

# INVEST GLASGOW

INNOVATION

INVESTMENT

ENVIRONMENT

CLUSTER

SPIN-OUTS

COMMERCIALISE



EXCELLENCE

GLASGOW

PRODUCTIVITY

FERTILE

NURTURE

ECONOMY



PROXIMITY



CITIES

SUPPLY  
CHAIN

ECOSYSTEM

SCALE

LOCATION

ZONES

VIBRANT

SPECIALISMS

WORLD-  
CLASS

COALESCE

# GLASGOW'S INNOVATION DISTRICTS

PROSPECTUS FOR INVESTMENT

# CONTENTS

The Innovation Economy, Prof Greg Clark CBE FAcSS	3–5
AMIDS	6–7
Glasgow City Innovation District	8–9
Glasgow University Innovation District	10–11



IMAGING CENTRE OF EXCELLENCE (ICE) AT QUB



# THE INNOVATION ECONOMY

BY PROF GREG CLARK CBE FAcSS

## THE INNOVATION ECONOMY

The innovation economy has reached a critical threshold in our cities. Since the global financial crisis, a new generation of technologies and the disruptive impacts of big data, the platform and sharing economies, and the global war for talent, have been transforming corporate business models, location preferences and workplace demands.

At the same time, cities have sought to diversify their own existing economic base and develop new sources of jobs and revenue. For most cities this imperative co-exists with the broader process of re-urbanisation and the need to optimise and rationalise land uses.

As a result, city leaders, landowners and developers are actively trying to accommodate the needs of advanced industries and firms in innovation districts and other types of location. What is in no doubt is that the innovation economy is disrupting business as usual for the public and private sectors in all cities and creating significant opportunities as a consequence.

## THE PRE-CONDITIONS OF AN INNOVATION ECONOMY: ECOSYSTEMS AND DEMAND DRIVERS

No city can accommodate the innovation economy without a strong innovation ecosystem – the networks of firms, institutions, customer communities, infrastructures, supply chains, labour markets and investment systems that coalesce across a city or region. A strong eco-system is able to sequence these factors to drive discovery, business formation, capitalisation, and growth.

Not all cities can host a vibrant innovation eco-system, especially if they lack fundamental economic demand drivers. These drivers include access or proximity to a large customer and supplier market, higher-risk investors, regular interactions between firms, and specialisation in sectors that experience competitive pressures to improve their productivity. Eco-systems also have a much wider geography than a single location, and responsibility for fostering and co-ordinating them is usually shared by many different organisations and tiers of government.

## GOING VIRAL: THE RISE OF INNOVATION DISTRICTS

Innovation eco-systems benefit from proximity and give rise to specific concentrations of innovation activity. Innovation districts are one key location but there are also innovation quarters, zones, campuses, triangles, parks, corridors and many other types of location.

Innovation districts have been observed since the late 1990s. The current literature on the practical ingredients of innovation districts has been headed by Brookings Institution and the World Bank. This research identifies the importance of “networking assets” in these districts that generate positive relationships between start-ups, incubators, research, education, and public policy institutions.

Subsequent research has identified several types of location: those organically embedded in urban neighbourhoods, adapting from a self-contained campus or science park format, and those which grow out of the sharing of assets, facilities and “traffic” among anchor firms and institutions.

Numerous cities around the world are keen to establish one or several of these locations, but they do not evolve and succeed just because city governments, universities, or landowners wish to have them. They require careful interventions at different points in their development: to spot promising firms and locations, create the initial conditions, activate their growth, and, later on, to sustain their momentum with added capacity and with flexible land uses.

The requirements to transform a designated innovation location depend on its size, location and inherited assets. The success of single innovation

‘hub buildings’, for example, often depends on the quality and depth of collaboration made possible through adaptive space, memberships, competitions and events. Conversely, innovation quarters close to major transport termini rely on high quality public space and the wise re-use of heritage to recreate an authentic sense of place. Larger vacated or greenfield innovation sites usually require a real scale of ambition, resources, skills and professional leadership to oversee the process of change. Each of these ‘types’ of innovation location, and others besides, have different ‘success models’ in order to become relevant and remain hospitable to innovation.

