeen South Harbour Official Opening

The Aberdeen City Region Deal (ACRD) Joint Committee has marked an important milestone, with the official project closure being signed off for Port of Aberdeen's Aberdeen South Harbour expansion.

The ACRD investment in the project ran to £11 million, made up of Aberdeen City Council and Aberdeenshire funding. This recognised the wider impacts for the city and shire region of an expanded harbour offering, which has the potential to support 17,500 jobs and deliver £2.4billion Gross Value Added annually.

The expanded port is a national strategic asset and supports the economy of the North East of Scotland, contributing to national and international connectivity, vital freight connections, the drive to net zero and Scotland's Just Transition.

The Joint Committee of the City Region Deal considered a project closure report in February 2024. That marks the formal completion of this significant investment. However the Joint Committee will continue to keep a close eye on the benefits coming from the investment through monitoring reports. A separate deal project remains in progress, supporting the development with improved local road infrastructure.

Outgoing Chair of the ACRD Joint Committee is Aberdeenshire Cllr Anne Stirling. She said: "Construction on this project started in 2017, and the Aberdeen City Region Deal Joint Committee have been following progress on it closely ever since. Being present at the official opening was a privilege, and testament to the partnership working which went into seeing this through to completion. When we first agreed to support this project as a committee it was because we had a shared vision of the future opportunities that this presented us, and we are already seeing that coming to fruition. My congratulations to everyone involved in the project."

Vice chair of the Joint Committee is Aberdeen City councillor Ian Yuill: "Aberdeen South Harbour is a tremendous asset for the North East. It enhances the already thriving port's offering in the region and continue unlocking new opportunities for regional growth, jobs, and investment in energy, trade and tourism. I am delighted the Aberdeen City Region Deal was one of the investment opportunities to allow for the South Harbour expansion and I look forward to seeing the transformational impact it will have on the North East in future."

Bob Sanguinetti, CEO, Port of Aberdeen, said: "Aberdeen's expanded port promises a vibrant future for energy, trade, and tourism across Scotland on the road to net zero, unlocking new jobs and attracting investment to the region. We look forward to working with our partners across the private sector and public sector to maximise the potential of this new facility."

### SOUTH HARBOUR CONSTRUCTION, REGIONAL AND COMMUNITY BENEFITS

At the peak of construction, there were 300 people working onsite and more than 30 companies from across the North East of Scotland were involved in the construction of Aberdeen South Harbour. These local organisations played an instrumental role in the successful completion and benefitted from contact awards of £44 million since 2020, with a further £16 million of work delivered by companies across the rest of Scotland.

#### **VIDEO HIGHLIGHTS**

The video showing how much has changed at the South Harbour, from beginning of construction to completionis available on the Signal Aberdeen YouTube channel.



The new facility has been heavily utilised since the phased opening began in July 2022. The new harbour has generated more than £3 million of revenue during its phased opening and is attracting vessels and projects that would have previously sailed past the city, often destined for a European port.

This increased activity in energy, trade and tourism supports local jobs, attracts local supply chain spend and investment, and the profits generated are reinvested back into the port to improve the facilities for future generations.

**RENEWABLES:** Offshore wind is our most significant opportunity for growth. The





OIL & GAS: Port of Aberdeen handles the largest volume of Platform Supply Vessel turnarounds in the UK and has bespoke infrastructure and on-site service providers to support platform and drilling operations. The Port will play a vital role as our customers decarbonise their operations, with the development of future

**DECOMMISSIONING:** The port's operating environment safely and efficiently handles the full lifecycle of decommissioning projects. The expanded port provides extensive deepwater berths, significant heavy lift working areas and an expert local supply chain to deliver dismantling, recycling and reuse services.





**CRUISE:** Port of Aberdeen is a gateway to the amazing attractions in the North an average spend by every passenger in the region of £134 per day in the immediate Aberdeen region. The Post looks forward to growing this work with the international cruise industry, with 80 cruise calls planned for 2024, many of which involve larger cruise ships carrying thousands of passengers.

GENERAL CARGO: With extensive storage and landslide facilities, the Port of Aberdeen supports the safe and efficient handling of cargo across multiple sectors. The Temporary Storage and Wharf Approval with GVMS facilitates faster clearance of goods with pre-lodged declarations.



### TOURISM BOOST IN THE NORTH EAST OF SCOTLAND

Between May and October 2023, Port of Aberdeen welcomed 43 cruise calls with more than 28,000 guests from across the UK and Europe visiting the region. The season was delivered with zero HSE incidents and generated an increase in revenue for the port.

The Port currently has 58 cruise calls scheduled for 2024, including 22 maiden calls, highlighting Aberdeen and Aberdeenshire's growing appeal as a cruise destination. Bookings extend as far as 2027, by which time over 100 cruise calls are anticipated, featuring industry giants like Fred. Olsen Cruises and Holland America.

