

6 UNIVERSITY/INDUSTRY COLLABORATION

We continue to prioritise innovation and enterprise through collaboration and working with the private, public and third sectors to achieve economic and societal transformation, regionally, nationally and internationally. To maximise the economic, cultural and social impact of our research, we aim to provide applied, translational and market ready solutions to strategically identified external priorities, generating income in order to drive sustained growth in capacity. Our strategic approach and contribution in this area is set out: <https://www.qmu.ac.uk/research-and-knowledge-exchange/knowledge-exchange/>

Skills as a key driver for innovation has become a primary focus for our enterprise activity. The importance of innovation within QMU has increased significantly, with growing acknowledgement of the pivotal role it plays in enhancing our student experience and delivering impact. A major driver is the development and sustainability of a changing culture that supports the capacity of our staff and students to be entrepreneurial in a variety of contexts. We will ensure that we maximise the impact of our UIF investment to diversify our income streams and that our offer to industry has currency, adds value to both parties and develops longer-term relationships.

Delivery of agreed contributions to the nationally approved University Fund (UIF) Outcomes oversees much of our knowledge exchange and enterprise activity. We are supporting our researchers in responding to a rapidly changing external context with increased emphasis on innovation and entrepreneurial initiatives, delivered through new and more strategic structures. There is considerable potential for QMU to add value through its involvement in these agendas ie Scotland Can Do and the Innovation Scotland Action Plan at both regional and national level, particularly where they are focused on our key economic sectors.

Shifting our business engagement from a transactional portfolio to a model based on strategic partnership has been a priority. This has seen us expand our portfolio of clients and add value to these relationships through formal key account management. In our Scottish Centre for Food Development and Innovation (SCFDI), this approach has secured major contracts for sensory work on behalf of large UK retailers. Our purpose-built sensory analysis suite assesses both new products before they are launched, and products already on the market.

Recognising that skills are intrinsically linked to innovation and that, combined, they are important drivers of inclusive economic growth and productivity, we have responded to the opportunities in the Skills Development Scotland (SDS) Skills Investment Plan for Food and Drink. An important objective was securing a key role for QMU in the technical development and delivery of Graduate Apprenticeships in Food and Drink, and optimising links with West Lothian College, SRUC and Abertay University.

As an institution rooted in regional economic agendas, but with international ambitions, we have continued to support local partnerships. We continue to strengthen our collaboration with East Lothian Council. This has ensured that collective regional assets play their part more fully in supporting the national economic agenda. QMU continues to host on-campus the East Lothian Business Improvement District (BID) and is also a BID member.

In August 2018, we welcomed the confirmation of City Deal funding of £600 million from the UK and Scottish Governments, which, when taken together with contributions from partners, will result in an investment of more than £1.3 billion in the economy of the Edinburgh and South-East Scotland region. Government funding of £30 million, being made available through the Edinburgh and South East Scotland City Region Deal, will contribute towards the development of the Edinburgh Innovation Park on land next to the University campus, a joint development by East Lothian Council and QMU. An Innovation Hub will facilitate an expansion of the University's existing SCFDI and will also provide flexible commercial space for small and medium sized businesses in the food and drink sector. Businesses will have ready access to the University's expertise in the healthy food and drink product market, including the development of new leading-edge functional foods and reformulation of existing products. The Innovation Hub is expected to act as a catalyst for the further development of an Innovation Park, based broadly around the theme of food and drink, on a 52-acre site close to the University campus.

We welcome the UIF as a focal point for Scottish Universities to develop and co-ordinate resources to address innovation challenges and opportunities. Institutionally, we will continue to pursue bold ideas in an environment where creativity, innovation and success is encouraged and celebrated. We will work consultatively and collaboratively with the other Scottish HEIs to benefit from new perspectives, and will continuously improve our innovation profile, as measured by key national/international benchmarks, and strive to deliver maximum benefit to society from our activities.

