Estate Development Update 2019
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The University of Strathclyde is a leading international technological university located in the centre of Glasgow, one of the UK’s and Europe’s most vibrant and exciting cities.

Founded in 1796 during the Scottish Enlightenment by Professor John Anderson as ‘a place of useful learning’, the University is a socially-progressive institution that enjoys a reputation for internationally-leading research, excellent education, and strong partnerships with industry, government, business and the third sector.

Strathclyde is a major employer and contributor to the economic success of Glasgow, and is playing a key role in the transformation and growth of the city, not only through our teaching and research, but through investment in our campus estate.

We believe a first-class working environment is both conducive to and essential for the delivery of our objectives in world-leading research, teaching, innovation and productive engagement with business and industry as well as society at large.

Over the past seven years, and out to 2023, Strathclyde will have invested £1 billion in its estate, transforming the student experience, expanding our learning and teaching facilities and growing the research base and capabilities of the university and its partners.

To date we have achieved much – the Technology & Innovation Centre (TIC), Strathclyde Sport, the Strathclyde Institute of Pharmacy and Biomedical Sciences, the Advanced Forming Research Centre, Power Networks Demonstration Centre, remodelling of the Strathclyde Business School, John Anderson Building, Lord Hope and Curran Buildings, acquisition of the Inovo Building and the installation of a Combined Heat and Power District Energy Network.

Going forward, we are now creating a Learning & Teaching Facility to enhance our education provision which brings together all student-facing services as well as developing a ‘Heart of the Campus’ project that will improve the visual appeal and biodiversity of our surroundings and create an engaging campus where students will want to stay.

We are also progressing the development of the Glasgow City Innovation District through the planning of new research and innovation focused buildings in the TIC Zone which sits at the heart of the District. These buildings will not only help to improve the fabric of the city, but will also create jobs, economic growth and collaboration opportunities. Moreover, one of the most exciting projects in Scotland – the creation of the National Manufacturing Institute Scotland within the Advanced Manufacturing Innovation District at Glasgow Airport – is well underway and Strathclyde is the designated “anchor university”.

Our values – which identify us as a people-oriented, bold, innovative, collaborative and ambitious institution – are amply reflected in our Estate Strategy. This demonstrates our aims for success, our desire to reach out to our partners and community, our pursuit of high quality impacts and the value we place on our greatest asset – the people who study and work with us.

Professor Sir Jim McDonald
Principal and Vice-Chancellor
Introduction and overview

The University of Strathclyde is operating in an ever-more competitive environment. There are multiple demands on the Higher Education sector to ensure high standards of education, a first-class student experience, widening access to university, internationally-leading research and working with business, industry and government to support economic growth.

Students rightly expect more, the public funding environment is tougher and technology is changing the ways we teach and learn, with co-location seen as the key to fostering innovative research.

All of these factors, combined with our own strategic goals – to grow our international student body, research income/base and our innovation facilities in Glasgow – influence what a university campus means in the 21st Century.

Since its foundation in 1796, the University of Strathclyde has grown over the years from its original incarnation as Anderson’s College on George Street, to an estate that extends to 290,176sqm and encompasses 40 buildings across four locations – the John Anderson Campus, Advanced Forming Research Centre in Inchinnan, the Power Networks Demonstration Centre in Cumbernauld and the University Sports fields at Stepps. This includes our residential properties.

Our student body is growing, particularly our international study population, and expectations of a university campus are higher than ever.

Strathclyde is also expanding its research base, requiring new facilities and room for co-location of research institutes and business incubators.

The development of the estate has been guided by a series of strategies each reflecting the requirements at the time, taking account of changes to technology and pedagogy.

It is vital that our estate continues to meet the needs of its users and the overall University strategy, while operating in a constantly-changing financial and political landscape.

Our aim is to achieve the highest standards in all aspects of campus management, building condition and environmental sustainability.

Over the last decade the University has invested heavily in its Estate to ensure our buildings are fit for purpose, but also to ensure it is the right size against a context of increasing staff and student numbers, and a campus that is attractive – and accessible – to people of all backgrounds and needs.

Efficient use of space is essential to maximise our teaching accommodation, while we are also mindful of the requirements for sustainability and the need for energy efficiency to reduce our carbon footprint.
The Estates Strategy provides a long-term vision and plan for developing and managing the University of Strathclyde estate in a sustainable way that will meet the institution’s strategic needs.

We will focus on providing fit-for-purpose facilities centred on the needs of students, staff and our partners in industry, business, government and the wider community.

Vision:
A leading international technological university, inspired by its founding mission, socially progressive, making a positive difference to the lives of its students, to society and to the world.