Bob Sanguinetti, Chief Executive, Port of Aberdeen said: "The 2023 cruise season was a great success, delivered with an excellent safety record, and positive feedback provided from both guests and cruise lines. We're working with our regional partners and the cruise lines to ensure we can further improve our offering for 2024 and beyond."

VisitAberdeenshire's 'Welcome to Aberdeenshire' volunteering programme has been pivotal in providing cruise guests a unique experience when they arrive in the city. The volunteers play a significant role in educating and assisting guests in discovering what Aberdeen and Aberdeenshire has to offer.

Chris Foy, CEO, VisitAberdeenshire, said: "The 'Welcome to Aberdeenshire' volunteers have been a mainstay during the cruise season and have inspired and guided arriving guests. Their dedication and enthusiasm for the region is hugely valued, and we will begin recruiting for new volunteers later in the year.

"Demand for future visits indicates that South Harbour and the wider region have already impressed cruise operators. We will continue to work closely with Port of Aberdeen, and with shore excursion companies to both attract more vessels and to disperse excursions across the City and Shire."

#### **VIDEO HIGHLIGHTS**

The AIDAaura video capturing the warm welcome of one of the cruise ship arrivals is available to watch on the Signal YouTube channel.

#### NET ZERO PORT AND FUTURE AMBITIONS

Port of Aberdeen has set the ambitious target to be the first UK port to achieve net zero by 2040.

Over the next decade, the port will invest up to £55million to become a leading exemplar in environmental stewardship and sustainability, pioneering green port innovation and facilitating energy transition solutions.

Port of Aberdeen's net zero strategy has three work streams - reducing emissions, facilitating future fuels, and supporting the energy transition. These guide all projects, investment, and decision-making.

#### **VIDEO HIGHLIGHTS**

The video about UK's first Net Zero port is available on the Signal YouTube channel.

### IN THE COMMUNITY

2023 saw a total of £70,000 in community charitable awards with a significant increase to £100,000 for its charitable donations in 2024, including the creation of strategic, multi-year partnerships with four Aberdeen based charities. The aim of these partnerships is to deepen the port's positive impact on the community and to build strong, lasting relationships with charities.

#### FUNDING PARTNERS AND GOVERNANCE

The Aberdeen Harbour Board (trading as Port of Aberdeen) operates as a Trust Port, created by an Act of Parliament. It is run by an independent Board for the benefit of its stakeholders and governed by its own legislation. The Board members have expert knowledge in Law, Construction, Finance, Oil and Gas, Port Operations, Commercial, Marine and Property.

The expansion project was significantly self-funded by the port with valuable support from the European Investment Bank, Scottish National Investment Bank, Scottish Enterprise, and Aberdeen City Council and Aberdeenshire Council through the Aberdeen City Region Deal.



#### TRANSPORT 5.

Two transport projects are being progressed within the City Region Deal, the Strategic Transport Appraisal, and External Transportation Links to Aberdeen South Harbour.

### TABLE 1: STATUS OF TRANSPORT THEME PROJECTS - 31 MARCH 2024

PROJECT	LOCATION	STATUS
Strategic Transport Appraisal	Aberdeen City and Aberdeenshire	In Progress
STA sub-project: Aberdeen Sub-Area Model (ASAM) Strategic Tests	Aberdeen City and Aberdeenshire	In Progress
STA sub-project: A90(N)/A952 Ellon Peterhead Fraserburgh	Aberdeenshire	In Progress
STA sub-project: A956 Wellington Road Junctions	Aberdeen City	In Progress
STA sub-project: Rail Freight Terminals	Aberdeen City	In Progress
STA sub-project: Regional Hydrogen Refuellers	Aberdeenshire	In Progress
STA sub-project: Transport Mobility Hubs	Aberdeen City and Aberdeenshire	In Progress
STA sub-project: Rapid Transit/Bus Corridors	Aberdeen City and Aberdeenshire	In Progress
External Links to Aberdeen South Harbour	Aberdeen City	In Progress

### **PROJECT 1. STRATEGIC TRANSPORT APPRAISAL**

The Strategic Transport Appraisal takes a 20-year strategic view of the transport implications of the investment unlocked by the Deal across all modes of transport including road and rail. The appraisal helps prioritise future transport investment in the region, guiding local and regional spatial planning decisions, as well as national strategies and work programmes. With the Strategic Transport Appraisal now completed, work is underway on a series of business cases and live pilots which were identified by the appraisal:

#### PROGRESSING A RAPID TRANSIT SYSTEM FOR THE NORTH EAST WITH ASAM

A key project stemming from the Strategic Transport Appraisal has been to update the Aberdeen Sub Area Model (ASAM). The multi-modal strategic model covers the main road and public transport network of Aberdeen and Aberdeenshire. The model is used to appraise and forecast transport patterns and trends, helping to inform regional policies and projects. With the ASAM update complete and tested, the model is now in use on a range of regional project. In particular, it has been used to provide a quantitative analysis on prospective routes for a future bus rapid transit system for Aberdeen.