Through the Universities Scotland Research and Commercialisation Directors' Group (RCDG), we are committed to contributing to all of the UIF national outcomes. We welcome all opportunities to embed good practice and implement any recommendations arising from RCDG led activity.

The current Research and KE policy environment is both challenging and vibrant, with new measures for Significant Responsibility for Research in REF 2021; the impact of the Industrial Strategy; the increasing emphasis on emerging and disruptive technologies, including Artificial Intelligence; the creation of UKRI and major new funding streams, such as the Global Challenges Research Fund (GCRF) and Industrial Strategy Challenge Fund (ISCF) that require new partnerships and approaches to conducting research; and Government ambitions to increase R & D as a percentage of GDP. QMU will use its refreshed portfolio of Research Centres to articulate its diverse strengths concisely and persuasively, including, as appropriate, its collective ability to address place-based or thematic challenges.

We have reported separately to the SFC on how we will deliver on the UIF National Plan http://www.sfc.ac.uk/web/FILES/UIF/QMU_updated_UIF_plan_2018-19.pdf

We have reproduced below our high level priorities over the period 2019-20 in particular. As a small institution, we have been unable to lead on any of the UIF collaborative clusters but are actively involved in and committed to working with the clusters for:

- Innovation Demand - ISCF
- Innovation Demand – SMEs
- Enhancing Researcher Skills for Business Engagement
- Entrepreneurship – including social enterprise and innovation
- Inclusive Growth - including opportunities arising from City Deals
- Equality and Diversity

Our Priorities for 2019-20 are summarised below, ie we will:

National Outcome One (demand stimulation)

Invest in our Research Centres and KE Centres to drive critical, multidisciplinary insights, generate more robust understandings of contemporary global challenges to foster positive cultural, economic and social exchange and increase external income generation. This will be supported by continued additional staff resourcing in our Research and KE Development Unit (RKEDU).

Re-establish the position of the refreshed QMU Research Centres and KE Centres and their points of distinction with the current external focus of interdisciplinarity and challenge led research to ensure we respond to key economic and societal demands, and grand challenges.

Invest in and support new QMU Innovation Fellows, appointed specifically in ISCF challenge areas, to increase engagement with the UK Industrial Strategy, gain traction and profile in securing ISCF funds in priority wave challenge areas, and support us in leading on collaboration with industry and other universities.

Continue to focus on the Scottish Government priority economic sectors of Food and Drink and Creative Industries, with a developing emphasis on Service Innovation that cuts across other sectors, such as Health and Public Services. Social Innovation also continues to be an area of enterprise resonating firmly with our institutional mission.

Maximise all opportunities for engagement with UKRI.

Scale up activity where exemplar models of SME engagement exist – specifically those demonstrating market ready research, and sustainable collaborative partnerships that are underpinned by evidence of demand and a willingness to invest in innovation.

Strengthen links between KE and the impact agenda by changing the focus from pursuing short-term business interventions, to creating culturally embedded behaviours and practices.

Embed the knowledge and expertise of our external partners to ensure our KE portfolio is demand led.

Promote QMU as a catalyst for economic growth and new enterprise creation in the regional economy.

Outcome two (simplification/commercialisation)

Maximise support to enterprising researchers by encouraging a culture of open access and open innovation. We will continue to invest in our institutional e-repository to exploit the full potential of the open innovation paradigm, recognising that institutional repositories represent a major and an alternative gateway to knowledge. In 2019/20 we will seek an external university partner to provide back office support to promote compliance with the Concordat for Open Research Data.

Promote access to cutting-edge facilities and equipment, proprietary data and industry resources. In emerging sectors we recognise that this can strengthen the innovation absorption process, enhance researcher capabilities to work across the innovation interface, and the mutual understanding of needs, capabilities, constraints and contexts. In 2019/20, Viarama, an SME focusing on Virtual Reality technology and a QMU collaborator on Innovate UK and Industrial Strategy grant applications, will take up residency in our Business Innovation Zone (BIZ).

Progress our ongoing commitment to adopting all simplified and standard contract templates and post project referral protocols, established through RCDG and supporting ongoing work to facilitate their implementation across all Scottish Universities.