Our Strategy has five strategic goals:

- To provide an outstanding student experience
- Internationally-leading research
- World-leading innovation and impact
- Global engagement
- Operational excellence

University values:

- **People-oriented** – committed to our staff and students, providing opportunities and investing in their development
- **Bold** – confident and challenging about what we do, and supportive of appropriate and managed risk in our decision-making
- **Innovative** – focused on discovering and applying knowledge with impact, and encouraging creative thinking and new ideas
- **Collaborative** – working together, internally and externally, with integrity and in an open, respectful way
- **Ambitious** – for our institution, staff and students as well as supporting the ambitions of our partners

The Estates Strategy is led by the Director of Estates working with the senior officers within the Estates directorate. The Principal and Executive Team of the University are involved in the process of development and approval of the Strategy. In addition, governance within these processes is enacted through the Estates Committee, the Executive Team and the University Court.

Our Estate Strategy is guided by the University’s Strategic Plan, the University’s values and our Scottish Funding Council Outcome Agreement 2017-2020.
Goal 1: To provide an outstanding student experience

As we grow our student population we will ensure a first-class student experience characterised by continued investment and innovation in accessible, intellectually-stimulating environments. We want to build a sense of community and engagement among students whether undergraduate or postgraduate.

Our learning spaces, both formal and informal, will be flexible and foster collaboration, with break-out study rooms and informal discussion areas. This includes the development and integration of audio-visual teaching infrastructure to further enhance the potential of Virtual Learning Environments and online course delivery.

New and refurbished teaching and learning environments will ensure we meet expectations and deliver the student experience and will support new pedagogy through technical enhancements of ‘traditional’ spaces, promoting diversity and equality.

Improved space utilisation will increase the usage and efficiency of our teaching estate, ensuring we maximise our accommodation to its full extent.

We will seek to create an engaging campus, that encourages students to stay on campus outside of class time to make use of facilities such as the Library, Strathclyde Sport building, (opened in Autumn 2018), catering and social spaces.

Central to this will be the concentration of all student-facing services in one place in the Learning & Teaching Building, which will also incorporate the Strath Union, enabling students to access information and assistance easily.

In terms of teaching facilities this building will establish a hub and spoke model and facilitate access to modern teaching and learning spaces. The ‘hub’ will be provided by developing new accommodation in this central facility with the ‘spokes’ located across the Campus.

The Learning & Teaching Building will be complemented by the Heart of the Campus – a re-landscaped Rottenrow garden – that will support biodiversity and wellbeing through attractive, social and relaxing spaces, with the flexibility to accommodate a variety of events.

We will build a stronger identity through the creation of recognisable gateways into the campus with better signage, lighting, improved public realm and pedestrianisation of surrounding roads to enhance safety and security.
The Learning and Teaching Building

The £60 million Learning & Teaching development represents the single-largest investment by the University in its campus and will help to transform the student experience at Strathclyde.

The project will bring together new learning and teaching spaces, student support services and Student Union through a redevelopment of two existing buildings on Campus, providing a fit for purpose state-of-the-art accommodation.

Scheduled to open in 2020, the Learning & Teaching Building integrates the former Colville and Architecture Buildings at North Portland Street and Rottenrow to create modern, adaptable space to meet the needs of tomorrow’s students.

It will also greatly enhance the built environment and perception of the campus becoming a structure befitting of Strathclyde’s position as a world-leading technological University and a place of useful learning.

The University was successfully-awarded a £10M loan from the Scottish Funding Council’s (SFC) Financial Transactions programme to support the development.
Goal 2: To support internationally-leading research

As a research-intensive University, we are home to world-class researchers in each of our four faculties – Engineering, Science, Humanities & Social Sciences, and the Strathclyde Business School.

We are making significant investments in fundamental research that could pave the way for the disruptive discoveries of tomorrow. At the same time, our renowned links with business, industry and the public sector are enabling us to tackle local, national and global challenges, and to readily bring products and services to market as well as influence policy making.

Modern, leading-edge facilities will be central to our goals of increasing the quantity of high-quality research in our key research themes, growing our population of postgraduate researchers and encouraging collaborations with international partners.

Our campus must meet the changing needs of staff and students.

We are upgrading older infrastructure through our Engineering & Science projects, developing shared and integrated facilities and ensuring we maintain them to a high standard.

As our collaborations and partnerships with external partners grow, we will ensure our facilities such as the Advanced Forming Research Centre and Power Networks Demonstration Centre continue to fulfil our needs.

