Institution: University of Strathclyde

1. Context and mission

The University of Strathclyde is a research-intensive, socially progressive, technological university. Founded during the Enlightenment as a 'Place of Useful Learning', we are an institution firmly grounded in the heart of Glasgow, contributing to the social, economic and cultural life of the UK with a global reputation and influence. Our focus is the translation of research outcomes for the benefit of business, industry and society as a whole.

Strathclyde's Faculty structure represents our areas of academic expertise and excellence. Over the REF period, we focused on integrating our historic strengths in Science (pure and applied) and Engineering with the expertise from our triple-accredited Business School and Faculty of Humanities and Social Sciences. Consequently, we strengthened both our socially progressive and technological innovation. Carefully planned and coordinated recruitment into academic, research, teaching and knowledge exchange roles has created the balance of research, research-informed teaching, and impact required to successfully deliver our mission.

Table 1: Strathclyde Faculties and Demographic Profile (2020)

Faculty	Academic FTE	Research FTE	Knowledge Exchange FTE	Teaching FTE	Undergraduate Total FTE	PGR Total FTE
Engineering	227.55	217.39	171.5	65.26	4188.2	651
Science	205.69	179.82	12	57.1	3556.2	480.3
Humanities & Social Sciences	169.11	52.44	24.03	111.56	4116.3	168.3
Business	115.3	22.59	16	25.3	2381.3	147.1
Total	*717.65*	*472.24*	*223.53*	*259.22*	*14242*	*1446.7*

Our strategy for the period 2014-2020 was to combine our academic strengths with our distinctive model of partnership working to deliver impact at pace for business, industry, government, and the third sector. This strategy has been very successful. The intensity and pace of our research and innovation led to us exceeding our growth target; we achieved £74m income in 2018/2019 against our target of £70M by 2020. We have also consistently exceeded our annual KPI targets for Field Weighted Citation Impact. Furthermore, as Table 1 demonstrates, significant investment has grown our Knowledge Exchange pathway for staff from 38.4 FTE in 2014 to over 205 FTE at submission. This large growth in KE staff demonstrates our focus on delivery of impact from research, with KE staff embedded in departments and industry centres to enable cross cutting innovation and research activity.

As a result of our relevance, connectivity, environment and research achievements we have been awarded: Times Higher Education (THE) Workplace of The Year (2017); Herald Higher Educational Institution of the Year (2018); THE UK University of the Year (2019, for a second time); Times/Sunday Times Scottish University of the Year (2019) and, The Queen's Anniversary Prize for Higher and Further Education (2020) for our innovative contributions to the energy sector. Our Business School was also ranked first in Scotland and in the top ten in the UK for business school research by THE (2014). We were also THE Entrepreneurial University of the Year in 2014,

and have continued to build on the culture and organisation recognized by the award, culminating in the launch of the Strathclyde Inspire programme which supports and drives entrepreneurship across the University.

The University's strategic framework (Table 2) provides the context for our planning around research investment, recruitment and engagement. Our Vision 2025 strategy is accelerating the intensity, scale and depth of our research and impact. We have set challenging targets which will ensure Strathclyde continues its trajectory, reinforcing its place as a thriving research-intensive University that makes a positive difference to people's lives in Glasgow, Scotland, the UK and throughout the world.

Table 2: Strategic Framework at Strathclyde

Our Vision	A leading international technological university, inspired by its founding mission, that is socially progressive and makes a positive difference to the lives of its students, to society and to the world				
Our Mission	From our foundation as 'the place of useful learning', we take it as our responsibility to research, teach and be of benefit to society – to reach outside the university to make the world better educated, prosperous, healthy, fair and secure				
Strategic Themes	Outstanding student experience	Internationally-leading research		World-leading innovation and impact	
Cross-cutting Themes	Global Engagement		Operational Excellence		
Our Values	People-oriented	Bold	Innovative	Collaborative	Ambitious

We are active in national and international peer groups. For example, we chair two of the Scottish Research Pools (Energy and Engineering) and are a member of the Conference of European Schools for Advanced Engineering Education and Research (CESAER). CESAER is a network of 56 European universities of Science and Technology which promotes sharing of best practice among its members, and which influences governments and policy makers with its advocacy activities in Europe. Our Principal was elected President of CESAER for the period 2018-2019. Our Associate Principal (R&I) chairs the CESAER Task Force on Innovation and is a Board member.