## A KEY ROLE FOR UNIVERSITIES

Universities often make a distinctive contribution to the development and leadership of an innovation district. There are many examples where university investment underpins a wider eco-system dedicated to innovation and expertise, and where students act as a valued supply of innovation consumers as well as the next generation of innovators. The Interdisciplinary Center in Herzliya, Tel Aviv, and the Oslo Cancer Cluster Innovation Park are two prominent examples where universities have convened a whole value chain and established deep horizontal links with schools, entrepreneurs and employers.

Universities are taking a lead in many other ways too. In Paris, universities are partnering to cluster their assets and become key co-ordinators of innovation-focused local development. In Amsterdam, the Vrije Universiteit (VU) is developing a uniquely mixed-use, 24/7 campus, and high tech laboratory facilities that bring together previously siloed specialisms. Elsewhere,





others collaborate to build micro-housing and so-called 'millennial villages' in central locations (e.g. The University of Boston). And there are emerging examples of universities that are setting up living lab housing projects for students to test new types of housing, public space, water and energy systems (e.g. RDM Rotterdam).

## MAKING INNOVATION DISTRICTS WORK

Innovation locations not only depend on a high quality of life and place in the wider city. They also have to provide the amenities, density, regulations and public spaces to foster real interaction. This is often a challenge in locations that are poorly connected, under complex ownership, or lack the right real estate product. Recent evidence suggests that land assembly can be essential to bring forward flexible development parcels that can adapt to the market cycle, while value capture planning and the ability to sell development rights to finance social infrastructure has proven key in many cities.

Many innovation districts have benefited from catalytic investment to demonstrate a new standard of place-making and attract a new kind of tenant to a neighbourhood. The strategic use of events and temporary installations, so-called 'tactical urbanism', can also test demand and enhance appetite among new audiences of innovative workers.

## GLASGOW'S LEADING EDGE

Fostering the development of Innovation Districts in Glasgow makes sense for a number of reasons. First amongst these is the clear fact that Glasgow has the attributes needed to make several innovation districts work. Scotland's largest urban economy is well connected to other poles of growth and has a growing business, talent, and investor base. It has a long tradition of success in 'applied knowledge and technology sectors' such as shipping, engineering, creative industries,

and medicine. Moreover, Glasgow has already successfully developed an International Financial Services District, a Creative Industries and Media Cluster, and a successful Central Business District with office, retail, education, and entertainment all working together. Glasgow knows how to build specialist districts. Most important, Glasgow has leading universities with technological expertise that are eager to work with business. This means that there are several complementary Innovation Districts already evolving in Glasgow bringing together leading technologies with world-class researchers, young ambitious companies and capable investors.

The three districts that are profiled in this report are ripe for investment now. They have a growing business base of leading edge firms utilising advanced technologies to be inventive and productive. The two urban districts have superb institutions stewarding their development and a growing population base and urban amenities. The airport based district has the successful and growing airport itself and an emerging cluster of advanced engineering and technology institutes. Together, these three districts have the scope to lead a new cycle of reinvestment and expansion in Glasgow's knowledge driven sectors and places.

1. Katz, B. and Wagner, J. (2013). The Rise of Innovation Districts: A New Geography of Innovation in America. Brookings Metropolitan Policy Program.
2. Clark, G. and Moonen, T. (2015). Technology, Real Estate and the Innovation Economy. ULI; Clark, G. and Moir, E. (2015). Density: drivers, debates and dividends. ULI.
3. Hanna (2016). Spaces to think: Innovation districts and the changing geography of London's knowledge economy. Centre for London. Available at [http://centreforlondon.org/wp-content/uploads/2016/04/J4234CFL\\_Innovation\\_Districts\\_WEB-FINAL.pdf](http://centreforlondon.org/wp-content/uploads/2016/04/J4234CFL_Innovation_Districts_WEB-FINAL.pdf)
4. Mulas et al. (2015). Boosting tech innovation ecosystems in cities : a framework for growth and sustainability of urban tech innovation ecosystems. World Bank Working Paper.

# ADVANCED MANUFACTURING INNOVATION DISTRICT SCOTLAND (AMIDS)

AMIDS will create an internationally recognised centre for innovation, research and advanced manufacturing. It will be home to the €72.8 million (£65 million) National Manufacturing Institute for Scotland (NMIS), which will be the catalyst for the development of Scotland's advanced manufacturing industry, providing support for manufacturing businesses and connecting all of Scotland's engineering universities and colleges.

