

City Chambers  
DUNDEE  
DD1 3BY

12th February, 2021

TO: ALL MEMBERS OF THE TAY  
CITIES REGION JOINT COMMITTEE

Dear Sir/Madam

**TAY CITIES REGION JOINT COMMITTEE**

Will you please attend a MEETING of the **TAY CITIES REGION JOINT COMMITTEE** on Friday, 19th February, 2021 at 10:00am, to be held remotely.

Please submit any apologies to Veronica Thomson, Committee Services Officer or telephone (01382) 434205 or by e-mail [veronica.thomson@dundee.gov.uk](mailto:veronica.thomson@dundee.gov.uk).

Members of the Press or Public wishing to join the meeting should contact Veronica Thomson, Committee Services Officer on telephone (01382) 434205 or by e-mail [veronica.thomson@dundee.gov.uk](mailto:veronica.thomson@dundee.gov.uk) by **12 noon on Wednesday, 17th February, 2021.**

Yours faithfully

ROGER MENNIE

Clerk to the Joint Committee

**1 WELCOME AND APOLOGIES**

**2 DECLARATION OF INTEREST**

Elected Members are reminded that, in terms of the Councillors Code, it is their responsibility to make decisions about whether to declare an interest in any item on this agenda and whether to take part in any discussions or voting.

This will include all interests, whether or not entered on your Register of Interests, which would reasonably be regarded as so significant that they are likely to prejudice your discussion or decision-making.

**3 MINUTE OF MEETING OF 22ND JANUARY, 2021**

(Copy enclosed).

**4 TAY CITIES REGION DEAL**

(Update by Mo Saunders, PMO).

**5 TAY CITIES REGION DEAL – BUSINESS CASES FOR APPROVAL**

**(i) TCD002 DUNDEE AIRPORT (REVENUE) BUSINESS JUSTIFICATION CASE**

(Report No TCRJC 01-2021 enclosed, and presentation by Gregor Hamilton, Dundee City Council)

**(ii) TCD012 ANGUS FUND OUTLINE BUSINESS CASE**

(Report No TCRJC 02-2021 enclosed, and presentation by Vivian Smith, Angus Council and Archie Gibson, Agrico).

**(iii) TCD016 GROWING TAY CITIES BIOMEDICAL CLUSTER FULL BUSINESS CASE**

(Report No TCRJC 03-2021 enclosed, and presentation by Robin Presswood, Dundee City Council and Dr Morag Martin. Professor Mike Ferguson and Professor Graham Houston, University of Dundee)

**6 AOCB**

**7 DATE OF NEXT MEETING**

Friday, 19th March, 2021, to be held remotely.

## **ITEM No ...3.....**

At a MEETING of the **TAY CITIES REGION JOINT COMMITTEE** held remotely on Friday 22nd January, 2021.

Present: -

### Angus Council

Councillor Bill DUFF  
Councillor David FAIRWEATHER  
Councillor Angus MACMILLAN DOUGLAS

### Dundee City Council

Councillor John ALEXANDER  
Councillor Lynne SHORT  
Councillor Richard McCREADY

### Fife Council

Councillor David ROSS  
Councillor Karen MARJORAM  
Councillor Tim BRETT

### Perth & Kinross Council

Councillor Murray LYLE  
Councillor John DUFF  
Councillor Grant LAING

### Non-Elected Members

Michael WRIGHT, Scottish Enterprise  
Gordon MCGUINNESS, Skills Development Scotland  
Councillor Andrew PARROTT, TACTRAN  
Alison HENDERSON, Dundee and Angus Chamber of Commerce  
Nigel SEATON, University of Abertay

### Also Present

Greg COLGAN, Dundee City Council  
Robin PRESSWOOD, Dundee City Council  
Steve GRIMMOND, Fife Council  
Margo WILLIAMSON, Angus Council  
Vivian SMITH, Angus Council  
Mark SPEED, TACTRAN  
Barbara RENTON, Perth and Kinross Council  
David LITTLEJOHN, Perth and Kinross Council  
Alison SEGGIE, Angus Council  
Roger MENNIE, Tay Cities Deal Legal Officer  
Sandy FLIGHT, Dundee City Council  
Mike BOYLE, Tay Cities Deal Comms  
Alan DOBSON, Tay Cities Deal Project Manager  
Lauren HOLLAS, Tay Cities Deal Project Officer  
Mo SAUNDERS, Tay Cities Deal Programme Manager

Councillor John ALEXANDER, in the Chair.

## **I APOLOGIES**

Apologies had been intimated from Ellis Watson, Hayley Mearns, Keith Winter Steve Bell and Karen Reid.

## **II DECLARATION OF INTEREST**

There were no declarations of interest.

## **III MINUTE OF MEETING OF 11TH DECEMBER, 2020**

The minute of meeting of 11th December, 2020 was submitted and approved.

## **IV CHAIR AND VICE CHAIR**

The Joint Committee was required to appoint a Chair from Dundee Council and Vice Chair from Angus Council for 2021/2022.

It was agreed that Councillor John Alexander of Dundee City Council be appointed as Convener and Councillor David Fairweather of Angus Council be appointed as Vice Convener.

## **V TAY CITIES DEAL UPDATE**

A presentation by Programme Manager, Mo Saunders, was given to the Joint Committee outlining the current position with regards to the Tay Cities Deal.

The Deal had been signed by the Partnership and Governments on 17th December, 2020. The financial year 20/21 is the first year of formal delivery. The Deal entered into was secured as a ten-year programme which would greatly assist the delivery of projects.

It was noted that the Partnership had entered into a commitment for a £300m programme which would create over 6000 jobs and could result in over £400m of investment, as supported by the Deal documentation.

The commitment also includes a programme of reporting to commence from January, 2021. Reporting updates will be shared with the Joint Committee at regular intervals along with the Annual Performance Report.

Members were informed that the following Business Cases have secured Government and Management Group approval to move forward to Full Business Case submission:

- TCD005 & TCD006 Rural Angus and Perth and Kinross Highspeed Broadband
- TCD010 JHI Advanced Plant Growth Centre
- TCD011 JHI International Barley Hub
- TCD017 Perth Cultural Transformation (incl Perth City Hall)
- TCD013 cyberQuarter

All Full Business Cases (FBC) will be presented to the Joint Committee for approval in due course.

A brief question and answer session followed after which the Joint Committee thanked Ms Saunders both for her presentation and also for the commitment to achieving the compression of the Deal.

## **VI CYBERQUARTER**

A presentation was given to the Joint Committee by Lorna Edwards, Head of Business Development, Abertay University.

The creation of a cyberQuarter would see the Tay Cities Region established as a centre of applied research and development and knowledge exchange in cybersecurity. And would exploit the University of Abertay's distinctive ethical hacking and offensive cyber security knowledge.

It was envisioned that the cyberQuarter would deliver:-

- Collaborative research and development with the cyber security industry to develop solutions that would improve cyber security amongst small and medium businesses
- Develop ethical hacking and offensive security activities to upskill workers and tackle local and national skill shortages
- Support business to raise awareness of cybersecurity risks and to increase the adoption of new products and services to become more cyber resilient and
- Deliver jobs growth in cybersecurity forma, from start-ups to large corporations, as new products and services were developed and commercialised.

An overview was given of elements of investment for the project and the way in which it would be delivered.

Thereafter, the Chair, on behalf of the Joint Committee, thanked Ms Edwards for the interesting and informative presentation.

## **XI DATE OF NEXT MEETING**

Friday, 19th February, 2021, to be held remotely.

John ALEXANDER, Chair.





**REPORT TO:** TAY CITIES REGION JOINT COMMITTEE – 19 FEBRUARY 2021

**REPORT ON:** TCD002 DUNDEE AIRPORT REVENUE - BUSINESS CASE JUSTIFICATION

**REPORT BY:** ROBIN PRESSWOOD, EXECUTIVE DIRECTOR - CITY DEVELOPMENT, DUNDEE CITY COUNCIL

**REPORT NO:** TCRJC01-2021

### **1.0 PURPOSE OF REPORT**

- 1.1 This report seeks approval of the Business Case Justification (BJC) for Dundee Airport Investment – Revenue (TCD002).

### **2.0 RECOMMENDATIONS**

- 1.2 The Joint Committee is asked to:
- a. Consider this report and the Business Justification Case at Appendix 2;
  - b. Note that the Management Group has approved the Business Justification Case for Dundee Airport Investment – Revenue (TCD002) and recommends it for approval to the Joint Committee.
  - c. Note that an overarching Outline Business Case setting the direction of both revenue and capital elements or the Dundee Airport Project will be brought forward for approval by the Joint Committee as the project is developed.

### **3.0 INTRODUCTION**

- 3.1 Report MG043-280121, which incorporated the Business Justification Case for Dundee Airport Investment - Revenue was approved at the Tay Cities Deal Management Group Meeting of the 28 of January 2021.

- 3.2 The Dundee Airport programme was awarded up to £9.5 million in the Heads of Terms Agreement dated 22 November 2018. The Agreement states:

“Transport Scotland and Highlands and Islands Airport Limited (HIAL) continue to work with local partners to support operations at Dundee Airport. The Tay Cities Partners are determined to enhance air connectivity directly to the region to support economic growth through business and tourism traffic and increase choice of routes to European airports to support international trade and investment opportunities. The Tay Cities Region Deal will support investigation of how to best to maximise existing aviation facilities within the region including consideration of the opportunities arising from the Heathrow expansion. Subject to the approval of relevant business cases, the Scottish Government will invest up to £9.5 million in and around Dundee Airport. This will include consideration of Air Traffic Control modernisation, securing and marketing new routes and enhancing airport facilities to support passenger growth.”

- 3.3 This Business Justification Case relates to revenue support of £600,000 as part of a wider funding package to secure the launch of a new air service between Dundee and London City Airport.
- 3.4 Since 2014, flights between Dundee and London have operated under a Public Service Obligation (PSO). The PSO recognises that the route is vital for the economic development of the Tay Cities region. The PSO allows compensation to be paid to the airline to cover operational losses. The selection of the operator is made by public tender.
- 3.5 Between 2014 and 2020, the route operated between Dundee Airport and London Stansted. However, surveys of stakeholders in the Tay Cities region consistently found a strong preference for the service to operate to a more central London airport. In assessing the tenders received for the operation of the route, the preferred option was the proposal from Loganair to fly to London City.
- 3.6 In addition to the new PSO route to London City Airport, Loganair has launched a new commercial service to Belfast City. These services have the potential to significantly increase passenger numbers utilising Dundee Airport and enhancing a key piece of transport infrastructure, contributing directly and indirectly to the regional economy.
- 3.7 The funding package that supports the PSO comprises contributions from Transport Scotland (Scottish Government), the Department of Transport (UK Government) and Dundee City Council. In addition, Scottish Ministers agreed to the contribution of £600,000 from Tay Cities Deal, subject to the delivery of a compliant business case and confirmation of Dundee City Council's contribution of £400,000.

#### **4.0 DESCRIPTION OF PROJECT**

- 4.1 The Tay Cities Deal project relating to Dundee Airport involves capital investment in improved air traffic management infrastructure as well as modifications to the terminal building and airfield.
- 4.2 The project in its strategic outline case sought revenue funding to support the development of new scheduled routes from Dundee Airport. The Scottish and UK governments have agreed to allocate £600,000 of the total award to revenue spending to be drawn down in 2020/21 and 2021/22 only. This report is about this revenue element only.
- 4.3 Dundee Airport has the potential to play a key role in supporting the economic recovery of the region, providing an important link to London City for local businesses and as an attractor for visitors to the region. Connectivity is critical to the development and success of many of the region's key sectors such as life sciences, digital, manufacturing and tourism.
- 4.4 A number of TCD projects and indeed the wider economy are supported indirectly by the airport and the connectivity it provides at a national and international scale. Ease of access to London, and indeed the wider global marketplace, is often seen as a key enabler/lever for inward investment and an attractor for talent. The perceptions that such a link provides to businesses, investors and talent should not be underestimated. It is this opportunity to support and attract future growth that the key objectives and other projects in the TCD will benefit from.
- 4.5 It is recognised that COVID-19 has impacted on the aviation sector globally, including flights from Dundee Airport. Uncertainty remains over the future of the aviation sector. However, as travel restrictions ease, demand for air services will return and it is important that the Tay Cities Region is well placed to respond and capitalise on new opportunities and markets. The need to ensure that the Dundee to London City route remains viable/deliverable is of importance to the long-term sustainability and growth potential of the airport.

#### **5.0 FINANCIAL IMPLICATIONS**

- 5.1 This project is currently profiled to spend up to £9.5 million, of which £8.9 million is capital and £600,000 is revenue from the Tay Cities Deal funding. The project has provided some



information to both governments with a view to requesting a further allocation of up to a maximum of £3 million from capital to revenue spend. The outcome of this request is pending and still requires to be considered by the partnership. The funding for the current revenue element is anticipated to be drawn down as below.

## 5.2

Year	Y1 – 2020/21	Y2 – 2021/22	TOTAL
Profile Drawdown	£300,000	£300,000	£600,000
Leverage	£200,000	£200,000	£400,000

## 6.0 DECISION PATHWAY

- 6.1 The Scottish and UK Governments have agreed to a different business case process for the Dundee Airport project to enable the revenue element of the project to progress this financial year. The project therefore used the Green Book Business Justification Case (BJC). This is a one step process that governments may authorise where the level of grant and circumstances merit it. The guidance and templates are available on the UK Government website. The BJC is shorter than an OBC and no FBC is needed.
- 6.2 The project has met the decision pathway milestones as set out below and the next steps are also indicated.

Deliverable	Date	Status
Governments' Approval	12/11/2020	Achieved
Thematic Board Recommendation	16/12/2020	Achieved
Management Group Approval	28/01/2021	Achieved
Joint Committee Approval	19/02/2021	

Governments have asked the project to provide an overarching OBC to set out the direction of both revenue and capital elements of the Dundee Airport project combined. The project will in effect become a mini-programme. In common with other programme OBCs, this will not become an FBC but will be brought to both to this meeting and the Joint Committee for approval. The project will then develop an OBC for the capital spend which is profiled to start draw down in 2024/25.

## 6.3 Outcomes and Targets

The outcomes for this element of the programme are:

Targets	Baseline	Target Uplift	Date
Securing new route to London City Airport	0	1	April 2020

**7.0 CONDITIONS**

- 7.1 The Thematic Board and the Management Group have not imposed any conditions but have provided a number of suggestions that may assist the project in the development of the FBC. These are set out in the assurance at Appendix 1.

**8.0 POLICY IMPLICATIONS**

- 8.1 This report itself has not been subject to an assessment of any impacts on Equality and Diversity, Fairness and Poverty and Environment, however the project will carry out the Equalities and Fairer Scotland assessments as part of the development of the capital spend OBC.

**9.0 CONSULTATIONS**

- 9.1 The Tay Cities Region Deal Management Group were consulted in the preparation of this report.

**10.0 BACKGROUND PAPERS**

None

GREGOR HAMILTON - HEAD OF PLANNING AND  
ECONOMIC DEVELOPMENT, DUNDEE CITY  
COUNCIL

DATE: 9 February 2021

**APPENDIX 1**

Project Information	
Project number	TCD 002
Project name	Dundee Airport
Project owner	Gregor Hamilton
Responsible Finance Officer	Gregory Colgan
Management Group Sponsor	Robin Presswood
Award amount under TCD	£9.5 million
Jobs - target number of jobs to be created	320
Leverage to be achieved	£400,000



# Dundee Airport – Revenue Support for Route Development

## 1 INTRODUCTION, SUMMARY, PROJECT OBJECTIVE

Dundee City Council requested £600,000 of support from the Tay Cities Deal (TCD), £300,000 in 2020/21 and 2021/22 to secure the PSO which will deliver a new route from Dundee Airport to London City. On the back of this Loganair propose to launch a commercial service to Belfast City, increasing passenger numbers utilising the airport and enhancing a key piece of transport infrastructure, contributing directly and indirectly to the regional economy.

Dundee City Council has secured a package of support to operate the PSO between Dundee and London City, with funding from Transport Scotland (Scottish Government), the Department of Transport (UK Government) and Dundee City Council. Scottish Ministers have agreed to the contribution of £600,000 from Tay Cities Deal, subject to the delivery of a compliant business case and Dundee City Council's contribution of £400,000, this will complete the funding package required to deliver the PSO. This document provides the Business Case justification required to secure the £600,000 from the Tay Cities Deal.

**Strategic Case:** Economic growth, with a focus on knowledge industries, internationalisation and growing the visitor economy, are the key priorities of the Tay Cities Deal and the associated Tay Cities Economic Strategy 2019-2039. The development of Dundee Airport is supported by both the Deal and the Strategy – recognising the importance of connectivity in economic growth.

**Options Analysis:** four options were considered during the development of the project with 2 forming the basis of this Business Case (in bold):

- **Option 1 - Do nothing – no commercial services operating from Dundee Airport**
- Option 2 – provide a PSO service between Dundee and London Southend
- **Option 3 – provide a PSO service between Dundee and London City with 2 daily rotations**
- Option 4 - provide a PSO service between Dundee and London City with 3 daily rotations

Option 3 was identified as the preferred option, offering the greatest economic benefits to the city:region, with flights direct to **the heart of London**.

### Passenger Numbers

Route	Y1 Passengers	Y2 Passengers
Dundee to London City	24,304	27,414
Dundee to Belfast	9,450	10,000

### Costs

3	Total Project Costs (CAPEX + OPEX)	£1,232,274	£2,467,119	£1,067,705	£4,767,098
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Funding					
4	OPEX funding – TCD	£0	£300,000	£300,000	£600,000
5	Third party funding (OPEX if any)				
	Dundee City Council	£83,274	£200,119	£116,557	£400,000
	Transport Scotland	£375,000	£700,000	£408,000	£1,483,000
	UK Department of Transport	£774,000	£1,267,000	£243,148	£2,284,098
6	<b>Total funding</b>	<b>£1,232,274</b>	<b>£2,467,119</b>	<b>£1,067,705</b>	<b>£4,767,098</b>
7	<b>Shortfall/Overage OPEX (OPEX Costs – Total OPEX Funding)</b>	£0	£0	£0	£0

## 2 STRATEGIC CASE

This project should not be viewed as a standalone project, but the first of several that will support the development and growth of Dundee Airport and sustain its future. Without the investment in the Dundee to London route that this project supports the future of the airport is at risk and the benefits expected as a result of the wider airport investment and the resultant connections will be lost.

An overarching Strategy for the development of the airport, within the framework of the TCD, will be developed shortly, which will cover this Business Case and the plans for the development of the airport's infrastructure – radar/surveillance installation and the development of passenger facilities at the airport – alongside enhanced marketing and route development work.

### 2.1 Context

Dundee City Council, as a local authority, is tasked with delivering a wide range of services, which includes supporting economic growth in its widest sense – including attracting investment and talent, supporting business growth and bringing visitors to the city. Connectivity has a key role to play in achieving those goals.

**Background:** Dundee Airport operates as a regional airport for much of the Tay Cities Region. It has the potential to be an international gateway for the region, enhancing connectivity and playing an important role in helping to optimise the competitiveness and wider benefits derived from established markets and new, planned investment in the Tay Cities Region.

The Airport is managed by Highlands and Islands Airports Ltd through a wholly owned subsidiary, Dundee Airport Ltd. The airport has a Management Board, which Dundee City Council is represented on.

**Strategic Links:** There is a key link between the project and key policies at a local, regional and national level. The key statutory and policy documents that the project supports are summarised as follows:

#### National Policies

- **Scotland's National Transport Strategy 2020 to 2040:** Transport Scotland published their new Strategy in February 2020, covering all forms of transport and all people. The Strategy recognises that transport is crucial for trade and competitiveness within Scotland, across the UK and internationally. Improving gateways, such as airports, supports exporters to grow in existing markets and explore new ones.

The Strategy recognises that to be productive, competitive and successful economically, it is important for Scotland to be well connected. Aviation will continue to play a key role in this, both in international terms and within Scotland and the UK. The Strategy also recognises the importance of regional airlines operating between Scotland and the rest of the UK and the world – particularly to places where rail is not an effective alternative for businesses e.g. Dundee to Belfast.

It is clear that maintaining and developing national and international links at Dundee Airport will help to achieve this.

### Regional Policies

- **TACTRAN Regional Transport Strategy 2015-2036:** The project contributes to a range of policies within the Regional Transport Strategy. This includes: **Economy:** to ensure that transport helps to deliver regional prosperity by improving efficiency, reliability and integration of the movement of goods and people; ensuring good connectivity between TACTRAN's cities and those in the rest of the UK, and with major airports. The Strategy aims to *“support the delivery of economic prosperity in the region through seeking improvements to the networks and services that connect Tayside and Central Scotland to the rest of Scotland, the UK, Europe and globally”*. It also highlights that connections by air are critical in supporting the region's tourism and export related businesses. Dundee Airport's development has the potential to support job creation, new business opportunities and enhance tourism, contributing to regional prosperity.
- **Tay Cities Regional Economic Development Strategy 2019-2039:** The Regional Economic Strategy has a focus on the “place principle” aiming to create more successful places across the region. Transport connectivity is a key aim – which investment in Dundee Airport will help to address. The Strategy recognises one of the key issues and challenges is the limited air services from Dundee airport and the lack of a connection with a major international hub such as Heathrow or Amsterdam and the journey times to and accessibility of Edinburgh and Aberdeen airports. The plan indicates that it will explore opportunities to maximise existing aviation facilities in the Tay Cities Region, including investment in the modernisation of air traffic control, securing and marketing new routes and enhancing airport facilities to support passenger growth.
- **Tay Cities Tourism Strategy 2019-2024:** The Strategy recognises the need to address common challenges such as connectivity and accessibility and making the region a more attractive place to visit – easier access will be a key part of this.