In addition to making seminal direct contributions through research, we encourage our staff to provide leadership in the UK through senior roles in national advisory groups and professional institutions. Prominent examples include our staff's positions as: Member of the Prime Minister's Council for Science and Technology; President of Royal Academy of Engineering; President of the Royal Society of Edinburgh; President of the British Medical Association; Board Member of the UK Committee on Climate Change; Member of the Council of Economic Advisers (Scotland); and, co-Chair (with First Minister of Scotland) of the Scottish Energy Advisory Board. We support pandemic response through leadership of the UK Government's SAGE Environment and Modelling Group and membership of the Scottish Government COVID-19 Advisory Group.

2. Strategy

Strathclyde's research and impact strategy has focused on increasing its capacity for fundamental research while creating infrastructure and collaborative centres with strategic partners that

accelerate our impact from research. The focus has been on delivering successes in both areas at pace and scale. In line with our values, we have been developing our talent pool through:

- Attracting internationally leading academics and exceptional early career researchers to Strathclyde to strengthen our existing talent in strategically important research areas (through our Global Talent Programme described in the "People" section).
- Developing focused cohort-based PhD research and training through highly-regarded EPSRC Centres for Doctoral Training, Strathclyde funded Centres for Doctoral Training, innovative work-based PhD programmes (e.g. with GSK) and the Strathclyde Research Studentship Scheme. These schemes have increased the number and quality of PhD researchers at Strathclyde.

We have focused on collaboration and supporting the "place" agenda, creating the Strathclyde "Innovation Ecosystem". This includes:

- Launching our £89M Technology and Innovation Centre (TIC) to accelerate industry and academic collaboration and co-location to deliver impactful research outcomes.
- Creating and leading industry research and innovation centres where co-location and collaboration drives the translation of research into impact and value.
- The creation of Scotland's first Innovation District and first Manufacturing Innovation District.

Our strategy has seen Strathclyde surpass the ambitious research income target set for 2020 (Figure 1). During the REF 2021 period we achieved a 56% increase in our competitively won research income, and a 52% increase in our industry research income (ranked 9th in the UK). Our pace of growth has validated Strathclyde's strategic plan and provided confidence that we will achieve our target of £125m in research income by 2025, set as part of our Vision 2025. Our research outputs have also attracted greater attention: since 2015/16, we have consistently exceeded annual KPI targets for Field Weighted Citation Impact, the target for which was set at 50% greater than the world average by 2020.

Figure 1: Research Income 2010-2025
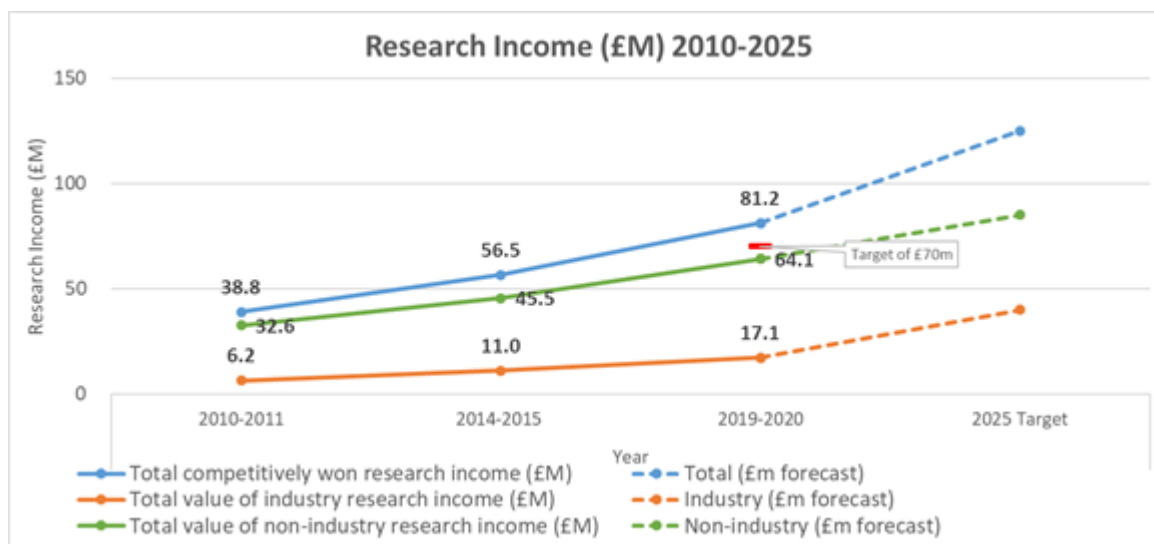
Stakeholder Collaboration, Innovation and Impact