## LOCATION

AMIDS is located in Renfrewshire, 6 miles west of Glasgow, with unrivalled connectivity:

- Adjacent to Glasgow Airport with regular one hour flights to London and connections to more than 120 worldwide destinations
- Direct access to Scotland's major motorway network

Situated at the centre of Scotland's largest labour catchment (1.8 million population within the Glasgow city region) and alongside established businesses such as Rolls Royce, Vascutek and Thermo Fisher, make the Advanced Manufacturing Innovation District Scotland the ideal investment opportunity.

In addition to NMIS, AMIDS is also supported by the following key investments:

- Location of the €10.08 million (£9 million) Lightweight Manufacturing Centre opening in May 2018 to support the aerospace and automotive industries
- Next to the University of Strathclyde's Advanced Forming Research Centre, leading in research and development of manufacturing technologies
- €44 million (£39 million) City Deal funding to provide the enabling infrastructure including key roads and bridge connections

Indicative financial appraisals suggest a Gross Development Value (GDV) of €217 million (£194 million) to €273 million (£244 million).

## INVESTMENT OPPORTUNITIES

The investment opportunity is flexible with AMIDS envisaged to be delivered through a public/private sector joint venture.

Investment is sought to finance and deliver demand-led commercial floorspace for AMIDS-related uses.

Significant investment and flexible development opportunities on a 64 hectare (158 acre) greenfield site, including:

- Design and build opportunities
- Flexible sized development plots for lease or purchase
- Advanced manufacturing
- Aviation services (including maintenance repair and overhaul, and cargo)
- Logistics
- Office space





## MILESTONES AND TIMESCALES

Phasing of the development is anticipated to be market driven, taking place over a 15 year period from 2019.

Planning consent is secured for the enabling infrastructure. A Planning Permission in Principle (outline planning consent) application for AMIDS will be submitted in Quarter 2 of 2018, with a view to this consent being in place by Q3 2018.


Enabling infrastructure and NMIS construction to commence 2018, and is due to be completed by 2020.

## PARTNERS

AMIDS will be delivered in partnership with a range of key Scottish public sector agencies including Scottish Government, Scottish Enterprise and Renfrewshire Council. Potential investors will have an opportunity to have a role in this partnership .


## KEY CONTACTS

 **Alasdair Morrison**  
Head of Regeneration

 +44 (0) 141 618 4664

 [alasdair.morrison@renfrewshire.gov.uk](mailto:alasdair.morrison@renfrewshire.gov.uk)

 **Stephen McFadden**  
Project Director (City Deal)

 +44 (0) 141 618 5709

 [stephen.mcfadden@renfrewshire.gov.uk](mailto:stephen.mcfadden@renfrewshire.gov.uk)

 [www.renfrewshire.gov.uk/amids](http://www.renfrewshire.gov.uk/amids)

# GLASGOW CITY INNOVATION DISTRICT

At the heart of Glasgow's vibrant city centre sits Glasgow City Innovation District, one of the UK's premier innovation destinations. With over €112 million + (£100 million +) of innovation investment, Glasgow City Innovation District is bringing together government, industry and academia to harness and build upon a base of research expertise, industry engagement and a pipeline of high-quality, work-ready graduates.

## LOCATION

A walkable, liveable 6 x 6 city block area that is home to the University of Strathclyde and the city's creative Merchant City quarter, the District is centrally located with direct access to the motorway network – and to Glasgow and Edinburgh airports – while Queen Street and Central stations connect to the Scottish and UK rail network.

## INNOVATION

The University of Strathclyde is a leading international technological university with an enviable track record of working with industry. The University and its new Technology & Innovation Centre (TIC) and inovo industry engagement buildings have already attracted a number high-profile organisations to the District. TIC is home to the Weir Group's Advanced Research Centre and the UK's only Fraunhofer research centre – Europe's largest contract research organisation – as well as the pharmaceutical research centre for Continuous Manufacturing & Crystallisation (CMAC) and Scotland's leading entrepreneurial organisation, Entrepreneurial Scotland.

