Research Wales Innovation Fund Strategy 2020/21 – 2022/23
(Revised September 2021)

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Section A: Overview

1. Strategic ambitions

Please provide an overview of your institution's 3 year [and beyond if longer term plans are available] approach to research and innovation activity which will be supported by RWIF. You may wish to highlight broad areas which you are targeting, and describe how RWIF funding will align with your institutional mission and internal strategies. [max 300 words]

A key strategic ambition of the University is to be recognised as the **research-led, entrepreneurial, bilingual university, of and for north Wales**. RWIF support is integral to achieving that aspiration and this strategy outlines how the University's Innovation and Engagement (I&E) activities will deliver this. A key component of our vision is the transformational contribution the University can make to the region economically, socially and culturally. We envisage an **Innovation Crescent**, stretching from the Irish Republic to the Northern powerhouse of northwest England with the University at its heart driving a **placed based innovation** agenda which recognises the transformational potential of **big science** on the economy. **Cross border collaboration** particularly with the adjacent Northern Powerhouse is key to augmenting this approach. This strategy comes at an important juncture for the institution with a new institutional vision and leadership and a pressing need to navigate the emerging funding environment **post-Brexit** and an economy potentially shattered by the **COVID-19 pandemic**. This presents both opportunities and challenges.

In addition to its recognized Research Excellence, Bangor University has a long-standing track record for delivering high quality and award-winning **Knowledge Exchange and Commercialisation (KEC)** programmes, focused on inspiring innovation, improving performance, and promoting sustainability which in turn have contribute to the University's international reputation for its teaching and research impact. Our performance in National I&E measure generally shows improvement year on year. However, there is recognition that current I&E activities must be grown in order to deliver the transformational impact required to support both the regional and UK economy.

Underpinning this strategy is the University's newly developed Strategy 2030, providing an institutional vision for the decade ahead. The approach consists of a number of strategic imperatives grouped around an immediate response to Reposition, Realign and Rebuild our

provision so that we have the appropriate agile structures, support mechanisms and processes to ensure the academic knowledge and capabilities of Bangor can be leveraged and deployed to support social and economic development. This thinking is in turn reflected in our priorities for I&E investment from RWIF and will provide a robust foundation from which we will be able to grow the impact of the Institution, establishing strategic partnerships locally, with both SMEs and larger organisations, and with large multinational companies.

Reposition	*Realign*	*Rebuild*
Recognised as the *Research-led Entrepreneurial University for North Wales*;	Recognise the breadth of I&E activities across the University and ensure they are embedded and mainstreamed	**Collaborate & Innovate for Recovery (CaIR)** - place I&E activities at the forefront of Bangor's contribution to COVID-19 economic recovery
Develop the **North Wales Crescent of Innovation** concept	Adopt the 8 principles of the KE Concordat and use them as 'organising principles'	Optimise and increase I&E capacity after a period of disinvestment
Anchor a Place-based approach at the heart of our I&E Contribution;	Adopt National I&E measures as part of a portfolio of institutional KPIs	Develop capacity across the institution to deliver the step change in I&E activity
Renewed emphasis on **Applied Research, Innovation, Enterprise** and **Civic Mission.**	Use RWIF support through linked investments to greater align KEC with the Impact, Enterprise, Employability and Civic University agendas	Post COVID-19, grow innovation and commercialisation activities in the academic domain linked to appropriate I&E National Measures
	Following Brexit, transition from Structural Funds as the main source of R&I support to prioritising other competitively won monies	Build on Bangor's strong HEBCI performance and further enhance reputation
		Embed a core offer of **Knowledge** and **Talent** to businesses and employers and rebuild a portfolio of strategic partnerships with key organisations

This three-year strategy is underpinned by phased approach to implementation:

Year 1	*Year 2*	*Year 3*
Consolidation, Integration and Foundations for Growth (*Reposition, Realign, Rebuild*)	Optimised Delivery & Growth Innovative and agile working	Enhanced Growth New and novel approaches
Baselining performance post-COVID	Monitor performance	Review and revise strategy
Initial Priority Investments	Further Priority Investments	Addressing New Opportunities

2. Capacity Grant

Our approach to the Capacity Grant element of both the RWIF and ICDF tranche is to ensure an appropriate balance between supporting existing I&E costs ('*Core Investment*') and identifying and investing in new activity ('*Enhancing Investment*') leading to improved performance in the National I&E Measures. We have constructed a dynamic approach that satisfies these two needs involving a sliding scale with the emphasis on '*Core Investment*'' in the ICDF phase with a structured switch in emphasis in the following years to '*Enhancing Investment*' in order to extend capacity and activity.

Core Investment	*Enhancing Investment*
Used to stabilise core costs within research and impact support services, strategic partnerships and projects, and aligned I&E costs across the institution (e.g. student enterprise and civic mission). The Capacity Grant element is a particularly welcome primer that greatly assists the transition to RWIF by providing much needed core support in I&E. *Core* support will require formal alignment of activities with national I&E measures.	A portfolio of new investment in staff and other resources has been drawn up to drive up our KEC activities for institutional priorities. Such roles are essential if the University is to contribute to the regional economic bounce-back required in north Wales after the Covid-19 crisis is over and the transition to a post-Brexit world.