"The Aberdeen Rapid Transit (ART) project has used the newly updated ASAM model to test a range of different route options for the proposed Bus Rapid Transit network in Aberdeen. Outputs from this work have enabled us to identify likely demand for ART services, anticipated public transport mode shift and park and ride usage as well as understand the impacts of the proposals on the wider road network. The use of ASAM has provided the quantitative evidence required to inform recommendations on a preferred network, a key stage in the development of the Business Case for ART." Kirsty Chalmers, Bus Partnership Fund Programme Manager, Aberdeen City Council



#### **IMPROVING KEY CONNECTIONS: A956 WELLINGTON ROAD**

The A956 Wellington Road is a key corridor which links Aberdeen city centre and the southern areas of Aberdeen city to the A90 (South) trunk road. This study focuses on the busy route connecting the Charleston Interchange through to Queen Elizabeth Bridge, passing Souterhead and Hareness junctions. It aligns with the investment in the adjacent Aberdeen South Harbour, and improved transport links, as well as the Energy Transition Zone. The multi modal study looks to appraise options for improving all modes of transport along the corridor including freight, public transport and active travel. It seeks to evaluate solutions that will maximise connectivity, improve resilience and efficiency, and futureproof what is a rapidly developing area.



This work, led by Aberdeen City Council, has now progressed to Design Manual for Roads and Bridges (DMRB) Stage 2 and Outline Business Case, set to be finalised in Spring 2024. Future steps look to extend the scope to DMRB Stage 3 (detailed design), ensuring coverage between Craigshaw Drive and Charleston Road North. This ensures the work can focus on a number of developing projects in the area, including the Energy Transition Zone masterplan, investment zone agreements, the active travel link at Craigshaw Drive, and progressing work on Aberdeen Rapid Transit.

#### IMPROVING KEY CONNECTIONS: A90(N)/A952

The A90(N)/A952 corridor is a vital link between our region's key ports, a core freight route, and an important link to investment zones. Connecting Aberdeen with Ellon, Peterhead, and Fraserburgh, the routes provide connections for regional and local bus services, as well as facilitating active travel between the area's communities. This project looks to strengthen the case for improving transport along this corridor, addressing accessibility, connectivity, and road safety pressures.

In 2023 an evidence review looked at earlier studies on the A90(N) and A952 corridors. This built on the previous work which considered upgrades to the Ellon by-pass, Toll of Birness junction, and implementing additional safety and reliability measures along the routes.

Stakeholder and public consultations were undertaken in parallel with the Buchan Sustainable Transport Study, a piece of work that looks at longer-term investment, and is led by Campaign for North East Rail and Aberdeen & Grampian Chamber of Commerce, funded by the Just Transition Fund. Together, the feedback received from the two studies has helped build a comprehensive and conclusive picture of transport to the north of Aberdeen. A Case for Change report and Preliminary Options Appraisal are now nearing completion, before work progresses to a Detailed Options Appraisal.

Councillor Alan Turner, chair of Nestrans said: "Addressing road safety, journey times, and reliability north of Aberdeen is a prominent issue for communities, businesses, and those travelling in the area. In collaborating with the Buchan Sustainable Transport Study, we're ensuring that those views are captured efficiently and shared among partners to progress these important pieces of work."

#### ASSESSING POTENTIAL FOR OUR REGION'S RAIL FREIGHT

Efficient freight movement plays a vital role in the success of our area's economy, with an interest and desire both regionally and nationally to see more sustainable and efficient movement of freight by rail.

The Rail Freight Terminals study sought to understand current and future demand for rail freight to and from the region. It looked at opportunities for growth, with a particular focus on Aberdeen due to the opening of the new Aberdeen South Harbour, and development of the Energy Transition Zone.

The study has also considered opportunities linked to the future development of hydrogen rail facilities in the region. A policy review, stakeholder interviews, and freight flow forecasting have all confirmed the significant potential for growth in the future.

The study's findings will be used to inform master-planning development, incentives for decarbonising freight, as well as guiding the strategic priorities of local authorities, and key stakeholders such as Port of Aberdeen and Energy Transition Zone Limited.

#### LIVE LABS:

MOBILITY HUBS – IMPROVING THE TRAVEL INTERCHANGE EXPERIENCE

A mobility hub is a convenient location for different modes of transport to connect. Trains, buses, bikes, and car sharing can meet in a centred location, allowing people to interchange seamlessly.

In the North East, the City Region Deal is helping to develop proposals for regional mobility hubs across the area. A feasibility study has explored how different models might work across five locations in the North East and now further work will focus on the two most promising plans: a hub at Ballater and network of mini facilities in Aberdeen.