And beside TIC, inovo is home to organisations and SMEs with close links to the energy and enabling technologies sectors, including the UK Offshore Renewable Energy (ORE) Catapult and three cross-Scotland Innovation Centres in sensors (CENSIS), industrial biotechnology (IBioIC) and digital health (DHI). The City Council's new Tontine business accelerator attracts and nurtures high growth entrepreneurial talent and is spinning out many of Glasgow growth companies of the future.

## PROPOSITION

Glasgow City Innovation District is a unique and proven city centre-based 'live, work, play, innovate' environment that is attractive to talent, innovation active companies and investors.

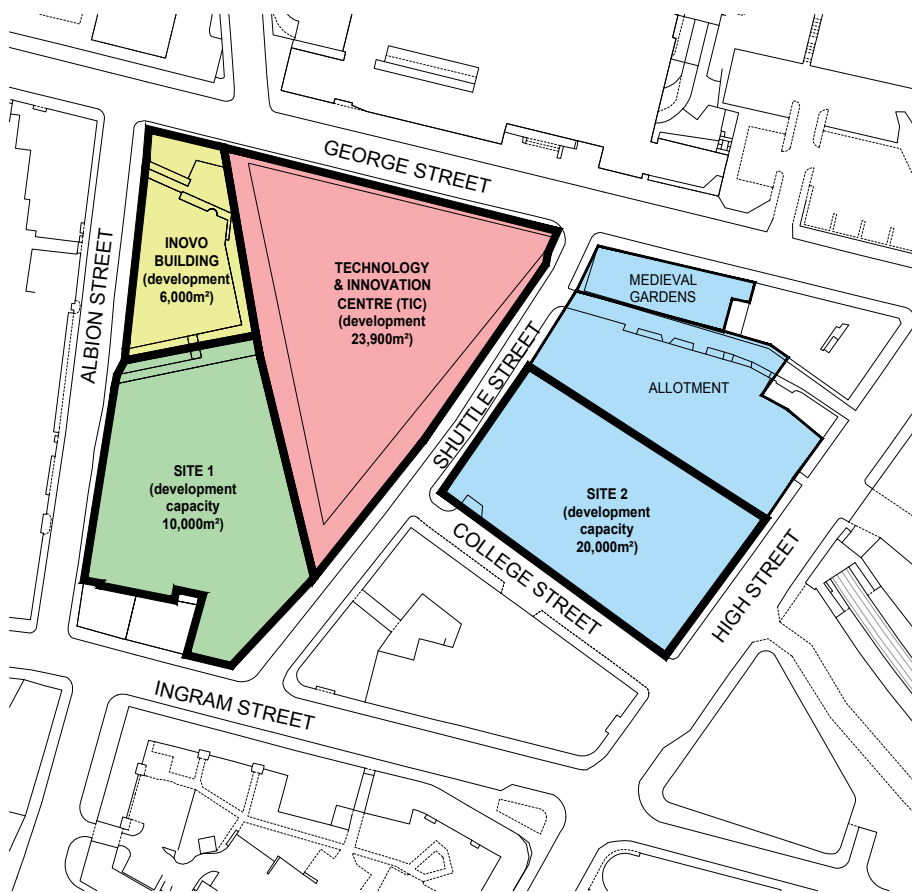
## INVESTMENT OPPORTUNITIES

Phase I of Glasgow City Innovation District has already seen €112 million + (£100 million +) invested in TIC, inovo and Tontine. Together these house 18 major research centres and innovation organisations and over 30 innovation companies and SMEs, including the UK's only Fraunhofer site.

Phase II of Glasgow City Innovation District includes two prepared vacant sites immediately adjacent to TIC and inovo. Site 1 is 0.4ha and can accommodate 10,000m<sup>2</sup> of company innovation space and Site 2 is 0.6ha and can accommodate 20,000m<sup>2</sup> of mixed research and innovation space.







TIC Zone site ownership and development capacity:

<span style="color: yellow;">■</span>	University of Strathclyde (Inovo Building) Site area approx. 0.174 Hectares
<span style="color: red;">■</span>	University of Strathclyde (TIC) Site area approx. 0.570 Hectares
<span style="color: green;">■</span>	Scottish Enterprise (Site 1) Site area approx. 0.392 Hectares
<span style="color: blue;">■</span>	Scottish Enterprise:- Medieval Gardens - 0.065 Hectares Allotment - 0.202 Hectares Site 2 - 0.408 Hectares Total - 0.675 Hectares

## MILESTONES AND TIMESCALES

Phase I (COMPLETED): inovo 5,000m<sup>2</sup> (GIA)/€14.6 million (£13 million) (2014); TIC 23,900m<sup>2</sup> (GIA)/€100 million (£89 million) (2015); Tontine 3,000m<sup>2</sup> (GIA)/€1.9 million (£1.7 million) (2016).