Continue to review internal processes to support commercialisation in order that we grasp opportunities while ensuring that activities are both commercially and ethically robust; protecting our public liability and ensuring our brand values are upheld. As a result of our IP back office support collaboration with the University of St Andrews, in 2019/20 we will launch a new, much simplified IP policy, underpinned by the principles of “Easy IP”, to ensure that knowledge sharing and partnership working is far more straightforward and cost effective. The Professor’s Privilege/ Easy IP brand will be a valuable marketing tool, both to academics and to potential industry and external partners, and sends a positive message that QMU is open and easy to work with. It will assist us in reducing the staff time and legal costs of the transaction stage, and will help build relationships and trust that should lead to an increase in research collaborations.

Outcome three (simplification/greater innovation):

Ensure the strategic use of UIF for external engagement and communications to advance UKRI priorities. In 2019/20, we will maximise all opportunities to engage with the ISCF, and have identified potential opportunities for QMU in the priority challenge areas of Healthy Ageing, Food Production, Audience of the Future and Next Generation Services (pioneering).

Pursue opportunities to match-fund and leverage external income in support of UIF activity. Build on complementary funding streams secured in 2018/19 from external sources, such as the Merchant Company, Santander and industry.

Continue to focus on the Scottish Government Economic Strategy and the Scotland CAN DO Framework. There will be a continued emphasis on an evidence-based approach on the targeted investment and impact of the UIF, ensuring that it is embedded across the institution and understood as a key enabler for industry interaction.

Continue to shift our model of business engagement from a transactional portfolio to a model based on strategic partnership, maximising all links with the Business Gateway, Industry Bodies, Scottish Enterprise and Interface.

Work with the Data Lab and School of Informatics at the University of Edinburgh to understand the potential of AI in our areas of strength and in increasing collaboration with data driven SMEs and accessing ISCF.

Maximise all opportunities from the Government funding of £30 million, being made available through the Edinburgh and South East Scotland City Region Deal, which will contribute towards the development of the Edinburgh Innovation Park on land next to the University campus, a joint development by East Lothian Council and QMU. Specifically the Innovation Hub will facilitate an expansion of the University's Scottish Centre for Food Development and Innovation (SCFDI), and will also provide flexible commercial space for SMEs in the food and drink sector. Businesses will have ready access to the University's expertise in the healthy food and drink product market, including the development of new leading-edge functional foods and reformulation of existing products. The Innovation Hub is expected to act as a catalyst for the further development of an Innovation Park, based broadly around the theme of food and drink, on a 52-acre site close to the University campus. We will continue to actively engage with the James Hutton Institute who are involved in the Tay City Deal (through the International Barley Hub and the Advanced Plant Growth Centre) to discuss synergies and complementary plans between institutions. This development has attracted interest from global food companies.

Develop and share good practice on the commercialisation of physical space and Innovation/Enterprise Parks linked to City Deal Partnerships. Through collaboration with other Universities, respond to the importance of the Innovation Theme in the Edinburgh City and Region Deal, and the component relating to the provision of support to emerging and fledgling companies, with the objective of delivering c400 data driven, innovative new companies over the duration of the project. Consider how we can collaborate with other Universities and the FE sector where there is a City and Region Deal interest.

In partnership with East Lothian Council, continue to work with businesses in the region as part of a unique Food and Drink based Business Improvement District (BID), the first of its kind in the UK.

Outcome four (entrepreneurialism)

Increase the on-campus Business Gateway's active involvement in the direct delivery of entrepreneurial education into the curriculum. In 2019/20, they will deliver enterprise education to an increasing number of undergraduate and postgraduate programmes across QMU.

Working with the Business Gateway, maximise opportunities to embed entrepreneurship within the curricula and develop channels for student input into these activities by creating curricula that showcase and reflect our critical and applied research and practitioner expertise.