### Links to Tay Cities Deal Projects

A number of TCD projects and indeed the wider economy are supported indirectly by the airport and the connectivity it provides at a national and international scale. Ease of access to London, and indeed the wider global marketplace, is often seen as a key enabler/lever for inward investment and an attractor for talent. The perceptions that such a link provides to businesses, investors and talent should not be underestimated. It is this opportunity to support and attract future growth that the key objectives and other projects in the TCD will benefit from, including:

- **Innovative, International Tay:** one of the key priorities of the Heads of Terms was to support the development of the region's economy as an innovative and outward looking. Having access to a regional airport helps to support this aim.

- **Developing a world class tourism offer:** investing in a wide range of visitor infrastructure, facilities and attractions to ensure the entire region can continue to develop its national and international visitor offer, attracting more visitors to the region, longer stays and increased spend. Having access to a regional airport will support this investment in the wider tourism product.
- **Advanced and sustainable manufacturing:** recognising the importance of technological change in supporting a growing economy, investment in advanced and sustainable manufacturing aims to support the growth of the industrial base. Accessibility is of significant interest to the business sector in considering investment – and Dundee Airport will help to enhance regional accessibility.
- **A Connected Tay:** the Tay Cities Deal identifies a range of transport infrastructure to support accessibility and connectivity, enhancing the customer journey. Dundee Airport complements initiatives such as an Active/Low Carbon Travel Hub at Perth and the Perth Bus and Rail Interchange – all of which will enhance connectivity and support economic growth. The project also supports further developments at Dundee Airport supported by the Tay Cities Deal – through the £8.1M Aviation Academy Project which will potentially see £2,1M invested at Dundee Airport to support pilot training alongside training for air traffic controllers.
- A number of **key projects** named in the Tay Cities Deal will benefit from there being an airport in the city with enhanced routes/flights – in relation to attracting and retaining talent to the region and supporting business/economic growth and making them more attractive to investment. These projects include:
  - Growing the Tayside Biomedical Cluster
  - Development of the International Barley Hub
  - Advanced Plant Growth Centre
  - Just Tech by the Leverhulme Research Institute
  - Abertay University's CyberQuarter
  - St Andrews University's Eden Campus

The Heads of Terms highlights that the Tay Cities Deal will support Dundee Airport to secure and market new routes to support passenger growth – the key aim of this element of the investment. The Heads of Terms stated “The TCD will support the investigation of how best to maximise existing aviation facilities within the region, including consideration of the opportunities arising from the Heathrow expansion. Subject to the approval of relevant business cases the Scottish Government will invest up to £9.5M in and around Dundee airport – including consideration of Air Traffic Control modernisation, securing and marketing new routes and enhancing airport facilities to support passenger growth.”

**Other Local Projects:** there are a range of non-Tay Cities Deal projects and organisations that will also benefit from the enhanced connectivity the new routes create. These include named initiatives such as Michelin Scotland Innovation Parc and un-named or as yet unknown projects such as future inward investment activity and conference/business tourism driven by our strong academic partners –



University of Dundee, Abertay University and the James Hutton Institute. Connectivity is a key driver of investment, both by indigenous companies looking to grow and develop new markets and the potential to attract inward investment to the city:region will also be strengthened by the enhanced connectivity the routes to London City and Belfast creates, and indeed future planned developments at the airport and potential growth in new routes. When providing responses to investment enquiries we are always asked to provide information on connectivity to key locations such as Edinburgh, Glasgow and London.

The opening of V&A Dundee in 2018 put Dundee firmly on the map – attracting 830,000 visitors in its first year – and future proposed developments such as the Eden Project and the 4000 -seater E-Sports Arena – Dundee’s attractions will continue to grow.

## 2.2 Case for Change

### 2.2.1 Spending objectives

The overall programme of investment for Dundee Airport with support from the Tay Cities Deal, comprises of both capital and revenue investment, which will be important to secure the Airport’s future and to deliver key economic objectives – with over £9.5M of support from the Scottish Government identified in the TCD Head of Terms. This Business Case focuses on stage one, the need for revenue support in the first 2 years of the Tay Cities Deal programme, securing the future of the airport in order to ensure the region benefits from the medium to longer term investment planned.

- Short to medium term **revenue support** is required to develop new routes and to market the Airport. The initial revenue funding will support the introduction of the route from Dundee to London City (a new destination in London which meets the needs of the business community who make up the majority of passengers much better than the existing Stansted route) which will also facilitate new route to Belfast (not requiring to use the PSO subsidy). The aim is to better support the public sector in its delivery of economic development activity and to support the growth of the local economy. This business case seeks to address the short-term requirement for support.
- The medium-term support required will be subject to discussions in 2021 when the current PSO ends. It is hoped that the level of subsidy required to operate the PSO will reduce over time when passenger numbers increase, but recognising that support may be required in the medium term for the route (beyond the current 2021 end date). Attracting additional commercial routes and increasing passenger numbers will also reduce the level of subsidy required to operate the airport – costs such as fire safety, baggage handling, desk staff etc. being shared across all flights. These are costs that are required regardless of the number of flights operating and at the present time have to be factored in to the London and Belfast routes only. Additional flights from the airport will see these costs reduced for the London and Belfast flights.
- COVID 19- the tender process for the PSO was concluded prior to the pandemic and clearly this has had an impact on the airline industry globally and Dundee is no protected from this. However, the International Air Transport Association has stated that domestic travel, such as the route between Dundee and London City, has bounced back more quickly than international travel. Loganair have also intimated that the route is performing better than some other regional services. Dundee is a small airport which means that interactions with others can be minimised and feelings of safety in current times are higher. Check in is 30

minutes before the flight and local parking means no need to take multiple mods of transport to reach the airport. This is a key selling point for the airport in current times.

**The Need for Investment - Revenue:** alongside a planned programme of capital investment in Dundee Airport (which also forms part of the Tay Cities Deal programme), Dundee City Council and partners recognise the importance of securing revenue support for route development and marketing of the airport and its routes in order to support the growth of the airport that the capital investment will enable.

**Public Service Obligation:** the funding will support an approved Public Service Obligation (PSO) route between Dundee and London City Airport, as well as the associated development of a new fully commercial connection to Belfast City Airport (not requiring support from the PSO subsidy and therefore the TCD – but would not operate without the London route). A PSO is established to support routes which are vital for the economic development of the region they serve, so in securing a PSO, the role of the London – Dundee link in the development of the economy has already been established/supported. Between 2014 and 2019 a PSO operated between Dundee and London Stansted. At the end of the PSO contract period in October 2019, the desire was to ensure that through the tender process, a new route would be established to a more central London airport that would deliver greater benefit to the local economy. These benefits will be calculated in the number of passengers using the route (aim is to increase passenger numbers).

**Route Development:** Without revenue support the Airport will find it difficult to attract new routes and enhance connectivity. The need to support route development work at regional airports has long been recognised. Funding from the UK and Scottish Governments support a number of Public Service Obligations, including the first public service obligation between Dundee and London Stansted in 2014. Other aviation development initiatives include the UK Government's Regional Air Connectivity Fund which in 2015 saw £56M of funding available for brand new routes for regional airports, which handle fewer than 5M passengers per year. The fund recognised the vital role smaller airports can play in improving connectivity and increasing trade and helping create new jobs in their regions. The fund aimed to support regional airports and airlines to expand their routes, to generate UK growth and jobs whilst boosting trade links with countries all over the world.

Airports are considered to be an important factor in the development of a regional economy. Studies have identified the impact of small airports on economic development with good transport connectivity a facilitator that allows the economic potential of an area to be realised. Regional airports allow communities to be part of the national economic and social fabric, providing connections within the UK and to Europe and beyond. Regional airports can act as catalysts for regional economic growth, enhancing the performance of business sectors and facilitating inward investment. Airports also support businesses to export and in bound tourism in an area.

The aim of a route development fund, for any airport, is threefold:

- To enable the airport to engage directly with airlines through business development work e.g. marketing of the airport and working with airlines to secure additional routes from the airport
- To support airlines to develop new services by sharing risk during the start-up period of a route and for smaller airports to meet the needs of their communities – citizens and businesses
- To enable airports/airlines to market new routes during the start-up phase

Given the Tay Cities region's ambition to be one of the most productive, knowledge-led economies in Europe and to develop a world class tourism offer, accessibility is key. Proposals to see the region grow as a tourism destination will only be enhanced by greater access to the region, including by air, through enhanced airport linkages with other UK airports and European hubs. The support sought for the new routes from Dundee Airport will help to achieve this ambition.

A recent paper from the University of West London (Marketisation of Air Transportation PSOs, published in New Vistas Vol 5 No.2) undertook a study of three PSOs from peripheral communities with PSO routes to London, including Dundee Airport's route to London Stansted. The study identified that the benefits of a well-connected economy are crucial to a number of growth opportunities, including Foreign Direct Investment, attracting tourists and increasing market reach. The focus of many regional economic strategies is now place-based and inferior connectivity makes external markets, labour pools and collaborators less accessible and the place less attractive. Those interviewed as part of the study described how important the air service to London was for businesses in the local area, as a tool to dispel the misconceptions that clients hold about a business competence based on its peripherality. Investors and businesses exploring new locations begin with a low tolerance of poor connectivity and this can hinder the region as a choice of business destination. The report also highlights the need for a route to be the highest attainable and not a "least bad" option, which supports the aspiration to secure a route between Dundee and London City Airport as opposed to Stansted – supporting the development goals and not relying only on the budget that funding partners can afford.

Economic activity drives connectivity and demand and connectivity facilitates economic activity – they sustain each other.

Having the key Dundee to London route is critical to the on-going and future development of Dundee Airport. Without such investment, the Airport will stagnate and the potential to attract new airlines and routes will be severely limited. The new Dundee to London City route will be a catalyst to attract other routes to the city.

**Projects outcomes/outputs:** The project seeks to deliver a range of qualitative and quantitative benefits for the region. This includes:

- To secure new routes from Dundee airport to both London City and Belfast (2 new routes secured)
- Support and increase passenger numbers using the Airport in the short term (see a growth in passenger numbers by October 2021 – baseline may have to alter as a result of COVID19).
- Maintain the key route to London required to support future growth plans and therefore act as the catalyst for the wider Airport regeneration project which aims to:
  - increase passenger numbers using the airport to at least 110,000 passengers per annum by 2030 (Year 10 – currently in the region of 23,000)
  - increase the number of routes on offer from the Airport, including to UK airports and European hubs by 2030 (Year 10) – with the potential for 16 to 22 movements per day (currently 6 per day in and out)
- Raising the profile of the region as a destination for visitors and business, enhanced perceptions – with access to key hub airports facilitating travel

- Support for key tourism and growth sector initiatives

Loganair provided the following planned passenger numbers to London City and Belfast. As outlined in section 2.2.4.

In July 2019, in advance of the PSO tender return, Dundee and Angus Chamber of Commerce undertook a survey of local businesses, to identify the preferred London airport for business travellers. The Chamber of Commerce were keen to see the Dundee to London route return to London City rather than London Stansted – identified as a better option for business travellers. The survey recognised that “the experience of flying in and out of Dundee’s airport is hugely convenient, very customer friendly and one which we must support and retain.”

The results of the survey found London City was the overwhelming preference for businesses in the region, with 71% saying London City was their preferred option, who need to be able to do business in London as much as for their customers coming to Scotland. The business community needs a good, reliable service which will, with quick connections from landing to their destination, allow them to be in the centre of London for close to 9am and give them a full day there before having to make their way home. No one expressed London Southend (one of the other potential options) as a route option.

Those responding to the survey had travelled around 350 times between Dundee Airport and London in the previous 2 years and that their customers had used a London to Scotland route at least 500 times, however, only 38% had used the Dundee Airport route.

The business community recognises that “having an airport so close to the centre of the Tay Cities Region is a key benefit to businesses, inward investors and to attracting visitors to come and enjoy the many attractions the region has” and that “businesses are calling out for more routes in and out of Dundee – we need to ensure that not only do we have a strong and well-used London connection, but that we look to build the use of the airport by encouraging carriers to bring other routes into the frame.”

82% of the businesses surveyed said that they had used the previous Dundee to London City route (ScotAirways/Cityjet operated a 4x a day rotation from Dundee Airport to London City, which saw passenger numbers through the airport rise to 75,000 per annum and showing the potential of the route and Dundee Airport to achieve the target outcomes of 110,000 passengers by Year 10 – 2030). The Amsterdam route was also proving to be very popular, before Flybe pulled out of the airport over concerns over radar/surveillance – with over 15,000 passengers in the 5.5 months the flight operated.

Belfast was chosen by Loganair as a second route from the city for a number of reasons:

- It addresses a route that is difficult to undertake by train or road
- There has historically been (and continues to be) a high number of students from Northern Ireland at both of Dundee’s universities. Bringing them, friends and family to the city is key – and an air route will be an added attractor of future students and talent to the city.

### **2.2.2 Existing Arrangements**

Dundee Airport is managed by Highlands and Islands Airports Ltd as part of their regional portfolio of airports. The Chief Executive of Dundee City Council is a member of the Board Dundee Airport Ltd.

Currently the airport offers a range of services that support the regional economy and the proposed project will see this offer enhanced further:

- **Commercial Flights:** LoganAir operated a Public Service Obligation route to London Stansted between 2014 and March 2020. London Stansted is not an ideal location for business travelers (who tend to make up the majority of passengers) and as a consequence passenger numbers were relatively static. The route was suspended due to Covid-19, immediately prior to the service moving to London City Airport. The service recommenced in July 2020. Dundee Airport has in the past had connections to Belfast, Manchester, Birmingham and Amsterdam. The Airport has the potential to develop new short haul routes to both UK destinations and EU hub airports. Loganair intend to launch a commercial route between Dundee and Belfast City Airport in September 2020.
- **Tayside Aviation:** delivering general aviation training and an RAF Flight School, with the potential to support the work of the proposed (another Outline Business Case) Aviation Academy for Scotland.
- **General Aviation:** the Airport regularly hosts private flights. Looking ahead, capital funding through the TCD aims to increase the number of private flights operating in and out of the airport.

The Airport facilities currently have the capacity to operate more flights per day and engage more passengers (up to 50,000 p.a.) However, capital investment in facilities will be required to enable the airport to have a significantly higher throughput of both aircraft and passengers. The capital investment will form a separate Business Case moving forward.

### **2.2.3 Business Needs**

**Current Challenges:** The airport currently handles around 22,000 passengers per annum, with average passenger numbers of 27,393 between 2013 and 2016 (this is higher due to the 38,000 passengers during 2016 when the Amsterdam flight was operational). Flybe operated 5x week rotation to Amsterdam between May and November 2016, which was well used, with ticket sales at almost 100% to February 2017 – over 15,000 people used the route in (on a plane with a capacity of 78 passengers). Over 90% of the passengers were leisure travellers – which is a significantly different dynamic from the London flight at 75% business travellers. But it shows that there is a wider market for the airport than just business use.

However, Flybe withdrew from the route in November 2016 over pilot concerns about radar/surveillance facilities at the airport, but its popularity showed that there was passenger interest in the region for local flights to key destinations, and many of the passengers were leisure rather than business passengers. Enhanced surveillance (that will be delivered in the capital element of the TCD bid) has the potential to attract additional airlines and new routes.

In the past Dundee Airport had scheduled routes to Birmingham, Manchester and Belfast, as well as Amsterdam. These routes stopped operating for a number of reasons, airlines no longer operating, takeover of airlines by other operators, high costs of fuel v passenger numbers and the issues with radar/surveillance cited above.

The planned development of Dundee Airport, and indeed Highlands and Islands Airports Limited's proposal to establish an integrated Air Traffic Management System at Inverness Airport, will address the physical challenges experienced when seeking to attract new routes/airlines to the airport. The

proposed marketing plans and route development work will support the further development of the airport – and raise awareness amongst local passengers and those at the airport’s destinations of the airport and the benefits of flying to Dundee. This work will continue during the development of the Full Business Case for the capital works at Dundee Airport, with the Council recognising the challenges the current pandemic places on air travel, worldwide.

Regional airports with limited passenger traffic must meet all the fixed costs and overheads associated with meeting core safety and security requirements, imposing a significant financial burden that cannot be passed on in full to commercial operators at current traffic levels. This means that the airport operates at financial loss each year. Increasing the number of airlines and passengers using the airport will help to reduce that loss.

The potential for Dundee to service London City (and in the future London Heathrow – an MOU having been signed between Heathrow Airport and Dundee City Council to prioritise a route to Heathrow if the third runway is built) is an important one and the recent tendering for a new PSO route has secured slots to London City. This has the potential to increase the number of passengers using the flight – as more businesses will seek to fly to London City than to Stansted. Indeed, before COVID 19 grounded all flights, the bookings for the new Dundee to London City route were looking extremely positive.

A study commissioned by TACTRAN, the Tayside and Central Regional Transport Partnership, undertaken by York Aviation in 2019 found that in 2018, nearly 2.8 million commercial air passengers travelled to or from the Tay Cities Region, of which, over 600,000 passengers travelled for business purposes and over 2.1 million passengers travelled for leisure. Over half of all passengers who travelled to or from the Tay Cities Region were short haul passengers, with domestic passengers accounting for nearly a third. The remaining passengers travelled to or from long haul destinations.

Edinburgh Airport is the most used airport for commercial air passengers travelling to or from the Tay Cities Region. In 2018, 79% of Tay Cities Region passengers used Edinburgh Airport for their journey. Glasgow Airport and Aberdeen Airport followed as the most popular airports, respectively handling 14% and 3% of all Tay Cities Region passengers. Dundee Airport, the only airport within the Tay Cities Region handling scheduled commercial services, handled around 0.7% of all Tay Cities Region passengers.

In order for the Airport to support the economic ambitions of the region there is a need to increase the number of activities at the Airport which will help it reach a critical mass where it can become more financially viable. The Airport has the potential to offer a wide range of additional services, over and above those already delivered:

- **Additional commercial services:** The Airport has the potential to develop a host of new short haul routes to both UK destinations and EU hub airports. Capital investment through the Tay Cities Deal is key to attracting a wider range of airlines to fly from the airport.
- **Charter services:** previous charter flights operating successfully between Dundee and Jersey, potential to redevelop this option
- **Development of the Aviation Academy for Scotland** as part of the Tay Cities Deal.

The second phase of the Tay Cities Deal investment in the airport includes capital investment in a range of infrastructure to make sure that the airport more attractive to the range of services outlined above and to passengers. This will include investment in radar and surveillance equipment and the

further development of the passenger terminal and its facilities. This work will be subject to another Business Case.

COVID 19 will have a significant impact on passenger numbers for 2020/21, with flights having stopped between March and July 2020. It is likely that Dundee Airport, as with all airports, will see reduced passenger numbers throughout the rest of the year as peoples' travel is curtailed and there is a need to reassure travelers that it is safe. The risk that flights might not resume for a significant period has been overcome and Loganair announced that they would begin flying again on the 6<sup>th</sup> of July. The Belfast flight had been due to start in the spring – it is now flying from the 18<sup>th</sup> of September.

The International Air Travel Association has indicated that it doesn't think that air traffic will return to pre-COVID levels until perhaps 2024, however, it also recognises that domestic travel has and will continue to rebound more quickly than international travel.

Whilst challenges will remain for Dundee Airport as a result of COVID, it is positive news for now that the flights have restarted. The on-going risks from COVID need to be monitored – recognising that passenger numbers will be significantly lower and that flights may be suspended again if travel restrictions are imposed once more.

**Market Failure:** the Scottish Government, Dundee City Council and HIAL recognise the need for public sector investment in the Airport. This is as a result of a general market failure of the private sector to provide or invest in small scale airports and the need to support routes as they start up. Private sector engagement in airports is generally only achieved at large scale airports such as Edinburgh where profit margins are real and achievable.

The market failure facing many regional airports such as Dundee relates to the private sector failing to invest in small scale airports with limited profit margins. Supporting development at the Airport, and in particular the key route to London, will help to encourage other providers to look at the airport as a potential route. For example, it has been proven (by the increase in passenger numbers brought about by the Dundee-Amsterdam flight) that increased passenger numbers can help to make the Airport more sustainable.

An additional market failure relates directly to the delivery and **development of new routes**, the focus of this business case. Starting new routes is a risky and potentially expensive activity for airlines and it is important to provide support where appropriate. The market failure linked to airlines not providing new routes without support is even more prevalent when working with regional airports, rather than those serving larger cities/catchments.

The paper from the University of West London identified that a PSO can correct transportation market failures by supporting services to peripheral regions. It also identified that access to transport connectivity is crucial to economic growth, but access to air connectivity is not evenly distributed across the country and this in itself represents a market failure.

