

Aberdeen City Region Deal Annual Progress Report 2019/20

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.

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1. AN INTRODUCTION FROM THE CHAIR OF THE ABERDEEN CITY REGION DEAL JOINT COMMITTEE, COUNCILLOR JENNY LAING

Four years ago, when we signed the Aberdeen City Region Deal, we set out to deliver increased and sustainable economic growth to the City Region. This Annual Report demonstrates how, over the past year, the Deal is delivering projects that have - and will continue to have - a positive impact on our economy.

At the time of writing we are in week eight of lockdown as a result of the Covid-19 pandemic. As many of us embrace working from home, the investment through our **Digital Programme** in superfast internet connections has enabled us to work, study and stay connected in this time of disruption and social isolation.

The unprecedented situation has given rise to multiple and severe challenges, and the dramatic fall in hydrocarbon prices is uniquely impacting our City Region. The forward steps laid-out within the Deal are enabling us to position ourselves to meet such weighty and unexpected economic and social demands.

Our focus on achieving a NetZero carbon economy and transforming transport links as addressed in the **Strategic Transport Appraisal** will be great enablers in meeting our goals. The Deal's Innovation projects, delivered through Deal partner Opportunity North East (ONE) offer key growth opportunities for the City Region. These include production and export of premium quality food and drink and **bio-therapeutics** solutions. "**Seedpod**" was officially launched in January at Deans' of Huntly and construction for the BioHub is due to begin this year.

As Chairperson of the Aberdeen City Region Deal Joint Committee, I am pleased to note the impressive work of a national asset, **the Oil & Gas Technology Centre**, now in its fourth year of delivery for Aberdeen city region. Innovations in intelligent data, predictive maintenance, remote asset monitoring, and wearable technology maintain safe staffing levels while increasing efficiencies and achieving greater decarbonisation of the industry. These investments will help our industry weather the short and mid-term storm of oil price fluctuations, a 'green recovery' in response to Covid-19 and provide a catalyst for our journey to NetZero.

In response to Covid-19, the OGTC has supported and connected energy companies and technology developers who are adapting their technologies to support the NHS: from repurposing facilities and equipment to make PPE and ventilators, to providing diagnostic, detection and isolation capabilities.

The achievements set out in this report demonstrate that through continued targeted investment, we can and will kickstart the economy post Covid-19. Together we will continue to build on the investment in **Aberdeen South Harbour and the associated transport links**, and the investment in the wider deal programme. At a wider city region level, our continued delivery will help accelerate our net zero ambitions and develop a globally integrated energy transition cluster here in the North East of Scotland.

On behalf of the Deal Partners, I would like to thank our partners and stakeholders and the businesses in our key industry sectors for their continued support.

Councillor Jenny Laing, Co-Leader, Aberdeen City Council & Aberdeen City Region Deal Joint Committee Chair

2. ABERDEEN CITY REGION DEAL OVERVIEW



Photo: BioHub Launch 2019. Left to right: Cllr Lumsden, Cllr Laing, Cllr Gifford, Sir Ian Wood

The Aberdeen City Region Deal is one delivery mechanism for the Aberdeen City Region’s economic vision. A vision which reflects the Scottish Government Economic Strategy (2015) for achieving increased sustainable economic growth. The two mutually supportive objectives of boosting competitiveness and tackling inequalities are underpinned by four key strategic priorities to drive growth – Investment, Innovation, Internationalisation and Inclusive Economic Growth.

Aberdeen City Council, Aberdeenshire Council and Opportunity North East, together with the UK Government and Scottish Government are working together to address the challenges currently facing the Region and to capitalise on the substantial opportunities.

Follow this link to read the City Deal Agreement: www.abzdeal.com

PROGRESS SHOWN AS INFOGRAPHIC

Year 1 Nov 2016 - October 2017

Nov 2016 - £250m City Region Deal signed

Feb 2017 - The Oil and Gas Technology Centre opens with £180m CRD funding

May 2017 - The OGTC Innovation Hub build starts

May 2017 - Construction begins on the new Aberdeen South Harbour with £11m investment from CRD Partners Aberdeen City & Aberdeenshire Council

June 2017 - CRD joint committee endorses the business case for a new Bio Hub

Sept 2017 - BioHub business case approved by UK/SG

Sept 2017 - Region selected as pilot for ultra-fast broadband for businesses as a result in CRD joint working

Oct 2017 - The Oil & Gas Technology Centre officially opened by Scotland's First Minister

Oct 2017 – Transport ASAM* – Interim upgrade finalised

Year 2 Nov 2017 - October 2018

Nov 2017 - Ultra-fast broadband for businesses gets underway

Feb 2018 - CityFibre & Vodafone announce a £40m investment for Fibre to premises

Mar 2018 - The OGTC announces first Tech X accelerator pioneers

Jun 2018 - Strategic Transport Appraisal STAG pre-appraisal objective setting

Nov 2018 - Sensor Network Business Case approved

Year 3 Nov 2018 - October 2019

2018 – OGTC establish Subsurface Solution Centre

July 19 - work on update to regional transport model commences, reflecting travel changes since the full opening of the Aberdeen Western Peripheral Route in Feb 2019

Sept 19 - Partners sign off Strategic Transport Appraisal - Option Development Report

Oct 19 - Full set of transport and travel surveys and information collected

Jan 19 – Food Hub Business Case Approved by UK Government and Scottish Government

Feb 19 – First of the 22 x 6,000 Tonne caisson unit arrive at Aberdeen South Harbour

Year 4 Nov 2019 - October 2020

Nov 19 - Strategic Transport Appraisal - Initial Appraisal of Options commenced

Jan 20 - SeedPod brand is launched for Food Hub

Mar 20 - Strategic Transport Appraisal work being used as evidence base for new Regional Transport Strategy

Apr 20 - Fibre contract awarded

Apr 20 – BioHub planning permission granted

2020 – The OGTC - 6 Solution Centre funded technologies reach commercialization phase (TRL9) Currently at 20

INCLUSIVE ECONOMIC GROWTH

Infographic

- Community Benefits Clauses which highlight the **living wage**, address **equal pay** and **skills and training** for projects starting after 2019.
- The Deal supports the rural areas significant amounts of economic activity in sectors such as **tourism, agriculture, food, drink, digital and renewables**.
- Skills projects in **schools, colleges and universities** promoting **Oil and Gas** and **Digital** continue.

EQUALITIES AND HUMAN RIGHTS

Aberdeen City Region Deal Leads and supporting officers continue to be supported by the Scottish Government. This ensures the projects consider equalities and inequalities, the Equality Act 2010 Public Sector Equality Duty, the nine protected characteristics and the Socio-Economic Duty (2010).

The completion of an Equality and Human Rights Impact Assessment (EHRIA) is a statutory requirement and a refreshed City Region Deal EHRIA was approved by Joint Committee in April 2019 demonstrating thorough consideration of socio-economic disadvantage and narrating mitigation measures that can potentially be applied.

PROCUREMENT AND COMMUNITY BENEFITS

The Aberdeen City Region Deal partners have adopted a shared approach to positive procurement including community benefits clauses within all contracts. Partners will set specific requirements for contractors to deliver on, maximising the impact of benefits generated and investments.

3. FINANCIAL STATEMENT

Infographic

- The only Deal signed to date with a significant Private investment of **59%**
- Programme funding spent to date **47%**

ABERDEEN CITY REGION DEAL PROGRAMME FUNDING 2016

Total Programme Funding - Original Deal						
(£'000s)	UKG/SG	Councils	Universities	Private Sector	Others	Total
Oil & Gas Technology Centre	180,000	0	23,500	116,400	34,200	354,100
Bio Hub	20,000	0	0	7,000	11,000	38,000
Food Hub (SeedPod)	10,000	0	0	8,050	2,050	20,100
Digital Theme	10,000	7,000	0	15,000	0	32,000
Strategic Transport Appraisal	5,000	2,000	0	0	0	7,000
Transport Links to the New South Harbour	25,000	0	0	0	0	25,000
Aberdeen Harbour Expansion	0	11,000	0	339,000	0	350,000
Total	250,000	20,000	23,500	485,450	47,250	826,200

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

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

In 2018, CityFibre and Vodafone announced a £40million investment to make Aberdeen a gigabit city through a Fibre to the Premises Programme. The Deal had anticipated £15million from private investment, this is now £25million more than profiled.

Forecast of overall funding for the OGTC has increased by 3% due to an expected increase in 'Private Sector' funding. This is based upon correlation of the level of investment secured during the Centre's first 18 months of operation. Also note that over £32million of funding originally classified as coming from 'Others' in the agreed business case has now been reclassified under 'Private Sector' but this does not affect the forecast funding overall.