Working with our Business School and Business Gateway, implement a novel approach to our new MSc in International Leadership and Management (IMAL). The programme is currently undergoing validation and we are exploring the inclusion of a business incubation project and tenancy in our BIZ as an alternative to a dissertation or consultancy project at the end of the programme.

In responding to REF 2021 requirements for Significant Responsibility for Research, apply a new workload allocation model that rebalances our emphasis towards academic capacity building to respond to external demand and capture high value academic links with industry.

As cited in our EU Concordat for Research Careers and European HR Excellence Award framework, work in partnership to develop people exchange by working collaboratively with other institutions to develop training for SME translational skills for researchers with a focus on co-creation, alignment of objectives and expectations, and the development of mutual value. Responding to the notion of "freedom to innovate" we will support Early Career and Contract Research Staff in accessing skills and time to respond to the innovation agenda.

In 2019/20, launch a new Entrepreneurship Framework and Action Plan to govern the operational direction of our enterprise activities. To date, we have supported nearly forty student and graduate start-up companies in our BIZ. These graduates come from a wide variety of backgrounds, including health, business, film and media, theatre studies and speech and languages.

Continue collaboration with Glasgow School of Art (GSA) and the Royal Conservatoire of Scotland (RCS) to establish a number of initiatives to explore and stimulate collaborative activity in Creative Entrepreneurship. These include the collation of persuasive case studies of creative industries students engaging with enterprise; devising and designing training to illuminate the actual professional ecology of creative industries; and

developing initiatives to support enterprise in sectors with high growth rates but where the business model is sole trader/owner practitioner.

In collaboration with GSA and RCS in 2019/20, roll out a programme of activity, to be delivered in partnership with the Cultural Enterprise Office, which we hope to launch as part of the Scotland CAN DO Festival. This will incorporate some online workshops/webinars which will explore a range of business approaches and models for Creative Enterprise. Topics to be covered include:

- Creative Freelancers- highlighting the value of one-person businesses, their impact on the economy and the wider society.
- Scaling-up creative enterprise – the journey of those businesses that have grown organically over time and now employ and re-employ a number of graduates from our educational institutions.
- Collaborative Creative Industries (1 week) Summer School for undergraduate and postgraduate students. At the end of the week, students will be tasked with presenting their business idea at Venture Fest in November 2019 to a panel of business experts.

Outcome five (international)

Maximise the position of our Institute for Global Health and Development to progress opportunities arising from new ODA funding opportunities for collaboration and growing international partnerships. Specifically, we will engage with our global alumni across all sectors of society to expand our connections and share expertise.

Review and improve the international profile of our Research and KE webpage.

Outcome six (inclusive growth and social impact)

Increase the number of QMU Social Enterprise and Community Interest Companies and explore new inter-university Social Enterprise partnerships, and specifically seek to collaborate with a wide range of cross-sector organisations to enhance and develop ecosystems of support for social entrepreneurs.

Actively engage in the RCDG group on Responsible Innovation.

In partnership with others, explore novel forms of enterprise incubation – incubators in ideas and innovation in culture and society, improve systems for national data sets for impact capture around social and cultural impact and KE, and develop new mechanisms for collating data on researcher mobility and career destination.

Continue to enhance public engagement with research through our commitment to the Concordat for Public Engagement and the National Co-ordinating Centre for Public Engagement's (NCCPE) Manifesto, signed in September 2018. We have committed to a new and refreshed collaboration with the Edinburgh Beltane Partnership and in October 2018, signed up to a new collaborative Beltane manifesto with the University of Edinburgh, Heriot Watt University and Edinburgh Napier University. In June 2019, we will co-host the first "Beltane Sparks" event with a focus on building collaboration in public engagement focused on the "Grand Challenges". In April 2019, QMU was delighted to be involved in Heriot Watt University's Oriam event, focused on Health, as part of the Edinburgh International Science Festival.

Outcome seven (Equality and Diversity)

Develop baseline data on equality and diversity for innovation and enterprise activities including graduate start-ups.