ICDF* ** The Capacity Grant element of the ICDF allocation will be used to cover bullets 1. & 2. below (shaded in grey). The sections below provide detail on what the remaining ICDF allocation will be utilised for.*	Core	Enhancing	Impact
1. Cover core costs of the R&I roles in research and impact support services and strategic partnerships and projects.	X		
2. Eligible Knowledge Exchange & Commercialisation non-pay costs in (e.g. IP, training (Welsh Crucible), conferences & events, subscriptions (North Wales Economic Ambition Board).	X		Leverage knowledge and knowhow for a commercial return
3. Costs of existing staff working in key related areas in Pontio Innovation (i.e. Innovation & Design).	X		Enhance Civic Engagement
4. Maintain continuity of salary funding for key posts related to the North Wales Growth Deal and REF currently funded under HEFCW's Strengthening the Welsh Research Base scheme.	X		Leverage "Place Based" strategic capital investment – "Levelling up the regions"

5.	Invest in key new posts linked to student-focussed links to business (Business Engagement and Employability Officer, Degree Apprenticeships).		X	Address key Capability Gaps in provision and support
6.	Invest in key new posts in research and impact support, and strategic partnerships and prjects to support increased engagement with business across the whole of north Wales drive up KE&C activity and UKRI grant capture within the University.		X	Address key Capability Gaps in provision and support
7.	Invest in core underpinning infrastructure to adequately support the delivery of the above teams and address widely recognised under resourcing (i.e. contracts, consultancy, project costing and financial administration, sponsorship and events). Training and networking opportunities for academic staff.		X	Address key Capability Gaps in provision and support
8.	Eligible Knowledge Exchange & Commercialisation non-pay costs in (e.g. IP, training (Welsh Crucible), conferences & events, subscriptions (North Wales Economic Ambition Board).		X	Leverage knowledge and knowhow for a commercial return
RWIF – Capacity Grant				
1.	Cover core costs of the R&I roles in research and impact support services and strategic partnerships and projects.	X		
2.	Eligible Knowledge Exchange & Commercialisation non-pay costs in (e.g. IP, training, conferences & events, subscriptions). (Enhanced knowledge base)	X		Enhanced Knowledge Base

Section B: Specific content

3. Commercialisation / income generating activity

RWIF has been designed to incentivise and reward performance, particularly in terms of external income capture. Outline the direction of travel for the next three years which will support delivery of the KPIs outlined in 3.1. Provide details on key areas of investment and growth. Outline where RWIF will be used to add value to existing activities, or how it will support new developments. Further guidance on this section is available in Circular W20/09HE. Your response should be framed in terms of social and economic prosperity for Wales. [1000 words max]

Bangor's approach to commercialisation and income generation activity is driven by the following strategic imperatives:

Aims for Commercialisation and Income Generating Activities	
1.	Winning more competitive Research and Innovation income
2.	Realising a Place-based Innovation Agenda (North Wales Innovation Crescent)
3.	Enhancing institutional KEC performance
4.	Improving our Research & Innovation Infrastructure
5.	Developing and extending our commercialisation portfolio

These are an acknowledgement that a different approach is required to successfully engage with the post-Brexit funding environment. Bangor University has benefitted hugely from Structural Funds, but the overall funding mix is unbalanced, with an over-reliance on WEFO monies to support research and innovation activities, particularly in the absence of other sources of I&E support.

Alongside this, there is a recognition of the University being a part of a unique economic geography. The recent Science and Innovation Audits involving the **'North West Arc'** geography have led us to the development of a compelling case for place-based innovation activities for our **North Wales Innovation Crescent (NWIC)** Model. Our aim is to provide Thought Leadership for the region by working collaboratively and collectively with regional partners in all sectors. This also chimes with Welsh Government's regionalisation agenda which sees North Wales as a district region of the nation. This anticipates a much-changed funding environment dominated by a rebalancing and levelling up agenda i.e. the Shared Prosperity Fund. Therefore, it is necessary to position ourselves as the University for North Wales providing the critical research and innovation backbone to feed a wider economic recovery effort. Our contribution to the **North Wales Growth Deal** with planned capital investments in flagship R&I Centres of Excellence in Low Carbon Energy, Digital Signal Processing and Environmental Biotech is bolstered by existing Ser Cymru and WEFO investments, providing a blueprint on which to build. We seek to further bolster our approach to big science for the region through the establishment of a **Medical School for North Wales**, to support the growth of life sciences in the region and build on existing excellence in Health Sciences and Wellbeing[1]. We are extending our links across the region, particularly in North East Wales, to deepen relationships with strategically important companies there, as well as enhancing our collaboration with other key regional partners such as Grŵp Llandrillo Menai, Coleg Cambria, AMRC Cymru and Wrexham Glyndŵr University.

Building on our extensive R&I portfolio of applied research (supported by WEFO and Ser Cymru), we will seek to further extend activity in regionally important sectors such as Environmental Sciences, High Value Manufacturing, Advanced Materials, Food & Aggrotech, Health & Wellbeing, Cultural and Creative Industries, and Financial & Professional services. Experience from the delivery of our ESRC **Impact Accelerator Account** and associated **Business Boost Funding** will ensure innovative approaches are mainstreamed into our extended engagement portfolio.

To address the immediate needs of the economy post-COVID we will continue to repurpose and enhance existing I&E support within a wider Research and Impact framework and structure. This provides a unique opportunity to integrate and augment our I&E support around a core institutional offer of the provision of **Knowledge** and **Talent** to business to support innovation and growth. Going forward we aim to grow HEBCI metrics that make up the National I&E measures, with specific investments and measures. We will increase resource in areas where we know a step change in performance is possible if suitable additional provision is made to increase capacity, capability and expertise. We will also review and identify the optimal delivery framework for commercial work and opportunities to participate in the ICURe programme.