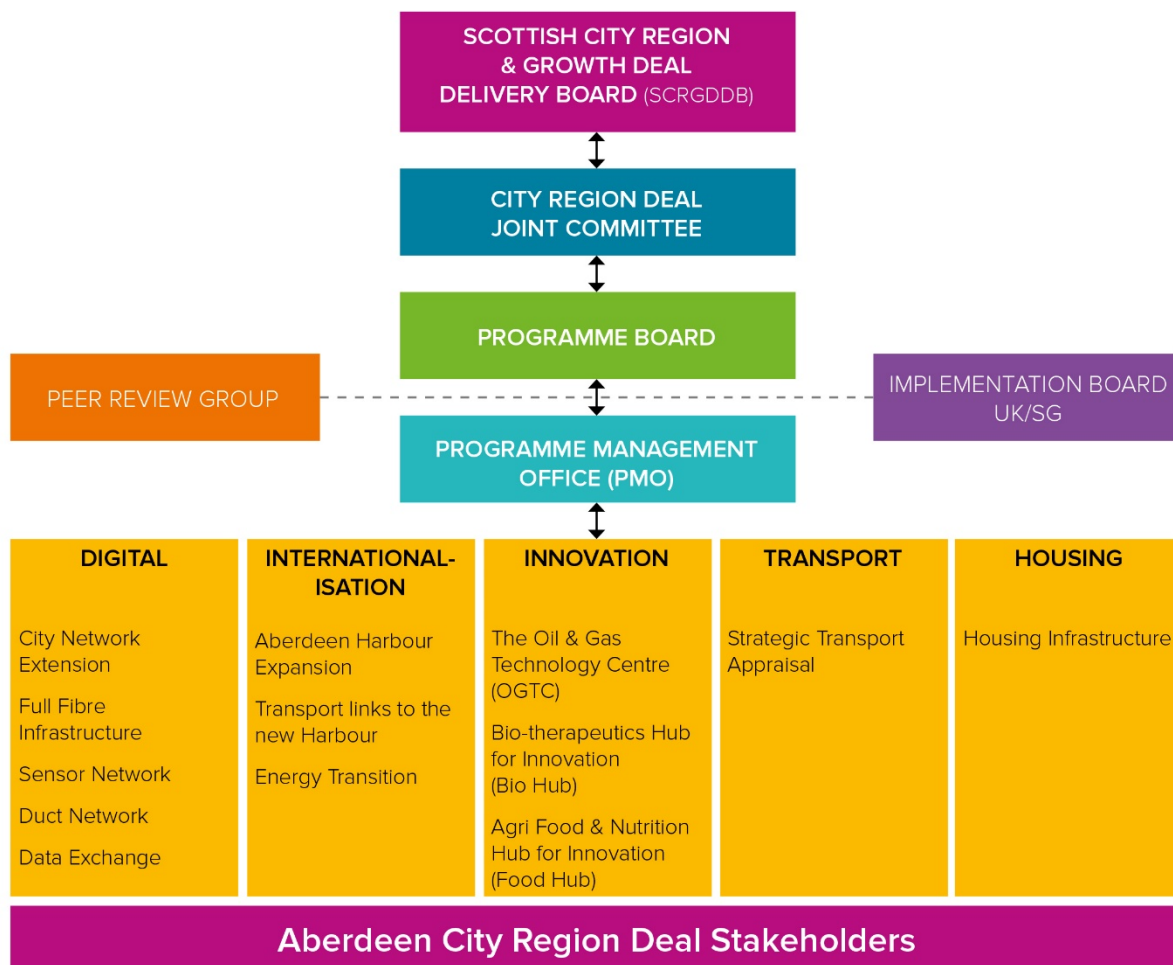
The approved business case for the BioHub set out a £40million investment project over 10 years from approval, with £2million of additional funding identified from the private sector and others. While all City UKG/SG funds will be utilised within the 10 year funding period, £4.4million of private sector and other funding will be invested outwith the initial 10 year term of the deal.

The approved SeedPod business case set out £21.1million of investment, with £1million of additional private sector and other contributions. £2.1million of SeedPod private sector and other funding falls outwith the 10 year deal term.

In 2017 Scottish Enterprise announced a contribution of £11.7million towards Aberdeen Harbour's £350million expansion.

4. 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.



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 includes 3x Aberdeen City Council Councillors, 3x Aberdeenshire Council Councillors and 3x Opportunity North East Board Members.

PROGRAMME MANAGEMENT OFFICE (PMO)

The PMO reports directly to a Programme Board which oversees the operations of the Deal. The PMO meets quarterly with the UK Government & Scottish Government Implementation Board to discuss progress and a formal review is held annually.

REGIONAL PARTNERS

The Digital, Transport and Housing Themes have working groups which oversee and drive forward the projects. Aberdeen Harbour, Oil & Gas Technology Centre (OGTC), BioHub and SeedPod are each governed by their own Board.

5. GEOGRAPHICAL OVERVIEW

The Aberdeen City Region continues to provide a competitive Business Environment with 25 of Scotland's top 100 businesses located here. In 2018 it was voted the best place in the UK to launch a business start-up. The region has two world class universities, University of Aberdeen and Robert Gordon University both of which are working closely with the Oil and Gas Technology Centre to deliver the Innovation Centres and OGTC to deliver National Research and Development Centres. The University of Aberdeen was named as Scottish University of the Year in the Times and Sunday Times Good University Guide 2019 and Robert Gordon University was ranked as top University in Scotland for employment in 2018.

The Aberdeen City Region Deal projects are located on the following plan.



6. PROJECTS - Synopsis, Partners, Milestones and Benefits

6a. THE OIL & GAS TECHNOLOGY CENTRE (OGTC)



Optional image [file ref: OGTC external shot]

Three years on, the OGTC has exceeded expectations with over 1,000 technologies screened, bringing to life 237 projects through £147 million co-invested with industry. With 20 technologies now commercialised, the organisation is forecast to deliver £10-15 billion in potential value for the UK - underpinning its goal to unlock the full potential of the UK North Sea, anchor and grow a diversified cross-sector supply chain and inspire a culture of innovation to deliver net zero.



[File ref: OGTC dashboard as 31 March 2020]

2019 also marked a key moment in the OGTC’s ambitions to accelerate the energy transition – and support the industry’s Roadmap 2035 - launching its dedicated Net Zero Solution Centre. Supported by UK Government and Scottish Government, alongside 10 industry, research and academic partners, the centre is focused on accelerating technologies that will decarbonise offshore operations, helping the UKCS to become the first net zero oil and gas basin, globally.

The OGTC is already supporting a host of companies focused on changing the carbon footprint of its operations by reducing carbon emissions, changing how they generate energy, preparing facilities to operate remotely and driving costs out of hydrogen generation.

A range of cross-sector collaboration is also under way, including the OGTC’s partnership with Offshore Renewable Energy Catapult (OREC), which is focused on creating an Integrated energy Vision for the North Sea - delivering a plan that will optimise the energy mix in the North Sea.



[File ref: Driving, Delivering and Connecting]

At the centre of the OGTC’s approach is its commitment to **driving, delivering and connecting** - working in close partnership with stakeholders to achieve this through its Solution Centres, National Centres and TechX accelerator programme.

Now expanded to include **seven solution centres** - Net Zero, Asset Integrity, Wells, Marginal Developments, Digital Transformation, Decommissioning and Subsurface - the OGTC is **driving technologies** that move the dial on key industry challenges. Taking direction from the solution centre technology roadmaps, a range of projects have progressed to field trial, including two integrated energy projects that could transform offshore power generation and reduce carbon emissions (see below). To date, 38 trials are now complete with 13 in progress and a further 46 planned.

The OGTC is also **delivering world-class research and development** in partnership with two North-East universities. The National Decommissioning Centre, a collaboration with The University of Aberdeen, was launched in early 2019 and has confirmed Chevron Corporation as its first anchor partner - supporting research on the environmental impacts of decommissioning. Two further projects partners have been confirmed, seven PhDs are under way and £2.6 million in additional funding secured. Working in partnership with Robert Gordon University, the OGTC is launching the National Subsea Centre (NSC) later this year. Chris Pearson has been appointed as Director of the NSC, which will tackle current and future challenges in subsea engineering.

The **TechX accelerator programme** continues to grow in strength, supporting game-changing start-ups within the energy industry. To date, cohorts one and two have now completed 10 field trials, with a further 20 secured, creating 20 new jobs and raising £2million in funding (with a further £15million in discussion). The 2020 cohort has attracted more than 150 applications from 37 countries, with around half coming from cleantech entrepreneurs, who will be supported by three strategic partners this year - BP, KMPG and newly joined, Equinor. The programme has also focused on expanding its international energy network, launching Tech Xchange. A partnership between TechX in the UK, Station Houston in the US and NERA (National Energy Resources Australia), this collaboration provides global market access and investment opportunities in key energy hubs.

Underpinning all the OGTC’s activity is its strong **culture of innovation**. The Centre’s innovation network connects industry with academia, scientific institutes, technology centres, communities of innovators and cutting-edge tech developers. This includes

key partnerships with technology and research organisations - including TNO and SINTEF in the Netherlands and Norway, and the National Composite Centre in the UK - leveraging centres of excellence to deliver common projects in support of the energy transition. Other alliances included the NECCUS programme and Scotland Net Zero Roadmap project, an industry, government, and expert collaboration to deliver a roadmap for the decarbonisation of the Scottish industry. A broader range of activity with universities, catapults, accelerator programmes, schools and communities are also undertaken through key events held in the OGTC's Innovation Hub. A cross section of this is highlighted in the sections below.

Solution Centres	TechX Accelerator	National R&D Centres	Culture of Innovation
Unlock UKCS potential & anchor the supply chain	Accelerate 100 new start-ups	Create at least two national R&D centres	Thought leadership for the industrial transition
Add >£8bn value	Add >£2bn value	Increase R&D capability	Ready for the future
Digital Transformation	15 new spin outs	National Decommissioning Centre with the University of Aberdeen	Horizon scanning
Net Zero		National Subsea Centre with Robert Gordon University	Cross-sector network
Subsurface	50% commercialisation		Academic network
Wells	£100m co-investment syndicate	Anchor the supply chain	Inspiring the next gen
Decommissioning			
Marginal Developments			
Asset Integrity			

[File ref: four key areas of the OGTC]

PARTNERS

Initially sponsored by ONE (Opportunity North East), the OGTC continues to be governed by its own Board, which represents a range of industry experts across business, academia, government and regulator.

Working across a range of academia institutes and industry sectors to identify shared challenges, the OGTC also leads cross-sector collaboration on technologies to help accelerate carbon reduction and create export opportunities and other net zero technologies.