#### EXPLORING SUPPORT FOR OUR GROWING NETWORK OF HYDROGEN-POWERED VEHICLES

The City Region Deal is also supporting Aberdeen's position as a leader of energy through a study on portable hydrogen refuellers. The North East is a pioneer of hydrogen technology for both transportation and energy, and this study has explored the feasibility and benefits of developing a flexible hydrogen refuelling facility, to further support the adoption of hydrogen vehicles. The study has provided valuable information on refueller footprints and equipment requirements, risks and costs.

#### PARTNERS/GOVERNANCE

The Transport Working Group is made up of the following organisations: Transport and Planning Officers from Aberdeen City and Aberdeenshire Councils; regional transport partnership Nestrans; and Transport Scotland. The group is chaired by Nestrans, who as the statutory regional partnership for North East of Scotland, have a co-ordinating role across each of the transport projects, and inter-linkages with projects being taken forward outwith the CRD programme. Over the past years the group has also been supported by the attendance of officers from the Scottish and UK Governments.

#### **PROJECT 2. EXTERNAL TRANSPORTATION LINKS TO ABERDEEN SOUTH** HARBOUR

The External Transportation Links to Aberdeen South Harbour project is being progressed by Aberdeen City Council, as Local Roads Authority. Following the early Scottish Transport Appraisal Guidance (STAG) assessment stages the project has progressed through the Department for Transport (DfT), Design Manual for Roads and Bridges (DMRB), Scheme Assessment Reporting processes.

In September 2023 the DMRB Stage 2 Route Option Assessment process identified a preferred route option within the STAG preferred corridor. The preferred route option included new active travel provision on Coast Road and Hareness Road, a revised Hareness Road/ Coast Road priority junction and upgraded Coast Road; including a new road crossing over the Aberdeen to Dundee railway line to the south of the existing bridge.

The DMRB Stage 2 preferred route option was subsequently refined and then subject to DMRB Stage 3 Scheme Assessment, where the advantages and disadvantages, in environmental, engineering, economic and traffic terms were assessed. The DMRB Stage 3 design was reported to the Aberdeen City Region Deal Joint Committee in February 2024.

The Stage 3 design includes segregated uni-directional cycle facilities on both sides of Hareness Road to its junction with Coast Road, improving walking, cycling and wheeling facilities for all active travel users.

A revised right/ left stagger at the Hareness Road/ Hareness Place/ Coast Road priority junction is provided with the mainline priority given to Hareness Road / Coast Road north. Coast Road south, towards Burnbanks Village and Cove, becomes the minor road, with a right turn ghost island to facilitate safe turning movements and preventing delay to mainline through traffic movements.

The new bridge over the Aberdeen to Dundee Railway line to the south of the existing bridge removes the current shuttle working and constrained horizontal alignment, allowing for improved journey times and facilitating the movement of larger vehicles accessing the south harbour.

An Outline Business Case (OBC) has been prepared which sets out the case for the intervention. The OBC has been developed in line with relevant STAG and DfT Transport Analysis Guidance (TAG). The OBC summarises the rationale, objectives, scope, and expected outcomes of the project, as well as the estimated costs, benefits, risks, and delivery options of the project.

Detailed Design for the project has commenced. Voluntary and compulsory processes for, discussions on the acquisition of the required land for the scheme are underway. Pre-planning application engagement has concluded and submission will be made Spring 2024. Construction procurement is expected to commence within the calendar year.

Find out further information on the Aberdeen City Council website.





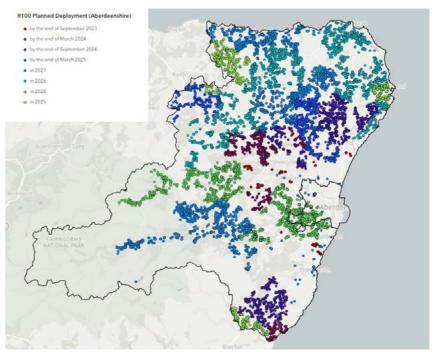


# 6. DIGITAL CONNECTIVITY

The Aberdeen City Region Deal provides the opportunity to create a sustainable infrastructure from which the region can transform into a world class digital area. At the core is the need to deliver ultrafast connectivity and use this to grow existing businesses; attract further investment; create new businesses; deliver excellent public services; support mobility and protect the environment; and enhance the area's attractiveness as a place to live and work.

Improving the region's digital infrastructure is key to the long-term future of the local economy. It will drive innovation through the better use of physical and digital assets to enhance public and private service delivery, to tackle inequality and to improve social outcomes.

### DIGITAL CONNECTIVITY PROGRAMMES



To date, the Aberdeen City Region Deal has the highest uptake of these support programmes in Scotland. As of March 2023, across the Aberdeen City and Aberdeenshire local authority area 902 Scottish Broadband Voucher Scheme vouchers have now been utilised, with Aberdeenshire having the highest uptake of vouchers in volume and percentage terms.