We will develop new facilities including the National Manufacturing Institute Scotland at Inchinnan – which will be constructed in collaboration with partners but managed by the University – and expand capacity through new research, office and conferencing facilities in the Technology & Innovation Centre (TIC) Zone to support the growth of the Glasgow City Innovation District.

Based on the results of the Research Excellence Framework 2014, the Times Higher Education ranked Strathclyde as one of the UK’s top 20 universities for research intensity in the UK
Advancing the future of manufacturing

The National Manufacturing Institute Scotland will be an industry-led international centre for manufacturing expertise where research, industry and the public sector work together to transform skills, productivity and innovation to attract talent, investment and to make Scotland a global leader in advanced manufacturing.

The services and support that NMIS will provide will be shaped by industry through elements such as a skills academy, Digital Factory 2050 and collaborative R&D space.

When it opens in 2021, NMIS will support jobs and economic growth across Scotland. Initial estimates predict it could attract up to 1,000 new jobs to the area within three-five years of becoming operational. As part of the wider Advanced Manufacturing Innovation District Scotland, being developed through the Glasgow City Region City Deal, it could also act as a catalyst for up to 10,000 jobs over the next 20 years.
Goal 3: World-leading innovation and impact

Our campus is globally connected, and as the only Scottish University founded during the Enlightenment period, we are proud of our innovative environment that establishes lasting links between our local community and global partners.

Together, we are creating jobs, driving business, informing public policy, and pioneering research in areas central to economic regeneration.

Alongside partners including Glasgow City Council and Scottish Enterprise, we are founding members of Scotland’s first innovation district – a dynamic hub for networks of companies, organisations and academia to inform, exchange and generate new ideas.

Our award-winning Technology and Innovation Centre which opened in 2015, is the beating heart of the Glasgow City Innovation District, and has become a beacon for innovation, attracting both global businesses and SMEs to the city. The landmark centre houses shared and flexible facilities, where 750 world-class researchers work side-by-side with industrial partners.

We will grow this Technology and Innovation Zone, which already has a high concentration of innovative organisations, including four UK catapult centres, four Scottish Funding Council Innovation Centres and the Fraunhofer Centre for Applied Photonics.

To meet demand, we will develop two additional buildings to enable more businesses to co-locate and benefit from a growing number of research clusters in areas including Energy, Industrial Informatics, Health Technologies, FinTech, Space, 5G Communications, Quantum and Photonics, Pharmaceutical Manufacturing, Nanotechnologies and Enabling Technologies.

At the same time, our Advanced Forming Research Centre near Glasgow Airport has more than doubled in size to meet demand. Created with industry, for industry, the centre is setting new standards in manufacturing design, and will form an important part of the National Manufacturing Institute Scotland (NMIS).

The £56M Medicines Manufacturing Innovation Centre, (MMIC) the world’s first industry-led facility of its kind, will revolutionise the way medicines are made. The MMIC will offer pharmaceutical companies, from start-ups through to multinational companies, a service to develop and adopt novel manufacturing techniques to adapt into their own manufacturing processes. The Centre will be led by the Centre for Process Innovation in partnership with Strathclyde, the Medicines Manufacturing Industry Partnership and founding industry partners AstraZeneca and GSK.

Both NMIS and the MMIC form part of the wider Advanced Manufacturing Innovation District Scotland (AMIDS) being developed by Scottish Enterprise and Renfrewshire Council, supported by Glasgow City Region City Deal funding.

AMIDS, the only one of its kind in the country, recognises the crucial role manufacturing plays in Scotland’s long-term economic future and will attract national and international manufacturing investment.
Scotland’s first innovation district

The Glasgow City Innovation District (TIC Zone) is transforming the way academia, business and industry collaborate to bring competitive advantage to Scotland by bringing together researchers and high-growth firms with technology and creative start-ups, to work side-by-side in a vibrant, innovation-led community.

The Glasgow City Innovation District, due for completion in 2022/23, is the result of a successful partnership between Glasgow City Council, the University of Strathclyde, Scottish Enterprise, Glasgow Chamber of Commerce and Entrepreneurial Scotland, and brings together an ambitious, forward-thinking community focused on tackling societal and global challenges and driving inclusive economic growth.

This model is widely recognised for improving productivity, creating jobs and attracting inward investment in several cities around the globe. Innovation districts are small geographic areas within cities where research universities, medical institutions, and companies cluster and connect with start-ups, accelerators and incubators.
Goal 4: To support global engagement

As an international university, we have a global outlook, a global community, and make a global impact.