**Investment Objectives:** The Dundee Airport project has been developed with a range of stakeholders – HIAL, Dundee City Council, TACTRAN, Scottish Enterprise and Transport Scotland, with work being undertaken by organisations and consultants engaged to identify the best way forward for the development of air links to and from the region.

The study commissioned by Scottish Enterprise and undertaken by York Aviation (Dundee Airport Economic Impact Study, May 2017) outlines the potential for the Airport and has fed into the overall programme for the development of Dundee Airport. A further study by York Aviation was

commissioned by TACTRAN in 2019 to support the preparation of the business case for investment in Dundee Airport through the Tay Cities Deal.

Dundee Airport requires phased investment and support across both capital and revenue activities:

- **Revenue support** to the existing PSO route to London City Airport. Securing the PSO has enabled the proposed launch of a service to Belfast City Airport in September 2020. Looking ahead, further revenue support may be required to attract and develop further new routes.
- **Capital investment** to upgrade operational activities and passenger handling, including, in the short term, surveillance technology and in the longer term, passenger facilities such as terminal halls and check-in; car parking; customs and immigration; airport stands and gates and runways.

The overall aim of the project and the main benefits include:

- **Improve Throughput:** increased route usage and passenger numbers – currently an average of 22,000 visitors use the airport per annum and the aim of the TCD project is to increase this to upwards of 110,000. The project can increase throughput by creating additional commercial services; increasing the number of charter flights using the airport; working with the Tayside Aviation Academy (TCD project). Growing the number of daily movements will be a key aim of the project. Revenue support through the Tay Cities Deal is part of the funding package to secure change to London City alongside a new route to Belfast.
- **Reduce Cost:** increasing passenger numbers will reduce the financial losses/subsidies at the Airport whilst maintain vital links and a Public Service Obligation route. The potential exists to reduce costs and make the Airport's commercial operation more viable whilst also enhancing connectivity. This could also see a reduction in necessary subsidies.
- **Improve Quality:** enhancing service through improved facilities for both airlines and passengers with improved radar/surveillance for airlines and better visitor facilities for passengers through the redevelopment of the terminal.

**Business Needs:** as outlined above, the airport in Dundee needs investment to help it address key challenges:

- the need to provide all the safety services of an operational airport means that low passenger numbers means higher losses per passenger;
- the surveillance systems, whilst safe/legal do not meet the requirements of all airlines
- the passenger facilities and airline facilities need improved
- there is a need to enhance the offer from the airport – attracting new routes – to increase passenger numbers



### 2.2.4 Main Benefits

**Projects outcomes/outputs and investment objectives:** The project seeks to deliver a range of qualitative and quantitative benefits for the region that will be supported by the project scope outlined above. This includes:

- Securing the route from Dundee to London City which will ensure the future for the airport as the wider regeneration elements are developed. As part of the tender submission for the PSO in 2019, Loganair anticipated passenger numbers for the PSO as follows:
  - November 2019-October 2020 - 24,304 (based on service operating to London Stansted until March 2020 and London City from April 2020)
  - November 2020 to October 2021 – 27,414
- Securing a new route from Dundee to Belfast.
- Working towards increasing passenger numbers using the airport to at least 110,000 passengers per annum – following both capital and revenue investment
- Increasing the number of routes on offer from the airport, including to UK airports and European hubs – with the potential for 16 to 22 movements per day
- Raising the profile of the region as a destination for visitors and business, enhanced perceptions – with access to key hub airports facilitating travel – increasing the number of visitors to the region and supporting business growth
- An additional £6.1M of GVA and 320 jobs – driven by growth in commercial air transport with the majority coming from operational impacts. The gross impacts of the airport grow substantially in GVA terms in all scenarios – this figure is based on Scenario 1 (outlined in the economic case and identified as the intermediate scope), driven by growth in commercial services.
- Support for key tourism and growth sector initiatives being supported by the wider Tay Cities Deal programme.

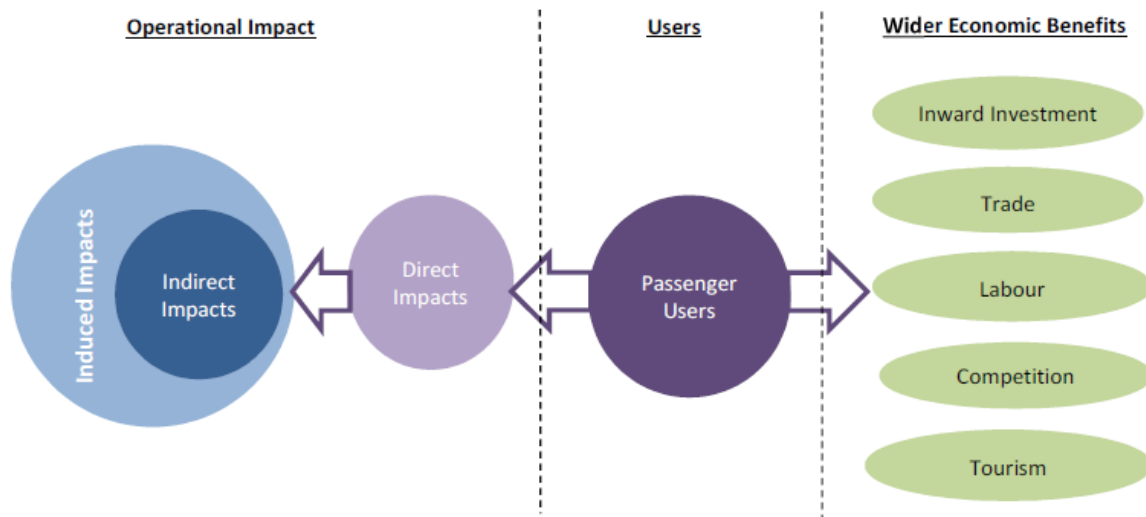
**Table 1: Projected passenger numbers at the time of the PSO tender**

Route	Y1	Y2	Total
Dundee to London City	24,304	27,414	51,718
Dundee to Belfast	9,450	10,000	19,450
TOTAL	33,754	37,414	71,168

The last 12 months saw passenger numbers of 22,000 on the Dundee to London Stansted Route. Whilst the proposed increase in passenger numbers may seem modest, they represent a 10% increase in year 1 and 24.6% increase in year 2 on the Dundee-London route. With the addition of the Belfast flight the increase in passenger numbers is 53.4% in Year 1 and 76.6% in Year 2. The London and Belfast routes will help move towards the 110,000 passengers per annum by Year 10.

The impact of airports on the economy goes beyond the direct (GVA) and indirect operational effects. The connectivity that is provided enables the fast, efficient movement of people and goods, which

enables trade, helps attract inward investment, facilitates flows of knowledge and labour, and brings visitors and their expenditure to an area, driving prosperity in the long term.



Source: York Aviation

Currently airport supports around £6.2M in GVA in the Tay Cities Region and around 170 jobs.

### 2.2.5 Main Risks

Key risks to the project (both revenue and capital elements) include:

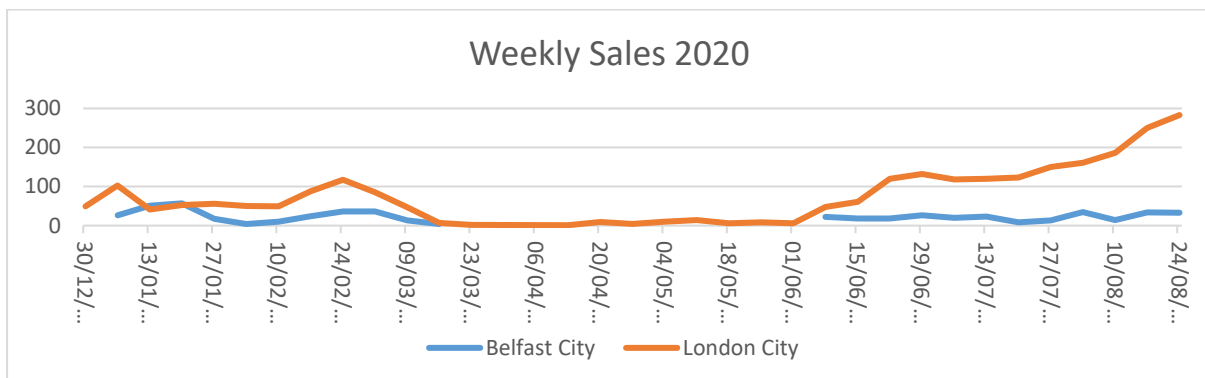
- Airline risks – collapse of the airline offering the PSO and additional routes
- Failure to attract additional routes
- Sustainability agenda – impact of the climate emergency

Risk	Mitigation	Impact	Likelihood
COVID 19 meaning that no flights operate in 2020/21	Support Loganair to deliver from Dundee as soon as possible. Contract payments continued to be paid to airline whilst service was suspended	High	Risk minimised by time – Loganair started flying again on the 6 <sup>th</sup> of July
COVID 19 meaning that the number of passengers remains low during 2020/21	Promote the route, support Loganair in promoting safe flying and airport conditions	Medium	Medium – however, PSO will continue to operate
COVID 19 leads to future lockdowns and stopping flights	Limited potential to mitigate against this. Dependent on too many extenuating factors to control	High	Medium to High Risk
Airline Collapse due to the impact of COVID 19	Providing the PSO which supports the Dundee to London service	High	Low Risk
Failure to achieve projected passenger numbers using PSO	Marketing of PSO to key business users in Dundee and London. Promotion of route to leisure travellers.	Medium	Medium – as a consequence of COVID 19 – Loganair have stated that the service

			is performing well compared to other regional routes but still below target
Airline decision not to launch service to Belfast City Airport	Close dialogue with airline and support for marketing of route	Low	Medium
Failure to develop/attract new routes	Secure funding from the TCD to deliver route development work and marketing support at Dundee Airport. Develop the airport and make it more attractive to potential customers and airlines	High	Medium to High Risk Board of HIAL, DAL
Climate Emergency	Work with airlines as they focus on decarbonising the sector Work to secure net zero status for the airport – 3 regional airports in Sweden have achieved this target – learn from best practice	High	Medium to High Risk Board of HIAL, DAL, DCC
Airport loses London link	Dundee Airport loses the commercial routes operating, jeopardising the future development of the airport	High	Sustaining and growing the London route is seen as key to securing the future of the airport

### Post-Covid Bookings

Loganair have provided stats for recent bookings and are seeing an increase in sales from Dundee to London City, but not yet reaching the 400 they had planned. However, sales from Dundee Airport have bounced back quicker than other regional routes they serve, including to London.



Note: the Belfast route only started on the 18<sup>th</sup> of September and the London route restarted on the 6<sup>th</sup> of July.

### 2.2.6 Constraints

No direct constraints have been placed on the investment of revenue for route development over the next 2 years.

### 2.2.7 Dependencies

None

### 3. OPTIONS ANALYSIS

This options analysis focuses solely on the revenue aspects of the airport development project – enhancing routes on offer from the airport, with the aim of attracting new passengers.

#### 3.1 Critical Success Factors

The critical success factors relate to the revenue project only.

Securing the PSO to London City Airport is a key success factor for the delivery of this project and the future development of Dundee Airport. It secures commercial services at the Airport in the short-term at least and further route development work can build upon the continued use of the airport by commercial operators.

**Affordability and Achievability:** the proposed project secures funding that makes the project achievable and affordable. The project has pulled together a mixed package of funding which support the development of the PSO route between Dundee and London City – this includes funding from the UK Government via the Department for Transport; Scottish Government funding via Transport Scotland, Dundee City Council and the revenue support from the Tay Cities Deal. The support of Dundee City Council, Transport Scotland, Department for Transport and the Tay Cities Deal makes the offer both affordable and achievable.

Long List: Four options were considered:

- Option 1 - Do nothing
- Option 2 - Support the development of the PSO route to London Southend with two rotations on weekdays and one on a Sunday. Attract a new route to Belfast.
- Option 3 – Support the development of the PSO route to London City with 2 rotations on week days and one on a Sunday. Attract a new route to Belfast.
- Option 4 – Support the development of the PSO route to London City with 3 rotations on weekdays and one on a Sunday. Attract a new route to Belfast.

Following the initial analysis of the 4 options and the receipt of tenders for the routes, the short-list of options was developed. This includes:

- Option 1 – No funding from TCD, Dundee City Council unable to secure additional support – PSO route between Dundee and London stops – no commercial flights from Dundee Airport
- Option 2 - Support the development of the PSO route to London City with 2 rotations on week days and one on a Sunday. Attract a new route to Belfast.

#### Overview of the Options:

**Option 1:** Failing to secure support for the London routes through the TCD would lead to a cessation of all commercial traffic at Dundee Airport, leaving it open only for general aviation activity (leisure flights, flight training and some private charters). This would have a detrimental effect on the region's economy and would impact on key elements of the Tay Cities Regional Economic Development Plan – which identifies connectivity as a key driver for economic growth. The lack of commercial flights from

Dundee Airport could also affect the region's ability to address the following key objectives outlined in the Regional Economic Strategy 2019-2029:

- Key business support – encouraging growth and investment will be easier with enhanced connectivity
- Growing tourism sector – enhanced connectivity is also key to the visitor market

**Option 2:** Flying to London City means that the journey time at both ends is minimised, making the route far more convenient for many passengers. A day return allows passengers 8 hours and 45 minutes in the city as opposed to the 7 hours and 16 minutes a flight to London Southend or indeed Stansted. This option also connects to a host of Loganair partners flying to other destinations from London City giving passengers a range of new destinations conveniently accessible from Dundee. The frequency of this service also affords the opportunity for the aircraft to fly the proposed commercial service to Belfast City Airport.

**Table 2 - Time in London by Route**

	<b>London City</b>	<b>London Southend</b>
Depart Dundee Airport	06:50	06:50
Arrive London Airport	08:40	08:40
Catch Train to Zone 1	08:54	09:00
Arrive Zone 1	09:15	09:53
Leave Zone 1	18:00	17:09
Arrive at Gate	18:45	19:00
Depart London Airport	19:15	19:30
Arrive Dundee	20:55	20:45
Time in London	8 hrs 45 mins	7 hrs 16 mins

It is recognised that other travel options are available from Dundee to London e.g. train, bus, driving or going to Edinburgh to fly to London, but none provide the quick, easy access flying from Dundee Airport to London City offers. This is of particular interest to business travellers who are often looking at the most time efficient method of travel (which can also be the most cost effective if the cost of staff time is taken in account).

Dundee Airport and Dundee City Council are keen to encourage people to use the route from Dundee to London City as opposed to using multiple forms of transport to enable them to fly from Edinburgh e.g. bus/train/car followed by a flight – to help reduce carbon footprint etc.

**Business Travellers:** the most cost-effective route for a business traveller (or indeed a leisure traveller) is not always the cheapest – time taken to complete the journey, the number of changes required etc. must also be considered when identifying the most cost-effective route. For a local company, flying from Dundee Airport may be the quickest way to get to London, or for their customers to get to them.

Flying from Dundee airport on the 6:50 flight, generally means arriving at the airport by 6:20 - a shorter check in time than at larger airports such as Edinburgh, catching the flight and being in the centre of London by approximately 915am – 3 hours. Flying from Edinburgh on the first flight means driving (the first train does not leave Dundee for Edinburgh until 6:02 arriving at Edinburgh Airport at 07:47 meaning the first flight that someone could catch to London City (currently) would be 08:50 arriving after 10:00 – and likely not being in the centre of London until 11. This would mean a potential journey

time of 5 hours as opposed to 3. The convenience factor for business travellers should not be underestimated when considering the most advantageous routes.

**Chosen Option:** this investment is to provide the revenue support to Dundee Airport – and the chosen option is Option 2 - Secure revenue support for route development and successfully deliver the PSO tender to London City, with an associated service to Belfast (not part of the PSO). The move to London City will also see Loganair using a larger plane on the route, increasing passenger capacity from 33 to 48.

In 2011, Dundee Airport handled 75,000 passengers a year when Scotairways flew 4 rotations a day between Dundee and London City, giving an insight into the capacity and demand and highlighting that London City airport is a more popular destination than London Stansted or Southend. The reduction in travel time at both ends of the journey is a key attractor to both business and leisure passengers. The ability for passengers to transit easily to other destinations through London City adds further appeal. The tender document highlighted Loganair's ambition to demonstrate a pro-active and positive approach to continuing to deliver improvements in their service from Dundee through the transfer of services to London City (and on-going discussions with Heathrow over opportunities that might arise from a third runway), which is a major development of the route and considered highly advantageous in competing against the growing low-cost carrier competition from Edinburgh to London. London City provides greater connection opportunities over any other slot available London airport (Southend, Stansted, Luton) and access to Loganair's code share partners KLM and British Airways.

**Table 3: Summary of Options Appraisals**

<b>OPTION 1</b>	<b>BUSINESS AS USUAL (BAU) – Do Nothing</b>
<b>Net Costs</b>	£0
<b>Advantages*</b>	None
<b>Disadvantages*</b>	<ul style="list-style-type: none"> <li>• The airport fails to deliver any commercial flights – the PSO is a key driver and attractor of other routes to the airport.</li> <li>• The airport fails to act as a catalyst of economic growth.</li> <li>• Commercial passenger numbers would be zero</li> <li>• The costs of delivering any services from the airport would increase.</li> </ul>
<b>Conclusion</b>	This would fail to deliver any of the critical success factors outlined.

<b>OPTION 2</b>	<b>Secure revenue support for route development and successfully deliver the PSO tender between Dundee and London City Airport</b>
<b>Net Costs</b>	£4,767,098
<b>Advantages*</b>	<ul style="list-style-type: none"> <li>• Secures 2 new routes from Dundee Airport- London City and Belfast and potential to increase passenger numbers.</li> <li>• The airport continues to support economic growth in the region, with its enhanced connectivity</li> <li>• Passenger numbers anticipated to grow to 27,414 in year 2 of PSO contract</li> </ul>

	<ul style="list-style-type: none"> <li>Subsidy per annum decreasing from £2,579,698 in year 1 to £2,187,400 in year 2 of PSO contract.</li> </ul>
<b>Disadvantages*</b>	The cost. This option is the only option capable of delivering the proposed benefits.
<b>Conclusion</b>	The delivery of Option 2 will enable the main benefits to be realised.

### 3.3 Recommended option

Option 2 is the recommended option – it enables Dundee and the surrounding region to access the best possible service to London – one that meets the needs of those most likely to use the service – the business community and tourists looking for a central airport to access London.

## 4. PROCUREMENT ROUTE

Dundee City Council has undertaken the approved procurement route for a Public Sector Obligation twice daily service between Dundee and London (classified as any airport within a 60-minute journey time to central London) and are the “purchaser” of the service. The service was advertised on the official European public contract opportunities website (TED) and was delivered as a single stage (open) procedure, proceeding as a single-stage competition open to all interested parties meeting the purchases minimum qualifications requirements. (Advert number – Services-245488-2019).

## 5. FUNDING AND AFFORDABILITY

A package of funding has been secured that enabled Dundee City Council to award the contract. In addition to support from the Council for the route, contributions from Department of Transport Scotland (UK Government) and Transport Scotland (Scottish Government) have been agreed. The Scottish Government has also agreed in principle to a funding contribution of £600,000 from the Tay Cities Deal which will finalise the funding package required to deliver the project. This agreement is subject to agreement of a compliant business case (this document) and confirmation of Dundee City Council’s contribution towards the cost of the PSO.

**Table 4: Cost and Funding for the Recommended Option**

Lifespan		31/10/19 to 31/03/2020	2020/21	2021/22	TOTAL
<b>Capital Expenditure</b>		N/A	N/A	N/A	
<b>Operating Expenditure</b>					
1	Other Operating costs	£1,232,274	£2,467,119	£1,067,705	£4,767,098
2	<b>Total Operating costs (OPEX)</b>	£1,232,274	£2,467,119	£1,067,705	£4,767,098
<b>Total Expenditure</b>					
3	<b>Total Project Costs (CAPEX + OPEX)</b>	£1,232,274	£2,467,119	£1,067,705	£4,767,098
<b>Funding</b>					
4	OPEX funding – TCD	£0	£300,000	£300,000	£600,000
5	Third party funding (OPEX if any)				
	Dundee City Council	£83,274	£200,119	£116,557	£400,000
	Transport Scotland	£375,000	£700,000	£408,000	£1,483,000
	UK Department of Transport	£774,000	£1,267,000	£243,148	£2,284,098
6	<b>Total funding</b>	£1,232,274	£2,467,119	£1,067,705	£4,767,098
7	<b>Shortfall/Overage OPEX (OPEX Costs – Total OPEX Funding)</b>	£0	£0	£0	£0

## Revenue Generation (if applicable)

**Table 5: Revenue Projections for the Recommended Option**

Recommended Option		31/10/19 to 31/03/2020	2020/21	2021/22
Revenues				
1	Sales and other Revenue	N/A	N/A	N/A

### 5. DELIVERY ARRANGEMENTS

Dundee City Council is awarding body for the PSO contract and will monitor and manage its implementation, working with the chosen airline and the Board of Dundee Airport.

**Contract Regulations:** the Invitation to Tender and the signed contract outline all the regulations and requirements for delivering the contract including, grant conditions, repayment of the grant, termination or extension of the contract, reporting procedures etc.