Strathclyde's mission is inherently socially progressive, providing a strong focus on the outcomes of our research for society. This leads directly to collaborative, interdisciplinary research (fundamental and applied) that is delivered directly into appropriate user contexts (industry, public sector). Our models for research with impact have continued to mature in this period.

Intensive engagement with companies is achieved through our well-established model for collaboration through industry-focussed research centres. We pool funding from multiple partners to solve multi-sectoral problems and challenges through multidisciplinary teams, while leveraging wider government research funding. Examples include the Advanced Forming Research Centre, Power Networks Demonstration Centre, Centre for Continuous Manufacturing and Crystallisation, Advanced Nuclear Research Centre, Weir Advanced Research Centre, Rolls-Royce University Technology Centre, and the EPSRC Quantum Technology Hubs. We also host four UK Catapult Headquarters/Hubs and four Scottish Innovation Centres on campus, ensuring strong collaboration with these organisations.

The UK Research and Development Roadmap (published July 2020) includes the 'Strathclyde Innovation Ecosystem' as a case study. This provides evidence of the impact of our approach, and the effectiveness of our integration into the UK innovation landscape. The Roadmap also mentions the National Physical Laboratory (NPL) Postgraduate Institute and the Offshore Renewable Energy (ORE) Catapult as further case studies. We are strategic partners in both of these, which are located on our campus, and we host one of the ORE Catapult Research Hubs. Strathclyde is a host site for NPL and the Laboratory of the Government Chemist. Our international reputation is endorsed through Strathclyde's role as the UK lead for Fraunhofer Gesselschaft, the hosting of Fraunhofer UK and our co-leadership of the Fraunhofer Centre for Applied Photonics.

Strathclyde's commitment to research and innovation with impact is further illustrated by the University's role in driving academic and translational research within Scotland's new Innovation Districts. We stimulated and are the anchor University in the Glasgow City Innovation District (GCID) and the Advanced Manufacturing Innovation District Scotland (AMIDS), with direct responsibility for the academic and innovation programmes in partnership with local and national government. The purpose of both initiatives is to increase employment and new venture creation, and to support the growth of small-to-medium sized enterprises. To enable effective access to Strathclyde's research, six new Clusters have been formed within GCID: Industrial Informatics; Health Technologies; Financial Technologies; Space Technologies; 5G Communications; and, Quantum Technologies. The Clusters build on our research impact over the REF2021 period and benefit from access to excellent facilities and research talent, underpinned by our experience in leading translational research programmes that embed knowledge in large Tier 1 companies and their innovation-led supply-chain partners and other SMEs. The University is supporting the development of GCID and AMIDs by continuing to invest in the campus; by 2025 the total invested will be £1Bn.

Strongly aligned to our socially progressive mission and our industrial centres, we deliver significant impact through policy/ economic research centres such as the Centre for Energy Policy, Institute for Inspiring Children's Futures and the Fraser of Allander Institute. We are also members of the International Sustainable Campus Network, which is a forum engaging us in the exchange of information and best practices for achieving sustainable campus operations and integrating sustainability in research and teaching.

The university has a major commitment to Knowledge Transfer Partnerships (KTPs) and hosts the West of Scotland KTP Centre, the largest of its kind in Scotland. In the past 22 years, the KTP Centre has helped establish over 400 projects and generated more than £57 million of KTP grants. The university is ranked 5th in the UK and 2nd in Scotland in the number of KTPs undertaken, with 65 won within the REF period. Our annual Engage with Strathclyde programme is a week-long series of events aimed at providing researchers the opportunity to develop relationships with

new contacts outside the academic sphere. The Programme won the 2014 THE Award for Knowledge Exchange Initiative of the Year and continues to grow.