KEY MILESTONES AND PROGRESS

Milestone timescales

OGTC established as a legal entity	2016	Completed
Appointment of OGTC Board	2016	Completed
Draft Business Plan Available and reviewed by the Board	2016	Completed
Completion of Peer Review of Business Case	2016	Completed
Business case presented to CRD Programme Board	2016	Completed
Major Milestone - Business case approval by CRD Joint Committee	2016	Completed
Major Milestone - Business case approval by UKG & SG	2016	Completed
Permanent OGTC premises secured	2016	Completed
First three Solution Centres identified	2016	Completed
CEO and Solution Centre Managers commence roles	2016	Completed
First three Solution Centres - feasibility studies, project scoping and identification of partners underway as appropriate	2016	Completed
Work commenced on developing the Supply Chain Accelerator Programme	2016	Completed
Centres of Excellence – Memorandum of Understanding signed by local Universities	2016	Completed
Big Data Project Scoping underway	2016	Completed
Technology Network Hub Project Scoping underway	2016	Completed

Major Milestone - Three OGTC managed Solution Centres up and running	2016	Completed
Temporary OGTC premises secured	2016	Completed
Business case sign off by OGTC Board	2016	Completed
Technology Accelerator Programme: Supply Chain R&D matched funding programme framework established (eligibility criteria, contracts, legal, IPR policy, payment terms etc.); 2 projects with funds secured and match funds released	2017	Completed
A technology knowledge database platform created and starting to populate	2018	Completed
Digital technologies / big data: Exemplar project well advanced	2018	Completed
Commencement of Hub build for National Decommissioning Centre	2018	Completed
Establish Subsurface Solution Centre	2018	Completed
Identify the role of the OGTC in providing physical space in the form of incubators to promote growth - draft plan worked up	2019	Completed
TechX - Matched funding program framework established (eligibility criteria, contracts, legal, IPR policy, payment terms, etc). 15 projects with funds secured and match funds released	Cohort 2 graduated in Sept 19, 22 companies in total. 12 companies due to start Cohort 3 in Aug 20	Completed
£64million co-investment match funding Currently £92.7m	2020	Completed
Secure undertakings from industry partners to commit to at least 60 offshore technology development and test projects Currently at 107	2020	Completed
6 Solution Centre funded technologies reach commercialization phase (TRL9) Currently at 20	2020	Completed
180 projects in the areas of Small Pools, Well Construction, Asset Integrity, Subsurface and Decommissioning identified, underway or completed. Currently at 211	2020	Completed
Digital Technologies / big data: 30 projects Currently at 25		Green
1 Further National Centre identified and in early stage of development with MOU's and co-funding agreements progressing to support OGTC Projects	In discussions on an Energy Transition Park in Aberdeen and the creation of a Net Zero focused centre in that space	Green
2 National Centres well underway for development	NDC launched in January. NSC in development with RGU	Completed
A Technology knowledge database platform created and populated	2020	Completed

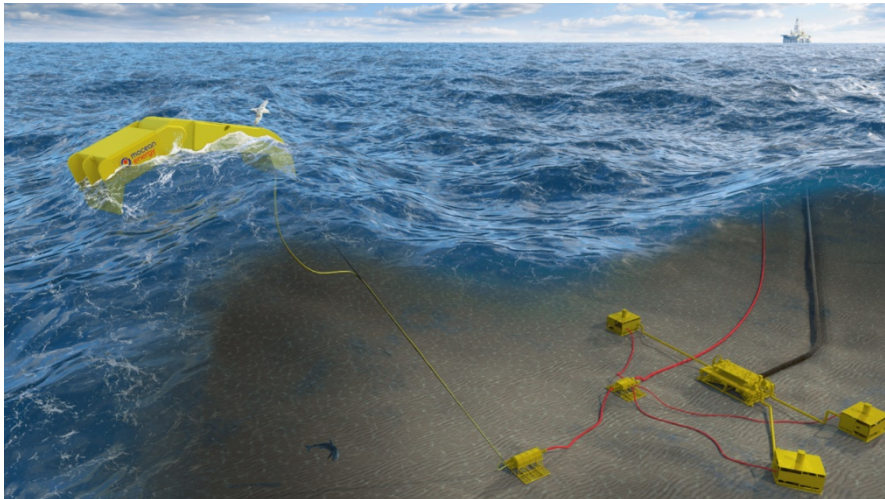
SUCCESSSES TO DATE

- £147 million co-invested
- 1040+ technologies screened
- 237 approved projects

- 41 field trials complete, 12 in progress and 53 planned
- 139 memberships
- 23,500+ visitors to date
- 2 calls for ideas

Key milestones/successes include:

- In February 2020, **Mocean Energy**, a TechX programme graduate, partnered with energy major Chrysaor and technology developers EC-OG and Modus, to develop a renewable subsea power generation and storage system. Co-funded through the OGTC, it will harness wave energy and subsea storage to power tiebacks or residential AUVs, with a technology field trial in Orkney planned. In September 2019, Mocean also announced investment in its Aberdeen base to commercialise its Seabase technology.



[File ref: Mocean]

- The OGTC's first 'spark in the water' was the **Ocean Power Technologies' PB3 PowerBouy®**, a partnership between wave technology developer OPT, Acteon Group and Premier Oil. Deployed in August 2019 on Premier's Huntington Field, the moored bouy is now being trialled to capture energy from the motion of waves to power monitoring and protection capabilities for subsea architecture. The bouy also has the potential to replace the need for decommissioning guard vessels, reducing offshore logistics and reducing carbon emissions.



[File ref: OPT PowerBouy]

- In September 2019, **Offshore Europe 2019** provided a key opportunity for the OGTC to showcase its delivery, including the first ever Start-up Village in partnership with TechX and Elevator. The Centre hosted two stands, partnered five STEM organisations, delivered six ‘pitch pit battles’, showcased 15 technology developers and 40 start-up companies and participated in 14 panel presentations. The organisation also used this as a platform to launch its Net Zero Solution Centre, focused on decarbonising operations and supporting the UK to become the world’s first net zero hydrocarbon basin.



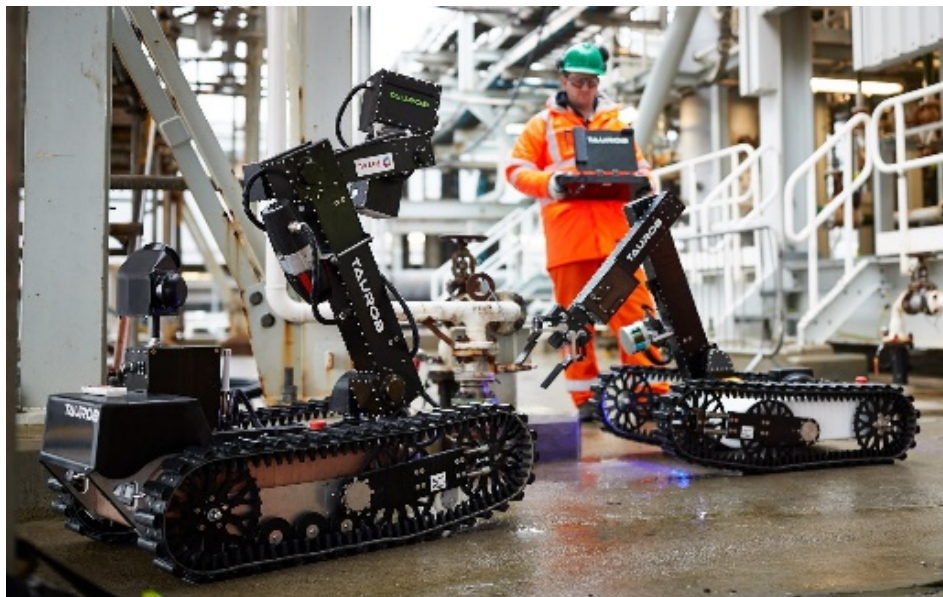
[File ref: Offshore Europe Net Zero Solution Centre launch]

- **Air Control Entech**, one of the OGTC’s first project partners, has grown significantly over two years, increasing turnover by 60%, employing 15 people and recently opening offices in Aberdeen City. The conclusion of its first project in August 2019 successfully delivered four proprietary UAV designs (manless tank entry, contact ultrasonics, 3D laser scanning and RFID scanning), including full design and flight test. This will address demand for a reliable UAV fleet capable of operating in an offshore environment.
- **EC-OG PowerHub**, one of the OGTC’s ground-breaking integrated energy projects, harnesses tidal currents to produce autonomous electrical power for subsea infrastructure. Now successfully field trialled, it reduces dependence on expensive umbilicals and has the potential to generate £200 million in savings to the industry and reduce carbon emissions. Following its initial start-up success, the company now employs 25 people (from a start-up team of 12 people), has secured £1.5 million in public sector funding and £2.5 million in private sector funding.



[File ref: EC-OG PowerHub]

- Working in partnership with technology developers **Taurob** and international operator, **Total**, the OGTC is co-funding the field trial of the world's first autonomous offshore robot. The robot is designed to perform a range of tasks, including visual inspections, read dials, level gauges and valve positions, navigate through narrow pathways and up and down stairs, measure temperature and gas concentration, and detect and navigate around obstacles and humans. In 2019 an onshore field trial was completed in Shetland, leading to a longer-term offshore field trial in 2020. This aims to prove the offshore capability and potential to transform offshore inspection, which could reduce cost by £128 million per year.