Building on the HEFCW supported **NWKT Hubs** project, we will work alongside the region's FE and HE institutions, AMRC Cymru, Welsh Government, the local KTN and knowledge-intensive industry to improve the project pipeline and increase the region's participation in key funding programmes such as Innovate UK. A **KTP Centre for North and Mid Wales** will form part of this initiative. We will seek the support of others to investigate using M-SParc, Optic St Asaph, and AMRC Cymru as a coherent chain of geographically spaced **archipelagos of innovation and knowledge transfer**

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[1] At Bangor this includes a broad portfolio of disciplines (including medical research, pharma, medical technologies, sports science, elite performance, rehabilitation, social care and applied social sciences) and is a fertile platform on which to further build innovative collaborations with the private, public and third sectors.

support to the local economy. The aim would be that the expertise inherent in the parent organisation can be called upon regardless of the physical location.

There are plans to further develop and integrate existing important I&E infrastructure at Bangor University, such as **M-SParc**, **Pontio Innovation** and the **Bio Composites Centre**, as well as delivering the DSIC (Deiniol Science and Innovation Campus) project: a major estates development at the heart of the University, with Growth Deal as the major catalyst for this. Consolidating several key R&I Centres and support in one location at its heart, this development will be shared innovation and business landing spaces to reinforce the connection between research excellence and commercial adoption.

Going forward a revised approach to commercialisation will deliver an enhanced and diverse portfolio of activities which support our wider aspirations and are appropriate to the size and nature of the institution (leveraging strengths in social science commercialisation as well as more traditional STEM opportunities). There will be a continued preference for licensing and working with others, such as investors, to share risk and maximise outcomes, as well as utilising existing programmes and networks (**Agor IP**, **Alumni** and **Angel** Networks). Despite being resource intensive, spinouts are the appropriate approach for certain technologies to achieve the optimal outcome. We acknowledge that to be successful in this space, a longer-term approach is required, and this three-year strategy provides the opportunity to continue to sustainably build our performance in this space.

Informed by Grahame Guilford's report, we aim to renew the process that supports the development and exploitation of our IP and will look to best practice from companies, such as Thales' 'Catalyst for Growth' model, that makes use of a suite of three well-defined Readiness Levels: Technology, Business and Customer, acting as a gateway to guide the investment strategy. The exploitation route used for our IP needs to look beyond traditional approaches and embrace new modes of working, such as Ash Maurya's Lean Start-Ups approach, and seek partnerships with a range of organisations, including those beyond the public sector.

A summary of strategic priorities and supporting enablers is presented below:

Aims:	Enablers:
1. **Increasing competitively won R&I Income**	1.1 Enhanced UKRI R&I grant capture 1.2 Increased participation in Innovate UK 1.3 Establishing a KTP Office for North and Mid Wales - improved levels of KTP performance 1.4 Further leverage of existing funding opportunities to deliver a 'Stairway of Excellence approach'
2. **North Wales Innovation Crescent (NWIC)**	2.1 Through North Wales Growth Deal deliver flagship R&I Centres of Excellence in Low Carbon Energy, Digital Signalling and Environmental Biotech 2.2 Identifying replacement funding for Structural Funds including an engagement strategy for Shared Prosperity Fund 2.3 Leverage our existing WEFO project base for future bids to the 'Strength In Places' programme

		2.4 Support regional significant developments such as North Wales Medical School and associated healthcare innovations
3.	**Enhanced KEC**	3.1 An enhanced core offer to employers of access to Knowledge & Talent 3.2 Developing our I&E interactions across our academic base 3.3 Optimised delivery framework for commercial work 3.4 Uplift in support for Contacts, Admin and Marketing 3.5 KEC Training and Networking opportunities for the Academic base
4.	**R&I Infrastructure**	4.1 Investing in existing R&I facilities including M-SParc, Pontio Innovation and BioComposites Centre 4.2 New Science Hub development
5.	**Commercialisation Portfolio**	5.1 Refreshed Commercialisation strategy, informed by Grahame Guilford's report; 5.2 Grow Licensing opportunities 5.3 Targeted support for Spin Outs 5.4 Commercialisation Funding (including technical and commercial feasibility and proof of concept to progress early stage idea and further build the pipeline with seed funding for most promising concepts)

3.1 Provide details of your institution's strategic KPIs for commercialisation and income generating activity:

The University has adopted HEFCW's National I&E Measures as part of a suite of refreshed institutional KPIs. Also presented below are additional institutional KPIs that are linked with the national I&E measures. The level of ambition for our institutional performance across the National I&E measures is articulated as part of the first-year review of this strategy.

National I&E Measure	Related Institutional KPIs
a) Collaborative Research income	• Year on year increase post-COVID recovery • Increased levels of UKRI income • Participation in Innovate UK programmes • Increased Nos. of KTPs with an initial institutional target of 8-10 programmes •
b) Contract Research income	• Year on year increase post-COVID recovery • Increased nos. of industrial contracts • Increased levels of Public &Third Sector Interactions
c) Consultancy income	• Increased levels of activity across the Institution
d) Income from use of Equipment & Facilities	• Year on year increase post-COVID recovery • Increased use by facilities by industry • Increased use by non-commercial organisations

g) Regeneration income	• Identify and grow alternative sources of funding
h) IP income	• Continue sustainable year on year increases • Increased levels of licensing
i) Nos. of Spin out	• Maintain and sustainably grow existing portfolio
Wales Innovation Network (WIN):	WIN KPIs: (as agreed through conversations with VCs, PVCs and HEFCW): • A material uplift in research and innovation income to the Welsh sector resulting from bids supported by the Wales Innovation Network. The Network will aim to secure an additional £30m to Welsh institutions over the initial three-year period. • To achieve this, as a KPI, the Network will aim to support a number of bids over the three-year period which total a minimum of £30m. • Finally, we would anticipate that at the two- and three-year points, the initiative will produce reports for the WIN Board, in partnership with participating institutions, outlining the bids developed with the sector, including the number of partners in each bid. These reports would reflect overall progress including relationship building with UKRI, industry and business. These reports may also outline the performance of the topline KPIs at a regional level to consider how the benefits of WIN have been felt across Wales and institutions. To be confirmed, as WIN is further established.