Academic Partnerships

We created our internal Strategic Research Themes to grow cross-disciplinary academic engagement and tackle modern complex challenges which require multidisciplinary approaches. The Themes are: Advanced Manufacturing & Materials; Energy; Health & Wellbeing; Innovation & Entrepreneurship; Measurement Science & Enabling Technologies; Ocean, Air & Space; and, Society & Policy. Adopting a thematic approach has brought researchers together from across the university enabling both interdisciplinary and cross-disciplinary working, and provides an easily understood entry point into the university for external organisations and for new and existing staff. As examples: a newly appointed Professor was able to coordinate connections across the university leading to the £18.1M One Ocean UKRI Grand Challenge Research Fund award, the largest single grant ever held by the university; cross-disciplinary collaboration led to seven Strathclyde Centres for Doctoral Training being launched in 2020 by early career researchers; theme wide engagement led to the successful ISCF funded Future Flight challenge CAELUS Project (Care & Equity – Healthcare Logistics UAS Scotland); and, the Measurement Science and Enabling Technology theme has developed the Global Environment Modelling and Measurement initiative with Stanford University which is developing major monitoring projects together with cities in advance of the COP26 climate change conference.

'Research Pooling' initiatives are an important part of our research strategy. They enable Strathclyde to support, and benefit from, the development of cutting-edge infrastructure and facilities, pump-prime funding for staff and doctoral students, and, ultimately, to take forward the research in the relevant subject areas. Strathclyde participates, often with a leading role, in the following Scottish research pooling initiatives: Scotland's seven university chemistry departments (SCOTCHEM); Scottish Universities Physics Alliance (SUPA); Energy Technology Partnership (ETP); Scottish Research Partnership in Engineering (SRPe); Scottish Universities Life Sciences Alliance (SULSA); the Marine Alliance for Science and Technology (MASTS); Scottish Institute of Policing Research (SIPR); and, the Scottish informatics and Computer Science Alliance (SICSA).

Strathclyde's international collaborations have increased substantially during the REF2021 period. In 2012, Strathclyde began actively building a network of International Strategic Partnerships (ISPs) with the aim of delivering world-class research collaborations, funding and knowledge exchange activity in key international markets. The partners were carefully selected to ensure their priorities aligned with Strathclyde's fundamental vision, themes and innovation centres, ensuring synergies could be easily identified. We now have 26 ISPs including Delft Technological University, where our European Policies Research Centre Delft is based, Hong Kong University of Science and Technology where we are collaborating on power engineering, and Waterloo University, which is collaborating with our Advanced Nuclear Research Centre.

A Culture of Integrity and Openness

At Strathclyde we recognise that our ambitions for research excellence are dependent on an underpinning culture of research integrity. Strathclyde were early participants in research integrity matters, starting our institutional repository in 1999, and responding quickly to developments (e.g. meeting the EPSRC research data roadmap requirements by May 2016). Strathclyde is a signatory to the Concordat on Research Integrity and, in 2017, updated our main policy document, the Research Code of Practice, introducing improved processes for handling allegations of

research misconduct and committing to the production of annual narrative statements on research integrity. We have invested significantly in central resources to ensure that we create policy, guidance and training to assist our researchers to meet the central tenets of the Concordat. The cross-disciplinary approach involving our library, Research and Knowledge Exchange Services directorate, IT teams and Organisational Staff Development Unit has resulted in significant positive behaviour change. This has resulted in the University regularly achieving 94% output compliance with the Open Access Policy (Strathclyde is ranked 4th in the Leiden 2020 rankings for proportion of published works as either Green or Gold Open Access) with 1008 datasets deposited since May 2016. We continue to commit to further development in this area as evidenced by the University signing the Declaration on Responsible Research Assessment (DORA) and the Concordat to Support Researcher Development. Current projects include a review of our Research Code of Practice, review and improvement of University Ethics processes, implementation of Trusted Research, and gap analysis for the Researcher Support Concordat; all working towards improved awareness, better processes and high-quality training for researchers on research integrity matters at all stages.