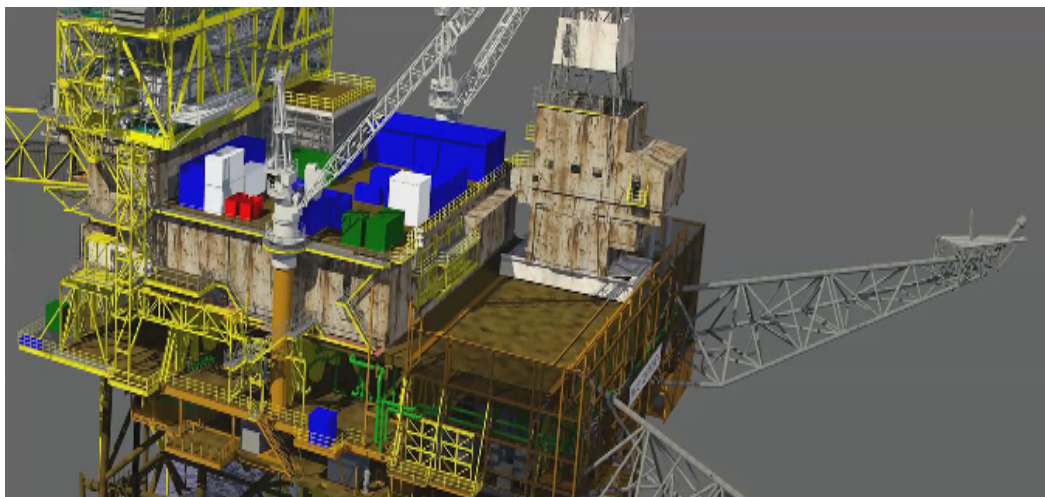


[File ref: Taurob robotics]



[File ref: Robotics partners at OE19]

- Well construction specialist, **DeltaTek Global**, has partnered with the OGTC to develop drilling technologies SeaCure and Articulock – enabling them to commercialise in just 18 months. The start-up company, which has been supported by the OGTC, now employs 11 people, has an established business in Aberdeen and an operations base in Houston, which have collectively secured contracts worth £1.5 million in 2019. The business also secured significant investment to expand the business.
- 2019-20 was pivotal in **GDi's** development of its digital twin and inspection modelling software, which has the potential to transform 3D modelling and 360-degree imaging. Using the latest laser scanning and photogrammetry technology, it creates a digital twin of the plant, using visual inspection systems to automatically detect and categorise defects. This has the potential to save £2million per platform or £500million across the UKCS. In 2020 the company is partnering with the OGTC to develop its latest innovation, laser scanning and reporting for asset management.



[File ref: GDi Digital Twin]

Awards

The OGTC has been recognised for number of awards, including partnerships with its technology developers. This included the 2019 'Excellence in Collaboration' award at the Decom North Sea Awards, alongside partner Spirit Energy, which recognised outstanding teamwork by the Thermite Collaboration Forum. The Centre was also shortlisted for the same award, for Ardent's Archimedes jacket buoyancy removal device, while Ecosse IP received the 'Outstanding Innovation' award for its Ambient Lifter technology, another project supported by the OGTC. The TechX team were recognised by AIRTO (Association for Innovation, Research and Technology Organisations) for the significant impact they have made over the past two years, winning the Best Practice in Innovation award.

BENEFITS

Benefit	Measures	Target	Target date	Current measure
Match funding	Co-investment match funding from the private sector (operations and supply chain)	£174.1m	2026	£147m
Increase in GVA	Additional GVA	£8.9B - £26.9B	2036	£1.8B
New technologies developed	Increase the number of new technologies that have been deployed on a first user principle	10	2026	23
Commercialised solution centre technologies	Number of OGTC solution centre funded technologies reaching commercialised phase (TRL9)	15	2026	20
Supply chain projects funded	Number of supply chain technology accelerated projects co-funded	100	2026	21

INCLUSIVE ECONOMIC GROWTH

The OGTC embraces knowledge and information sharing, connecting people and organisations through a range of events. The Centre's Innovation Hub provides an inspirational place for companies, technology providers, schools and the broader community to share learning and embrace the art of the possible. This year the Hub hosted:

- Over 8,300 visitors to the OGTC
- 185 overall events
- 25 Tech20 talks
- Three technology showcases



[File ref: Technology Showcase]

The OGTC has also prioritised STEM (Science, Technology, Engineering and Maths) at the heart of its agenda, supporting a range of programmes:

- Together with the Scottish Council for Development and Industry (SCDI), the OGTC hosted a **VEX Robotics** schools learning session for teachers in the local area. This included sponsorship of robotics kits for use in 10 schools across Aberdeen City and Shire to help inspire the next generation through building and programming robots.



[File ref: Vex Robotics]

- The **Primary Engineers Programme** supported 10 primary schools through an initiative that promotes engineering careers for pupils, while helping teachers to proactively address gender imbalance in science and engineering. The OGTC team supported classroom roll out and provided the Innovation Hub for ‘train the trainer’ sessions.
- A team from OGTC supported Heathryburn Primary School’s participation in **Lego League**. Held in Aberdeen for the first time, the team “Supreme Lego League Team” won the coveted ‘Best Innovation Award’ and were successful in getting a wild card entry to the Scottish finals, held in Perth.



[File ref: Heathryburn School Lego League]

- The OGTC brought the **Titan II STEM Innovation Truck** to Aberdeen for the first time, which saw over 240 local school pupils and teachers immersed in range of technologies and interactive exhibits. Showcasing technologies such as 3D printing, robotics, drones, VR and thermal imaging, this gave young people the chance to be inspired by the range of opportunities an interest in STEM can unlock.



[File ref: Titan Truck]

- The OGTC played an active role in **mentoring young people** in the workplace, hosting a range of placements, summer internships, Career Ready interns and apprenticeships.
- **The Energy Hub** was developed in partnership industry and the OGTC, including a **STEM industry group** to align activity in support of the next generation of talent. The group pools resources, minimises duplication and provides a consistent voice to promote the opportunities within the energy sector, including representation at key events.



[File ref: STEM Energy Hub]



[File ref: STEM industry group]

- For those who have already begun their career, the OGTC launched a new **Mentoring with Energy** app in partnership with industry. The initiative is focused on ensuring tomorrow's workforce is supported today - improving diversity and inclusion within the industry, initially targeting mid-level career women looking to advance into senior roles. Complementing this is **Mentoring Circles**, a peer-run mentoring group which addresses the issues women in the energy sector face when taking their career to the next level.



[File ref: mentoring app]

Douglas Ross, UK Government minister:

“It is fantastic to see the progress of the OGTC over the past three years in which it has achieved many impressive results. The Centre is a key part of the transformative Aberdeen City Region Deal, into which the UK and Scottish Governments are jointly investing £250 million to maximise the region’s strengths and spark innovation, ensuring a sustainable and prosperous future. I look forward to seeing the continued progress of the Centre in keeping Scotland at the forefront of the global energy industry as we adapt to a net zero society.”

Paul Wheelhouse, Scottish Government minister:

“Since its creation three years ago the OGTC has played a key role in the Scottish Government’s aims to create a sustainable, secure and inclusive energy transition for Scotland, thanks to its commitment to innovation, collaboration and the development and deployment of new technologies. Its Net Zero Solution Centre will support the sector’s ambition to become the first net zero hydrocarbon basin in the world - a key element of a sustainable, secure and inclusive energy transition.

“It’s through the success of organisations like the OGTC, which has received £180 million investment from the joint Scottish and UK Government Aberdeen City Region Deal, that we will see Aberdeen transition from being Europe’s oil and gas capital to being recognised as a truly global energy city – further demonstrating the additional benefits brought about by City Deals and Growth Deals.”

Councillor Jenny Laing, Aberdeen City Council Co-Leader:

"The OGTC is a wonderful example of what can be achieved when the public and private sectors work together for long-term economic, environmental and social goals. The recently published Aberdeen Economic Policy Panel report underlined the continuing significance of the oil and gas sector whilst stressing the need for diversification within the energy sector.

“As we transition to net zero, the qualities that have helped us succeed in the North Sea will ensure that the Aberdeen City Region continues to lead and inspire as we look to develop renewable technologies. At the same time, the research taking place on decommissioning and subsea - both driven by the OGTC - and the efforts to green oil and gas production means that we are perfectly placed to consolidate our position as a global energy capital.”

Councillor Jim Gifford, Aberdeenshire Council Leader:

“The OGTC was one of the first ‘bricks and mortar’ projects to come from our City Region Deal, and a clear demonstration of our collective aims and aspirations. Since it was established we have met with the leadership of the OGTC regularly through our Joint Committee. This allows us all to keep updated on the work they are doing. For me, the strength of the OGTC is the mechanism it provides to support new ideas and bring them to market. It is about fostering an entrepreneurial attitude across the sector, and work done through the TechX programmes gives equality of opportunity from the pool of entrepreneurs.”

Andy Samuel, Chief Executive of the Oil and Gas Authority:

“Over the past three years, the OGTC has gone above and beyond to drive technology development in the UK oil and gas industry, creating many valuable opportunities for companies, individuals and academia. Technologies supported via the OGTC have a powerful impact across the whole oil and gas lifecycle. With technology, innovation and integration playing such a critical role in the route to net zero, the OGA will continue to work closely with the OGTC and industry on technology development and deployment.”

Sir Ian Wood, Chairman of Opportunity North East:

“The OGTC has developed very successfully over the last three years and is now playing a significant role in growing and anchoring our oil and gas supply chain in the North East of Scotland long term, beyond the North Sea. The technology developed will significantly enhance and maximise the economic recovery of our North Sea oil and gas reserves and grow our international reputation and reach.

“Alongside this, the OGTC’s Net Zero Solution Centre will undoubtedly help develop an important renewables industry in the North East of Scotland contributing significantly to achieving net zero by 2050. Opportunity North East’s plans for an Energy Transition Zone are complementary and, between them, with the new Aberdeen South Harbour and the significant potential of St Fergus for CCS, there’s every opportunity to develop a global energy transition cluster in our region.”

Deirdre Michie, Chief Executive, OGUK:

“New technology plays a crucial role in pioneering lower carbon solutions as we look towards a net zero future, and this is thanks to the ground-breaking thinking and innovations developed by our world-class supply chain. The OGTC is integral to all of this and its achievements over the past few years, including the launch of its Net Zero Solution Centre, are really impressive and they should be proud of what they have achieved. Roadmap 2035 shows we are already playing an active role in the transition to a more diverse energy mix, with many of our members developing new technologies and bringing them to market, and the OGTC is vital to these moving forward.”