**Grant Payment:** Dundee City Council will make a provisional payment of the grant prior to the end of the financial year, either as a lump sum or as a series of regularly agreed payments. The Conditions of Contract for the PSO ensure that the amount of subsidy paid in each financial year shall be the lesser amount of the deficit which Loganair incurs in operating the service to London and the sum specified in the tender. In the event that the airline does not incur any deficit in respect of the PSO, no subsidy will be paid. Shortly after the end of the financial year the airline will provide a reconciliation of the costs for the year – the costs, income and level of grant – to enable a calculation to be undertaken that works out how much, if any of the grant is to be repaid. The airline would be required to make the repayment within 21 working days.

**Monitoring:** Dundee City Council will get regular reports from the airline/airport about passenger numbers, overall performance and planned marketing etc. The Council and the airline will also meet quarterly to discuss, assess and support performance. Dundee City Council will report to the airport's management board. Dundee City Council are represented on the airport's board and HIAL by the Chief Executive, David Martin.

**Community Benefits:** The Conditions of Contract also set out Community Benefits requirements in relation to fair work practices and information provided by the airline is monitored during the contract term.

**Changes to Activity:** The airline may only make changes to the capacity, frequency, and nature of the PSO with the prior written consent of Dundee City Council.





**REPORT TO:** TAY CITIES REGION JOINT COMMITTEE – 19 FEBRUARY 2021

**REPORT ON:** TCD012 THE ANGUS FUND – OUTLINE BUSINESS CASE

**REPORT BY:** VIVIEN SMITH – DIRECTOR OF STRATEGIC POLICY, TRANSFORMATION & PUBLIC SECTOR REFORM, ANGUS COUNCIL

**REPORT NO:** TCRJC2-2021

## **1.0 PURPOSE OF REPORT**

1.1 This report seeks approval of the Outline Business Case (OBC) for TCD012 The Angus Fund.

## **2.0 RECOMMENDATIONS**

2.1 The Joint Committee is asked to:

- a. Consider this report and the OBC for TCD012 The Angus Fund attached at Appendix 2.
- b. Note that the Management Group has approved the OBC for TCD012 The Angus Fund and recommends it for approval to the Joint Committee.
- c. Note that further Outline and Final Business Cases will be brought forward for approval by the Joint Committee as the projects within the overarching OBC are developed.

## **3.0 INTRODUCTION**

3.1 This project was awarded up to £26.5 million in capital from the Tay Cities Deal funding in the Heads of Terms Agreement dated 22 November 2018. The key project information is at Appendix 1. This is the first version of the OBC for the fund and as such indicates the broad intention for use of the Angus Fund.

3.2 The OBC will be further updated as project FBC's are considered, at least on an annual basis. This approach will provide the opportunity to exploit the emerging synergies between the individual projects and the wider City Deal programme, together with a macro assessment of the economic impact being achieved across the Angus Fund. This is a similar approach to other programme based OBC's, for Culture and Tourism and Skills, although each approach will differ slightly due to the initial starting position when the Heads of Terms were signed.

3.3 With respect to the Angus fund, three engagement events were held to help define the projects to be included in the funding and these are currently being worked up with partners. The detail in each of the projects to be funded will be submitted through the Tay Cities governance arrangements for ultimate consideration of the FBC by Joint Committee for each project recommended for inclusion in the Angus Fund.

#### 4.0 DESCRIPTION OF PROJECT

4.1 The UK Government will commit up to £26.5million to the Angus Fund. The Angus Fund will help achieve an investment balance across the region by investing in projects across Angus to be developed collaboratively with Angus Council and other local partners as part of the Deal.

4.2 The purpose is to increase productivity through clean growth, protecting places for future generations to live, work, and visit. The Angus Fund will contribute to the development and implementation of innovative, clean technologies, which will also significantly reduce the region's carbon footprint; contributing to national reductions in carbon use.

4.3 To deliver this purpose the Fund will support three connected components, namely:

- clean growth;
- low carbon; and
- agricultural technology.

4.4 The proposed projects to be developed through the Angus Fund are as follows:

Theme	Proposed element/project	Project description	Estimated proportion of Angus Fund	Estimated total spend
Clean Growth	Connecting Montrose	Reopening of Montrose railhead	£2.6m	£16m
		A90 to Montrose link road utilising low carbon technologies		
	Zero Four	Clean growth business units demonstrating low carbon building and energy technologies	£2m	£7m
	Mercury Drone Port	Drone R&D Centre of Excellence, incorporating airspace trial area and associated onshore facilities	£1m	£1m
Low Carbon	Low carbon housing	Demonstrator clean growth housing project in Arbroath	£3m	£18.5m
	Angus Rural Mobility Hub	Hub located off A90 to support a range of mobility services, including EV charging, freight clean fuel, last mile delivery, car and fleet sharing, on demand transport etc.	£2.9m	£5.9m
Agri tech	Centre for Agricultural Sustainable Innovation (CASI) Aim to facilitate collaboration between agri businesses and promote farm based innovations - "hub and spoke" model: central hub coordinating spoke activities.	Technical Quality Centre	£3m	£5m
		Neutral Spirit Plant	£5m	£6m
		Precision farming facilities	£2m	£3m
		Innovation Farm	£5m	£10m
		Total	£26.5m	£72.4m
<b>TOTAL</b>			<b>£98.9m</b>	

- 4.6 It is proposed that Angus Council and partners will develop the OBC / FBC's for the Agritech CASI and the Mercury Drone Projects early in 2021/22. Subsequent OBC/FBC's for the remaining projects will be submitted in due course for the remaining projects identified above over the period of the financial profile.
- 4.7 In order to accelerate these early projects ahead of the TCD funding profile, Angus Council will support the cashflow from the Council's Capital budget which has identified funds specifically for Tay Cities Projects in Angus.

## 5.0 FINANCIAL IMPLICATIONS

- 5.1 This project is currently profiled to draw down up to £26.5 million in capital from the Tay Cities Deal funding. The funding is anticipated to be drawn down as below.

**Table: Profile agreed on 17/12/20 and the leverage as set out in the Financial Plan.**

Year	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Total
	22/23	23/24	24/25	26/26	27/27	27/28	28/29	
<b>Profiled draw down £000.</b>	2,070	4,507	5,151	9,065	2,727	2,980	0	26,500
<b>Leverage</b>	1,000	4,000	7,000	8,000	9,600	5,000	4,300	38,900

## 6.0 DECISION PATHWAY

- 7.1 The project has met the decision pathway milestones as follows. This is a Fund level OBC and a full FBC will not be required. The projects within the fund will produce OBCs and FBCs which will come to the Management Group and Joint Committee following the same process as for named projects.

### Decision pathway milestones

Stage	Milestone	Date achieved
OBC	Governments' Endorsement	24/9/20
	Thematic Board recommendation	17/11/20
	Management Group recommendation	28/01/21
	Joint Committee approval	

## 7.0 CONDITIONS

- 7.1 As described earlier this is a fund level OBC which is being submitted for approval. Further Full Business cases for each of the individual projects identified in Item 4.2, will be brought to the Management Group and Joint Committee for approval subject to approvals from the Governments and Thematic Board.

## 8.0 POLICY IMPLICATIONS

- 8.1 Assessments on the impacts on Equality and Diversity, Fairness and Poverty and Environment will be carried out as each of the projects within The Angus Fund are developed.

## **9.0 CONSULTATIONS**

9.1 The Tay Cities Region Deal Management Group were consulted in the preparation of this report.

VIVIEN SMITH – DIRECTOR OF STRATEGIC POLICY,  
TRANSFORMATION & PUBLIC SECTOR REFORM, ANGUS COUNCIL

DATE: 3 Feb 2021

**APPENDIX 1**

Project Information	
Project number	TCD012
Project name	The Angus Fund
Project owner	Alison Smith
Responsible Finance Officer	Ian Lorimer (Director of Finance)
Management Group Sponsor	Vivien Smith
Award amount under TCD	£26.5 million
Jobs - target number of jobs to be created	100
Leverage to be achieved	£38.9 million



Angus Fund OBC

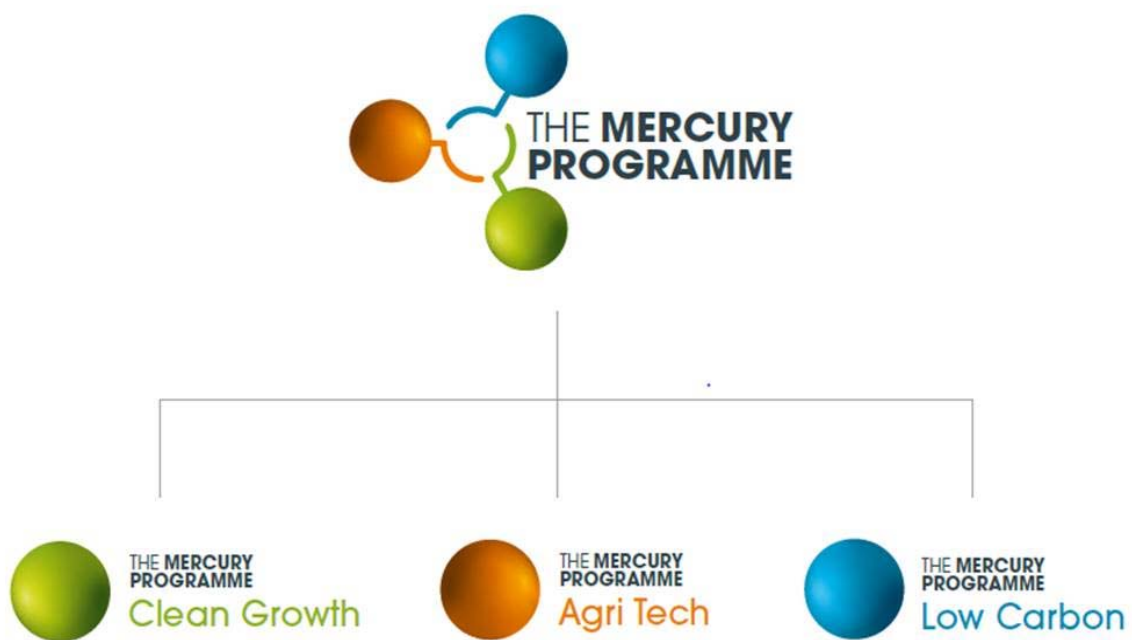
APPENDIX 2





# The Angus Fund

## Outline Business Case





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# 1. Executive Summary

## 1.1 Introduction

The Tay Cities Deal Heads of Terms were signed in November 2018. Angus Council was awarded £26.5m funding from UK Government (the Angus Fund) to develop collaborative projects with a range of partners, with an overall Outline Business Cases (OBC) to be presented to UK Government for approval, followed by Further Business Cases in due course for each individual element as required. As this is an unusual investment, we feel it is important to outline the additional benefits of our ability to take a wider approach in this OBC, which we have called The Mercury Programme.

## 1.2 Background: The Mercury Programme



Angus is located on the east coast of Scotland, where the Tay meets the North Sea. The county is diverse, rich in history, skilled in manufacturing and leaders in food production. Angus has a population of almost 117,000 across seven vibrant burghs, and dozens of villages and rural communities.

The county has a successful mixed economy with particularly strong activity in agriculture, engineering, food and drink, oil and gas and tourism. Manufacturing is embedded within Angus, employing almost 15% of all workers, well above the Scottish average. The county is also seeing an expansion of capabilities to support both onshore and offshore renewables projects and contributes to the energy sector particularly with international companies based in Montrose such as Baker Hughes.

The Angus Fund presents a huge opportunity for Angus to drive economic growth across the county, the Tay Cities Region and beyond. This fund provides the catalyst for an ambitious strategic approach which partners now refer to as The Mercury Programme. The intent of the Mercury Programme is to grow public sector investment to £100m in clean growth over the 10 year programme with the aim of releasing £1bn in economic growth over the same period. This chimes well with the UK Government's estimation of the clean growth sector doubling in value over the same timeframe from £220bn to £440bn.

We have worked with key stakeholders to help shape the Mercury Programme, hosting three events with around 150 local businesses and academic partners engaged in developing the content and scope of our collective ambition. Many participants have helped us to develop the vision and consequently the elements that are proposed to be funded by the Angus Fund.

Partners across the Tay Cities Region have recently updated the Economic Strategy for the area and clean growth is now at the centre of our collaborative ambition. The Angus Fund, and the linked, wider Mercury Programme, will contribute significantly to that growth with the North East of Scotland being a key hub for economic expansion in clean growth industries. Alignment with other projects named in the Heads of Terms such as The Eden Campus, Beacon Project, International Barley Hub, Advanced Plant Growth Centre along with other emerging opportunities such as the new clean growth ambitions at the Michelin site in Dundee (Michelin Scotland Innovation Parc) will ensure the Tay Cities Region becomes an industrial hive for innovation and research aimed at tackling climate change.

### **1.3 Overview of the Angus Fund**

The Angus Fund will be used to stimulate The Mercury Programme, Angus Council's visionary £1bn partnership programme across the Tay Cities region between government, public, private and community sectors.

Having this opportunity with the Angus Fund has allowed ideas to be developed with an identified resource and with this in mind engagement across the region for evidence-based innovation demand to boost sustainable growth was undertaken. It was important to establish our purpose at the outset (our why) to inform what we should be doing and how we should go about delivering, to have the greatest impact.

The purpose of the Mercury Programme is to:

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**‘Increase productivity through clean growth, protecting places for future generations to live, work and visit’**

---

We will achieve this by becoming a sustainable, low carbon region that is leading the development and implementation of innovative clean technologies to deliver increased economic growth, while at the same time significantly reducing our carbon footprint and contributing to national reductions in carbon use.

To deliver this purpose, we have identified three connected components which we will focus on and which have been used to determine the aspects of the Mercury Programme that we would like to be supported and funded by the Angus Fund. A description of each of these components follows.





### 1.3.1 Clean Growth

North Angus and Montrose will be promoted as a clean growth zone where new technologies will be used to improve energy efficiency and emerging data will be used to understand the required improvements to ensure carbon reduction. We will look to provide improved transport connections by road, rail and sea and we are investigating ways of using the Local Development Plan and other emerging planning tools to support growth. This will build on the opportunities presented by a significant and expanding Montrose Port, recent investments from major businesses and the potential to move freight from road to rail. There will be research into new carbon capture methodologies and look at options to reuse agricultural plastics, both in the road infrastructure and as an alternative fuel source. New energy sources will be critical to achieve low emissions targets and provide essential cost savings. We will support the development of the former airfield site Zero Four to accommodate the anticipated growth in North Angus and address current demand. This will also include a future skills and innovation hub to service the emerging offshore wind opportunities and demand for a skilled workforce. Future low carbon technology, through the use of drones, will also be developed on the Zero Four site.



### 1.3.2 Low Carbon

This component will focus on the development of low carbon and renewable solutions for transportation and energy across Angus and the wider Tay Cities Region, utilising electric and hydrogen vehicles as low emission transport methods, creating a low carbon transport corridor coordinated and connected with the Regional EV Strategy and Delivery Programme, which will support a potential EV and hydrogen distribution centre located on development land at Brechin just off the A90. This aspect of the Mercury Programme will also demonstrate new energy technologies and culture in large-scale housing developments to engender an integrated 'business as usual' approach to zero carbon in new build, while also researching the processes needed to retrofit current housing stock to zero carbon, connecting the low carbon housing to low carbon transport. Implementing urban and rural renewable integrated energy management solutions across electricity generation, air and water heating will also be explored.



### 1.3.3 Agri Tech

Agriculture is a key industry in Angus and this component will look at the ability to provide a clean growth, data driven and bio economy approach to the sector. Land-based agri tech innovation will be the catalyst to increased and sustainable primary crop production, improved food security and

nutrition, extension of the growing season, better crop yields and soil, development of new products and a reduced carbon footprint with the aim of net zero, or ideally carbon negative, production systems. At this component's core will be authenticity and provenance – an important selling point now for primary and associated secondary producers. This exciting work will employ a field-based approach to innovation and develop a co-operative approach to data use and capture that will have significance in terms of development, expansion and exploitation at regional, national and global levels.

#### **1.4 Developing the components**

As the concept of the Mercury Programme was developing we were also keen to explore which elements could best be supported through use of the Angus Fund.

Early discussions regarding the Angus Fund within Angus Council and with representatives from Scottish Futures Trust (SFT), Scottish Enterprise (SE) and business leaders, allowed us to establish the developing components that now make up the Mercury Programme.

A series of three workshops were held with local industry and other stakeholders in May, August and October 2019. These workshops allowed industry to help identify and shape the key components of the Mercury Programme, and subsequently to present and develop the project ideas that would support our ambitions for clean growth and be funded by the Angus Fund.

Around **150 delegates** from across industry, academia and the third sector attended the three workshops, delivered in Carnoustie and Montrose. The first and second workshops focused on ideas generation, engagements and collaborations. There were then three sub groups formed, one for each component who worked on the ideas generated and started to formulate, discuss and hone down a list of potential elements to be funded. The third stakeholder event allowed each sub group to present their ideas to the full group and allowed for discussion and feedback on the elements selected. This fully inclusive and transparent process ensured that local businesses, as well as other stakeholders, were represented and involved in the decision-making process.

The events provided evidence for the linkages between the three components of the Mercury Programme and the developing elements within the Angus Fund. A Tay Cities board was then established within Angus Council to consider the outputs from the stakeholder engagement events and to support the development of the proposals that make up the Angus Fund.

The three components of clean growth, low carbon and agri tech, although identified separately, are very much complementary and in reality overlap to form supporting routes to net carbon zero sustainable economic development e.g. repurposing agricultural plastics to develop new thinking in roads infrastructure, using of drones for intelligence led farming practice, co product use in field based innovations resulting in better than zero carbon emissions etc. The most common threads emerging from the events, which tend to feature in the majority of the proposed elements, are energy use, skills and the importance of data to inform practice. These feature across all aspects of the Mercury Programme.

## 2. Project Background

As a direct result of stakeholder engagement, six specific elements have emerged and been identified by the Angus Council Tay Cities board, to receive funding from the Angus Fund:

### 2.1.1 Clean Growth

#### *Connecting Montrose*

Montrose has experienced significant economic growth over recent years, and has the potential to grow substantially more over the next 10 years.

Baker Hughes has added over 100 new positions to its workforce in Montrose, and created a world class Sub-Sea learning facility and invested in improvements to their original site as well as establishing a long term presence in Montrose Port to increase transportation by sea. They are ensuring it will continue to support the oil and gas industry to clean and reuse specialist equipment. GSK have one of their two UK plants in Montrose and have invested heavily in the facility over recent years.

International companies are choosing to expand in Montrose and the Port of Montrose, with its new quaysides, has an ambition to be one of the lowest carbon ports in the whole of the UK. The Port Authority also has further growth plans within its 25 year masterplan. The recent announcement by Seagreen of Montrose being selected as the Operations and Maintenance (O&M) Base for their new offshore wind development off the coast of Angus will bring in 50 new onshore and 50 offshore jobs.

These companies, and others, have told us they need Montrose to be better connected to the A90. The scale and potential of growth in this area requires infrastructure that aids not hinders that expansion. An opportunity to re-open the railhead would facilitate the use of lower carbon, more sustainable methods of transport between road, rail and sea. We need to continue to support our companies to stay, but at the same time provide space for new growth opportunities and inward investment. We aim to provide support to companies that wish to engage in our Clean Growth ambition located at the Zero Four site in Montrose. We will therefore be seeking a 10% contribution (£2.6m) from the Angus Fund to support the development of improvements to the road infrastructure and reopening the railhead to better connect freight, public transport and private usage. The main funding for the road improvements will likely be made by Angus Council, and funding opportunities for the railhead improvements will also be explored in partnership with Network Rail and Transport Scotland. The total cost is around **£16m**. The Angus Fund contribution will be aimed at assessing the use of carbon capture in road verges, a concept that Abertay University want to work with us to deliver, and to test the use of plastics in a major road. We will hope to repurpose agricultural plastic through the Beacon Project for this new approach to civil engineering.

#### *Low carbon infrastructure/integrated energy management system*

Isla Developments has purchased 123 acres of development land on the former Montrose Airfield site, marketed as Zero Four <https://isla-developments.com/zerofour/>. The site offers very strong potential to support economic growth in Montrose. This area has the potential to provide a base for the growing offshore wind sector and offsite Port operations amongst other development opportunities. The ambition also includes development of starter business units, hotel, car parking, helipad, renewables

centre to develop new businesses and developing skills all serviced by an integrated energy management network.

We are now seeking investment of **£2.5m** from the Angus Council capital programme and **£2.5m** from the remainder of the Industrial Fund side agreement with Scottish Government to support the Zero Four development. We are aware that the associated infrastructure costs for bringing the site forward fall within devolved matters, however we would like to develop a locally sourced energy supply and a contribution from the Angus Fund of **£2m** is being sought to help enable the delivery of a clean growth model for business to be built into the site at the outset. We are considering a range of options for this from a solar based distributive energy supply, to ground source heating, sewage waste processing and even a silicates and power from rice husk plant opportunity.

Within the Strategic Outline Case a pilot of simplified Planning Zone was proposed for the North of Angus. The timescales for evaluation of the Scottish Government's Simplified Planning Zones pilots and implementation of the new Planning Act (specifically Masterplan Consent Areas) will not come forward quickly enough to support the immediate development of the Zero Four site, so alternatives are currently being considered. The Local Development Plan review is taking a place based approach which will provide a framework for growth in the area based on the identified opportunities and strengths. The Mercury Programme purpose and goals, including the ambitions of partners will be taken into account in the strategic masterplanning of the area. Further intervention in terms of simplification of planning regulation in the area will also be considered.