3.2 How will your strategic approach in this area align with HEFCW's Research and Innovation: the Vision for Wales? Select the pillars supported:

☒ Excellence
☒ Place
☒ Innovation
☒ Collaboration

For this section all four pillars apply. One of the key foci for our RWIF strategy is an emphasis on place. We have adopted the EPIC matrix as the assessment tool to assess whether an activity can be considered as contributing to a place-based innovation approach. To successfully do that, all four pillars need to map against it, in order to reach the threshold and be prioritised for inclusion in this strategy.

3.3 How do your strategic ambitions for commercialisation and income generating activity support the Vision's goals, milestones and ambitions?

[Max 250 words]

Our strategic ambitions for our commercialisation and income activities are highly complementary to the Vision. A key priority for us is to increase levels of competitively won R&I Income and this ambition aligns completely with goal, milestones and ambitions of the Vision which articulates the

same goal for the sector. The Vision anticipates this to be one of the key challenges the sector faces in the emerging post Brexit funding environment. As part of this sector wide issue Bangor will ensure that the profile of its R&I contributions is raised outside of Wales and that opportunities are identified and pursued as a priority.

Furthermore, our research ambitions align with those of the Vision which seek Wales to be recognised for high-quality research which advances knowledge and generates ideas that lead to the products and innovations of the future. Alongside implementing a more systematic approach to exploiting the multiple pathways between research and the economy, we acknowledge our role in contributing to the four pillars of the UK Innovation Strategy and the priorities of Welsh Government's Programme for Government. We will work with widely aligned partners (HE, FE, RTOs, and government) to deliver an enhanced innovation eco-system for the region and collaborate widely with business (both large and small), the public sector and social enterprise to deliver programmes focused on delivering innovation and improved performance.

4. New business growth and skills support

Outline the support you intend to provide for new start-ups, spin-offs, and meeting the targets of schemes such as the WG's Youth Entrepreneurship Programme. Provide information on where RWIF will add value to existing activities, and where it allows you to invest in further growth. Further guidance on this section is available in Circular W20/09HE.
Your response should be framed in terms of social and economic prosperity for Wales. [1000 words max]

Bangor's approach to new business growth and skills support is driven by the following strategic imperatives:

Aims for New Business Growth and Skills Support	
6.	Improved levels of Student Employability across the University
7.	Promoting entrepreneurship amongst the student body
8.	Increasing the level of Graduate start-ups and anchor them in the region as part of Innovation and Enterprise eco-system.
9.	Innovative skills provision for the regional economy
10.	Explore options for a KESS 2 replacement which build on significant contribution of the programme.

Enterprise
Bangor University has identified improving levels of employability as a critical institutional priority and has launched and ambitious programme of activities as part of an Institutional Action Plan[2] to stimulate this. Building on institutional success such as the **Bangor Employability Award** we will prepare our graduates to be adaptable and be able to spot, evaluate and seize opportunities as they emerge. We understand the link between Entrepreneurship and making our students more

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[2] Including a commitment for all Undergraduates to have a placement with an external organisation.

employable and will align our related I&E activities to contribute to this institutional imperative. At the heart of our plans to work with employers going forward is an enhanced institutional offer to provide access to Knowledge and Talent, supplying talented skilled individuals to drive forward innovation in their companies. Building on existing University systems, proposals for **an Intercalated Year** are being developed. The University will build on notable successes in this space such as the flagship **Enterprise by Design Programme** with planned enhancements including student start-ups to take forward winning concepts. The University's Science Park, **M-SParc** has brought a significant additional dimension to the institutional Enterprise offer. It is home to the Region's Welsh Government supported **Enterprise Hub** and the home to several student enterprise initiatives which will be built upon. It also houses the University's Grad Start Up incubator (part funded by Santander Universities) as part of wider **Student Enterprise Accelerator** programme. This has a Discover, Define, Develop and Deliver pathway linking critical different aspects of the campus to commercialisation journey. We intend to build on the success of our Science Park to support the drive for greater employability, start-up and commercialisation levels from the University.

Building on **B-Enterprising** activities, the University will engage the student and graduate community to develop enterprise skills and ideas, provide support to build confidence and knowledge, provide opportunities to network and test trade and concentrated support for start-ups. The University will also continue to work closely with other partners in the region to ensure appropriate support packages to aid business growth and survival. The targets currently delivered by the **Welsh Government's Youth Entrepreneurship Strategy** will be met and enhanced and important activities such as test trading and market research will be expanded. We will also collaborate with other institutions in Wales to build on the recent successful virtual Summer Start-Up Week to engage, empower and equip students and graduates. Bangor University is a member of EEUK (Enterprise Educators UK) and will continue to encourage our staff to develop their own enterprise skills and to embed entrepreneurship into their teaching and learning as per QAA Enterprise and Entrepreneurship Education (2018). We will continue to sponsor international students for the two-year Start Up Visa and offer pre and post start-up support. Encourage more social enterprises to develop as well as welsh-speaking, female and BAME entrepreneurs.