6b. BIOHUB



The BioHub is a 10 year £40 million investment project to accelerate business growth and build on the strengths of the Life Sciences cluster in the North East of Scotland, which includes the company base, University of Aberdeen, Robert Gordon University and NHS Grampian.

Following approval of the business case by the UK Government and Scottish Government in late 2017, BioAberdeen Ltd, sponsored by Opportunity North East (ONE), was set up to deliver the BioHub project and has appointed a multidisciplinary team to project manage and construct the BioHub. ONE has supported BioAberdeen to progress with the build project that will enable the BioHub to deliver the outcomes set out in the approved business case. An exciting design for the BioHub has been developed by an architect-led design team. It will provide a focal point for Life Sciences companies in the region with an environment that will encourage and support innovation and collaboration. The BioHub, located within the Foresterhill Health Campus in Aberdeen, received planning permission in March 2020.

A preferred construction contractor to deliver the project has been identified and it is anticipated that contracts will be agreed, and site works will commence mid-2020, with the BioHub opening to its first tenants in the latter half of 2021.

ONE continues its engagement with and support of companies across the Life Sciences sector, to deliver activities across the segments set out in the business case to drive collaborative innovation, research commercialisation, and company creation and growth..

Increasing Innovation through Collaborative infrastructure:

- Working with local established companies and start-ups to understand their current and future needs to determine the correct balance and flexibility of office and laboratory space

Creating High Growth Sustainable Business:

- Pre-commercialisation and pre-accelerator workshops delivered in conjunction with Universities and NHS Grampian
- An Accelerator programme delivered to support new start life science businesses
- Leadership skills developed through workshops and mentoring support to encourage business growth

Building and Promoting Core Strengths:

- Marketing and communications campaigns under development
- Attracting industry leaders and major life sciences events to the north east
- Working with businesses and the NHS to increase the artificial intelligence and digital healthcare capabilities of the region

Enhancing the Cluster through Collaborative Partnerships:

- Continuing to develop a network of regional, Scottish and international partnerships
- Broadening the membership of the life sciences network, engaging with successful academics and entrepreneurs

PARTNERS

The BioAberdeen Board maintains a membership base that reflects a partnership led by the private sector and the diversity of the sector, including ONE, NHS Grampian, University of Aberdeen and Robert Gordon University.

KEY MILESTONES AND STATUS

MILESTONE	TIMESCALES
BioAberdeen Ltd established Complete	March 2017
Business Case approved by UK and Scottish Governments	October 2017
Launch Life Sciences Support Programme Complete	October 2017
Build a 69,000 square foot flexible collaborative Hub space	H2 2021
Achieve minimum 80% occupancy target by year 5	2026
24 start up and spinouts achieved by year 5	2026
Develop 2 international collaborations	2026



Prof Andy Porter, chief technical officer at Elasmogen and director of the Scottish Biologics Facility at the University of Aberdeen, said: “The outlook for life sciences in Aberdeen has never been stronger or better than it is at the moment. The life sciences businesses in the region include established companies and earlier stage spinouts and start-ups. Bringing them together in the BioHub will establish a real cluster and further accelerate innovation within the commercial, clinical and academic communities. Having a life sciences sector in the city that is really collaborative in how it conducts research but isn’t too big and overwhelming means that we can get that triple helix of companies, academics and clinicians established and working to innovate and commercialise.”

BENEFITS

Benefits outlined in the BioHub business case.

Benefit	Measures	Target	Target Date
Life Science support programmes	Life Science support programme launched	Deliver	Delivered 2018
GVA	Generate GVA	£76m-£138m	2047
Startups and Spinouts	Number of spinouts achieved	24	2026
Networking events focussing on company growth	Number of networking events per annum	4	2026
International collaborations	Number of international collaborations in place over 5 years	2	2025

6c. FOOD HUB (SeedPod)

The Food Hub - SeedPod, sponsored by Opportunity North East (ONE), is a £21m investment project over 10 years to accelerate growth and innovation of existing businesses and start-ups by building on the strengths of the food and drink industry in the North-East of Scotland through a consumer-focused, customer-driven approach to innovation across all sectors of the industry.

The business case for the Food Hub was approved by the UK Government and Scottish Government in January 2019, and Food Hub (NES) Ltd was set up with a diverse industry-led board to develop and manage the Food Hub project with support from ONE. An architect-led design team is working with Food Hub (NES) and ONE to develop an inspiring design for the building, which will deliver the Food Hub's objectives over the longer term.

The investment announcement event hosted by ONE in January 2020 also launched the branding for Food Hub – **SeedPod**.



ONE continues its engagement with and support of companies across the Food, Drink, Agriculture and Seafood sectors, to deliver activities across the segments set out in the business case.

Foods of the Future

- Food, drink and agriculture companies are provided with market insights information through our partnership between ONE and Scotland Food & Drink.
- The export partnership with SDI and network events support ongoing product and market development.

FoodX accelerator, incubator and scale up

- A third business growth programme was successfully delivered to aspirational food and drink companies in the region.
- Follow-on and mentoring support is provided to previous business growth programme participants.
- Start-up boot camps delivered for new companies across all sectors.

Food Industry 4.0

- Working with NMIS in a collaboration agreement to deliver a step change in digital and automation technology adoption.

Innovation infrastructure

- Design team appointed and development of concept design well underway.
- Heads of terms agreed for lease of site at Craibstone

Key milestones	Planned / achieved date
Business Case Approved by UK Government and Scottish Government	January 2019
Delivery team appointed	December 2019
Planning submission	Q3 2020
Build and open a 30,000 sq. ft flexible space	H1 2022
The first cohort of 10 start-ups participating in the accelerator programme	2021
10 start ups achieved per year	2025
Increase in company turnover by min 5% per annum	2025
20 companies to have achieved significant sales (10% turnover) in new markets (at least 2 of these to be international)	2028

BENEFITS

Benefits outlined in the Food Hub business case.

Measures	Target	Target Date
First cohort of 10 start-ups participating in the accelerator programme by January 2020	Minimum of 10 companies	2020
10 start-ups achieved per year by year 5 (2025)	2 per year	Progress will be monitored quarterly from July 2020 – Dec 2025
1 growth programme per year, with 10 company participants in each	Minimum of one programme ongoing per year	Food Hub team will report on progress towards target annually years 2021-2025 along with income generation figures
4 companies per year investing in advanced processing technology/smart manufacturing – achieving 25% gain in productivity	4 companies	Progress to be monitored quarterly from 2020-2025
10 companies investing in R&D, 5 of these in collaboration with academia	2 per year	Measure annually in year 2025
Increase in company turnover by min 5% per annum by 2025 by companies supported by the Food Hub		Annually from 2025
20 companies to have achieved significant sales (10% of turnover) in new markets (at least 2 of these to be international) by 2028		Annually 2028

Gregor Mackintosh, managing director of Mackintosh of Glendaveny, said: “North east Scotland is a driving force in Scotland’s food and drink industry. SeedPod will be the place where businesses and people can share knowledge, innovate and inspire one another - whether they are start-ups developing a new idea, established manufacturers interested in the latest production technology or businesses accessing market insights and new product development support. By providing this centre of excellence for the industry we will build on our sector strengths, grow existing and new businesses in the region, deliver national impacts for the sector and increase our premium product presence in high-value international markets.”

6d. ABERDEEN SOUTH HARBOUR



The Harbour Vision: To become Scotland's premier port, offering world class facilities to national and international customers and stakeholders.

Aberdeen's Harbour Extension "Aberdeen South Harbour", was delayed in 2019 and with the compounded impact of COVID19 completion date is being forecast as 2021. On completion it will be a unique facility due to its distinctive blend of capacity, location and connectivity. Along with the North Harbour, it will represent an exceptional opportunity for commercial growth and diversification.

Infographics

- Adjacent to the largest oil and gas supply chain in Western Europe
- 300 metre vessels can berth alongside
- Serving a City with an international airport, rail and trunk road connectivity
- A harbour with a water depth of up to 15 metres
- Gateway to one of the UK's greatest untapped tourist destinations
- A harbour with the largest amount of berthage in Scotland

PARTNERS

The Harbour is operated by 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 Harbour Board members have expert knowledge in, Law, Construction, Finance, Oil and Gas, ports, Commercial, Marine and Property.

"In terms of investment, Aberdeen Harbour's South Harbour expansion is the largest port infrastructure project underway in the UK, and the largest single investment project in the history of UK Trust Ports".

Michelle Handforth, Chief Executive, Aberdeen Harbour Board

MILESTONES & PROGRESS

Construction of Aberdeen South Harbour is now well underway, with the project 70% through the building process.

Milestones and status

Key Milestones	Timescales
Construction Commencement	Complete -May 2017
Commencement of Dredging Operations	Complete - September 2017
Commencement of Piling Operations	Complete -May 2018
4,000 accropodes manufactured at the purpose built automated factory in Gregness	Complete - December 2018
First of the 22 x 6,000 Tonne caisson unit arrives	Complete - February 2019
Completion of North Breakwater	To be rescheduled
Arrival of final closed quay caisson	To be rescheduled
Completion of South Breakwater	To be rescheduled

A total of 22 caissons will be used in the Harbour, forming the foundations of the closed Dunnottar and Castlegate quays. These quays will be used by some of the largest vessels associated with sectors such as decommissioning and cruise.

In total 9,000 accropodes will be made for South Harbour and some of them are the largest accropodes in the world. These accropodes will act as the outer armour for the North and South Breakwaters, protecting the harbour from a 1-in-200-year storm.