### **Drone Port Montrose**

Montrose provides the ideal location for testing and developing new drone flight operations due to the relatively underused air space and control systems, the closest of which are located in Dundee and Aberdeen, well outwith the 5 mile recommended perimeter for flight path networks. The emerging off shore wind developments are likely to benefit in the immediate future from these technologies, both in terms of transport costs for equipment and visual testing systems, but companies across the UK have a need for a regulated testing area which can be provided on the former airfield site at Montrose, Zero Four.

The rapid development of Unmanned Aircraft Systems (UAS) technology over the past 5 – 10 years has left the regulatory environment behind UAS capability and is constraining the next phase of technology development and service provision. The enabler for this next phase of development is the ability to operate unmanned aircraft systems beyond visual line of sight (BVLOS), in autonomous flight and in unsegregated airspace. To this end the UK's aviation regulator, the Civil Aviation Authority (CAA), has established its Innovation Sandbox to look for organisations that want to work towards operating Unmanned Aircraft Systems, Beyond Visual Line of Sight (BVLOS) in unsegregated airspace. Drone Port Montrose and the wider Mercury Drone Ports Programme aims to facilitate this goal by providing the infrastructure to make Angus the location of choice for companies looking to develop enabling technology, procedures and services in this field.

Angus Council has invested a small revenue resource (**£50k**) to commission the development of the necessary licencing arrangements and designated air space at this time, but once these are in place, the development of the Drone Port will require investment. We estimate this will cost circa **£1m** from the Angus Fund.

### 2.1.2 Low Carbon

Angus lends itself to support the development of renewables and carbon capture aimed at tackling climate change. Indeed a number of wind turbines have been developed over Angus in recent years and capacity studies for wind and solar support development in this work. A move to harnessing solar energy is a growing business opportunity. The Forestry Commission are a key partner and managing forestry in Angus is a day to day aspect of their work. There is peatland and wetland in Angus, all playing their part in clean energy growth and carbon capture. We are well placed to build capacity in all of these areas. We are also exploring the carbon credit system currently as an aspect of the Mercury Programme. We believe that there are two significant areas of change that we need to support people through in relation to behaviour change in respect of low carbon usage and these are housing and transport. Both also provide opportunities for business growth and new skills development as we collectively transition to a low carbon economy. For that reason we are prioritising research and innovation approaches to both, utilising the Angus Fund for part of the development in each.

#### *Low carbon housing*

We know that housing is a large contributor to carbon emissions and we need to consider the best approach to reduce emissions in both new build and, importantly, current housing stock. Our purpose is therefore to demonstrate how technical innovation in renewables, particularly photovoltaic (PV), battery storage and hydrogen, alongside energy efficient construction can achieve zero carbon targets in new and existing homes at a large-scale. Also, to help tackle climate change practically and effectively, as well as provide a test bed for research and analysis to compare how the same methodologies may deliver varying outcomes.

We propose to develop a demonstrator clean growth housing project in Arbroath that will utilise the latest zero carbon housing standards in a new build development and current housing in the town. We will demonstrate and contrast the effectiveness of methodologies in the two settings, so that innovative construction techniques and renewable technology can be adopted in housing development, learning lessons about marketability, demand, people behaviours and profitability. We will also identify any challenges with lifestyle and design a programme of education, training and information to support customers.

The aim is to drive down costs, increase supply, and support zero carbon manufacturing supply chains. The partnership approach involves both governments, Angus Council, Construction Scotland Innovation Centre and Abertay University.

We want to transform Arbroath into a low carbon town by delivering affordable housing at zero carbon standards, both new build and retrofitting existing housing in the town. 25% of new affordable homes will be for mid-market rent or shared equity sale and 75% for social rent.

Angus Council and Scottish Government will invest in the funding for 100 new build affordable houses totalling **£15.5m**. Angus Council currently owns the 50 retrofit stock houses. We need an additional **£3m** from the Angus Fund to undertake the additional energy and technology additions to the houses in order to undertake the research that will help to unlock the best future approaches to adaptation and build in housing towards a zero carbon approach.

## Low carbon transport

Angus Council has secured European Regional Development Fund funding (ERDF) of **£188k** to develop a low carbon hub at Orchardbank Business Park. The total project cost is **£470k** and will build on the growing number of electric vehicle (EV) charging points available across Angus. It will also contribute to a low carbon corridor connecting Aberdeen to Dundee and beyond.

One of our partners is developing a proposal to develop a low carbon distribution hub on land just outside the main town of Brechin and next to the A90 that could be game changing in terms of hydrogen distribution. We anticipate that large vehicles will move to hydrogen based fuel and it will be important to be able to generate hydrogen as well as consider new distribution networks by smaller electrically charged vehicles.

The site at Brechin will help build the transport corridor between the cities of Aberdeen, Dundee and Perth, by developing a hydrogen fuelling and hub station to help secure a future where low carbon transport becomes the vehicle of choice by bus, HGV, rail and sea vessels. Aberdeen has developed a hydrogen centre to the South of the city, linking to the A90 Trunk Road and Dundee will develop a hydrogen transport hub at the former Michelin site, whilst Perth are looking at hydrogen possibilities at Broxden as part of the Low Carbon Transport & Active Travel Hub, ideally placing the Brechin hub in the centre of these developments. Angus Council has already committed **£3m** towards the business park at Brechin in its capital programme and a further **£2.9m** will be needed from the Angus Fund to help realise this development.

Other local landowners are exploring solar based distribution for smaller cars and vans at Padanaram and bio methane opportunities utilising sugar beet at Stracathro which can potentially fuel future agricultural vehicles.

All three landowners are working with Edinburgh University to help test new locally based, low carbon transport networks.

### 2.1.3 Agri Tech

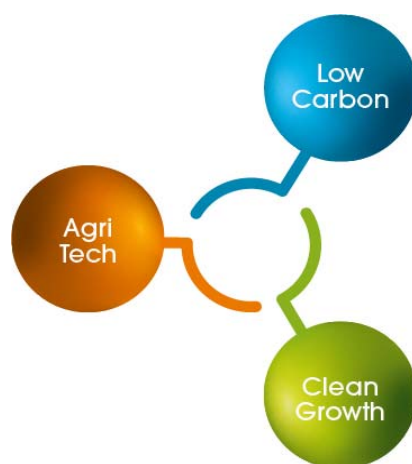
#### *Centre for Agriculture Sustainable Innovation*

An exciting development to create a Centre for Agricultural Sustainable Innovation (CASI), based on a hub and spoke model. This is a field based research and innovation project, unlike any other across the UK. Spokes will be designed to focus on certain themes, and proposals include:

- *Quality*: The construction of a Technical Quality Centre capable of handling in excess of 15,000 x 100 tuber samples gathered from growers fields across Scotland and the UK annually. This can be used for potatoes and other vegetables. (**£5m**)
- *Co/by product use*: The development of a sustainable supply of neutral spirit to the Scottish alcohol industry through the construction of a neutral spirit plant within Angus, shortening supply chains and transport requirements and reducing carbon emissions to better than zero. (**£6m**)

- *Innovation*: The creation of an AgriTech Innovation Platform (AIP) or Agri Hotel where field-based innovation will stimulate sustainable (bio)economic development in several areas all which have application in the region, but importantly will create tools, technologies and intellectual property (IP) that will have global applications and therefore economic growth. These areas will include new food/non-food crops delivering to the protein, fibre, horticulture, pharma and sustainable chemical feedstock sectors, integrated pest and disease management, soil health and circular economy, encompassing resource reuse (co-product bio refining and valorisation( e.g. cereal husks, straw non-class 1 fruit etc) (£10m)
- *Automation*: A focus on new innovative technology including data collection automation, intra-inter farm connectivity, drones, net zero farming. (£5m)
- *Data*: The collection, processing and potential application of data across the spokes will be an ongoing theme of the CASI. (£1m)

A further key benefit of the CASI will be the new governance arrangements and a co-operative model which is currently being explored. We plan to invest **£15m** from the Angus Fund towards this highly important work to ensure future farm based innovations can be developed and new business created as a result. However, this important investment is not enough to cover the whole spectrum of ambition at this time and the co-operative will therefore need to seek additional funding to support the appointment of a director with staff to ensure additional funding streams can be leveraged, the co-operative is embedded and the international opportunities are explored and exploited.





### 3. Strategic Case

#### 3.1 National context

The objectives of the Mercury Programme demonstrate strategic fit with the *Climate Change Act 2008 (2050 Target Amendment) Order 2019*, which commits UK Government and the devolved administrations to reduce greenhouse gas emissions to net zero by 2050. The legislation sets a series of 5 year caps on greenhouse gas emission, known as “Carbon Budgets.” This model was followed by the United Nation’s Paris Agreement, signed at COP21, the first globally binding global change agreement to be adopted.

In Scotland, the *Programme for Government* commits Scotland to achieving net zero by 2045 by making significant changes to the way that we live, work and travel. The Mercury Programme identifies a number of areas where emissions can be reduced, including buildings and heating, the public sector transport fleet and farming and food production.

The *Scottish Climate Change Plan 2018-2032* sets a vision that, by 2032, Scotland will have reduced its emissions by 66%, relative to the baseline, while growing the economy, increasing the wellbeing of the people of Scotland and protecting and enhancing the natural environment. A commitment is made that, by 2032:

- Scotland’s electricity system, already largely decarbonised, will be increasingly important as a power source for heat and transport.
- Scotland’s buildings will be insulated to an appropriate level, and will increasingly be heated and cooled by low carbon technologies.
- Scotland will have phased out the need to buy petrol and diesel engine cars and vans, implemented low emission zones in Scotland’s largest cities and made significant progress in reducing emissions from buses, HGVs and ferries.
- Our industrial sector will be more energy efficient, more productive, and increasingly use more innovative technologies, presenting significant economic and competitive opportunities.
- Landfilling of biodegradable municipal waste will have ended, we will have reduced food waste, more of Scotland’s waste will be recycled and a more circular economy will present significant economic opportunities.
- Scotland’s woodland cover will have increased, and more of our peatlands will be restored to good condition, benefiting people, biodiversity and ecosystems.
- The Scottish agriculture sector will be among the lowest carbon and most efficient food production systems in the world.

In order to achieve net zero by 2045/2050, there needs to be a significant reduction in greenhouse gas emissions across a number of sectors including housing, transport and agriculture. In delivering the Mercury Programme, Angus Council and partners can help achieve these reductions in the local area and develop technology which can support the global fight against climate change.

Linking Planning in Scotland the National Planning Framework (NPF) is a long-term strategy for Scotland. It is the spatial expression of the Government Economic Strategy, and of our plans for development and investment in infrastructure. NPF identifies national developments and other



strategically important development opportunities in Scotland. It is accompanied by an Action Programme which identifies how we expect it to be implemented, by whom, and when.

Scottish Planning Policy (SPP) is to set out national planning policies which reflect Scottish Ministers' priorities for operation of the planning system and for the development and use of land. The SPP promotes consistency in the application of policy across Scotland whilst allowing sufficient flexibility to reflect local circumstances. It directly relates to the preparation of development plans; the design of development, from initial concept through to delivery; and the determination of planning applications and appeals.

Together, NPF and SPP, applied at the national, strategic and local levels, will help the planning system to deliver our vision and outcomes for Scotland, and will contribute to the Scottish Government's central purpose.

The Mercury Programme is committed to doing all it can to deliver clean growth for future generations. The UK Government's commitment to Clean Growth, delivering economic growth while cutting greenhouse gas emissions, is set out in the *Clean Growth Strategy (2017)*. The strategy highlights the importance of protecting businesses and households from high energy costs, and the need to develop low cost, low carbon technology in the UK. The six elements of Angus Fund, combined with the wider Mercury Programme, will address both of these issues, addressing fuel poverty and developing new technology to help tackle climate change worldwide.

Clean Growth is also a driver of the UK *Industrial Strategy*, identified as one of four Grand Challenges. There is an opportunity for the UK to lead the world in developing, manufacturing and adoption of low carbon technologies, and the Angus Fund elements are closely aligned to the objectives of the Industrial Strategy. The UK Government in its Industrial Strategy also sets out ambition for growth in the bio economy across the country. The strategy identifies that the GVA of this industry is currently estimated at £220bn and provides around 5m jobs. The ambition is to double that growth in the next 10 – 15 years and Angus, within the Tay Cities Region, is well placed to help facilitate that growth. We have therefore developed the concept of The Mercury Programme and the elements of the Angus Fund to establish a purpose that will help to achieve that aim.

The Angus Fund will also deliver in line with *Scotland's Economic Strategy*, addressing the long term issues of skills, jobs and economic growth by creating additional high-skilled jobs and supporting investment and growth in innovative key sectors of the economy (Renewable Energy and Low Carbon Economy). The Angus Fund also supports the Scottish Enterprise Strategic Framework vision of *an economically vibrant Scotland making a positive impact on the world* by creating new jobs and by stimulating capital investment across the region. The elements delivered as part of the Angus Fund will also support the Low Carbon Transition, identified as a key National Opportunity by Scottish Enterprise.

### **3.2 Regional context**

The *Tay Cities Regional Economic Strategy* was refreshed by partners in 2019. The strategy, jointly developed by the four local authorities, aims to create more businesses and better-paid jobs, increasing opportunity and addressing wealth distribution and wellbeing across the region. The strategy sets a series of aims including:

- *Encouraging, supporting and investing in research, innovation and collaboration to improve efficiency, productivity, sustainability, business growth, new opportunities and higher paid jobs.* A critical factor in our purpose to increase productivity through clean growth as Angus currently suffers from a low wage economy in a Scotland context.
- *Supporting investment in key infrastructure and improvements in regional connectivity.* Again an important element for The Mercury Programme, but aligned to low carbon future opportunities. Additionally, the links to our digital connectivity are key in this regard as data management and the emergence of artificial intelligence (AI) in influencing future business development and choice in new innovations in both clean growth and the agri tech elements of the Mercury Programme and Angus Fund.

Importantly, the strategy now also sets out partners' ambitions to deliver economic advantage to the Tay Cities Region through fostering *clean growth opportunities*. This lies at the heart of the purpose of the Mercury Programme. The achievement of the aims in the strategy is supported by the delivery of the Angus Fund, as the elements funded will demonstrate and deliver new, innovative technology and see investment in research and development across Angus to benefit business locally and regionally, to enable the development of new products and skills as well as share learning at an international level.

The strategy also highlights the importance of the Energy sector, with significant opportunities across the region in offshore wind and the transition to a low carbon economy. The Regional Economic Strategy commits to:

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*Establish North Angus and Montrose as a clean growth zone to encourage and promote the use of innovative green and clean technologies to improve efficiencies and create new energy sources to contribute to lower carbon emissions targets. Under Business Infrastructure, a commitment is also made to develop a Clean Energy Zone in Montrose and develop the North Angus Growth corridor. These projects will be enabled by the Angus Fund and the wider Mercury Programme.*

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Partners across the Tay Cities Region have been collaborating for many years. The Strategic Development Plan (TAYplan) identified strategic development areas including Montrose. The emerging indicative Regional Spatial Strategy will help to bring forward a regional context to support the local development plan process. The Local Development Plan review is taking a place based approach which will provide a framework for growth in the area based on the identified opportunities and strengths. The Angus Fund projects also supports the objectives of the *Tactran Regional Transport Strategy 2008 - 2023* and the *Tactran Regional Electric Vehicle Strategy*.

Across the Region Deal, the Mercury Programme is closely aligned to a number of the other Tay Cities projects, including the Beacon Project, the Perth Innovation Highway, the Eden Project, The International Barley Hub and the Advanced Plant Growth Centre. We are already under discussion with the owners of these projects in order to identify any potential opportunities for collaboration. Similarly, there is clear alignment between the objectives of the Mercury Programme and the Michelin Scotland Innovation Parc (MSIP), and both teams are actively engaged in discussion.

### 3.2.1 Local Context

The six elements where the Angus Fund can best contribute, as detailed above, will help to deliver the objectives of Angus Council's flagship Mercury Programme. The purpose of the Mercury Programme is to increase productivity through clean growth, protecting places for future generations. Although the Angus Fund will support delivery of six elements of the Mercury Programme, the Programme is wider than the Angus Fund and extends beyond Angus, linking to other resources.



North Angus and Montrose will be established as a clean growth zone. This will encourage and promote the use of innovative green and clean technologies to improve efficiencies, and create new energy sources to contribute to lower emissions targets.

This project will act as a significant step change project centred on development of a private sector led development at Zero Four by Isla Developments at the former airfield site in Montrose. This will consist of 'low carbon energy efficient' buildings for companies in the Angus growth sectors – manufacturing, offshore wind, food & drink– and with the potential to attract inward investment and start-ups from the growing clean economy sector.

Sustainable economic development depends on setting the conditions for the development of new business and the growth of existing firms that add sustainable value to the economy - whether through technology, job creation, or social value benefits. To be globally competitive, continuous productivity increases are vital, which in turn depend on innovation.

This innovation will be further enhanced by the development of new technologies in road surfacing including the use of re-cycled plastics and electric vehicle charging roads using technologies which are available but are new and can be developed and boosted by research with academia partners. The research linked to carbon capture along roadside verges is also potentially world leading.

Angus Council will use these ambitions outlined in The Mercury Programme as a catalyst for the development of a pilot project to create a simplified Planning Zone which is proposed as part of the current planning reform and will inform master planning across the region. However given timescales for evaluation of the Government's Simplified Planning Zones pilots and implementation of the new Planning Act (specifically Masterplan Consent Areas) and will not come forward quickly enough to support the immediate development of the Zero Four site, so alternatives are currently being considered. The Local Development Plan review is taking a place based approach which will provide a framework for growth in the area based on the identified opportunities and strengths. The Mercury Programme vision and goals, including the ambitions of partners will be taken into account in the strategic masterplanning of the area. Further intervention in terms of simplification of planning regulation in the area will also be considered

The future development of Montrose and the North Angus Area, will allow for the development of sites to service the offshore wind industry as operations and maintenance hubs for the new windfarms that are being created of the coast of Angus. The Zero Four development, at Montrose Airfield and

Montrose Port will become key infrastructure to ensure that these windfarms stay operational at all times. Transport corridors to allow the delivery of materials will become key for the supply chain.

Civil Engineering Innovation is one potential aspect for the use of waste products being re-purposed and reused in construction. Pulverized Fuel Ash (PFA) has been used as a cement replacement in concrete for decades; recycled tyres and glass have been added to asphalt mixes; and the introduction of the land fill tax, the first UK tax with an explicit environmental purpose, combined with the aggregate levy has changed the approach of the construction industry, encouraging recycling and use of by-products from other industrial processes rather than virgin materials and waste to landfill.

Through this development, there is the potential to reduce the amount of waste, and in particular plastic going to land fill combined with reducing the use of virgin oil related products, repurposing plastic waste as a construction material. Some of the technologies are already available with use of plastic in bituminous surfacing in other parts of the country, and plastic kerbs. This element of the programme will intrinsically link with the proposed Tay Cities Deal Beacon Project in Perth and its re-use of plastics.



With the growth of ecommerce at 15% per annum and the drive towards decarbonising the UK economy through models that create inclusive opportunities, innovative approaches towards generating and distributing low carbon heat and electricity for regional growth are a priority for both UK and Scottish Governments. The development of offshore wind will go a long way to realising national targets, yet it is currently expensive to transport electricity generated to the National grid at Leeds and therefore it is likely some of the electricity that would otherwise be wasted can be used to generate hydrogen. The hydrogen can then be used to fuel buses, HGV's, trains and shipping in the future. Indeed a local shipping company is already developing plans for the latter.

Low carbon energy infrastructure with digital connectivity for domestic and commercial use alongside hybrid, electric and alternative renewable fuels such as hydrogen vehicles are essential to support this transition. Much of the focus to date in developing these networks has been focused on cities, yet rural areas, which form a large part of the Tay Cities region, have a vital role in the success of the UK's climate change adaptation strategy by virtue of their natural environment, heritage in renewable energy, dispersed population and economic centres.

The low carbon transport project included within the Mercury Programme will support the adoption of low carbon technology within the region. Feasibility will be undertaken to identify the most effective source, whether that be solar, hydrogen or bio methane.

It is also proposed that a zero carbon housing demonstrator project be delivered as part of the Angus Fund. The need to build affordable housing across different tenures is well documented, as is the need to provide it in a sustainable smart way. Sustainable, not only in terms of resources (material, human and financial), but also in terms of the customer and ease of use. What is equally important is for existing homes to be adapted to become carbon neutral or zero carbon as this is where the biggest

impact can be made. Likewise in a changing society the need to explore smart technology solutions is vital.

Through the Local Housing Strategy (LHS) 2017-22, the Council and its partners aim to deliver outcomes which focus on increasing the supply of affordable housing, and improving the condition and energy efficiency of existing stock. Our aim is to provide a safe and well-designed environment in which people have the space, encouragement and motivation to develop and thrive. That means offering affordable warm homes of the right type and in the right place that meet family needs, but which also have flexible options to respond to aspirations.