Bangor University is extremely proud to have recently extended to 2023 its membership of the Santander University network, which has provided us with invaluable support for enterprise and employability activities. During the COVID Crisis we were able to run an Emergency **Enterprise Support Allowance** for our student and graduate start-up businesses with additional funding from Santander. Bangor's record with the **Santander Universities SME Employability Programme** is one of the best in the Network with 100% satisfaction rates from host companies and one of the highest rates of onwards employment with the host SME. Looking to take forward a sister **Graduate Placement Programme** within the North Wales Growth deal based on a similar programme developed by the Cardiff City Region for their City Deal and delivered by the University of South Wales. Furthermore, our involvement in the **GO Wales** and **the Santander Universities Employ Autism HE Network** reinforce our commitment to widening participation and ensuring all our students are equipped for the world of work.

Additionally the University is in the process of bringing existing **Arloesi Pontio Innovation** facilities including the University's Fab Lab together with the **Product Design Course** to create an augmented **Design Innovation Centre** for students and businesses to access to develop and prototype ideas with a strong link back to **M-SParc** for their commercialisation. Alongside this sit longer term plans

to develop an **Industrial Enterprise Academy (IdEA). IdEA** will take existing Degree Programmes with a strong project /placement component (such as product design) and integrate them into an exciting, enhanced offer to employers whilst delivering a step change in our interaction with industry.

Skills
The University is conscious of the important role it plays in providing the skills and talent to drive forward the regional economy. Our offer supports both workforce development through our undergraduate and postgraduate provision and the upskilling of the existing workforce through our varied CPD and professional qualifications programmes. This will even more important in the recovery period post-COVID. A key contribution in this respect is our **Degree Apprenticeships** portfolio consisting of Digital and Engineering provision. Building on our existing strategic relationship with our FE delivery partners Grŵp Llandillo Menai, we have broadened delivery of our digital programmes to Coleg Cambia for the intended final year of the pilot, and also the extended period that was recently announced, to ensure we have Degree Apprenticeship provision across the region. In particular, we see digital provision as a key contribution to rebuilding the economy of North Wales post-COVID. Following the pilot phase, we will seek in conjunction with the Regional Skills Partnership to extend Degree Apprentice provision into other regionally important sectors such as Energy and the Environment, Health Interventions and Social Care, Adventure Tourism and the Creative Industries, as well as to consider apprenticeships at a higher degree level. Our experience of delivering **Police Constable Degree Apprenticeships** from September 2020 will inform this expansion.

A direct result of the University's Strategic FE partnership with the Coleg Cambria has been the potential of delivering innovation, especially in the areas of lifelong learning and reskilling for the current and emerging economy and the marriage of that innovation with the delivery of skills. Our vision will establish a new form of technology skills academy situated in northeast Wales, building on the cornerstones of industrial need, applied technology research, together with agile and continuing training. The **Skills Factory** will bridge the FE/HE schism and deliver its vision outside the accepted patterns of education and training presently predicated on age and traditional educational qualifications. Driven by the need for a highly skilled, well-paid STEM based workforce and addressing the future needs of the local and regional economy post Covid-19, the Skills Factory will deliver access to employment in STEM sectors and provide new pathways into new careers.

Following the end of the current funding arrangement, we wish to build on our portfolio of leadership and management programmes, **ION Lead**, **Twenty 20** and **North Wales Business Academy** support through additional investment in this area to support **CPD** and **non-traditional learning** and a renewed integrated offer to Entrepreneurs, SMEs, Large Organisations and Social Enterprises.

Bangor University has led on important ESF supported **Knowledge Economy Skills Scholarships** programme in its current and previous iterations for the sector. Its signification contribution has been well documented and recognised. An institutional priority will be contributing with partners and stakeholders across Wales to develop the successor programme, which builds upon and further deepens the impact of the KESS to 2023. Alongside this effort we will look to use RWIF support to develop a portfolio of part-funded **Industrially focused PhDs** and **Fellowships** for ECRs to bolster our place-based innovation priorities.

Aims:	Enablers:
6. **Improved levels of Student Employability across the University**	6.1 Internships, Placements, Student Projects and Interconnected Year 6.2 An enhanced core offer to employers to Access Knowledge & Talent 6.3 Portfolio of strategic relationships with key employers 6.4 Target Connect 6.5 Enterprise By Design 6.6 M-SParc
7. **Promoting entrepreneurship amongst the student body**	7.1 B-Enterprising activity 7.2 Santander Universities 7.3 M-SParc 7.4 Embed Entrepreneurship into the curriculum as part of a wider programme to increase employability
8. **Increasing the level Graduate start-ups and anchoring them in the region as part of developing Innovation eco-systems**	8.1 M-Sparc Incubation Space 8.2 Discover, Define, Develop, Deliver Pathway (Santander Enterprise Accelerator) 8.3 Enterprise Hub
9. **Innovative skills provision for the regional economy**	9.1 Increasing our Degree Apprenticeship provision 9.2 Investment in our academic Colleges to support CPD and non-traditional learning 9.3 New integrated ways of working with FE 9.4 Regional Skills Partnership
10. **Explore options for a KESS 2 Replacement which build on significant contribution of the programme.**	10.1 National follow-on programme for KESS 2 10.2 Portfolio of Industrial focused PhDs and Fellowships

4.1 Provide details of your institution's strategic KPIs for new business growth and skills support

The University has adopted HEFCW's National I&E Measures as part of a suite of refreshed institutional KPIs. Also presented below are additional institutional KPIs that are linked the national I&E measures. The level of ambition for our institutional performance across the National I&E measures is articulated as part of the first-year review of this strategy.