Phase II:


TIC Site 1 (East): 0.37ha site to accommodate c. 10,000m<sup>2</sup> of innovation space.


TIC Site 2 (West): 0.41ha site to accommodate c. 20,000m<sup>2</sup> of research & innovation space.


## GLASGOW CITY INNOVATION DISTRICT PARTNERS

University of Strathclyde, Glasgow City Council, Scottish Enterprise, Glasgow Chamber of Commerce and Entrepreneurial Scotland.

## KEY CONTACTS

 **Kevin Kane**  
Business Director, University of Strathclyde

 +44 (0)7714 676 529

 k.kane@strath.ac.uk

# GLASGOW UNIVERSITY INNOVATION DISTRICT

The Interdisciplinary Innovation Zone on the University campus at Church Street and the Clinical Innovation Zone on the Queen Elizabeth University Hospital (QEUH) site serve as anchors of the Glasgow University Innovation District – a partnership between the University of Glasgow, Glasgow City Council and Scottish Enterprise.

## LOCATION

Only 3 miles from the city centre and 6 miles by road from Glasgow Airport, the West End and Waterfront area of the city is an exceptional environment for innovation, boasting internationally significant clinical and research infrastructure, a talented workforce and an enviable cultural vitality.

## THE VISION

Working with partners, Glasgow City Council and Scottish Enterprise, and with the support of the Scottish Government, the University of Glasgow aims to build on this foundation to establish a world-class innovation district and push Glasgow into the top rank of global innovative cities.

The Clinical Innovation Zone at the QEUH is attracting leading biomedical companies from all over the world, and it is growing all the time. The Interdisciplinary Innovation Zone, part of the €1.12 billion (£1 billion) development of the campus in the West End of the city, will complement its clinical

counterpart – and the two together will act as the twin anchors of the district.

The new Interdisciplinary Innovation Zone on the western edge of the campus will:

- Provide the space and infrastructure for industry contacts to work alongside teams as researchers
- Nurture a fertile community of start-ups, spin-outs and other entrepreneurial activity to support Glasgow's transformation into a global nexus of innovation
- Generate opportunities for students, staff and the broader community to develop and master the next generation skills needed to excel in the global economy
- Attract global talent
- Power the regional economy

Together the Zones will drive innovation in the University's four key opportunity themes: smart campus, precision medicine and chronic diseases, the nano and quantum world, and cultural and creative economies.

## MILESTONES AND TIMESCALES

Phase 1 of the construction of the University campus extension will be completed in 2023. The University has recently commenced the design of the innovation zone.

## INVESTMENT OPPORTUNITIES

This will provide a unique opportunity to partner with the University in a mixed use development which will support the ambitions of the Glasgow University Innovation District. The size and scale of the investment opportunity will be determined once early designs for the Innovation Zone have been developed.





## GLASGOW UNIVERSITY INNOVATION DISTRICT PARTNERS

University of Glasgow, Glasgow City Council,  
Scottish Enterprise

### KEY CONTACTS

---



**Ann Allen**

Director of Estates and Commercial Services



+44 (0)141 330 4387



[ann.allen@glasgow.ac.uk](mailto:ann.allen@glasgow.ac.uk)



# INTERESTED? FIND OUT MORE

TO FIND OUT HOW INVEST GLASGOW  
CAN SUPPORT YOU, CONTACT:

✉ [invest@glasgow.gov.uk](mailto:invest@glasgow.gov.uk)

🌐 [investglasgow.com](http://investglasgow.com)

🐦 [@invest\\_glasgow](https://twitter.com/invest_glasgow)

🌐 [Invest Glasgow](https://www.linkedin.com/company/invest-glasgow)

☎️ +44 (0) 141 287 8616

© 2018 Invest Glasgow

Partner



**INVEST  
GLASGOW**