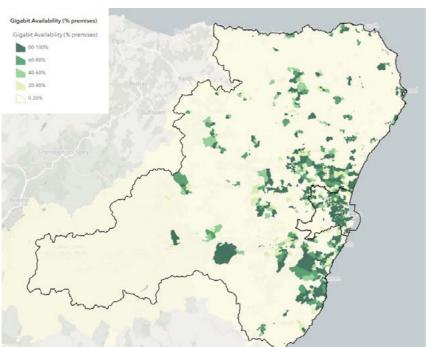
The Reaching 100% programme has delivered an additional 4,770 Fibre to the Premises (FTTP) connections across the Region, in addition to the ACRD funded projects, and the telecoms industry own commercial upgrades. A further 11,604 full-fibre broadband connections will be connected in the Region by the end of the Reaching 100% Programme in 2028.



In addition to the Aberdeen City Region Deal (ACRD) funded projects, the Scottish Government's Reaching 100% programme, and UK Government's Project Gigabit, provide support for premises with internet speeds below 30Mbps. The Digital Engagement Team (funded by the ACRD) set up in November 2021, works to stimulate demand in these programmes, supporting residents to find the best possible solutions for each property, whilst working closely with a wide network of telecoms operators, to encourage impactful bespoke solutions for residents and communities. Up to £5,000 of funding is available for premises which will not receive connectivity upgrades by other means.

Project Gigabit is being finalised for rollout in Scotland, through collaboration with UK and Scottish Governments. Much of the Aberdeen City Region has been confirmed to be included within a procurement lot for Project Gigabit, inviting telecoms operators to bid in for the work to deliver gigabit capable broadband connections to more premises, which can already access superfast broadband, but are not in scope for planned upgrades to gigabit capable. The procurement process is expected to take place through 2024, into 2025.

The Digital Engagement Team is also actively engaging with rural communities, and clusters of



disadvantaged properties, to continue the gap analysis in digital connectivity, and to identify opportunities to aggregate subsidy value with which to encourage investment from local and national telecoms operators. With this approach, there has been successful community solutions identified and delivered, in numerous hard-to-reach areas of the region. Since inception, the Digital Engagement Team has directly supported over 3,700 residents in matters relating to digital connectivity. Additionally, the team has held 18 public events in the past year to provide advice, support and information directly to communities and stakeholders.

#### DIGITAL INFRASTRUCTURE BUSINESS GAP ANALYSIS

The outcome of the digital infrastructure gap analysis produced three new projects to deliver 5G networks in the region. To further address the gaps in digital infrastructure across the Region it is prudent to wait to see how Project Gigabit will be rolled out in Scotland. As mentioned above, Project Gigabit procurements in Scotland are being developed jointly by the UK Government and Scottish Government through a collaborative approach, in which the Scottish Government will be the lead partner on implementation management. Such procurements will be additional and complementary to any coverage provided by the R100 contracts and would not require City Deal funding. Further detail is expected to be available in 2024. The Aberdeen City Region Deal Digital Working Group will be working through 2024 to develop project proposals to further expand and improve digital infrastructure.

#### PARTNERS/GOVERNANCE

The Digital Programme is supported by a Digital Working Group made up of expertise and representation from Digital and Technology, Roads and Data and Insights Teams from Aberdeen City and Aberdeenshire Council. The NHS, Aberdeen & Grampian Chamber of Commerce, Opportunity North East, Robert Gordon University, University of Aberdeen, Data Lab, Censis and Scottish Enterprise. Over the past years the group has also been supported by the attendance of officers from the Scottish and UK Governments.

The list of following projects have been identified to improve digital infrastructure in the Aberdeen City Region, with varying geographic implications.

#### TABLE 2: STATUS OF DIGITAL THEME PROJECTS - 31 MARCH 2024

PROJECT	LOCATION	STATUS
City Network Extension (City-wide Fibre Connectivity)	Aberdeen City	Complete
Full Fibre Infrastructure (Gigabit Connectivity)	Aberdeen City and Aberdeenshire	Complete
Duct Network Phase 1	Aberdeen City	Complete
Duct Network Phase 2	Aberdeen City	Complete
Duct Network Phase 3	Aberdeen City	In Progress
Port of Aberdeen 5G*	Aberdeen City	In Progress
Huntly 5G*	Aberdeenshire	In Progress
ONE 5G Pop up network*	Aberdeen City and Aberdeenshire	In Progress

\*Memorandum of Understanding (MoU) Funding

#### **PROJECT 1. DUCT NETWORK EXTENSION**

Initially this duct network would be for the Local Authority strategic transport needs, followed by engagement with commercial organisations to encourage them to utilise the expanded network to enhance their fibre offering in Aberdeen City, consequently stimulating the market. This project also provides the enabling infrastructure for sensors and provide the opportunity for Aberdeen City to be used as a testbed for connected and autonomous vehicles and support 5G installations.