National I&E Measure	Related Institutional KPIs
e) Nos of CPD Days,	• Year on year increase post-COVID recovery • Increased Nos. of Degree Apprenticeships
f) CPD income,	• Year on year increase post-COVID recovery
j) Nos. of Graduate Start Ups	• Year on year increase post-COVID recovery; • Exceeded WG Youth Entrepreneurship targets (nos. of staff champions, start-ups, test-trading, referrals to other support programmes)

	- Ongoing employability rate from Santander SME Employability programme (70+%). Use as a benchmark for other related programmes - Year on year improved performance in Graduate Outcomes survey.

4.2 How will your strategic approach in this area align with HEFCW's [Research and Innovation: the Vision for Wales](#)? Select the pillars supported:

☒ Excellence
☒ Place
☒ Innovation
☒ Collaboration

For this section we believe all four pillars apply. Excellence in this context not only applies to Research Excellence (which is particularly relevant for aim 10) but also for teaching excellence, which is recognised through the University's TEF Gold status.

One of the key foci for our RWIF strategy is an emphasis on place. We have adopted the EPIC matrix as the assessment tool to assess whether an activity can be considered as contributing to a place-based innovation approach. To successfully do that, all four pillars need to map against it in order to reach the threshold and be prioritised for inclusion in this strategy.

4.3 How do your strategic ambitions for new business growth and skills support the Vision's goals, milestones and ambitions?

[Max 250 words]

The Vision flags the role innovation, enterprise, entrepreneurship and skills development has in transforming Wales' productivity. We share the ambition for Wales to be recognised as leader in innovation, enterprise and entrepreneurship and skills development. Aligning this with a deep understand of place means we can develop areas of distinctive strength and expertise whilst anchoring related skills development and new business starts in our home region. The University seeks to place itself at the heart of interconnected innovation eco-system for the region. The key themes and interventions planned seek to mitigate the barriers that inhibit exploitation of knowledge and knowhow, slow the adoption of new technology and instead encourage innovation and enterprise. In terms of skills this mean making our graduates better prepared for the world of work and more open to the possibility of setting up a start-up. It also means working in close partnerships with our colleagues across North Wales in FE/HE, the Welsh and UK Government and local and national employers to upskill and reskill those in employment and as well as those unemployed. Our aim, in concert and collaboration of partners and stakeholders is to the make the region a more active proposition for investment and to develop a local eco-system that support the development of indigenous companies via new start-ups and diversification of activity in existing enterprises via entrance into, and progression up, new and established supply changes to enhance the regions resilience.

5. Civic Mission and Public Engagement

Bangor's approach to civic mission and public engagement is driven by the following strategic imperatives:

Aims for Civic Mission and Public Engagement in this strategy:	
11.	Support local communities overcome economic and social challenges arising from COVID-19
12.	Enriching the bilingual, cultural, health, social and economic prosperity of our region
13.	Further develop Community Outreach through flagship initiatives
14.	Continued recognition as the Sustainable University

Bangor University has a long tradition of civic mission and public engagement. In the University's new strategic plan, *Strategy 2030,* economic, social and civic impact is one of four transformational themes which underpin the University's four strategic drivers: research, transformative learning, excellent student experience, and Welsh language and bilingualism. By including civic mission among our transformational themes, we will be better placed to fully embed and integrate civic mission as a core aspect of activities, moving away from any remaining outdated perceptions of civic mission as a 'third mission' endeavour. Our strategy emphasises commitments to:

- Social and economic prosperity for the region;
- Supporting regional businesses and the skills agenda;
- Working with partners to create cohesive and resilient communities;
- Ensuring that we are an accessible University for the region.

This approach is maintained in the new institutional vision underpinning this strategy with its focus on the *Leading Place, Social Enterprise & Innovation and Active Citizenship* pillars from HEFCW's Civic Mission Themes; reinforcing the I&E themes articulated in previous sections (links with Schools are dealt elsewhere in the institution).

The University participates fully in partnership working with local government and other external stakeholders through various boards, including the Gwynedd and Môn Public Service Board, Betsi Cadwaladr Health Board and the Bangor City Strategic Partnership Group. The COVID-19 crisis has underlined the important convening power of the University as an anchor institution. Our science park, **M-SParc,** led a community of local makers, students, businesses and individuals to design, 3D print, and assemble visor shields for free distribution to medical staff and carers. In a truly

community effort, this network came together to produce over 6,000 pieces of PPE. This effort was enhanced by **Santander Universities'** match to the network's crowd sourced funds allowing scale-up to ensure coverage across our region.

Since being established, **M-SParc's** doors have been open to the community, enabling new audiences to learn about the University's work and provide work experience and a range of events for students, young people and local school pupils, including coding clubs, the F1 schools '*Team Drive'* event, and the launch of the **Profi** project to inspire Year 12 pupils at risk of becoming NEETS to consider their future careers. M-SParc's '*On Tour'* outreach initiative has taken the work of the Science Park to communities such as Bethesda and Colwyn Bay, with plans for further 'tours' across the region. M-SParc are leading on a Digital Skills Week, in partnership with Technocamps and the School of Computer Science and Electronic Engineering, providing workshops and assignments to help fill the digital skills gap, and the M-SParc Academy is now open, providing opportunities for young people to develop their skills. Additionally, work placements and internships have been arranged with tenant companies leading to graduate employment complimenting the Graduate Incubator and wider start up support available through the Enterprise Hub.