There are well established links between lack of housing opportunity and poverty, and the Scottish Government recognises in particular the link between the delivery of affordable housing and child poverty, with a range of actions around housing contained within the Child Poverty Delivery Plan 'Every child, every chance' 2018-22. Housing is the largest cost that most families will have to meet, and the availability of good quality, affordable housing has a direct impact on household income.

Since 2011/12, the Council has prioritised delivery of over 400 new affordable homes across communities in Angus. These have been delivered directly by the Council as well as housing association partners, and have been supported by the Scottish Government's Affordable Housing Supply Programme. The Strategic Housing Investment Plan 2019/20 – 2023/24 projects that over 600 new affordable homes could be delivered in the next five years. Around 40% of these will be built in areas which are in the Scottish Index of Multiple deprivation bottom quintile (lowest 20%), most notably in Arbroath.

It is envisaged that both Scottish Government and Angus Council will continue to invest in the delivery of new affordable homes, but the need to consider future build to zero carbon standards and understand what works best in the process is the feature of the Angus Fund element of the Mercury Programme. However, as a housing provider, Angus Council is equally interested in how to best retrofit existing properties as approximately 30% of carbon emissions currently emanate from the homes we live in. Therefore, we believe strategic intervention is essential to contribute to the understanding of how best to support both UK and Scottish Governments ambitions towards net zero.



Agriculture is a key industry in Angus and this theme looks at the ability to provide a clean growth and bio economy approach to the sector. Land based Agri-tech innovation will be the catalyst to increased primary crop production, improved food security and nutrition, extension of the growing season, better crop yields and soil, development of new products and a reduced, or ideally negative, carbon footprint. At this theme's core will be authenticity and provenance – an important selling point now for primary and associated secondary producers.

To test out this initial concept with potential partners, industry and stakeholder's concept an engagement event was held facilitated by Scottish Futures Trust and attended by key agri businesses. Without exception the stakeholders recognised that food and drink production, and in particular primary production (agriculture), was a key feature of Angus and one in which it was the dominant

force within the Tay Cities region. But importantly even those not active in the sector recognised its pivotal importance in terms of economy, employment and the potential for significant up-scaling and up-skilling through the adoption and exploitation of innovation.

Agriculture is a multi-faceted sector and it is apparent that there are several underpinning facets within which innovation is required to achieve step-change evolution in the sector, in Angus and the wider rural region. These include the crops currently growing and the potential for evolution in this area, (protein/fibre.pharma/chemicals), soil health, integrated pest and disease management, climate change resilience including water management, and modelling of these factors to deliver short, mid and long-term solutions. In addition, there was clear acknowledgement that there is recognised international innovation expertise locally - The James Hutton Institute, Invergowrie - and that via them, and some of the existing Angus agriculture companies, additional innovation can be brought into Angus from UK, EU and global academic and industrial agricultural innovators.

The component of Agri-Tech was therefore viewed not only as a sensible target for the Angus Tay Cities deal support but in fact a necessary one. The recent regional area statistics from Scottish Government support this, identifying that Tayside (predominantly Angus) had 70 per cent (1,400 hectares) of the land used for orchard and soft fruit in Scotland. Tayside (predominantly Angus) also accounted for nearly half (47 per cent or 8,600 hectares) of the land used to grow vegetables for human consumption.

The Angus Fund projects support the outcomes of the *Council Plan*, the *Angus Community Plan 2017-2030* and the *Angus Local Development Plan*.

Renewable Energy is a key priority for Angus, strengthened by the recent announcement that Seagreen will locate its Operations and Maintenance base at Montrose Port. Ongoing support for the offshore wind sector is key to the wider Mercury Programme and will be delivered through the Mercury Programme Clean Growth theme.

### **3.3 Case for Change**

#### **3.3.1 Spending objectives**

Our objective is to utilise the £26.5m Angus Fund to help lever in additional public sector investment to a total value of £100m over the next ten years. We have already identified where more than half of this investment will come from and set this out in our financial case in this OBC. The aim is to lever in £1bn of business investment over the same period and again the outlook is positive with the recent announcement from Seagreen re O&M from Montrose Port with 100 new jobs, the Port Authorities plans for further growth and two further offshore wind developments as yet to be realised off the coast of Angus. Work is now underway with supply chain businesses and Angus has a strong history of success in engineering and manufacturing so is well placed to benefit from any emerging opportunities. Baker Hughes have expanded and have created 100 new jobs. GSK have also invested heavily over recent years and are in the process of considering further investment in clean energy to support the plant's continued manufacturing capacity. The 123 acre site that is Zero Four has significant capacity to help grow the clean growth economy and we want to ensure that in bringing that site forward every opportunity to focus on the key purpose of the Mercury Programme. It is important therefore to use some of the Angus Fund to establish transport connectivity within this area through road, rail and sea, energy use in the town and be at the cutting edge of 5G technology



development to support this growth and anticipated expansion. The new potential created through the use of drone technologies will also be supported through the use of the Angus Fund.

We are already investing in low carbon transport technologies as a council, but the aim is to look to the future in respect of transport networks that are clean in nature. We also want to invest in researching the best approach to developing zero carbon housing and retrofitting homes in our housing stock, again focusing on new energy use and AI, as well as supporting behaviour change and linking to our ambitions of reducing child poverty alongside fuel poverty reductions. We will also explore the concept of supporting vulnerable older people at home through the use of new technologies. Key aspects of this investment will help to create opportunities for re-skilling and up-skilling of the future construction workforce.

We intend to focus the majority of the Angus Fund in the Agri tech area as we believe that there are opportunities for significant business growth and carbon reduction through innovations targeting improved production systems, product quality practices and harnessing the potential of new technologies to inform farming of the future in an international context. The ability to develop new products from co product is also key to our ambition and already there are significant new ideas are coming forward from the farming community in Angus which will involve new innovations and IP. This is likely to result in new business emerging that reuse products to the benefit of reducing carbon and achieving clean growth in the bio economy. Overall these innovation-led activities will turn the climate change targets into opportunities for growth in the bio economy.

### **3.3.2 Existing arrangements**

Unfortunately it is not possible to quantify the existing arrangements for all of the aspects to be funded by the Angus Fund at this time. Suffice to say that many of them do not exist at present and information will be provided where arrangements do exist at the FBC stage.

### **3.3.3 Business needs – current and future**

We have built the concept and detail of the Mercury Programme on clear business needs. The focus on innovation and research has led us to be more future focussed, but business are already thinking about the next 10 year time horizon. The three stakeholder engagement events, with input from over 100 business, helped us to build the concept and explore the best opportunities for growth in a collaborative way. Business has been open and often sharing what could be considered commercially sensitive and confidential information as they have engaged in the development of the exciting proposals emerging through discussion. We believe it is vital to respond positively to the openness and engagement of those key businesses who have come together and invested their own time, knowledge and expertise in order to help deliver the big ambition of the Mercury Programme as well as enable the best contribution from the Angus Fund to secure the business growth we need to deliver.

### **3.3.4 Potential scope and service requirements**

Again, as more certainty is developed for each aspect a review of what is core, desirable and optional will be undertaken in the final business case as elements are brought forward for consideration over time. Many elements to be funded are currently being worked up into firm asks from the fund at this time e.g. conversations are planned with the civil aviation authority re use of drones beyond line of sight from the coast of Montrose, the research based elements with regard to the road safety re use of plastic and carbon capture are being explored, the corporate governance for the CASI is being

developed with identification of the wider benefits to the farming community of forming a cooperative etc. However, it is important to demonstrate our progress in this iteration of the OBC.

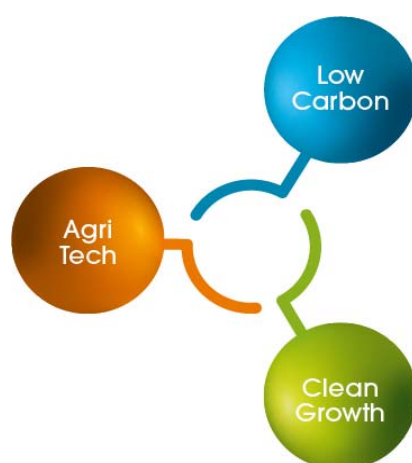
### 3.3.5 Main benefits and risks

The potential benefits of the Mercury Programme are vast. The engagement with the private sector who are leading many aspects in a collaborative way is a key benefit, as is the potential for additional public sector investment over the lifetime of the project. Growing the Angus economy, the creation of new and more jobs alongside development of new and existing skills are also key intended benefits. However, increasing wage growth, reducing poverty and tackling inequalities in order to support sustainable communities and reduce child poverty are also key benefits of the Mercury Programme. Clearly the reduction in Carbon use to net zero is a key aim that the programme will contribute towards, playing our part in helping to tackle climate change globally. Further benefits include the unique partnership opportunity created between UK, Scottish and local government in utilising a general fund approach as opposed to a project specific fund and the leverage opportunities this presents. The branding of The Mercury Programme is also a benefit as it is already beginning to gain traction and interest in our ambitions.

The key risks are that our approach to the use of the Angus Fund is not supported in whole or in part, business withdraw their involvement due to lack of pace or alternative commitments, additional public sector resources are not able to be realised in part or in full and that the economy globally is impacted by factors out with our control.

### 3.3.6 Constraints and dependencies

As the Mercury Programme is a new way of thinking about increasing productivity through clean growth, protecting places for future generations it is likely to evolve over time and any constraints and dependencies will emerge as we move towards the implementation of the elements of the Angus Fund. We have built the programme based on the opportunity presented by the £26.5m Angus Fund and it is therefore fundamentally dependant on other aspects of the programme including resources and delivery. However, we believe this dependency creates strength and enables a broader ambition to be realised over the 10 year lifetime of the fund.





## 4. Economic Case

An Economic Impact Assessment is under discussion with SE colleagues, and will be included in the next iteration of the OBC.

The projects funded as part of the Angus Fund aim to deliver against the following headline performance indicators:

<b>Economic Growth</b> <ul style="list-style-type: none"><li>• Increased GVA (Baseline 2015 £2.0bn)</li><li>• Average Annual GVA Growth Rate (Baseline 2012-2015 2.7%)</li></ul>	<b>Productivity</b> <ul style="list-style-type: none"><li>• GVA per Worker (Baseline 2015 £45,400)</li><li>• Change in GVA per Worker (Baseline 2005-2015 35%)</li></ul>	<b>Business Base</b> <ul style="list-style-type: none"><li>• Businesses Birth Rate per 10,000 adults (Baseline 2016 33)</li><li>• Business Investment in R&amp;D per head of population (Baseline 2016 £32)</li></ul>
<b>Green/Bio-economy</b> <ul style="list-style-type: none"><li>• Carbon emissions reduction of 80% by 2050</li><li>• Ecological impact reduction target of 66% for new developments.</li></ul>	<b>Connectivity</b> <ul style="list-style-type: none"><li>• 100% broadband coverage by 2030</li><li>• increase number of new EV hubs by 50% by 2025</li></ul>	<b>Inclusive Growth</b> <ul style="list-style-type: none"><li>• Higher value skilled jobs created</li><li>• % private sector investment</li><li>• Increased STEM participation in schools</li></ul>

### 4.1 Wider Outcomes

To increase productivity from clean growth protecting places for future generations to work live and visit.

Angus will be a flagship sustainable low carbon region embedding innovative green technologies in to our economy, people and places.

### 4.2 Options Appraisal

UK Government awarded Angus Council £26.5m of Tay Cities money in the Heads of Terms to develop collaborative projects with local stakeholders. In order to develop the Angus fund project, it was necessary to consider the options for allocation of the funding.

The following options were considered:

Option 1 - Do Nothing	This case would restrict growth in Angus and limit the economic investment of the private sector. Lack of development in new technologies will limit the creation of new employment and development of new skills.
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Option 2 – Interim Option – Proposed Capital Plan (AC)	Limited investment by Angus Council utilising existing resources and existing capital funding will provide some development of projects, however opportunities to develop new technologies and development of research and development would be limited and may be lost.
Option 3 – Preferred Option – Angus Fund	This is the option that has the support of stakeholders and offers real solutions to the development of Clean Growth, Low Carbon and Agri Tech opportunities. These three components will lever out additional investment from public and private sector, business growth and increased employment in the area from a new emerging industry sector – Clean Technologies

### 4.3 Workshops

Angus Council delivered three Mercury Programme workshops in May, August and October 2019. The purpose of these workshops was to engage with local businesses and stakeholders, and to work with them to identify projects supporting the Clean Growth agenda. Around 150 delegates attended the three workshops, delivered in Carnoustie and Montrose. The delegates included representatives from the agricultural, renewable energy, transport, property and manufacturing sectors. Many of the delegates were inspired by the discussion and took up leadership roles in bringing forward ideas for inclusion in the evolving Mercury Programme.

The first and second workshops focused on ideas generation, engagements and collaborations. Attendees were invited to discuss ideas in round table settings, to allow for key elements to be developed jointly. The Angus Fund SOC was developed based on discussions at the first workshop in May 2019 and contained a long list of options for elements of the Angus Fund. These high level options were developed based on the discussions at the first workshop.

<b>Long list of options</b>
Public/private centre for R&D
Offshore Wind Servicing
International Business Growth/Start Up
Bio-centre to repurpose agricultural co products
Masterplan Opportunity
Hydrogen fuel innovation/EV charging
Civil engineering innovation
Zero carbon housing at scale for mid – market rent
Soft Fruit/Potatoes - R&D/New Growth/Sustainable Food
Soil Technology
Robotics for Agriculture
Food Innovation
Renewables – solar/wind

The second workshop built on these discussions, developing and refining ideas. A number of key elements were then presented to an audience of local stakeholders at the third workshop, inviting comment and feedback to help test and further refine ideas. This process informed the selection of short listed elements to be funded:

### **CLEAN GROWTH**

Improving connectivity and supporting growth in North East Angus

Energy, AI and clean growth

Mercury Drone Port

### **LOW CARBON**

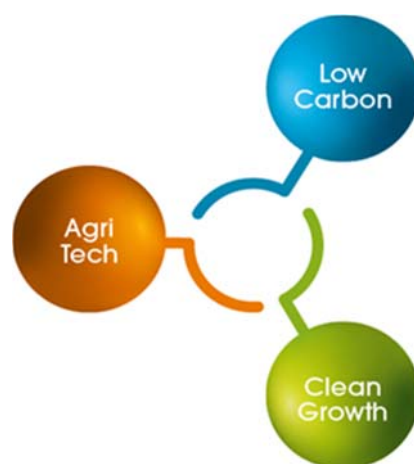
Low Carbon Housing

Low Carbon Transport

### **AGRI TECH**

Centre for Agriculture and Sustainable Innovation (CASI)

The Mercury Programme is also closely aligned to a number of the other Tay Cities projects, including the Beacon Project and Perth Innovation Highway the Eden Project, The International Barley Hub and the Advanced Plant Growth Centre. It also connects to a projects currently under development in the region, namely Michelin Scotland Innovation Parc. Discussions are already underway with the regional teams for each respective project, in order to understand how the Angus Fund and indeed the Mercury Programme can best collaborate, delivering an even greater impact for the region as a whole.

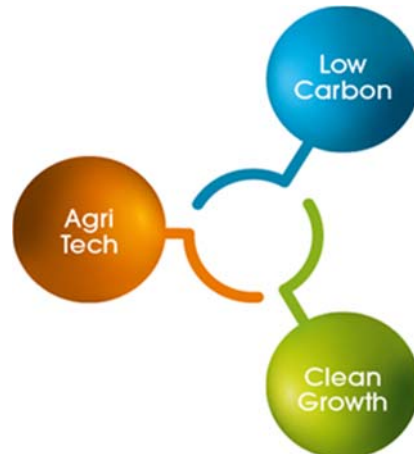


## 5. Commercial Case

The Commercial Case will be developed further in the next iteration of the OBC, with particular reference to business models which are currently under discussion.

An initial risk assessment has been carried out on the Angus Fund. This will be expanded in the next version of the OBC, but main risks can be summarised as follows:

- Risk that the selected areas for funding fail to develop a robust business case. This will be mitigated by involving Angus Council, along with colleagues from Scottish Enterprise where appropriate, in discussions with local business to support development of the Outline Business Case.
- Risk that the selected areas to be funded are unable to secure match funding. This will be managed by working to explore external funding options, but at the same time managing expectations around the available funding and the need to leverage additional sources of finance.
- Risk that the momentum developed by the Mercury Programme workshops stalls, and businesses no longer engage with the Angus Fund. This will be mitigated through regular engagement with businesses, and ensuring that all elements are developed in a transparent and inclusive manner.



## 6. Financial Case

### 6.1 Introduction

The £26.5m Angus Fund has been provisionally divided between six elements which were identified through the Mercury Programme workshop process. A robust financial model will be developed for each element and included in further iterations of the OBC/FBC that will be put forward for each, in line with guidance received from UK Government.

### 6.2 Capital and revenue requirements

The table below gives a provisional breakdown of the funding allocation, although this is subject to change, based on the production of a robust business case which will be developed for each element.

	Costs (£m)	City Deal Funding (£m)	Other Provisional Funding (£m)
Connecting Montrose	16	2.6	13.4
Clean Growth Park	7	2	5
Mercury Drone Port	1	1	-
Low carbon housing	18.5	3	15.5
Low carbon transport	5.9	2.9	3
CASI	29	15	14
<b>Total</b>	<b>77.4</b>	<b>26.5</b>	<b>50.9</b>

The revenue requirements for each element will be outlined in the individual business cases for each.

### 6.3 Impact on organisation's balance sheet

Each element will have a different structure, and therefore a different impact on the partners' balance sheets. Full details outlined in the individual business cases that will be prepared for each element in due course.

### 6.4 Impact on organisations income and expenditure account

Each element will have a different structure, and therefore a different impact on the partners' income and expenditure accounts. Full details outlined in the individual business cases that will be prepared for each.

### 6.5 Overall affordability and funding

The table at 6.2 outlines the first steps towards delivering the £100m of public sector investment in clean growth. We will provide further detail over the next year as the Mercury Programme develops further.

## 6.6 State Aid compliance

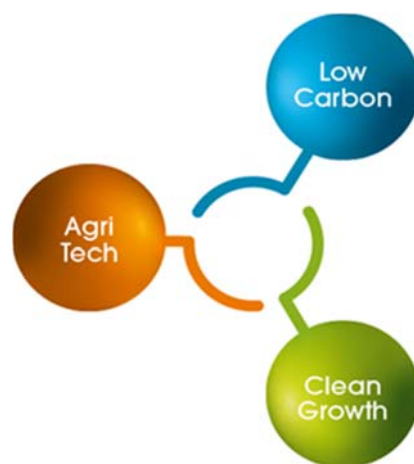
Initial discussions have taken place with Angus Council's legal team, however will be fully assessed as each element is refined and a full assessment will be presented within further iterations of the OBC.

## 6.7 Next steps

The Financial Case will be further developed in the next iteration of the OBC and we will undertake the necessary work to support further Business Case requirements. The Financial Case would seek to expand:

- Outputs and outcomes (qualitative and quantitative); - but these are outlined in this document
- Resources available from a local authority position;
- Any statements of support from stakeholders including any identified Government agency, private sector or other stakeholders / partners;
- Financial modelling information;
- On the financial mechanism for each element; and
- Joint venture working with the private sector.

Angus Council will commit resource to manage the Angus Fund and contribute to the delivery of the whole Mercury Programme.



## 7. Management Case

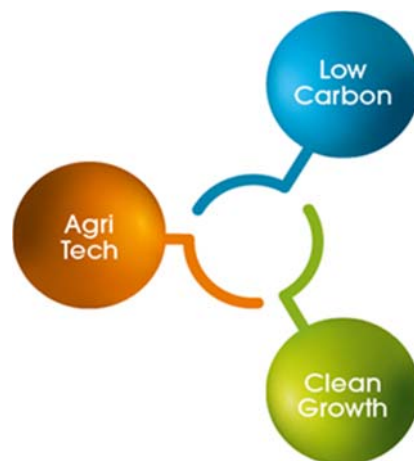
The six elements included within the Angus Fund each have a lead identified. In some cases, this is an individual from the private sector, but in others the ownership sits within Angus Council.

Discussions are currently underway in relation to the business model to be used in each aspect. In some cases, this may involve a Cooperative or Association, or alternatively a Joint Venture or partnership may be formed between Angus Council and a private company.

Where required specialist consultants will be engaged to assist in specific parts for each of the elements (i.e. Economics)

Monitoring and Evaluation requirements will be agreed prior to the release of funding, and Angus Council will maintain responsibility for ensuring that we are delivering KPIs as agreed.

Angus Council is well-placed to manage the Angus Fund project with experienced, qualified staff and established procurement processes to deliver all elements of the proposal.









**REPORT TO:** TAY CITIES REGION JOINT COMMITTEE

**REPORT ON:** TCD016 GROWING THE TAY CITIES BIOMEDICAL CLUSTER: FULL BUSINESS CASE

**REPORT BY:** ROBIN PRESSWOOD, EXECUTIVE DIRECTOR - CITY DEVELOPMENT, DUNDEE CITY COUNCIL

**REPORT NO:** TCRJC3-2021

## **1. PURPOSE OF REPORT**

1.1. This report seeks approval of the Full Business Case (FBC) for project TCD016 Growing the Tay Cities Biomedical Cluster.