The four quays in the new port will be named Balmoral, Dunnottar, Crathes and Castlegate, in honour of the history and heritage of the North East of Scotland.

The 175.6 metre MV Beltnes, a Self-Discharging Bulk Carrier, and the largest vessel to visit Aberdeen Harbour to date, has been utilised to discharge thousands of tonnes of fill material behind concrete caissons, as part of the creation of the Dunnottar and Castlegate Quays.

The fill material used behind the caissons has been quarried from Norway and will provide these quays with significant heavy-lift capacity, all designed to support activity associated with the onshore and offshore energy industry.

7,300m including South Harbour

5,900m existing Harbour

Harbour – total quay length

Cruise size

CURRENT CRUISE

VESSELS

CRUISE VESSELS

IN NEW HARBOUR

165 metres 300 metres +

BENEFITS

BENEFITS OUTLINED IN THE ABERDEEN HARBOUR BUSINESS CASE

Benefit	Measures	Target	Target Date
Increase in GVA	City Region	£0.8b per year	2040
	Scotland	£0.9b per year	2040
Increase in Jobs	City Region	5,550	2040
Cruise Ships	Cruise Vessel Visits	60 visits	2025
		75 visits	2030
		85 visits	2035

* BiGGAR Report, 'Economic Impact of Aberdeen Harbour Nigg Bay Development' commissioned by Scottish

Enterprise in 2013 listed the above economic benefits of Aberdeen South Harbour and “improvements to the roads infrastructure around Nigg Bay”, the latter is being taken forward through the External Links to Aberdeen South Harbour Project.

SOUTH HARBOUR: RENEWABLES

The Scottish Government aims that half of Scotland’s heat, transport and electrical energy needs will be met by renewable energy by 2030. Offshore wind energy will be a key aspect of this target and Aberdeen Harbour is in an ideal location to support these offshore wind projects. Once open, South Harbour will provide the capacity to marshal components for the pre-installation phase for Scottish territorial and round-three projects.

DECOMMISSIONING

Aberdeen Harbour has been a hive of decommissioning activity, and in the last year, more than 10,000 tonnes of decommissioned materials have crossed the quayside. The opening of South Harbour will only add to this, supporting many more customers with their decommissioning requirements.

CRUISE ACTIVITY

The existing North Harbour is able to accommodate vessels of up to 165 metres in length. In cruise industry terms, this covers the smaller vessel end of the cruise market. These vessels accommodate between 100 and 200 passengers, and generally these vessels support ‘specialist’ cruises which focus on a particular activity such as bird-watching or wildlife appreciation. The new South Harbour, however, will be able to accommodate vessels of up to 300 metres and more. Although representing a doubling in vessel length, the difference in passenger numbers per vessel is much greater than 50%.

These larger cruise vessels that South Harbour will be able to accommodate and carry up to 3,500 passengers. It is a startling fact that South Harbour has the ability to welcome a cruise vessel large enough to accommodate more passengers in a single visit than the total number of passengers to visit the North Harbour in a whole season. This is the quantum leap that South Harbour represents in terms of an opportunity for the City and Region.

INCLUSIVE ECONOMIC GROWTH

Moving forward the Harbour aims to:

- Become one of the most environmentally friendly ports in Scotland - continuing to act as guardians of the wildlife we share our home with
- Continue as one of the most prolific supporters of local charities in the region
- Use technology and innovation to further reduce carbon footprint
- Continually strive to improve and grow services

EXAMPLE OF ENVIRONMENTAL MITIGATION

Two underwater curtains made entirely of bubbles have been used during the construction of South Harbour to limit disruption to marine animals. The ‘double-bubble’ curtain is believed to be the first in the UK and reduces the underwater sound levels from construction. Each bubble reflects the sound back into the bay and away from surrounding areas.

COMMUNITY BENEFITS

Aberdeen Harbour Board is committed to ensuring that the investment of the new harbour brings with it lasting benefits for local communities. As part of the project a programme of community benefit initiatives have been developed that will ensure a positive impact on the local economy and the surrounding communities.

TARGETED RECRUITMENT AND TRAINING

A Community Benefit Steering Group (CBSG) has also been established, consisting of Aberdeen Harbour Board, Aberdeen City Council, North East Scotland College, CiTB, ACVO and Skills Development Scotland, to ensure a local approach to the development of training and employment opportunities on the AHEP project.

Projects include

- Community Ambassadors
- Pre-Employability Training
- Apprenticeship Opportunities
- Returnships
- Work Experience Placements
- Workforce Training

Further information can be found at: www.ahep.co.uk/CommunityBenefit.aspx

6e. TRANSPORT



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

PARTNERS

The Transport Working Group is made up of the following organisations: Transport and Planning Officers from both Aberdeen and Aberdeenshire Councils, Nestrans, and Transport Scotland. Transport Scotland have remained a key partner within the CRD Transport Working Group since its first meetings in summer 2016. Joint working has shaped the partnership approach, and also how both the modelling and appraisal work has been undertaken.

STRATEGIC TRANSPORT APPRAISAL

The Strategic Transport Appraisal is taking 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 is supporting decision-making regarding the development and prioritisation of future transport investment in the region, informing regional investment plans for transport infrastructure, local and regional spatial planning decisions, and national strategies and programmes of work. Two streams of work have progressed. The ongoing development and appraisal of options, and the update of the ASAM transport and land use model.

MILESTONES

ASAM* – Finalise Interim upgrade	Complete October 2017
Strategic Transport Appraisal – Problems and Opportunities Study	Complete June 2018
Strategic Transport Appraisal – Commence Options Generation and Sifting	Complete August 2018
Strategic Transport Appraisal – Options Generation and Sifting	Complete July 2019
Strategic Transport Appraisal – Commence STAG1 Appraisal of Options	Complete Oct 2019
ASAM* – Commence Upgrade – Post Aberdeen Western Peripheral Route (AWPR) opening	Complete August 2019
Strategic Transport Appraisal – Complete STAG 1 Appraisal of Options	May 2020 for draft

ASAM* – Complete Upgrade – Post AWPR Opening	November 2020
Strategic Transport Appraisal – Commence STAG 2 Appraisal of Options	January 2021
Strategic Transport Appraisal – Complete STAG 2 Appraisal of Options	April 2022
Strategic Transport Appraisal – Commence Business Cases	April 2022

* Aberdeen Sub-Area Model (ASAM)

FINALISATION OF WORK ON OPTION GENERATION AND SIFTING

Consultants Jacobs were commissioned to continue work on the pre-appraisal aspects of the Strategic Transport Appraisal, being asked to work with stakeholders to develop a long list of interventions, and then to sieve them with respect to the agreed transport objectives. This work was reported to the City Region Deal Joint Board, Nestrans Board, and Council Committees between June and September 2019.

COMMISSIONING OF WORK ON INITIAL APPRAISAL OF LONG LIST OF OPTIONS

The long list of options requires an initial appraisal to refine the content and packaging of options and assist with prioritisation and the most appropriate delivery routes. STANTEC were commissioned in October to undertake this work, informed by the new National Transport Strategy which was published early in 2020. The work is currently at a draft stage, prior to consideration at relevant committees, and consultation as part of the Regional Transport Strategy.

SUPPORTING THE DEVELOPMENT OF THE NEW REGIONAL TRANSPORT STRATEGY

The outcomes from the initial appraisal on the Strategic Transport Appraisal is forming the evidence based for the draft Regional Transport Strategy, which is currently in preparation, aiming for consultation later in 2020. This reflects the integrated approach being taken for the development of the Strategic Transport Appraisal, ensuring that the work undertaken informs and complements the wider development of associated documents, as well as identifying the key projects required to achieve the objectives of the City Region Deal.

SUPPORTING TRANSPORT SCOTLAND'S STRATEGIC TRANSPORT PROJECTS REVIEW

The success of the CRD Transport Working Group in facilitating progress on regional transport planning has been recognised by Transport Scotland, who have used the model developed in the North East to inform regional partnership approaches for their Strategic Transport Projects Review (STPR) consultation process. Work in the north east on Strategic Transport Appraisal has put it ahead of some other parts of Scotland, but close liaison has been maintained with the STPR team during this period.

INFORMING THE LOCAL DEVELOPMENT PLANS

A key objective of the Strategic Transport Appraisal was “tying together transport infrastructure and development planning/management, on a city/region basis”. One way that this has been progressed is the use of emerging outcomes from the Strategic Transport Appraisal, and use of the CRD funded strategic transport model to test the impact of future housing and employment allocations on the regional transport network. This work is now providing a robust evidence base for the Local Development Plans being progressed by both the Aberdeen City and Aberdeenshire Councils.

UPDATE OF ASAM TRANSPORT AND LAND USE MODEL

February 2019 saw the full opening of the Aberdeen Western Peripheral Route and Balmedie to Tipperty dualling project. This brought significant changes on travel patterns regionally, and one focus of the 2019/20 year has been capturing these changes. During Autumn 2019 an extensive programme of traffic, and public transport surveys were undertaken, which was integrated with other programmes of work (including A96 dualling, and Low Emission Zone development). This information, combined with other information on trip patterns, is now being used to produce a 2019 Base Year update of the model, and future year forecasts. This will be used to test the effectiveness and impacts of proposed packages of interventions currently being developed within the Strategic Transport Appraisal. This will benefit subsequent work on national strategic transport projects review, but also the regional transport strategy.

COMMUNITY ENGAGEMENT

The first phases of the strategic transport appraisal has required broad community and stakeholder engagement to understand the key problems and opportunities related to the north east's transport network. To this end, extensive engagement exercises were undertaken, comprising of A similar exercise was undertaken to help develop the long list of potential interventions, with work focusing on stakeholder and Elected Member workshop sessions. The format and representation of these session was found to be very useful, and this approach is now being rolled out across Scotland as part of Transport Scotland's Scottish Transport Projects Review.