Pontio, our Arts and Innovation Centre, has community engagement at its mission's heart. Providing both the University and the local community with a first-class professional venue, Pontio has sought to deepen the University's contribution to artistic, cultural and engagement activities, the regeneration of the city, and to build engagement between academic and local communities. **BLAS**, Pontio's arts participation project offers children and young people a variety of arts experiences. Since its 2013 launch BLAS has gone from strength to strength linking inspiring practitioners with Bangor's enthusiastic children and communities. In 2021/22, there will be a new strategic partnership with North Wales Africa Society, who are based on Bangor's high street, along with Cwmni'r Fran Wen who are re-locating to the city and other community organisations such as Gisda, Gwynedd Council Social Services and Maes Ni. The community work has also been further enhanced by the HEFCW supported project **BRAMA** which introduces circus skills / performing arts to disengaged teenagers at a loose end during weekends and school holidays. A successful pilot levered in £100k of Big Lottery funding for three further years.

Pontio Arts will collaborate with Swansea and Aberystwyth University on a national community engagement project, **Home and Hinterland**, that will straddle diverse communities, students, academics, and freelance artists.

Pontio is also home to the University's **Fab Lab** and '*maker*' community providing another important bridge to the wider local creative community. Going forward the University is examining how it can its cultural and civic mission around the musical traditions of Wales.

As part of our wider COVID-19 response the University has built upon its strong commitment to the Welsh language. Supported by Welsh Government, Bangor University's **Cysgliad**, Welsh language spellchecking and grammar checking software package, has been released as a free download to support Welsh-medium learners, their families, small organisations and the general public to use the Welsh language as they work from home during the pandemic. Developed by Canolfan Bedwyr's this initiative reinforces their wider contribution to our Civic Mission which includes the **Ap Geiriaduron** app for smart phones, one of the best performing software license downloads in

the annual HE-BCI Survey. The popular **Welsh for Adults** and **Languages for All** programmes have the potential to widen participation through digital augmentation.

The University has other major public engagement initiatives it wishes to further develop. **Treborth Botanic Garden** maintains a strong programme of educational outreach and engagement with the local community and is considering a National Lottery Heritage bid to redevelop its visitor facilities. The University is considering how it will deliver its high-profile **Public Lecture Series** going forward in the new age of social distancing by introducing a digital participation aspect. Linked with this will be renewed emphasis on the public understanding our research with a new series of **TEDx Talks.** The University's **Special Collections** are similarly seeking to develop their programme and widen audiences. The relationship with Bangor's Museum, **Storiel** will be expanded as will links with the **National Trust**, **Cadw, Oriel Mostyn**, and the recently awarded **World Heritage status** of the slate landscape in northwest Wales. The success of existing I&E related School initiatives such as **Technocamps** will be built on. The university will work with regional initiatives focused on the public understand of science where there is strong alignment with our research strengths such as **Welsh Mountain Zoo**, the **Mon Geo Park** and the proposed **Earth Project** in Llanberis.

Bangor has a strong tradition of **Student Volunteering**. Delivered by the Students' Union. This is one of the most impactful and visible contributions to the local community as well as being highly beneficial for student participants, particularly with their employability. The Students' Union offers volunteering opportunities for students on over 50 different community-based projects. Volunteers carry out a total of 600 volunteering hours a week, working over several key areas, including children, sports, mental health, the environment, community, campus and elderly project. Support from Santander Universities has allowed widening of activities, something we will continue to develop in terms of supporting of rebuilding the vitality of our communities post-COVID-19.

We also seek to build on success in the establishment of **Social Enterprises** based on University IP (or the licensing of IP) for public good. The establishment on the **Mindfulness Network Charity** and the licensing of the **Food Dude programme** to Bord Bia[3] in the Irish Republic provide foundations on which to build. Our involvement in major civil society research initiatives such as **WISERD** and experience of delivering our **ESRC IAA** will be leveraged to build additional collaborations to enrich the social and economic prosperity of the region and nation. Our policy contributions on modern day slavery and procurement contribute the Welsh Government's aspirations for Fair Work become a reality.

The University is proud of is status as the **'Sustainable University'.** We are passionate about promoting a culture and scholarship of environmental stewardship, living in harmony, and caring for the world in ways that meet our economic, social, environmental, and cultural needs. Underpinned by our world-renowned research, we will support the development of Wales as a bilingual learning country with a knowledge driven economy for the benefit of the world and future generations. The University has appointed an Associate Pro Vice Chancellor to lead on all aspects of sustainability within the institution, including embracing and promoting the five ways of working to achieve Wales' well-being goals and the UN Sustainable Development Goals. We will develop our curriculum to reflect a commitment to sustainable development and global citizenship; promoting sustainability in I&E activities and an ethos of 'Welsh is for everyone' normalising the experience of living in a multi-lingual environment.