Continue to champion Female Entrepreneurship, building on the success of our 2019 EntreprenHER event with our Chancellor Prue Leith. In 2019/20, we will ensure that our mandates for equality and diversity and social innovation cut across all of our UIF activities, rather than acting as discrete, unsustainable, stand-alone initiatives. With the Scottish REF Managers Group, we will embed good practice from REF 2021 across KE activities.

Deliver plans, as cited in our EU Concordat for Research Careers and European HR Excellence Award framework, to develop and share good practice in relation to promoting industry engagement as a form of bridging for contract research staff and look at possible models of cross-institutional collaboration. We plan to

link this activity to equality and diversity impact assessment profiles of staff who undertake commercialisation and knowledge exchange. We will increase the integration of innovation and enterprise activity with initiatives such as ATHENA Swan, Aurora and our REF 2021 Equality Codes of Practice.

In collaboration with the Cultural Enterprise Office and the FE sector, continue to roll out our proposal for a BA (Hons) in Creative Enterprise to illuminate the actual professional ecology of creative industries and develop curricula to support enterprise in sectors with high growth rates but where the business model is sole trader/owner practitioner. This responds to research highlighting the extent to which significant socio-economic inequality exists in regards to establishing a career in the creative industries.

7 SUSTAINABILITY

Sustainability in all its forms is one of the University's stated values. Our high level strategy, QM150, resonates with sustainable principles. It states one of our core values as being 'committed to all forms of sustainability'.

We continue to define sustainability according to its three pillars – environmental, economic and social. We believe that sustainability affects everyone, so our Sustainability Committee has representatives from all parts of the University, and has identified work streams which promote this value in the student experience, the academic curriculum, the management of our estate and our use of resources. The Sustainability Committee has responsibility for monitoring the achievement of the key objectives within the Climate Change Action Plan and for oversight of the collation and reporting of other external statutory and benchmarking reporting.

The Sustainability Committee reports directly to the Executive Board and by extension to the University Court. The Committee will provide important assurance to the Court that the University is meeting its obligations under the Revised Code of Good HE Governance 2017.

Queen Margaret University's major step towards the forefront of climate change action came with the move to a new sustainably engineered campus in 2007, which reduced annual carbon emissions by 38%. The University was among the first signatories of the Universities and Colleges Climate Commitment for Scotland (UCCCS) in November 2015, and continues to report against both mandatory and recommended criteria under our Outcome Agreement and annual PBCCD return.

Underlining the holistic approach taken to sustainability at QMU, a Climate Change Action Plan has been in place since 2010 and was relaunched in 2018. The plan establishes baselines, and seven key areas for action. The next steps include calculating realisable targets, investigating climate change adaptation and seeking further engagement and feedback from stakeholders.

Reducing our carbon emissions is a major objective of our revised Climate Change Action Plan 2018-2023 (CCAP). The updated plan seeks to build and improve on previous accomplishments, with the ambition to reduce annual carbon emissions by 12% per annum by 2022 (from a 2015/16 baseline). This will see annual emissions coming below 2000tCO_{2e} for the first time in the University's history. As well as the environmental benefits, the cost savings represent best value for public investment.

Queen Margaret University recognises a need to take action beyond simply fulfilling mandatory reporting duties. For climate change action to work most effectively, all the university's occupants and stakeholders need to be invested in the cause. While there may be growing recognition for action on climate change, it is important to maintain and build momentum over the long-term. To move beyond compliance, into a position of leadership, Queen Margaret University will continue to take the necessary steps in educating and engaging with staff and students.

In the last PBCCD report (November 2017) we were able to report further encouragingly positive emissions reductions. The reduction is due predominantly to our Biomass plant taking over a significantly higher proportion of heating requirements (from gas), decarbonisation of the electricity grid, and a reduction in electricity use. Overall we achieved a reduction of around 20% (500tCO_{2e}) compared with 2015-16.

Although reducing emissions is an important part of this plan, primarily through projects focused on energy consumption, as an institute of learning, Queen Margaret University recognises its potential to have a wider influence; through helping educate and engage students on the existential challenge that climate change