A saving in the budget allowed to have three phases for delivery. Phase 1 works for the West Route (A944) completed in September 2022 and Phase 2 (South route, A956) completed in September 2023. In February 2022 the Joint Committee approved Phase 3 with the preferred route as follows:

- Union Street, Holburn Street to Garthdee Roundabout
- Garthdee Roundabout to Haudagain (Hilton Drive)
- Completion of Northern Route (King St north to AWPR)

This route has been selected as it would follow standard communications design for maximum coverage and to have multiple resilience points to reduce any downtime. It should be noted this is in reference to a communications network for the traffic management network.

These works would then allow for majority of the strategic road network to be completed and an additional 175km build within the project.

Phase 3 Design works started in October 2022 and project completion is planned in March 2026 due to impact of weather conditions and risk associated with resource.





#### **PROJECT 2. PORT OF ABERDEEN 5G**

This project provides the provision of investment to Port of Aberdeen to procure a private 5G infrastructure in the new Aberdeen South Harbour to increase productivity and reduce operational costs, making Aberdeen comparable with leading ports across the world.

Ports offer unique potential for the use of 5G services in fields such as logistics, environmental monitoring, crane operation, customs, operations and the exchange of images and data. It is accepted that this is a key long-term area for investment.

The 5G private network for the port operation would be procured by the Port of Aberdeen and part funded by investment from the Port and Aberdeen City Region Deal.

A tender process for the Port of Aberdeen 5G network was commenced in October 2023 and following extensive reviews of the applications made under the process a contract was awarded to North for installation work to commence in the first quarter of the new financial year in 2024.

### **PROJECT 3. HUNTLY 5G**

Huntly 5G project provides investment in 5G infrastructure, systems and data transfer technologies to ScotEID/ Scottish Agricultural Organisation Society to facilitate the delivery of industry leading Agri-tech applications and services and environmental monitoring in rural Aberdeenshire using Huntly as an initial area.

The project will be centred on Huntly along with contiguous river valleys including those of the Deveron and Bogie.

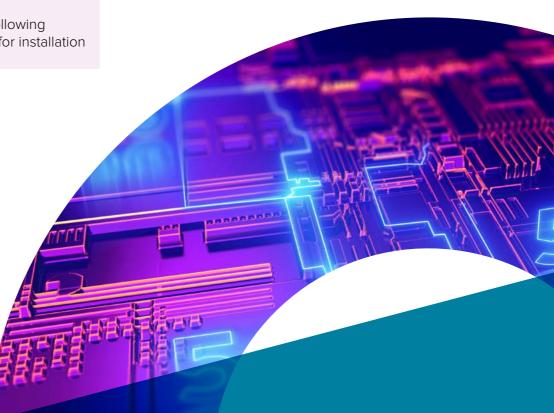


Optional use cases of benefit The development of mandatory use cases in Environmental Control and Agriculture

Following discussion with industry the concept was to take a rural settlement and provide ubiquitous access to full fibre, 5G and other wireless technologies to implement the above applications in a commercially sustainable, real-world way. Once proven the concept could scale and be replicated across rural economies in Scotland.

The provision of 5G, fibre and/or any other suitable data transfer technologies within the project location will enable the provision of Agri-tech and environmental use cases. The goal is to demonstrate the commercial viability of investment in rural communities and the provision of commercial use cases in the sector. This will be used to leverage commercial investment across other rural settlements.

Standalone 5G network has been procured (currently in-build) and will be used to support a range of agriculture uses cases as identified with ScotEID. Ongoing engagement with farmers and other rural stakeholders to align with emerging requirements of the sector.



#### PROJECT 4. OPPORTUNITY NORTH EAST 5G "POP UP" NETWORK

This project aims to enable businesses to innovate, increase competitiveness, and grow through the use of private 5G networks, particularly in rural or remote locations and critical growth sectors, including food and drink manufacturing and production, agriculture, and tourism.

Through the project, ONE is collaborating with the Scotland 5G Centre to expand the impact of the fixed 5G innovation test bed in ONE Tech Hub in Aberdeen with a complimentary transportable private 5G network for deployment in regional businesses. This approach will facilitate the development of digital solutions for industry by enabling in-situ testing and demonstration in the field.

Combined with ONE Tech Hub and the business support available to the growth sectors, the project provides businesses a unique opportunity to innovate and adopt state-of-the-art digital technology quickly.

During the year, the project progressed through its planning phase and moved into implementation. A memorandum of understanding was prepared between ONE and the Scotland 5G Centre, outlining the roles and responsibilities of each party. The implementation plan was developed, detailing the project's timeline, key milestones, and expected outcomes. The equipment specification was completed and procurement started, ensuring that the project has the necessary technology to achieve its goals. The equipment specified is a firstof-its-kind mobile solution for indoor and outdoor use with weather and damage protection to suit a variety of environments.