Openness in research also relates to our mission as a place of useful learning; extending beyond HE, industry and the third sector, to directly engage the public in our research. As examples, our Explorathon and Explorathon Glasgow Schools Programme are aimed at fostering a greater understanding of research in the wider public. Annually, we organise an Images of Research competition and a subsequent year-long touring exhibition that challenges researchers to portray their work and its impact in a single, eye-catching image and short story. As a result of our activities, Strathclyde was awarded a Silver Watermark award for public engagement in 2018 – the first of only four institutions to receive an award.

3. People

Our People Strategy ensures we have the right talent and teams to continue to grow the volume, intensity and quality of our research. Over the REF2021 period, we have invested heavily in our staff, appointing 379 academics and 1453 researchers to achieve our research and impact objectives. From the REF2021 census date to the submission date, an extra 18 academics were appointed and we are on track to deliver our additional target of 400 new academic hires by 2025. As highlighted in Section 1, we have also significantly grown our KE staff to over 230 FTE at submission.

Investment in staff has been underpinned by our Strathclyde People 2020 Strategy (launched in 2015) which focused on five key areas: inspiring leadership; delivering our values; developing our staff; attracting new staff who will support our success; and, retaining and rewarding staff. Our People Strategy 2025 builds on this commitment with emphasis on "ensuring everyone's efforts count", "effective leaders", "a thriving environment" and "retention and attraction of talent". Strathclyde was awarded the THE Leadership and Management Award for Workplace of the Year 2017 in recognition of our approach to recruitment, staff development and promotion, and our commitment to supporting staff at all levels.

Strategic Recruitment of Research Talent

Strathclyde has a successful strategy for growing at pace the quality and impact of our research. The Strathclyde Global Talent Attraction Platform (GTAP) attracts senior academic leaders who can immediately develop impactful research at scale. The Chancellor's Fellowship Scheme (CFS) recruits cohorts of early career academics who are mentored and developed within a training and

support programme that allows them to progress as part of a diverse and inclusive cohort of future leaders. Since 2014, we have recruited 78 Chancellor's Fellows and 118 senior academics. Our strategic recruitment schemes are augmented by ongoing appointments by Faculties and Departments to fulfil targeted needs in different disciplines. Since REF 2014, we have recruited an additional 379 academic staff, raising our total academic headcount from 670 (HESA 2012/13 figure) to 756.

Delivering on our Values

Strathclyde has adopted flexible remote working and family-friendly policies which support all staff, including those who are carers or have disabilities. Prior to Covid-19, we had recognised that virtual working would become more popular and were developing new arrangements for staff to work flexibly. Strathclyde rapidly transitioned to a working from home model for staff and were the first in the sector to introduce Friday Rest Days to support staff with their wellbeing and caring requirements. This was offered to staff for the first three months of the pandemic. Following this, we moved to "Meeting Free Friday" and the Principal's widely communicated encouragement to reduce email traffic on a Friday. This was intended to allow space for our staff to focus on their key activities such as research and research administration, which otherwise might be hindered by pandemic working arrangements. An agile working toolkit has been launched to further support staff.

Support for ECRs is provided through the Strathclyde Programme in Academic Practice, Researcher Development and Knowledge Exchange (SPARK) coordinated by the Organisational Staff & Development Unit. The SPARK programme is primarily targeted at new and early career staff and provides colleagues across each of the university's job families with flexible, individualised, and progressive routes for personal and professional development, leading to postgraduate certificate, diploma, and masters level awards. There are currently 253 people registered, and 126 qualifications have been awarded during the REF period. We also created the Strathclyde Programme in Research and Leadership (SPIRAL). The key aim of this programme is to develop and strengthen leadership and best practice to support career development. In the REF period there have been 6,683 attendances at 415 events, which have directly supported our reported research growth.

We were the first UK institution to implement a recognised career pathway in Knowledge Exchange (KE), with roles from early career KE Associate to Professor of Practice. In October 2020, Strathclyde was one of the first universities to sign up to the national Knowledge Exchange Concordat on the day it was launched, demonstrating our commitment to develop our knowledge exchange activities through the concordat's eight guiding "good practice" principles. We currently have 223 FTE staff in the KE career path. Reflecting the success of our approach, we were awarded a Universities Human Resources award in 2015. We ensure all academic applicants to our EPSRC IAA fund appoint an impact champion. Impact Champions receive special support and training as a cohort, and a number have progressed to academic careers at Strathclyde, where they have led on impact development.