While our heart is in Glasgow, we are immensely proud of our international innovation network with leading universities throughout the world that includes the likes of Stanford University, Delft University of Technology, Hong Kong University of Science & Technology, Nanyang Technological University, NYU, MIT and the University of Waterloo in Canada.

Internationally, we are working with our partners to support the UN Sustainable Development Goals, from providing access to reliable electrical power in The Gambia, to improving health, water sources and sanitation in Malawi.

Through our estate we aim to engage globally in its fullest sense. Our facilities will be of an international standard with technology enabling us to connect with students and partners abroad while reducing the need to travel.

World-class research facilities also support our international staff recruitment initiatives, such as our highly-successful Global Talent Attraction Programme which has attracted a number of internationally-leading researchers.

Facilities such as the Advanced Forming Research Centre, National Manufacturing Institute Scotland and Power Networks Demonstration Centre provide physical assets accessible to our international industry partners, which include the likes of Rolls-Royce, Weir Group, Cisco and Boeing.

The development of the Glasgow City Innovation District will create an accessible public realm where research and innovation is showcased, enhancing the fabric of the east end of the city centre and contributing to regeneration efforts.

It will also allow us to expand our conferencing facilities, such as those already found in the TIC, and to help bring the world to us, literally, by expanding our ability to host international symposia and events.

Our entrepreneurial and incubator spaces will support young businesses to grow and reach global audiences.

The Confucius Institute, housed in dedicated accommodation in the historic Ramshorn Kirk, helps school children and businesses seeking to learn more about the language and culture of China, one of the world’s most important and influential countries.

Strathclyde Sport, meanwhile, supports health, fitness and physical and mental wellbeing in the University and wider community.
A new home for our award-winning languages centre

One of the most historic buildings of the University has been redeveloped to become the new home of Strathclyde’s Confucius Institute and headquarters of Scotland’s National Centre for Languages (SCILT).

The Grade A-listed Ramshorn Kirk, built in the 1820s and designed by architect Thomas Rickman, has undergone a £2M refurbishment that will allow it to act as a learning hub for the local community, host conferences, exhibitions and performances, and enable the Confucius Institute and SCILT to support more schools and engaging with the local community.

The building, opened in September 2019, includes a flexible seminar/learning space that can host a variety of events, seminars, lectures and meetings thereby ensuring this historic building is revitalised for the city.

The refurbishment has been supported by Hanban, the China-based headquarters of the Confucius Institute worldwide.
Goal 5: To deliver operational excellence

In order for the University to achieve its strategic objectives, our campus must continue to develop.

As we update our older buildings and construct new ones, our aim is to ensure our estate is graded ‘excellent’ or ‘good’.

Our investments and maintenance programmes will comply with procurement legislation and represent best value-for-money.

We will work to ensure high space efficiency through high space utilisation thanks to high-quality, flexible spaces with the supporting technological requirements that will also help us to future-proof the campus.

Financial and environmental sustainability is a primary concern, and our recently completed Combined Heat and Power District Energy Network will help us to deliver a 50% reduction in carbon dioxide emissions 15 years ahead of the University’s 2030 target while making financial savings. Heating systems throughout the campus have been upgraded to provide the level of control suitable for the next generations of efficient operation.

We will continue to focus on our environmental impact in the area of sustainable transport by promoting sustainable travel alternatives to, from and between University sites to reduce the number of trips taken by single occupancy vehicles. We have Cycle Friendly Campus status, thanks to our bike storage facilities and our cycle to work scheme, while our electric vehicle fleet is helping to minimise the environmental impact of travel between our sites.

Estates is seeking to make all new buildings carbon neutral for energy and to make all refurbishment work as energy efficient and adapted to climate change as possible.

There are also strategies in place to reduce water consumption and manage waste and recycling and embed sustainability across campus.
Engineering excellence in energy

The £20M Combined Heat and Power project was completed in 2018 and will play a crucial role going forward in the University’s efforts to reduce its carbon footprint.

The initiative saw the replacement of the University’s old boilers in the John Street Energy Centre with a new state-of-the-art 3.3MWe CHP engine and 24MW of boiler plant that allows the University to generate a major proportion of its electricity requirements and use the resultant heat to heat its buildings, distributing both via an underground network comprising 2,000 metres of pipes and over 1,000 metres of cable around the campus.

The system, installed by Vital Energi, is generating substantial financial savings and reducing our carbon dioxide emissions by 4,500 tonnes. The network also has future capacity to connect to other buildings in the proximity of the University, including the Campus Residences and potentially other public buildings such as the Glasgow City Chambers.

The Energy Centre also includes learning and teaching facilities that will be utilised by staff and students.