EXTERNAL LINKS TO ABERDEEN SOUTH HARBOUR

The Transport Links to Aberdeen South Harbour is developing the initial options to determine the most appropriate external road improvement in relation to external transportation links to the Aberdeen South Harbour Development at Bay Of Nigg.

Consultation follows established guidance (Transport Scotland’s Scottish Transport Appraisal Guidance).

- Individual and small group face to face discussions
- Public internet survey Stakeholder
- workshop discussion including NHS, Disability Forums, Youth Groups, small business interests, alongside transport providers such as bus companies and train service providers
- Community council surveys
- Elected Member workshops, with MPs, MSPs, and Council Members

EFFECTIVE PUBLIC AND STAKEHOLDER CONSULTATION ON EMERGING OPTIONS

Stakeholder and public engagement exercises were held as part of the STAG Pre-appraisal and Part 1 process. The stakeholder engagement exercises were repeated in 2019/20 as part of the STAG Part 2 appraisal with a public consultation programmed for autumn 2020.

UPDATE OF STAG PART 2 STUDY, ON THE DETAILED APPRAISAL OF THE REMIANING OPTIONS

Continuing appraisal of the four options taken forward to next stage (STAG Part 2) of appraisal work.

ENSURING CO-ORDINATION BETWEEN CRD STUDY, AND ONGOING WELLINGTON ROAD STUDY

Opportunity has been taken to align the programme, appraisal process, and future consultation activities with the Wellington Road Corridor study.

ONGOING STAG PART 2 STUDY

Stantec consultants are continuing to take forward the STAG Part 2 study, following on from their work on STAG Part 1. The STAG Part 2 study is appraising public transport, active travel and road options identified during the STAG Part 1 process to a greater level of detail.

Key issues being investigated are the crossing of the rail line, impact on road network, impact on landfill site, and wider community impacts (including loss of green space). It is also considering the wider land use opportunities provided by the approval of the Energy Transition Zone in the Local Development Plan. It is anticipated that the outcomes from the STAG Part 2 Appraisal will be reported towards the end of 2020.

Milestone Timescales

Inception and Project Management	Complete
Remobilisation and Option Scoping	Complete
Transport Planning Objectives Review	Complete
Case Study Review	Complete
Geo-environmental and Geo-technical inputs	Complete
Engineering Feasibility and costings	Complete
Public Transport Feasibility and Costings	Complete
Phase 2 Engagement	Complete
Development of Demand Scenarios	Complete
Model development and option testing	May 2020
STAG Part 2 Appraisal	June 2020
Phase 3 Public Consultation	August 2020
Draft STAG Part 2 Report	August 2020
Final STAG Part 2 Report	September 2020
Committee Reporting November	September 2020

6f. DIGITAL CONNECTIVITY

Digital Update

The Aberdeen City Region Deal is supporting an increased delivery of ultrafast fibre connectivity and a region wide sensor network. This investment will also feed a regional data platform from which business, residential and public services can develop innovative applications.

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.

The 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.

DCMS Connection Voucher Schemes

In addition to the CRD-funded projects, Connection Voucher schemes will assist in the uptake of gigabit capable connections via retail internet service providers catering for the residential and business markets. Funding of up to £3000 per SME and £500 per residence is available to retail internet service providers (ISPs) who provide gigabit capable connections. These schemes are administered by DCMS and are promoted to end users and ISPs by direct contact, via trade bodies and on social media.

PARTNERS

The Digital Programme is supported by a Digital Working Group made up of expertise and representation from Digital, Roads and Business Intelligence Teams from Aberdeen City and Aberdeenshire Council. The NHS, Aberdeen & Grampian Chamber of Commerce, Opportunity North East, Robert Gordon University, Aberdeen University, Data Lab and Censis.

THE PROGRAMME CURRENTLY CONSISTS OF 5 PROJECTS

Infrastructure – Digital

There are five projects identified to improve digital infrastructure in the Aberdeen City Region, with varying geographic implications:

- City Network Extension (City-wide Fibre Connectivity) - Aberdeen City
- Duct Network Extension – Aberdeen City
- Full Fibre Infrastructure (Gigabit Connectivity). Aberdeen City and Aberdeenshire
- Sensor Network – Aberdeen City and Aberdeenshire
- Regional Data Exchange – Aberdeen City and Aberdeenshire

Headline Achievements

- The Design work for Phase 1 of the Duct Network Extension has been completed and procurement is underway
- Full Fibre Infrastructure tender has been undertaken. As part of this work a Gigabit Connectivity Framework was developed which is the first of its kind in Scotland. The project will also result in an increased footprint of fibre across the City Deal Region. This may act catalyst for further investment by commercial parties to build off this network to provide fibre to our homes and businesses.

Project Updates

1. CITY NETWORK EXTENSION PROJECT – ABERDEEN GIGABIT CITY

The Aberdeen City Council fibre network will be extended to 57 additional sites across the City. This has successfully stimulated private sector investment of up to £40 million by City Fibre and Vodafone. Building on the Council's fibre network, City Fibre will utilise this to extend and deploy 800km of fibre within Aberdeen City, providing the majority of the City with access to 'fibre to the premises' at gigabit speeds.

CityFibre's Fibre-To-The-Premises (FTTP) transformation project is quickly building momentum. Until recently, most businesses and homes were connected through old-fashioned copper wires which was slow and unreliable. With FTTP however digital connectivity and speeds are greatly improved, in turn helping to improve businesses and allowing individuals the greater ability to work from home and stream entertainment. This work also helps provide the platform for Aberdeen to become a fully 'Smart City'.

Since CityFibre's announcement of £40 million private investment in Aberdeen City in 2018 (delivered in partnership with Vodafone) there has been significant progress. Works have been undertaken, or in process, in Kincorth, Torry, Northfield, Middlefield, Garthdee, Ferryhill, Hilton, Ashgrove, Cornhill and Bridge of Don.

Current Update

Since work started on 23rd July 2018 on the network build in the City thirty of the fifty-seven Aberdeen City Council corporate sites have now been connected. All the sites are due to be completed in 2020, however the programme for scheduled works has been impacted by the COVID-19 outbreak.

Build Starts	Completed July 2018
10 sites connected	Completed December 2018
14 sites connected	Completed July 2019
30 sites connected	Completed February 2020
40 sites connected	July 2020
Payments to Capita on completion of 75% connected	August 2020
50 sites connected	September 2020
57 sites connected	October 2020
Final payments	November 2020
Project completed	December 2020

Benefits

Timing additionality – securing a level of investment sooner than would otherwise occur without the proposed project
Scale additionality – securing a level of coverage and future roll-out on a scale that would not occur without the proposed project
Transformation of Aberdeen City into one of the UK’s most connected Cities within two years
Lays the platform for further connectivity, such as 5G and the internet of things Introduces competition in the area, thereby reducing the cost of connectivity to citizens and businesses
Lays the foundation for expansion into key Aberdeenshire economic development locations

Project 2 - Full Fibre Infrastructure

Building on what has been achieved in the City Network Extension project, an aggregated public sector demand approach is being taken to extend fibre further into the City Region. This will be primarily achieved by connecting Aberdeenshire Council sites (with NHS and City sites being a beneficiary) to dark fibre. This will enable public services to be delivered to the community that will result in improved delivery of education, health, transport and other services.

The project will also result in an increased footprint of fibre across the City Deal Region. This may act catalyst for further investment by commercial parties to build off this network to provide fibre to our homes and businesses.

Suppliers were invited to tender for new ‘Gigabit Connectivity’ procurement framework. Responses were evaluated and successful bidders are now appointed as Framework Suppliers. The call off contract has been signed with the successful bidder, with works to commence in early June.

Contract notice issued	Completed May 2019
Return of responses	Completed June 2019
Evaluation of responses	Completed July 2019
Announcement of successful bidders for the framework	Completed July 2019
First call of contracts issued	Completed August 2019
Preferred bidder informed	Completed December 2019
Contract signed	Completed March 2020
Implementation starts	April –May 2020
Network build starts	June 2020
Network build complete	December 2020 (will be delayed due to COVID-19)

Benefit

Benefit	Measures
Businesses and homes will have access to ultrafast digital services	No. of businesses passed by fibre (within 50 metres) No. SMEs connected to and number of residential homes passed
Increased number of premises within Aberdeenshire to be addressable by full fibre (within 200 metres)	No. of urban premises Number of rural premises
Invest in ultrafast fibre along the development corridors to key employment centres and leisure locations	Fibre along primary travel to work routes

Project 3- Duct Network Extension

Initially this duct network would be for Council use, 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 will also provide the enabling infrastructure for the proposed sensor network and provide the opportunity for Aberdeen City to be used as a test-bed for autonomous vehicles and also support 5G installations.

Current Status

During late 2019 and early 2020 design works were successfully completed by Aberdeen City Council Officers for the Phase 1 connection west route connection (A944) and the procurement for Phase 1 has been undertaken and the successful bidder

selected. Due to the coronavirus the tender period was extended to the 9th of May 2020 due to this being an unprecedented event and the subsequent consequences on businesses.

Review of business case by the Scottish Government	January 2019
Implementation team appointed	February 2019
Begin Design phase	February 2019
Complete Design phase	February 2020
Begin procurement – Contract One	March 2020
Procurement Award – Contract One	June 2020
Begin Implementation – Contract One	August 2020
Begin Procurement – Contract Two	September 2020
Procurement Award – Contract Two	December 2020
Begin Implementation – Contract Two	February 2021
Duct Network Completed	February 2023

Benefits

Benefits	Measures
Stimulate the market to increase competition	No. of communication providers in the local market
Quickly deploying 5G small-cell	No. of small-cell communication sites Uptake of 5G Cost of 5G
Early adoption of autonomous vehicles	No. of suppliers testing autonomous vehicles in Aberdeen
Cost-effective Enabling Digital Infrastructure	Ducts along primary travel to work routes Implement smart transport network No. of duct partners (e.g. NHS, Police, Universities, etc.)