Centres for Doctoral Training (CDTs) are an established and preferred route for PhD training by UKRI. The Strathclyde Centres for Doctoral Training initiative capitalises on the University's success with CDTs and other forms of cohort training, and contributes to the delivery of the University's PGR growth target of 2000 FTE by 2025. Commencing with 5 Centres from October 2014, the scheme provides seed funds to initiate Centres with a clear strategy and ambition for growth, and provides a platform for the development of large-scale CDT proposals in future UKRI

rounds and equivalent external funding calls. 32 SCDTS have been established during the REF period involving 201 postgraduate researchers, with the most recent 7 Centres being led by early-career researchers to support their career development.

Supporting the Wider Development of our Talent

We are a signatory to the revised Researcher Development Concordat and have held the EU HR Excellence in Research Award since 2011. This accreditation reflects our commitment to:
- Supporting researchers throughout their careers
- Implementing the Concordat to Support the Career Development of Researchers
- Meeting the requirements for research degrees set out in the UK QAA Quality Code

Support for our Research Students

We established the Strathclyde Doctoral School (SDS) in 2018. This provides a vibrant and comprehensive student-centred research and training environment focused on supporting the development of the next generation of researchers, innovators and leaders. All postgraduate researchers (PGRs) accepted for study at Strathclyde automatically become part of SDS. The mission of SDS is to build a community of ambitious, socially progressive researchers motivated to contribute to society and the world around them. Through our Researcher Development Programme and PG Certificate in Researcher Professional Development, which are aligned with the Vitae researcher development framework, we deliver a distinct approach to training that develops the 'whole person'. The PG Certificate, launched in 2012, is the first academic award in the UK to recognise and reward the wide array of skills and experiences that PGRs gain during their PhD research. For the academic session 2019/20, we delivered 253 events and courses for 2798 attendees.

Equality, Diversity and Inclusion

The University of Strathclyde is a socially progressive institution, committed to achieving and promoting equality, diversity and inclusion (EDI) in its learning, teaching, research and working environments. Our commitment to EDI developed from our earlier Equalities and Outcomes Action Plan, is embedded within our Vision 2020-25 strategic plan and People Strategy, and reflected in our shared University values. The following are examples of initiatives and activities relevant to recruitment and support of staff and research students:
- Use of the Athena Swan Charter framework to address gender imbalances in staff recruitment, development and progression. The University holds a Bronze Athena Swan award and 15 departmental awards (including a Faculty level award for Strathclyde Business School).
- The University's Race Equality Working Group was established in 2019/20 to develop actions which will promote an inclusive environment for Black, Asian and Minority Ethnic (BAME) students and staff, and promote racial diversity across the University. The Vice-Chancellor is a member of this Group, ensuring institutional focus and priority.
- The Student Experience directorate and School of Education hold LGBT Charter awards. The Charter recognises the achievements of organisations in including LGBTI+ people in every aspect of their work, protecting staff and providing a high-quality service.
- Our Family Friendly Research Leave Policy provides academic staff returning from maternity or other relevant family leave with up to 3 months paid leave to re-engage with research.

In addition, the University provides annual funding and support for female staff to participate in Advance HE's leadership development programme for women, Aurora. Since 2013, 81 women have been supported through the programme. 40% of the participants were promoted as part of the promotion campaigns during the REF period. Also, we are delivering STEM Equals, a four-year EPSRC Inclusion Matters research and impact project focused on creating more inclusive STEM communities for women and LGBT+ people in both academia and in industry, in partnership with BAM Nuttall Ltd.

Strathclyde was the first university in Scotland to be awarded Carer Positive 'Exemplary' status for its support of staff who are also carers. The award is Carers Scotland's highest level of recognition and builds on the University's 2018 award of Carer Positive 'Established' status". Our Scottish Government funded project Equally Safe in Higher Education and the SFC funded TransEDU research project developed toolkits and recommendations to address respectively gender-based violence, and barriers for trans students and staff across the FE and HE sector.

4. Income, infrastructure and facilities

Strathclyde's target for research income by 2020 was £70m, which was exceeded with £81M of research spend recorded in 2019/20. We are now progressing towards our 2025 target of £125m. Strathclyde has been at the forefront of the UK vision of linking high quality academic research with industrial and stakeholder impact, as outlined in the UK Research and Development Roadmap published on 1st July 2020.