## **2. RECOMMENDATIONS**

2.1. The Joint Committee is asked to:

- a. Consider this report and the executive summary of the Full Business Case at Appendix 2 (A copy of the Full Business Case is available to the Committee on request).
- b. Note that the Management Group has approved the Outline Business Case and Full Business Case for the Growing the Tay Cities Biomedical Cluster and is recommending it for approval to the Joint Committee.
- c. Approve the Full Business Case, approving the allocation of up to £25 million in capital to the project.

## **3. INTRODUCTION**

3.1. The Growing the Tay Cities Biomedical Cluster project was awarded up to £25 million capital in the Heads of Terms Agreement dated 22 November 2018. The key project information is at Appendix 1.

3.2. The project will deliver two key components:

1. A **Tay Cities Innovation Hub** to deliver c4,000 sq. m new space for spin out and spin in companies in Bio Pharma, Bio Tech, Med Tech and Informatic sectors supported by the University of Dundee's School of Life Sciences

2. A **MedTech pipeline** of c1,000 sq. m of refurbished facilities and complementary infrastructure that supports University and NHS activity in development and testing of medical technologies and health care skills training provision.

- 3.3 The project seeks to support 281 new jobs by the end of Tay Cities Region Deal and lever in over £148 million of private investment over the first 15 years from the Innovation Hub being operational. The Full Business Case was approved by the Management Group on 28 January 2021.

#### 4. DETAILED DESCRIPTION OF PROJECT

- 4.1. The Scottish Government will commit up to £25 million to Growing the Tay Cities Biomedical Cluster project. The vision of Growing the Tay Cities Biomedical Cluster is to harness the leadership position and unique assets in Life Sciences and MedTech innovation to drive the Innovation economy for Scotland.
- 4.2. The project will also cement the Tay Cities as a region that has internationally recognised excellence and scale in Life Sciences and MedTech research and industrial engagement. The University of Dundee is attracting significant venture capital into new spin-out companies created from Life Sciences expertise and IP and associated informatics and artificial intelligence platforms.
- 4.3. The key objectives of the project are:
  - De-risking biomedical discovery research from the University of Dundee
  - Helping translate Life Sciences discovery research into commercialisation opportunities.
  - Retaining the IP and commercial investment in the resulting BioPharma, Biotech and Informatics innovation companies in the Tay Cities Region.
  - Providing a platform for MedTech developments, with close collaboration between academia, industry and the NHS, product innovation and commercialisation based on the identification of need within ongoing NHS healthcare delivery.
  - Creating an environment for medical device prototype manufacturing, trialling and spinout/spin-in commercialisation.
  - Optimising the use of the unique cadaveric resources and Image Guided Therapy Research Facility for device development and optimisation and high fidelity skills healthcare training in support of MedTech innovation and its clinical adoption.
  - Increase venture capital investment in the Tay Cities region into Life Sciences, MedTech and related spin-out companies.
  - Increasing employment in Tay Cities region by creating sustainable high-quality jobs in the Life Sciences and MedTech sectors.
  - Nurturing entrepreneurial and business leadership skills to increase participation of staff and students in innovation and entrepreneurial activities.
  - Enabling new companies to better access investment finance and international markets.
  - Attracting Life Sciences and MedTech companies to spin-in and settle in Tay Cities region.
  - Increasing the number of regional strategic partnerships between academia, healthcare and industry.
- 4.4. The funding will deliver new and refurbished infrastructure adjacent to the main University of Dundee campus and Ninewells Hospital.

#### 4.5. The Tay Cities Innovation Hub

The Tay Cities Innovation Hub will provide 4039 m2 of new build on the Dundee Technopole directly adjacent to the University of Dundee's City Campus, which will include:

- Fit-for purpose laboratory and office space for new companies
- Entrepreneurship and Business Development expertise and support
- Networking and communication space

The Tay Cities Innovation Hub will provide excellent and attractively priced facilities for new spin-outs and spin-ins supported by the expertise and IP of local HEIs (the Universities of Dundee, Abertay and St Andrews) and NHS Tayside. These will typically be Informatics, BioPharma, BioTech, and MedTech companies that will also benefit from access to University of Dundee facilities and technology platforms.

#### 4.6. The MedTech Pipeline

The MedTech pipeline will see a refurbishment of 1,092m2 of existing space. This will include a newly refurbished MedTech R&D Unit which will be housed within the Institute for Medical Science and Technology facility, owned by the University of Dundee and located on the main Ninewells Hospital site in close proximity with the School of Medicine.

Investment will also be made to increase the capacity of the unique Thiel Cadaver facilities housed within Centre for Human Anatomy & the University of Dundee (CAHID) to meet growth in demand from industry for what is the optimal cadaveric model for device testing and development. These facilities are not available elsewhere in Scotland or at scale anywhere in the UK and offers a substantive competitive advantage to the Tay Cities region and Scottish MedTech industry.

Investment in the refurbishment of these facilities will complement existing infrastructure in the region. MedTech innovations flowing through the enhanced Tay Cities MedTech ecosystem will create a pipeline of MedTech spin-outs, and attract spin-ins, for the Tay Cities Regional Innovation Hub, where the companies will enjoy bespoke facilities and take products through proof of concept and proof of principle to preclinical testing.

#### 4.7. Delivery

Key Dates	Due Date	Status
Concept designs and estimated costs	Dec '19	Complete
Submission of Planning Application	Jan '21	In progress
Commencement of Construction / fit out works	Sep '21	Not Started
Completion of Construction / fit out works	Mar '22 – Jun '23	Not Started
Occupation of Buildings	Mar '22 – July '23	Not Started

## 5. FINANCIAL IMPLICATIONS

- Table: Funding profile as agreed by both governments on 17/12/20 and leverage as set out in the Deal Financial Plan.**

[illegible]

## 6. DECISION PATHWAY

6.1. The project has met the decision pathway milestones as set out below.

Decision pathway milestones and planned timeline		
Stage	Milestone	Date achieved
<b>OBC</b>	Governments' Endorsement	3/6/20
	Thematic Board recommendation	2/7/20
	Management Group approval	30/7/20
	Joint Committee informed	11/12/20
<b>FBC</b>	Submission of FBC	18/9/20
	Governments' Endorsement	27/11/20
	Thematic Board recommendation	14/01/21
	Management Group recommendation	28/01/21
	Joint Committee approval	

## 7. Covid 19

7.1. The project has addressed implications of Covid 19 in the FBC which sets out the changes to the Strategic Case since the OBC and notes the impact of Covid 19 and the potential of the sector to benefit product development and provide jobs. (page 21 of the FBC). It also includes an update on new policy objectives arising from Covid 19 at page 27. Covid risks are also addressed in the Risk Register at appendix 10 of the FBC. The project also submitted an assessment of the impact of Covid 19 to the partnership as part of the exercise led by Scottish Enterprise in April 20. The project did not consider that Covid 19 would risk or delay the project. No risks in respect of BREXIT have been identified in the FBC.

## 8. CONDITIONS

8.1. None

## 9. POLICY IMPLICATIONS

9.1. An assessment of impacts on Equality and Diversity, Fairness and Poverty and Environment was included in the FBC and Inclusive growth addressed within its own appendix.

## **10. CONSULTATIONS**

10.1. The Tay Cities Region Deal Management Group were consulted in the preparation of this report.

ROBIN PRESSWOOD, EXECUTIVE DIRECTOR - CITY  
DEVELOPMENT, DUNDEE CITY

DATE: 3 Feb.2021

## APPENDIX 1

<b>Project Information</b>	
<b>Project number</b>	<b>TCD016</b>
<b>Project name</b>	<b>Growing the Tay Cities Biomedical Centre</b>
Project owner	Mike Ferguson & Graeme Houston
Project Finance Director	Carol Prokopyszyn (Director of Finance)
Management Group Sponsor	Robin Presswood
Award amount under TCD	Up to £25 million capital
Jobs: Target number of jobs to be created	169 construction and 250 by 2033/34
Leverage to be achieved	£119,099,000





# **GROWING THE TAY CITIES BIOMEDICAL CLUSTER**

## **EXECUTIVE SUMMARY**

**CONFIDENTIAL**



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# 1 EXECUTIVE SUMMARY

## 1.1 Introduction

- The University is a leading global contributor in Life Sciences with internationally-recognised research excellence and scale in this sector. It has a global reputation for translation and impact in drug discovery and the development of new medical devices.
- The Tay City Deal announced £25m funding for the University and its partners to develop a Biomedical Cluster. This business case:
  - Provides justification for the investment of these funds and clarifies the expected outcomes of this proposed investment
  - Identifies the potential options to deliver the expected outcomes
  - Considers the commercial, financial and management arrangements to ensure successful delivery
- The business case is structured in accordance with the Five Case Model – the HM Treasury best practice approach to business case development and a requirement to secure City Deal funding.

## 1.2 Background

- The preparation of the Full Business Case has been led by the University of Dundee (UoD), in partnership with NHS Tayside, through the work of the Academic Health Science Partnership in Tayside<sup>1</sup> (AHSP), and Dundee & Angus College.

## 1.3 Strategic Case

- Regions with strong Life Sciences offerings can reap the rewards of this investment climate, and create local economic growth, so long as they have: (a) excellence and scale, (b) the ability to convert early innovation into investible assets, (c) the credibility and reputation to attract Venture Capital interest and (d) a physical infrastructure and business development environment to retain company formation and growth close to the founding expertise and IP.

### The Case for Change

- National (UK) and international VC investment into Life Sciences was subdued between the 2008 financial crash and 2013, but since then has more than doubled and continues on an upward trajectory.
- The University of Dundee, through its long-term strategic investment in translational capabilities such as the Drug Discovery Unit and the Laboratory of Quantitative Proteomics and the Institute for Medical Science and Technology, is de-risking innovative scientific

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<sup>1</sup> AHSP is a formal innovation partnership between UoD and NHS Tay Cities (<http://www.ahspartnership.org.uk/ahsp>)

research from HEIs from across the region, Scotland, the UK and beyond. This is generating significant spin-out opportunities with substantial VC interest.

- However the Tay Cities region desperately needs the infrastructure to house and support these companies. Currently high-growth spin-out companies based on Tay Cities Life Sciences intellectual property (IP) are locating elsewhere due to the lack of business ready infrastructure in the region. Further enterprises in the Life Sciences pipeline will leave the region if new facilities are not made available.
- The lack of suitable infrastructure now requires the level of public sector investment planned under this project. It would create new incubation space to anchor and nurture high growth companies in the Tay Cities region and enable them to continue to benefit from proximity to the world-class life sciences facilities and expertise of the University of Dundee. Demand analysis indicates that there is potential to fill the space proposed.
- **Scope of the Project**
- The FBC seeks approval of £25 million of Tay Cities deal capital investment into the Biomedical Cluster project. This consists of the following two components:
  - A new Tay Cities Innovation Hub will meet the projected demand by equity backed spin-out and spin-in companies in the areas of BioPharma, BioTech, MedTech and Informatics Innovation. The formation of these companies is driven largely by the University of Dundee's School of Life Sciences containing >800 researchers and an average annual research income of >£40m and a highly entrepreneurial culture. The Tay Cities Innovation Hub is projected to be completed by September 2023 and provides 4039sqm of space of modular design to enable companies to lease the proportions of laboratory and office space they require to grow. The Innovation hub is built on a financially sustainable business model from the lease income.
  - A MedTech Pipeline will create 1092sqm of innovative University facilities (School of Medicine and Centre for Anatomy and Human Identification) open also to the NHS and proximal to ongoing clinical care for (i) the clinically informed development and testing of emerging medical technologies and (ii) to enhance healthcare skills training provision in support of MedTech innovation and its clinical adoption. MedTech solutions developed in this unique environment will provide a pipeline of investment opportunities to create spin-out companies, and attract spin-in opportunities, that will feed into the Innovation Hub. The refurbished facilities are expected to be completed between June 2022 and Feb 2023.
- Collectively the £25 million investment will enable the Tay Cities region to become the life sciences innovation driver and inward investment magnet for Scotland.
- In delivery of the project a proactive approach will be taken to inclusive growth to unlock opportunities for community participation and engagement, local employment and local supply chains, and participation from under-represented groups in the regional life sciences sector.



- The current COVID-19 pandemic has created a massive disruption and impact across the world. Research is the ultimate exit strategy from the pandemic and the importance of a strong UK life sciences sector that can help develop new diagnostics, therapeutics and vaccines for public benefit has been brought into sharp relief. The importance of early diagnosis, remote monitoring of patients and reducing hospital visits – supported by the Life Sciences sector - becomes even greater as the NHS strives to restart elective procedures and referral pathways. A strong UK Life Sciences sector is even more vital for a post-pandemic world to ensure the UK has the technological readiness to deal with major new infectious diseases and ensuring the UK has the strong R&D base and supply chain resilience in the future. The Dundee Life Sciences sector has the potential to help in the post COVID-19 recovery by providing economic and societal benefits through both product development and the provision of much needed jobs.
- The planned extension of the University based Thiel cadaveric resource will better position it to respond to the continued professional development needs of surgical and dental professionals which has been limited by the cancellation of non-urgent care and lack of fresh frozen cadavers in other facilities due to Covid-19. It is expected that this will establish a legacy of healthcare engagement that will enhance opportunities for the project post the pandemic.

#### **1.4 Economic Case**

- As per HMT Green Book requirements, the Economic Case comprises two parts:
  - The Green Book's Options Framework approach to develop and appraise a long-list of potential project options, resulting in four being short-listed.
  - A detailed appraisal of these short-listed options using Cost Benefit Analysis (CBA) to identify a preferred project option.
- The CBA involved the detailed modelling of each option's costs, benefits and risks over a 30-year analysis period. The modelling used discounted cashflow techniques to compare costs, benefits and risks occurring at different times, discounted at 3.5% to produce the required net present value and benefit cost ratio summary statistics. The appraisal was undertaken on a resource cost basis that excluded VAT, tax and other transfer payments. Monetised costs and benefits were included in base year (2020/21) prices with the effects of inflation removed. In addition, the CBA focused solely on the welfare impacts of this project on Scotland rather than the UK as a whole, as requested by the Approval Authority.
- At the FBC stage a review of capital costs and professional fees was undertaken by appointed cost consultants Gleeds and project management Pick Everard. This identified that a modest increased sized Innovation Hub would provide greater economic benefit over the longer term. This option was considerably more attractive for future proofing the capacity of the Tay Cities region to anchor and grow life sciences companies and alleviated the significant risk of a smaller facility being at capacity within a few years of construction. The scope of the capital works of the Medtech and Thiel facilities remain unchanged.

- The CBA analysis demonstrates the preferred option delivers significant value over and above the counterfactual generating additional value to Scotland of £193 m over 30 years with a benefit cost ratio of 5.93. This mean that for every £1 of cost some £6 of benefit is forecast to be realised for Scotland. Benefits are estimated to be shared broadly two thirds to society and one third to the University of Dundee.

## 1.5 Commercial Case

- The Commercial Case sets out the approach to procurement activity on the programme. All procurement activity on the programme will take place in accordance with the provisions of relevant Scottish, UK, and EU procurement legislation.
- University is utilising an OJEU compliant construction framework in order to appoint the Principal Contractor, and have provisionally approached a contractor on the SCAPE Major Works framework to provide this service.
- The contractor will be appointed via a Delivery Agreement, using the NEC3 ECC Option A form of contract, in keeping with the terms of the SCAPE framework.
- A summary of the key developments are included below:

<b>BioMedical Cluster</b>			
Element	Project type	Objective	Location
Tay Cities Regional Innovation Hub	New Building	To support spinout and developing companies with necessary laboratory infrastructure through their high growth phase within the Innovation Hub.	Dundee Technopole, James Lindsay Place (directly adjacent to UoD City Campus)
MedTech R&D Unit	Refurbishment	To offer unique MedTech R&D capabilities such as Thiel cadavers and state-of-the-art imaging facilities, as well as ISO certified prototype production to a pre-clinical level.	Wilson House, Ninewells Campus (UoD owned property)
Thiel Facility (CAHID)	Extension	To provide additional cadavers to support the main MedTech R&D unit.	UoD Main Campus, CAHID building.

- The site for the Tay Cities Regional Innovation Hub is on the brownfield Technopole land, currently owned by Dundee City Council. The site is in close proximity to the School of Life Sciences on the main University campus and its associated research excellence, technology platforms and scientific services. The Technopole is identified in the Dundee Local Development Plan 2019 as a Specialist Economic Development Area.
- Dundee City Council's planners have been consulted on the proposal and, in a letter dated 23 July 2020 (Appendix 7), the Head of Planning and Economic Development advised that:
  - The project is aligned with the Tay Cities Regional Economic Strategy which identifies the life sciences sector as a key opportunity for growth in Dundee.

- Within Specialist Economic Development Areas, encouragement is given to the establishment of uses within Class 4 (Business), particularly those uses that are in accordance with the Area's distinctive nature.
  - In principle, the development of an Innovation Hub within the Technopole is in accordance with the Local Development Plan.
  - The indicative scale and massing that has been shared raise no major concerns.
- The University is in receipt of a letter from Dundee City Council, dated 20 July 2020, confirming an offer to the University of an exclusivity period as preferred bidder for a period of 12 months for the land, with further 12 monthly extensions - to be granted at the discretion of Dundee City Council - to a maximum of 36 months, subject to agreed progress (Appendix 7). Appropriate allowances have been made by the University for the purchase of the land. The University of Dundee will own and operate all facilities described within this business case.
- The key project dates are listed below.

Deliverable	Due Date	Status
Concept designs for Innovation Hub new build and MedTech Pipeline projects and estimated costs.	December 2019.	Complete
Submission of Planning Application for all elements.	January 2021	In progress
Commencement of construction/fit-out works: MedTech Pipeline <ul style="list-style-type: none"> <li>▪ Thiel Cadaver Facility Extension (CAHID)</li> <li>▪ MedTech R&amp;D Unit Refurbishment (Wilson House)</li> </ul> Tay Cities Innovation Hub	September 2021	Not Started
Completion of Construction/Fit out works: MedTech Pipeline <ul style="list-style-type: none"> <li>▪ Thiel Cadaver Facility Extension (CAHID)</li> <li>▪ MedTech R&amp;D Unit Refurbishment (Wilson House)</li> </ul> Tay Cities Innovation Hub	March 2022 November 2022  June 2023	Not started
Occupation of buildings: MedTech Pipeline projects <ul style="list-style-type: none"> <li>▪ Thiel Cadaver Facility Extension (CAHID)</li> <li>▪ MedTech R&amp;D Unit Refurbishment (Wilson House)</li> </ul> Tay Cities Innovation Hub	March 2022.  December 2022.  July 2023	Not Started

- In accordance with the requirements of the Tay Cities Region Deal community benefit clauses are in place to assist inclusive growth by unlocking opportunities within relatively deprived communities and groups.

## **1.6 Financial Case**

- The Financial Case demonstrates the affordability of the preferred option in the context of the University's overall financial plans. The costs of the programme have recently been verified. The Scottish Government will provide £25,000,000 of the total project cost through the Tay Cities Region Deal that will fully cover the development of the MedTech pipeline and the construction of a three storey 4039 sqm Innovation hub (top floor as shell). An additional £3.6m external funding will be separately sought to cover the fit out of the remaining floor. The University of Dundee is contributing the purchase of land and operational revenue costs towards the development.
- The current financial implications of the project in both capital and revenue terms confirm the projects affordability and sustainability. Revenue activity for the Tay Cities Innovation hub is from rental income of the incubation space. Revenue for the MedTech pipeline will be in the form of both R&D funding and commercial income from companies using equipment in the facilities.