Project 4 - Sensor Network

Currently, within Aberdeen City there is a network of over 1,000 sensors which are used to manage traffic flow, monitor the environment, etc. The Sensor Network project in CRD is expected to expand this existing network to:

- enable better transport management (both private and public sector)
- facilitate smart travel and autonomous vehicles
- provide data to feed the Regional Data Exchange (Project 5)
- enable anonymised data to be made available for delivering public and commercial services more efficiently

The scope of a sensor network is wide-ranging and it is important to investigate the opportunities, limitations and requirements on the communications network before proceeding with its deployment as it will not be possible to include all sensors at once, rather can build the network over time as and when funding becomes available.

Current Status

An outline business case was approved by Joint Committee in February 2018 to allocate £150,000 for the development of the business case for this project. Following a presentation from IBI to the working group, Programme Board and key stakeholders the SCOPE has further being defined for the Consultants, who are contracted to develop the business case, and a revised date for Business Case completion is November 2020.

Milestone	Timescale
Contract awarded for the provision of services to deliver a full business case	February 2019
Project inception meeting	March 2019
Stakeholder engagement meetings	May 2019
Stakeholder Workshops	June 2019
Progress update presentation	August 2019
Revised date set for Business Case completion	November 2020

Benefits

Enhanced awareness: sensors can be deployed in buildings and roads to report on real-time conditions such as temperature, air quality and congestion enabling traffic managers and facilities managers to make data led decisions on strategy and maintenance
Rapid control and response: sensor networks can be beneficial for the real-time sensing of unpredictable conditions allowing resources to be targeted more effectively in situations as varied as waste bin collections to the detection and response to flooding
Trend identification: sensor networks can be used to identify trends in citizen interests, concerns, and needs ensuring that the services and facilities offered better match their needs
Data-driven decision analytics: this allows statistical analysis of data collected from sensors to detect anomalies and predict conditions

All of this offers endless possibilities to enable stronger decision-making, enhancing the lives of residents by reducing costs and improving services as well as forecasting and planning for the future. An effective and well planned sensor network can also contribute to the economic success of the region by providing a reliable data pool of information. Businesses are better able to make informed decisions through data analytics, encouraging investment and innovation.

Project 5 - Regional Data Exchange

The UK Government and Scottish Government have commissioned a number of studies assessing the economic value of making public sector data open and accessible. These studies concluded that UK-wide the direct benefits are around £1.8 billion per year and the indirect benefits are around £5 billion per year. The Regional Data Exchange will support transactions of data between participating stakeholders with an aim to establish an operational market in regional data and the development of innovative applications.

Current Status

An outline business case was approved by Joint Committee in February 2018 to allocate £150,000 for the development of the business case for this project. Following a presentation from IBI to the working group, Programme Board and key stakeholders the SCOPE has further being defined for the Consultants, who are contracted to develop the business case, and a revised date for Business Case completion is November 2020.

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Revised date set for Business Case completion	November 2020

Benefits

More efficient delivery of council services
Improved health and accessibility of services
More efficient use of resources
New innovative developments of apps and services leading from new external data
Stimulating growth through new insights (data)
Attractive environments for start-ups and better use of regional assets
Greater access to services and information

7. CHALLENGES, OPPORTUNITIES AND NEXT STEPS

PROJECT	CHALLENGES	OPPORTUNITIES
The Oil and Gas Technology Centre	Access to additional funding opportunities	There is an opportunity for the OGTC to respond and play a key role in the Net Zero Carbon agenda

	Oil Industry reducing spend due to oil price crash, may result is less opportunities to work on new technology	Active engagement on cross industry net zero projects
BioHub	Programme and cost implications in building construction in light of COVID-19	To ensure the BioHub can deliver new digital and biomanufacturing requirements post-COVID.
Food Hub - SeedPod	Programme and cost implications in building construction in light of COVID-19	Advanced manufacturing and automation.
Aberdeen Harbour Expansion	To complete works at Aberdeen South Harbour after the impact of COVID19 and subsequent delays.	To ensure the wider development zone in the immediate vicinity of Aberdeen South Harbour at Altens/East Tullus is utilised to meet the needs of the region. The Energy Transition Vision and Infrastructure Plan was approved at Committee on May 4 th 2020. The regional Partners are working together to respond to the FreePorts Harbour Consultation.
Transport Links to Aberdeen South Harbour	Maintain the pace of the options appraisal in light of the significant public and stakeholder interest. Public consultation events have confirmed the interest that surrounding communities have in the project and their sensitivity to potential adverse impacts of the specific route options.	Improve Transport Links will be important to realising our Energy Transition Vision as well as enhanced tourism.
Strategic Transport Appraisal	<p>Work is being undertaken within a busy and evolving landscape, at the same time as reviews of transport and land use policy and projects at local, regional and national level. The Impact of COVID 19 will also need to be considered.</p> <p>There is also a risk that some of the previously identified problems, opportunities and priorities may require to be re-visited, or re-profiled, during the recovery phase of COVID 19 due to impacts on wider economy and capital / revenue availability.</p>	There is clear opportunity for the Appraisal to deliver multiple benefits across all agencies based on an early identification of regional transport priorities.
Digital Infrastructure	<p>To continue to attract additional commercial investment in digital infrastructure and gigabit solutions for the most remote and isolated parts of the region.</p> <p>To identify areas not covered in line with unknown Government future plans.</p>	<p>Acting as a test-bed location for 5G investment, including in rural areas and inshore waters.</p> <p>To revisit the Digital programme projects to ensure projects are aligned to the regions priorities.</p>

NEXT STEPS

PROJECT AREA	NEXT STEPS
Programme Management Office	<p>To work with UK/SG to address the challenges of COVID 19 and understand what flexibility can be given around delayed milestones and drawdown of payments due to delays caused by COVID19</p> <p>To work with UK/SG to address the Benefits outlined in the Deal Document 2016 and the impact of COVID19 on key benefit measures such as GVA and Jobs Created</p> <p>To work with UK/SG to discuss opportunities within Digital and Housing Programmes to meet the regions needs in light of COVID19.</p>
The Oil and Gas Technology Centre	To agree with UK/SG at Checkpoint Review future priorities and milestones.
Transport	The impact of COVID 19 cannot be wholly mitigated by the project, but at the earliest possible time, a revised programme will be developed.
Digital	<p>Now, more than ever, have we come to realise the importance of digital infrastructure and connectivity during the recent COVID-19 outbreak. This has enabled many of the workforce to continue to work-from-home (wherever possible) as well as to help many businesses to adapt and survive this unprecedented event. Not only that, but it has allowed individuals and businesses to access vital support, important information as well as apply for support funding. Post lockdown the UK we are likely to see a shift in how we work, especially if social distancing is still likely to be place for a considerable time, and digital will continue to play a major role in our national and regional economy as businesses continue to undergo their digital transformation.</p> <p>This emphasises the importance of the digital projects being undertaken as part of our City Region Deal; ensuring digital connectivity and an excellent digital infrastructure for our region. This will help allow build the foundation for greater digital transformation and new opportunities for businesses to respond to the changed economic landscape not just in the UK but also globally. We will continue to work with key partners and our digital working group to provide additional value and benefit to Aberdeen City Region, and to seek digital solutions to help support our regional economy.</p>
BioHub	Award construction contract and start on site.
SeedPod	Approve concept design and move to tender of construction contract

8. COMMITTEE, BOARD AND MANAGEMENT

THE ABERDEEN CITY REGION DEAL JOINT COMMITTEE 2019-20

Cllr Jim Gifford, Chairperson of the Joint Committee and Leader of Aberdeenshire Council
Cllr Jenny Laing, Vice Chairperson of the Joint Committee and Co- Leader of Aberdeen City Council
Cllr Douglas Lumsden, Co-Leader of Aberdeen City Council
Sir Ian Wood KT GBE, Chairman, Opportunity North East
Cllr Marie Boulton, Aberdeen City Council
Patrick Machray OBE, Opportunity North East
Cllr Peter Argyle, Aberdeenshire Council
Cllr Richard Thomson, Aberdeenshire Council
Professor Stephen Logan, Opportunity North East

THE ABERDEEN CITY REGION DEAL PROGRAMME BOARD 2019-20

Richard Sweetnam, Chair of the Programme Board and Chief Officer - City Growth, Aberdeen City Council
Stephen Archer, Director of Infrastructure Services, Aberdeenshire Council
Alan Wood, Head of Finance, Aberdeenshire Council
Belinda Miller, Head of Economic Development & Protective Services, Aberdeenshire Council
David Rennie, Head of Partnerships, Scottish Enterprise
Rab Dickson, Director, Nestrans
Jess Anderson, Governance Team Leader, Legal Services, Aberdeen City Council
Jennifer Crow, Chief Executive, Opportunity North East
Sarah Rochester, Communications & Marketing Manager, Aberdeenshire Council
Nicola McIntosh, Oil & Gas Technology Centre Lead
Julie Wood, Programme Manager, Aberdeen City Council

THEME LEADS 2019-20

Wendy Robertson, Digital Lead, Aberdeen City Council
Paul Finch, Transport Lead, Aberdeenshire Council
Nicola McIntosh, Oil & Gas Technology Centre Lead
Lindsay McKenzie, Bio-Therapeutics Hub for Innovation and Food Hub for Innovation Lead, Opportunity North East
Jon Oakley, Aberdeen Harbour
John Lovie, Accountant, Finance, Aberdeenshire Council

9. CONTACTS

For more information visit:

abzdeal.com

investaberdeen.co.uk

To view the Regional Economic Strategy Action Plan visit:

www.bit.ly/RESactionplan

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