The first pilot project site was identified in a rural farm location in Aberdeenshire, and the Scotland 5G centre undertook a survey. The 5G equipment has been successfully installed and is in operation, capturing data to monitor livestock health.

Alongside this initial project activity, an industry engagement event was held at ONE Tech Hub in January 2024 to highlight the 5G opportunity to businesses within key growth sectors and promote the project to prospective beneficiaries.

In 2024-25, the project will be in its full implementation phase, with activity including the receipt, testing, and commissioning of equipment, business engagement, and 5G projects developed. The first in-situ project will be successfully completed, and two further in-situ project sites will be identified. Applications for project funding are open, and screening is in progress.

# CHALLENGES, OPPORTUNITIES AND NEXT STEPS

Project	Challenges	Opportunities
Net Zero Technology Centre	Access to additional funding opportunities.	Active engagement on cross industry net zero projects.
		Grow Technology Services portfolio, sales pipeline and footprint.
ONE BioHub	Start-up and spinout companies and scaling businesses face a challenging environment for raising investment.	There is now a focal point for the entrepreneurial ecosystem with space for spinout, startup & scaling businesses.
	Funding to support the capital fit-out costs on grow-on space.	Pipeline of commercialisation opportunities emerging from research institutes.
ONE SeedPod	Revised construction programme with opening in 2025	There is industry demand for innovation space & expertise across all sizes of business, driven by commercial and market needs.
Aberdeen South Harbour Expansion	To deliver the full envisaged benefits of the project in an ever changing political and economic environment, being subject to decisions on North Sea transition, vessel environmental fuels and changing climate that are outside the Port's control.	Repositioning of the North East as the Net Zero Capital of Europe. Working with Energy Transition Zone (ETZ) to meet the needs of the new business opportunities associated with the transition to renewables. Continuing to establish Port of Aberdeen to be the strategic choice for all vessel support requirements for ScotWind successful constructors - 18GW of power will be generated by offshore developments within 100 nautical miles of the North East of Scotland. There is no better location for developing of renewables than here. Attracting investment to the region in support of both energy and other industries - as a trade hub alone, the Port of Aberdeen exported around £950m of goods worldwide in 2022.

Strategic Transport Appraisal	COVID 19 introduced significant disruption to travel patterns, and accelerated changes in other travel demands and behaviors, some of which will have a lasting legacy. This impacts how previously identified problems, opportunities and priorities are addressed. There area also emerging constraints on capital / revenue funding availability.	The conclusion of the Strategic Transport Projects Review (STPR) process during 2022 brought some clarity around the route-map for the development and implementation of several regionally significant transport schemes, although funding issues are now impacting this. Enhancements being built into the revised Transport Model provide opportunities to test a wider range of future scenarios, which is being augmented by regionally specific research on travel patterns.
External Transportation Links to Aberdeen South Harbour	The challenge has been to maintain the pace of the design process whilst, continuing to take into account the significant public and stakeholder interest in the project. Programme risks require to be carefully managed with respect to ongoing design, land assembly, and third-party interfaces, alongside the currently available grant funding window.	Improved Transport Links will be important to realising our Net Zero Vision and linking together proposed opportunity sites.
Digital Connectivity	Continue attract additional commercial investment in digital infrastructure and gigabit solutions for the most remote and isolated parts of the region. To identify areas not covered in line with unknown Government future plans. Ensure voucher scheme through Scottish Government is taken-up (where appropriate).	Promote the Aberdeen 5G Hub and maximise opportunities for 5G technology. Update the Smart City Strategy to ensure the digital infrastructure in the city region is fully utilised. Investigate and promote the use of the duct network extension for commercialisation. Realise the community benefits through good working with contractors and partners and to help ensure the city region has a confident, digital ready workforce.

#### NEXT STEPS

Project Area	Implementation Plan 2024/25 K
Net Zero Technology Centre	<ul> <li>Deliver upon Core Projects and</li> <li>TechX Cohort 6 Delivered</li> <li>Thought Leadership - demonstation</li> <li>Key partner in regional ecosys</li> <li>Active STEM programme</li> <li>Launch of Geothermal Centre</li> <li>Government business case su</li> </ul>
ONE BioHub	Continue attract new tenants a
ONE SeedPod	<ul> <li>Q3 2024/25 – construction pre</li> <li>Q4 2024/25 – ONE SeedPod</li> </ul>
Aberdeen South Harbour Expansion	<ul> <li>Records for longest, tallest and been broken</li> <li>All Quays are in service</li> <li>Continue to grow and expand</li> </ul>
Strategic Transport Appraisal	<ul> <li>Wellington Road Junctions cor</li> <li>*ASAM19 – Strategic Testing to</li> <li>Mobility Hubs complete Strategic April 2024</li> <li>Rail Freight Terminals Study to</li> <li>Hydrogen Re-fuellers – Compl</li> <li>A90/A952 Corridor Study to be</li> </ul>