## **1.7 Management Case**

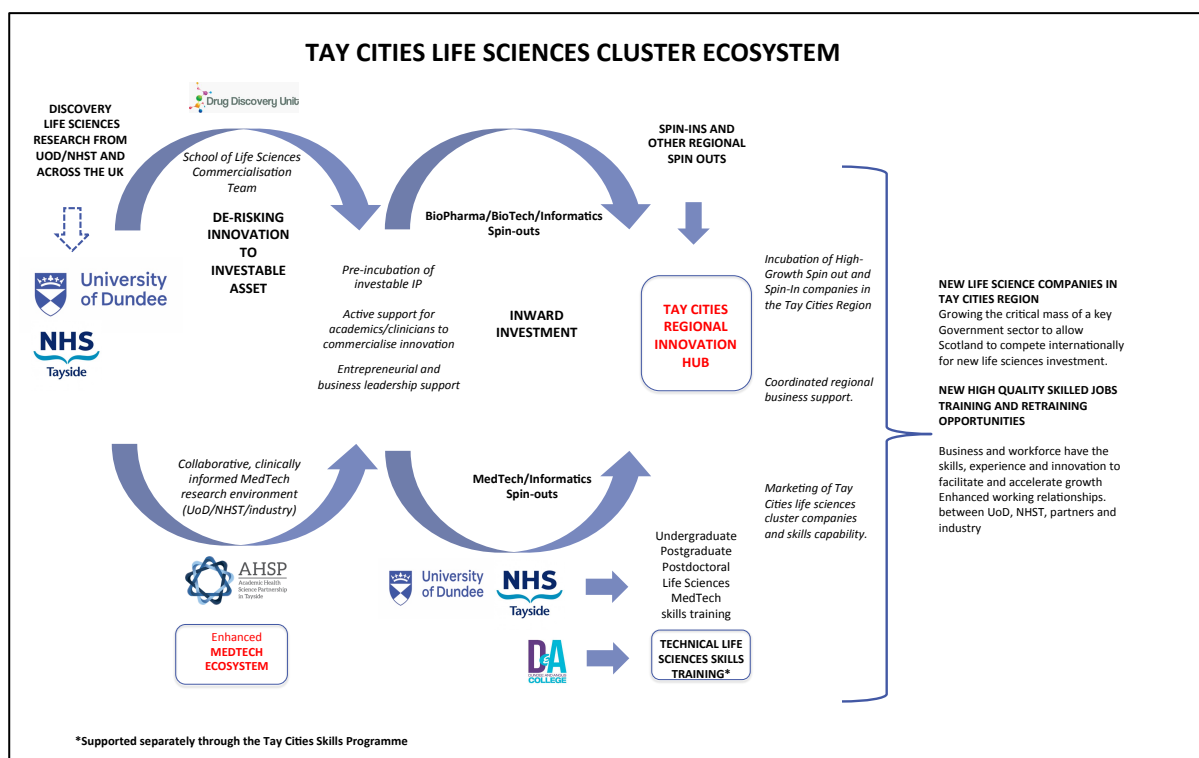
- The University of Dundee has significant experience in delivering large scale and complex capital projects to time and on budget.
- The project has a transparent and robust governance arrangements with effective reporting and change control to ensure that there is strong risk management of the project.
- The University of Dundee will implement an effective stakeholder communications and management plan in partnership with the Tay Cities Deal Programme Management Office.
- The University of Dundee will ensure that the outputs and outcomes of the project are fully delivered and realised through effective monitoring.

## 2 PROJECT DESCRIPTION

### 2.1 Vision and Strategic Objectives

- The vision of Growing the Tay Cities Biomedical Cluster is to harness the leadership position and unique assets in Life Sciences and MedTech innovation to drive the Innovation economy for Scotland (Figure 2.1.1).
- Tay Cities as a region has internationally-recognised excellence and scale in Life Sciences and MedTech research and industrial engagement, evidenced in (Appendix 1). The University of Dundee is attracting significant venture capital (VC) into new spin-out companies created from Life Sciences expertise and IP and associated informatics and artificial intelligence platforms.
- The strategic objectives are to harness fully these exceptional capabilities and reputation to catalyse a step change in innovation-led growth in the regional economy by:
  - De-risking biomedical discovery research from the University of Dundee, and the wider UK HEI sector, *i.e., taking innovation to investible asset*, via the University of Dundee's Drug Discovery Unit in the School of Life Sciences.
  - Helping translate Life Sciences discovery research into commercialisation opportunities.
  - Retaining the IP and commercial investment in the resulting BioPharma, Biotech and Informatics innovation companies in the Tay Cities Region.
  - Providing a platform for MedTech developments, with close collaboration between academia, industry and the NHS (through the work of AHSP), product innovation and commercialisation based on the identification of need within ongoing NHS healthcare delivery.
  - Creating an environment for medical device prototype manufacturing, trialling and spin-out/spin-in commercialisation.
  - Optimising the use of the unique Thiel embalmed cadaveric resources and Image Guided Therapy Research Facility for device development and optimisation and high-fidelity skills healthcare training in support of MedTech innovation and its clinical adoption.
  - Increasing venture capital investment in the Tay Cities region into Life Sciences, MedTech and related spin-out companies.
  - Increasing employment in Tay Cities by creating sustainable high-quality jobs in the Life Sciences and MedTech sectors.
  - Nurturing entrepreneurial and business leadership skills to increase participation of staff and students in innovation and entrepreneurial activities.
  - Enabling new companies to better access investment finance and international markets.
  - Attracting Life Sciences and MedTech companies to spin-in and settle in Tay Cities.
  - Increasing the number of regional strategic partnerships between academia, healthcare and industry.

**Figure 2.1.1: The flow of research innovation into inward investment, company and job creation for the Tay Cities Region**



*Note: The capital investments highlighted in red are the Tay Cities Deal funded components that will enable transformational innovation growth.*

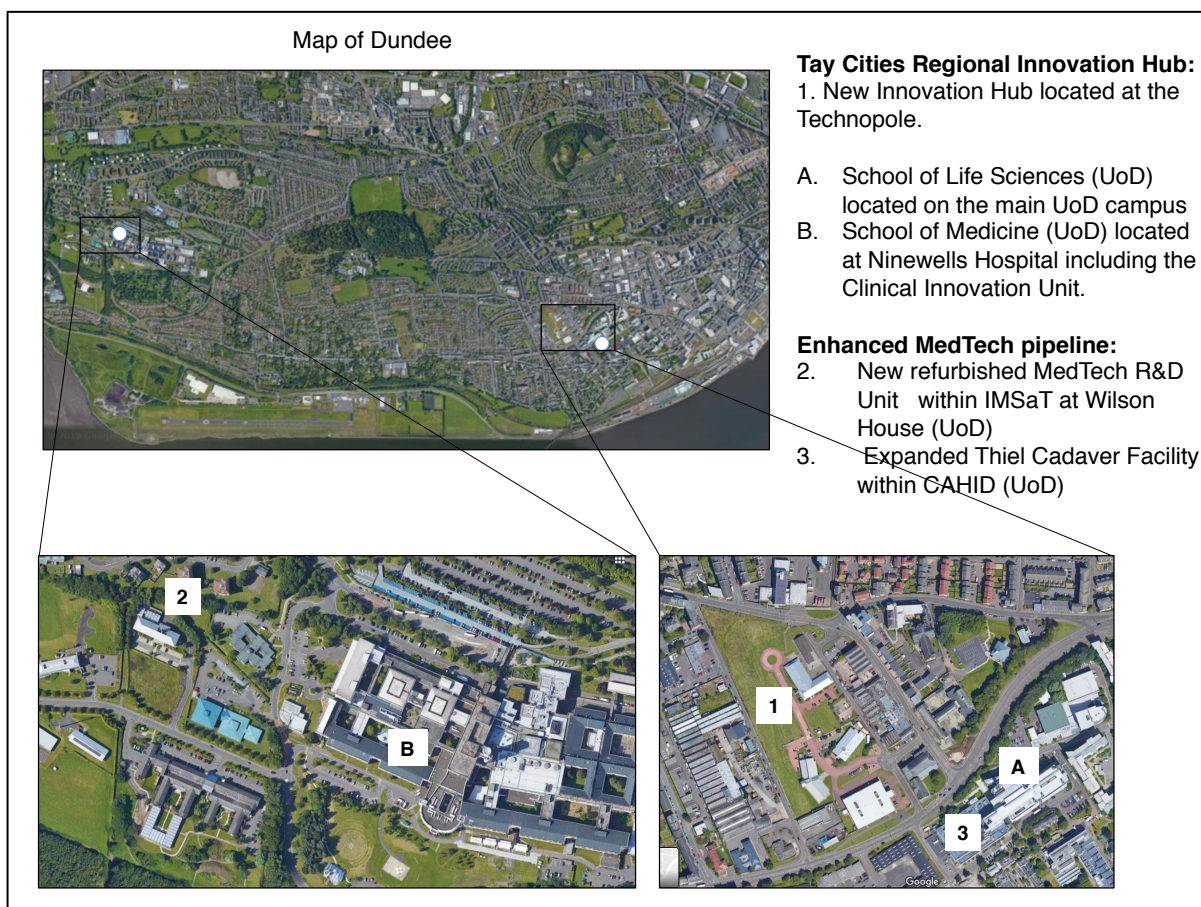
- The current COVID-19 pandemic has created a massive disruption and impact across the world. Research is the ultimate exit strategy from the pandemic and the importance of a strong UK life sciences sector that can help develop new diagnostics, therapeutics and vaccines for public benefit has been brought into sharp relief. The importance of early diagnosis, remote monitoring of patients and reducing hospital visits – supported by the Life Sciences sector - becomes even greater as the NHS strives to restart elective procedures and referral pathways. A strong UK Life Sciences sector is even more vital for a post-pandemic world to ensure the UK has the technological readiness to deal with major new infectious diseases and ensuring the UK has the strong R&D base and supply chain resilience in the future. The Dundee Life Sciences sector has the potential to help in the post COVID-19 recovery by providing economic and societal benefits through both product development and the provision of much needed jobs
- A positive consequence of the tragic circumstance of Covid-19 is the demonstration of increased potential for local firms to work with the NHS and University in an innovation led way to help solve immediate clinical need. The University and NHS Tayside are currently very active at this tripartite Covid-19 collaborative interface and our aim is for this model of cooperation to remain as a positive legacy, fast-tracking working together through to clinical adoption.



## 2.2 Delivery

- The project delivery involves new and refurbished capital infrastructure adjacent to the main UoD campus and Ninewells Hospital (Figure 2.2.1). Figure 2.2.1 provides an overview of the site locations.

**Figure 2.2.1: Location of the capital developments that are included in the Growing the Biomedical Cluster business case**

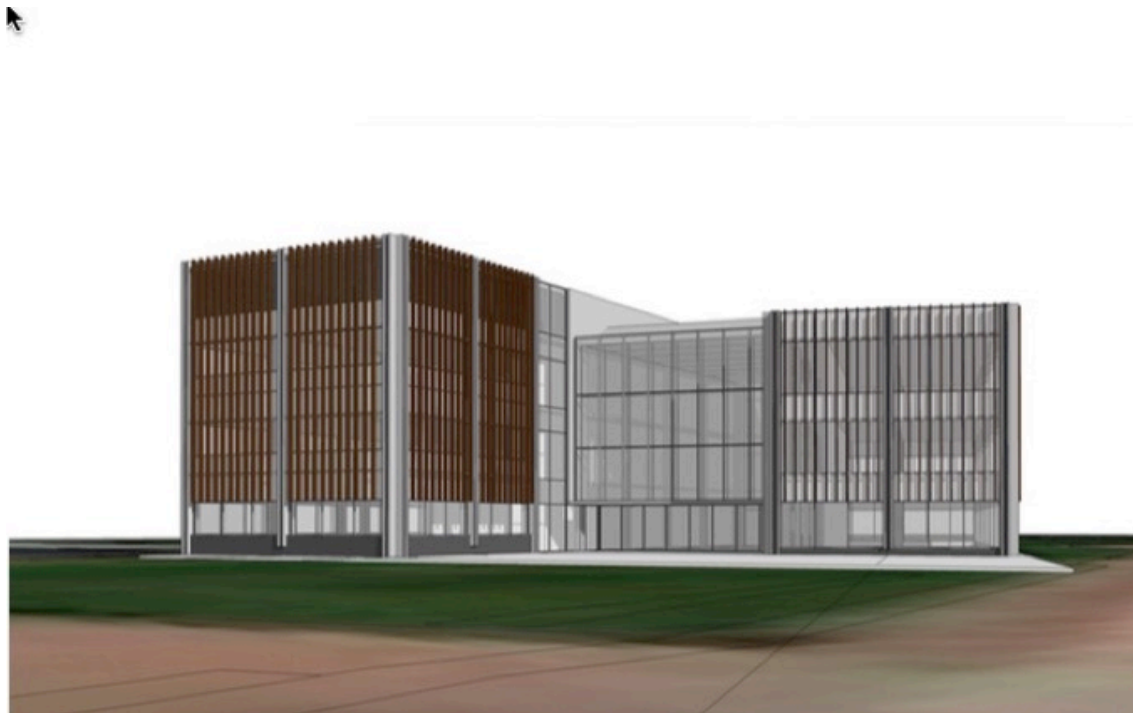


### The Tay Cities Innovation Hub

- The Tay Cities Innovation Hub will provide 4039 m<sup>2</sup> of new build on the Dundee Technopole at James Lindsay Place, directly adjacent to the University of Dundee's City Campus, which will juxtapose:
  - Fit-for purpose laboratory and office space for new companies
  - Entrepreneurship and Business Development expertise and support
  - Networking and communication space

- The Tay Cities Innovation Hub will provide excellent and attractively priced facilities for new spin-outs and spin-ins spawned by the expertise and IP of local HEIs (the Universities of Dundee, Abertay and St Andrews) and NHS Tayside. These will typically be Informatics, BioPharma, BioTech, and MedTech companies that will also benefit from access to UoD facilities and technology platforms.

**Figure 2.2.2: Architect drawing of Tay Cities Innovation hub**



- The “fit-for-purpose” design philosophy is based on anticipated demand, made possible by the local HEI and NHS processes of company pre-incubation. The aforementioned organisations encourage entrepreneurship and commercialisation of scientific expertise and IP. They assist this by providing space and financial and technical support to move innovation to an investible position. Consequently, the Innovation Hub management, as part of UoD Research Innovation Services, will have real-time visibility on companies approaching incorporation and receipt of significant seed-funding and/or series-A investment. The Tay Cities Innovation Hub management will work with the companies to configure flexible modules of office/informatics space and laboratory space (biology, tissue culture, equipment, synthetic/medicinal chemistry and clean-room) to satisfy their needs.
- It is these companies (growing from about 5-10 to up to 30-40 staff over 3-5 years) that will occupy the Innovation Hub. Successful companies will then move on to their own bespoke accommodation in the Dundee Technopole, Technology Park or MediPark, with the full assistance of Dundee City Council and Scottish Enterprise.
- While the majority of the space will be for company occupation, some will be for communal use by the companies (networking space, café, bookable meeting rooms). In order to give the best chance of success, the location of the Tay Cities Innovation Hub on the



Technopole immediately adjacent to the main UoD campus will enable close proximity with the School of Life Sciences, with its world leading research expertise, high-end technology platforms and laboratory services that will benefit the Hub. Further the site location being immediately adjacent to the UoD campus will benefit from the UoD Centre for Entrepreneurship and Research and Innovation Services providing access to legal and business planning expertise, as well as to Dundee City Council (BioDundee), local Gateway and Scottish Enterprise business support. In particular for emerging MedTech companies, continued access and dialogue with NHS Tayside, Scottish Health Innovations Ltd and NHS procurement will be supported through the work of AHSP.

### **The MedTech Pipeline**

- MedTech product development is complex, requiring multi-disciplinary team-working and multiple stages of development and testing prior to clinical trials and use in humans. The landscape has become more challenging in recent years with increased requirements of regulatory bodies (MHRA/FDA). Few MedTech companies will invest or acquire technology without clear clinical feasibility and device testing in quality assured laboratories. This currently limits academic and clinically led project commercialisation.
- The Tay Cities Region currently has unique preliminary facilities to deliver clinical feasibility e.g. Thiel cadaveric models, device testing (e.g. computational techniques) and underpinning compliance with regulatory standards. However these facilities lack the scope to fully maximise the opportunity to ensure a leadership position in MedTech commercialisation and clinical engagement. Through making modifications and enhancements to our existing MedTech provision the project will accelerate the development of a broad range of MedTech devices/technologies through to commercial MedTech manufacturing.
- We will enhance our established areas of expertise in minimal invasive therapies, imaging, health informatics, digital health and clinical engagement, in the key clinical areas of cardiovascular, cancer, and subject to sufficient equipment resourcing neurosciences, where additional opportunities in the MedTech pipeline/clinical innovation through to clinical adoption may be leveraged from the TCD investments.

### Refurbished and expanded infrastructure funded through TCD

- **Refurbished MedTech R&D Unit** (Institute for Medical Science and technology (IMSaT), Wilson House, UoD). A newly refurbished MedTech R&D Unit will be housed within IMSaT located in Wilson House. Wilson House is owned by the University of Dundee and is located on the main Ninewells Hospital site in close proximity with the School of Medicine. Together with the existing Clinical Innovation Unit (detailed below) and Thiel Cadaver Facility at the Centre for Anatomy and Human Identification (CAHID), the Unit will offer unique MedTech R&D capabilities such as cadaveric and state-of-the-art imaging facilities, computational capabilities as well as ISO certified prototype production to a pre-clinical level.

- **Thiel Cadaver Facility** (Centre for Human Anatomy & Identification CAHID, UoD). Investment will be made to increase the capacity of the unique Thiel Cadaver facilities housed within CAHID, UoD to meet growth in demand from industry for what is the optimal cadaveric model for device testing and development. Thiel is a form of cadaver that most closely approximates to 'life-like' patient simulation and as it is not available elsewhere in Scotland or at scale anywhere in the UK it offers a substantive competitive advantage to the Tay Cities and Scottish MedTech industry.

Complementary existing infrastructure

- **Clinical Innovation Unit** (Ninewells Hospital main site). The Clinical Innovation Unit provides a unique innovation exploration environment bringing industry, clinicians, the social care sector and academics together at the MedTech innovation/training interface.
- **Additional UoD MedTech infrastructure** – The University of Dundee has additional environments supporting MedTech innovation. The Institute for Medical Science & Technology (IMSaT) (also within Wilson House) is positioned at the interface between biomedical and physical sciences and undertakes R&D in pursuit of advances in patient care. The Image Guided Therapy Research Facility (IGTRF) provides a simulated healthcare environment and associated clinical models for medical device development and testing. The MedTech pipeline is also supported by the work of healthcare facing academics in Biomedical Engineering, Computing/Artificial Intelligence and Design.
- MedTech innovations flowing through this enhanced Tay Cities MedTech ecosystem will create a pipeline of MedTech spin-outs, and attract spin-ins, for the **Tay Cities Regional Innovation Hub**, where the companies will enjoy bespoke facilities and take products through proof of concept and proof of principle to preclinical testing.
- While a primary objective of the MedTech Pipeline is to enhance the product offering of Scottish based spin-in companies we will equally aim to attract new spin-ins to the Tay Cities Region from outwith Scotland, with the objective of achieving net increases in critical mass and economic growth. Such spin-ins are expected to be UK and non-UK SMEs and larger corporates taking up residency in either the Innovation Hub, Dundee Medipark, Technology Park or similar.
- A key objective in attracting such companies to the Tay Cities region is to ensure that the facilities and know-how offered by the Pipeline are promoted and marketed throughout the national and international MedTech sectors. We will work primarily with Scottish Development International, Scottish Enterprise and Healthcare UK to deliver this.
- Attracting spin-ins will not change the infrastructure request as it has always been planned that development of the MedTech pipeline will comprise a careful re-design of our MedTech innovation environment, along with equipment enhancement, to ensure that our facilities are common in terms of alignment with both the spin-out and spin-in evolutionary pathways. Key to the success of such alignment, and particularly engagement with spin-ins, will be the proactive commitment of our business development team to ensure a seamless interface

between off-site company facilities and our enhanced Ninewells/ University main campus based resource. The 'key account' style management demands to ensure the success of the axis with spin-ins is well recognised and we are confident of achieving synergy across this domain.

### **IP management**

- The University of Dundee has robust IP and commercialisation management in place through its technology transfer office Research and Innovation Services (RIS). The University supports and nurtures spin-outs during the pre-incorporation phase and has a robust policy to manage this process. When IP is licensed to spin-outs at an appropriate trigger point such as a certain level of investment (e.g. Series A) or certain level of sales, the IP will be assigned to them. Once the IP is assigned, any IP generated relating to the original IP is owned by the company. Once the company is incorporated and spun out of the university any new IP (foreground IP) that is unrelated to University IP is owned by the Company. The University will take a standard 20% equity stake in any spin-out but thereafter acts with them in an arm's length manner. It is important to note that all companies that will enter the Innovation hub either from UoD or other HEIs will be beyond this process and will own their IP. Any new IP generated by those companies is managed by them and is under their ownership.

## **2.3 Project Cost and Leveraged Investment**

- The total project cost is projected to be £25,692,000. This includes (1) the purchase of the brownfield site on the Technopole on which the Tay Cities Innovation hub will be built and the University of Dundee contributes this cost to the project. A provisional sum of £500,000 (subject to negotiation) has been included. (2) The University of Dundee will contribute operational costs of the Tay Cities Innovation Hub and MedTech pipeline of £192k, which is required in the early years of the project until the operation of the facilities are sustainable. It is proposed drawdown of the £25million of Tay Cities Region Deal investment is over the period from 2020-2024.
- An additional £3.6m external funding will be separately sought to cover the fit out of the remaining floor of the Innovation Hub.
- The modelling of predicted leveraged investment in new spin out companies through the Tay Cities Deal funding in infrastructure to support the Biomedical Cluster is outlined in the Economic Case. UoD Life Sciences alone is currently pre-incubating seven spin-out company opportunities that are attracting interest from international and national venture capital organisations. We estimate that the Innovation Hub will enable use to secure and anchor in the Tay Cities Region >£148 million inward private investment over the first 15 years from the Innovation Hub being operational.

## **2.4 Key project milestones**

- The anticipated overall project outputs are summarised below.

<b>Forecasted outputs</b>	<b>Value Generated</b>
Number of people working in the Biomedical cluster by the end of the Tay Cities Deal (2033/34)	281
Number of people working in the Biomedical cluster by the end of the 30-year economic analysis period (2052/53)	800
Sqm of new and refurbished property delivered (by 2023/24)	5131 sqm
Construction jobs supported during initial construction period*	169
Net Present Value to Scotland of this Project (over the 30-year economic analysis period)	£193m
Benefit Cost Ratio	5.93