Our approach has been to create new strategic centres for research collaboration, driving industrial collaboration, research income growth, and place-based, national and international impact. Our £89M investment in the Technology and Innovation Centre (TIC) and £37M investment in the Advanced Forming Research Centre (AFRC) are cornerstones of this strategy. These have driven significant research growth and directly led to our positioning as the anchor University in the Glasgow City Innovation District and the Advanced Manufacturing Innovation District Scotland (AMIDS). The University also acquired the Inovo Building, investing £12M to host innovation companies and innovation centres at the heart of our campus, supporting our engagement with industry and co-operation with translational research centres.

The AFRC, a node in the High Value Manufacturing Catapult, is a globally-recognised centre of excellence in innovative manufacturing technologies, and metal forming and forging research. It is now enhanced by our £7M investment in the Lightweight Manufacturing Centre (LWMC), which forms part of AMIDS. These are examples of our successful strategy of significant investment in unique centres that combine infrastructure and equipment with industry-driven research programmes.

A further example is our £12M investment in the Scottish Centre for Advanced Plasma Accelerators (SCAPA), a unique UK-wide facility driving fundamental advances in laser and plasma research. This has unlocked significant research council funding and positioned SCAPA as a leading research facility, leading to further UK-wide influence and impact through our membership of the Cockcroft Institute. The £10M investment in the Power Networks Demonstration Centre (PNDC), with industry and academic partners, put Strathclyde at the heart of smart energy advances and innovation. This directly led to £7M from the UK Government's Driving the Electric Revolution (DER) challenge for a Scottish DER Industrialisation Centre, led by PNDC.

In 2012, Strathclyde established the ARCHIE-WeSt High Performance Computing (HPC) facility; a regional supercomputer centre dedicated to research excellence and wealth creation, and serving partners including the universities of Glasgow, Glasgow Caledonian, West of Scotland and Stirling. In 2014, we invested £2.5m to replace and expand its storage network. In 2018, Strathclyde refreshed the ARCHIE-WeSt facility hardware at the cost of almost £1M. This has been supplemented with an additional £120k investment in increased storage and GPU capability, to support emerging Big-Data and AI research. The HPC facility now supports over 150 staff and PGR students per year, and contributes to the production of approximately 80 research papers annually.

Growth in facilities is achieved by combining university funding with investment from public sector research agencies and industry, and co-location and participation in networks to access shared facilities. In recognition of the significant estates investments to support our strategy, Strathclyde was shortlisted for the THE Leadership and Management Awards 'Outstanding Estates Strategy' 2018.

Centralised Support for Research & Knowledge Exchange

Our Research & Knowledge Exchange Services Directorate (RKES) is dedicated to the support of research and KE activity. This includes identification of funding opportunities and support to develop applications to funding schemes within and beyond the UK. RKES also provides dedicated staff who assist coordination of our Strategic Theme activities and administer internal funding programmes to initiate and develop collaborative research across the university. A key element of this support is ensuring that equality, diversity and inclusion (EDI) are always considered. For example, when allocating PhD scholarships and more recently Covid-19 related funding extensions, EDI aspects such as caring responsibilities and complex circumstances have been a formal part of the decision-making process. Also, when preparing EPSRC Strategic Equipment Bids, early career academics and technical staff are often included as part of the investigator team, ensuring staff on different career paths benefit and their contributions are suitably acknowledged.

Strathclyde has a long and successful history of commercialising the inventions and business innovations made by our staff, who share the benefits for their endeavours. This is achieved in two ways: the licensing of our intellectual property rights to global companies; and, the formation of spin-out and start-up companies. During the REF period, we have launched 9 spinouts, been awarded 60 licences and generated £2M from shareholdings and over £2.9M in royalty income. We invested £4.8M in 15 companies, with a 12:1 leverage to £62.4M from other investors. Our investments have created 300 jobs and £25M annual turnover. Our innovative strategies for research and commercialisation have placed Strathclyde among the top 10 universities in the UK for spin-out and start-up formation. Over this period, the University's SME support initiative, Strathclyde Links, has supported 76 SMEs via the Scottish Funding Council Innovation Voucher scheme.