#### Key Milestones

nd diversify portfolio

strate at key events including COP29 stem working towards Just Transition

#### ubmission for future funding

and users

roject complete

launch

d largest vessel to visit Port of Aberdeen have all

#### cruise visits

omplete Design Options in October 2023 to be completed in January 2024 egic Business Case including Feasibility delivered in

be completed in April 2024 olete Outline Business Case in April 2024 be completed in October 2024



External Transportation Links to Aberdeen South Harbour	<ul> <li>Updated Outline Business Case &amp; DMRB Stage 3 Report submitted to UK/SG, Transport Scotland</li> <li>Submission of Planning Application</li> <li>Complete Detailed Design</li> <li>Post Design Public Exhibition</li> <li>Supplier Selection - Complete SPD</li> <li>Conclusion of statutory processes</li> <li>Structure – Technical Approval (ACC and Network Rail)</li> <li>Final Business Case Submitted</li> <li>* Design Manual for Roads and Bridges (DMRB)</li> </ul>
Digital Connectivity	<ul> <li>Duct Network Extension</li> <li>October 2024 Phase 3 50% Complete</li> <li>April 2025 Phase 3 75% Complete</li> <li>March 2026 – Completion Phase 3</li> </ul>
	<ul> <li>Port of Aberdeen 5G</li> <li>January 2024 – Contract Awarded</li> <li>April 2024 – Begin installation and upgrade of mobile network infrastructure</li> <li>October 2025 – Delivery of use cases and applications</li> </ul>
	<ul> <li>ONE 5G "Pop Up" Network</li> <li>November 2023 – Legal Agreements signed</li> <li>March 2024 – Procurement tender of network infrastructure</li> <li>June 2024 – Grant scheme goes live</li> <li>March 2026 - 9 Deployment grants awarded</li> </ul>
	<ul> <li>S.A.O.S Huntly 5G</li> <li>October 2023 – Legal agreements signed</li> <li>March 2024 – Use case specification, demonstration and requirements capture completed</li> <li>July 2024 – Finalisation of systems integration requirements and presentation to ACRD and commercial partners</li> <li>September 2024 – Procurement of commercial partner to implement commercial network in study footprint areas and subsequently scale across Scotland</li> <li>March 2025 – Installation and upgrade of fixed and mobile network infrastructure</li> </ul>

# COMMITTEE, BOARD AND MANAGEMENT

#### THE ABERDEEN CITY REGION DEAL JOINT COMMITTEE

Cllr Ian Yuill, Chairperson of the ACRD Joint Committee and Co-Leader of Aberdeen City Council Cllr Miranda Radley, Aberdeen City Council Cllr Christian Allard, Aberdeen City Council Cllr Anne Stirling, Vice Chairperson of the ACRD Joint Committee and Deputy Leader of Aberdeenshire Council Cllr Gillian Owen, Aberdeenshire Council Cllr Gwyneth Petrie, Aberdeenshire Council Sir Ian Wood KT GBE, Chairman, Opportunity North East Jennifer Craw, Chief Executive, Opportunity North East Professor George Boyne, University of Aberdeen, Opportunity North East

#### THE ABERDEEN CITY REGION DEAL PROGRAMME BOARD

Julie Wood, Interim Chief Officer - City Growth, Aberdeen City Council and Chair of the ACRD Programme Board Alan Wood, Director of Infrastructure, Aberdeenshire Council Jennifer Craw, Chief Executive, Opportunity North East Mary Beattie, Head of Finance, Aberdeenshire Council Paul Macari, Head of Planning and Environment, Aberdeenshire Council Matthew Lockley, Head of Innovation & Place in NE, Scottish Enterprise Rab Dickson, Director, Nestrans

Jessica Anderson, Team Leader, Regulatory & Compliance Team, Legal Services, Aberdeen City Council Nicola McIntosh, Chief Financial Officer, Net Zero Technology Centre Stuart Bews, Interim ACRD Programme Manager, Aberdeen City Council John Wilson, Chief Officer – Capital, Aberdeen City Council Sarah Rochester, Service Manager, Communications and Marketing, Aberdeenshire Council

#### THEME LEADS

Paul Finch, Strategic Transport, Nestrans Alan McKay, External Links to Aberdeen South Harbour, Aberdeen City Council Ross Stevenson, External Links to Aberdeen South Harbour, Aberdeen City Council Nicola McIntosh, Net Zero Technology Centre Lindsay McKenzie, ONE BioHub & ONE SeedPod Lead, Opportunity North East Jon Oakey, Port of Aberdeen John Lovie, Accountant, Finance, Aberdeenshire Council Aigul Gray, PMO support

Jamie Coventry, Economic Adviser, Aberdeen City Council

# CONTACTS

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