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[3] The Irish Food Board

Aims:	Enablers:
11. **Support local communities overcome economic and social challenges arising from COVID-19**	11.1 Helping lead the regional COVID response through membership of the North Wales Economic Ambition Board (and other regional fora) 11.2 Redirecting existing resources into COVID-19 R&I responses and build new initiatives 11.3 Promote Active Citizenship and Community cohesion through Student Volunteering 11.4 Increased participation in the Welsh Civic Mission Network 11.5 Promote the use of the Welsh language in home working and schooling during the Covid-19 crisis 11.6 Bangor Strategic Partnerships Group and PSBs
12. **Enriching the bilingual, cultural, health, social and economic prosperity of our region**	12.1 Provision of community learning opportunities 12.2 Leveraging Civic Society research in partnership 12.3 Support the creation of additional Social Enterprises based on Bangor IP 12.4 Collaborating on regional public understanding of science projects aligned to recognised research strengths (e.g. Welsh Mountain Zoo, Mon Geo Park, Earth Project)
13. **Further develop Community Outreach through key initiatives**	13.1 Pontio, M-Sparc and Treborth Botanical Gardens 13.2 Public Lecture Series 13.3 Special Collections 13.4 I&E related School Initiatives (e.g. Technocamps)
14. **Recognised as the Sustainable University**	14.1 Sustainability Strategy 14.2 Associate Pro Vice Chancellor (Sustainability)

5.1 Provide details of your institution's strategic KPIs for civic mission and public engagement

The University monitors its annual performance in key Table 5 measures from HE-BCI survey and it is concerned that performance in this space will continue to be impacted by COVID -19, particularly those activities which measure 'attendees' from the general public.

The University has recently appointed an Associate Pro Vice Chancellor (Civic Mission) and will significantly enhance capacity through the appointment of 2fte of additional staff to provide dedicated support for the University's civic mission objectives. The University is preparing a new civic mission strategy, due to be launched early in 2022. We will review our institutional KPIs as part of the civic mission strategy development.

HE-BCI Table 5 Measures (nos. of attendees)	Linked Institutional KPIs

a) **Public Lectures**	Maintaining top 20 UI Green Metric Global University Ranking	
b) **Performance Arts**	Expand existing portfolio (3) of Social Enterprises (new creations or through the licensing of IP to existing Social enterprises)	
c) **Exhibitions**	Further improve by 10% Software License Downloads	
d) **Museum Education**	Contribute Regional Economic indicators: GVA levels, job creation, etc.	

e) **Other:** events which don't fit into the above headings, included:
    ○ STEM or School Events
    ○ Community events
    ○ Media engagement, e.g. Radio or television interviews by staff		

5.2 How will your strategic approach in this area align with HEFCW's Research and Innovation: the Vision for Wales? Select the pillars supported:

☒ Excellence
☒ Place
☒ Innovation
☒ Collaboration

For this section all four pillars apply. One of the key foci for our RWIF strategy is an emphasis on place and this has a resonance in the context of Civic Mission and Community Engagement. Excellence here covers both Research and Teaching which feeds much of our civic mission activities. We have adopted the EPIC matrix as the assessment tool to assess whether an activity can be considered as contributing to a place-based innovation approach. To successfully do that all four pillars need to map against in order to reach the threshold and be prioritised for inclusion in this strategy.

5.3 How do your strategic ambitions for civic mission and public engagement support the Vision's goals, milestones and ambitions?

[Max 250 words]

The Vision promotes a view of institution that can clearly articulate their role in civic mission and community engagement. Global players which in their locality contributing to the social and economic wellbeing of their community. This importance of this contribution is brought home by COVID -19. The Vison states that Universities need to clearly articulate their role in civic mission and community engagement. We recognise importance of this and seek through our strategy to build upon the already substantial contribution we make.

Following the appointment of an Associate Pro-Vice Chancellor for Civic Mission and two civic mission officers operating in professional services, Bangor University will have substantially increased the level of resource supporting its civic mission activities. The University is a member

of the Welsh Civic Mission network and is committed to the core aims of the Civic Mission Framework (Wales). The University is developing a Civic Mission Strategy that will emphasise the cross-cutting and fully-integrated expectations outlined in the University's new strategic plan. The new strategy will emphasise importance of the following drivers:

- The need to respond to 'Grand Challenges' facing societies and supporting social justice and economic success to enable sustainable communities;
- The Research Excellence Framework (REF) with its emphasis on the wider impact of research on society
- The steer for HE to become more employer responsive through developing the workforce's higher-level skills and enhancing graduate and postgraduate employability;
- The importance of engaging with community groups and organisations across north Wales;
- Demonstrating the added value of universities to the economy and society;
- The opportunity for all students to develop their employability skills;
- The role of the institution in contributing to regional and national health and wellbeing agendas;
- Emphasising local supply chain expectations in our procurement strategies;
- The importance of engaging with Schools;
- Understanding the impact of the recession, austerity measures, Brexit (and now COVID-19) on the community and voluntary sectors.

Section C: Alignment to policy and priorities
6.   Wales and UK Policy

Describe how your RWIF strategy aligns with relevant place based regional, Welsh, and UK policies such as e.g. local city region / regional growth deals; WG's Prosperity for All: economic action plan; UK Industrial Strategy; Public Services Boards; UPP Civic University Foundation; Youth Entrepreneurship Strategy; Science for Wales; Regional Economic Frameworks etc.
[500 words max]

There are a number of policies and strategies that have strongly informed the development of this document. Taken together they all have a strong sense of place with an underpinning commitment to the transformational potential of place-based innovation which is marbled throughout this strategy. We consider this to be a golden thread providing the strategic context to present our proposals. Specifically, the following have shaped our thinking:

We acknowledge our role in contributing to the four pillars of the UK Innovation Strategy and the priorities of Welsh Government's Programme for Government, building on the themes of the UK Government's **Industrial Strategy** with its headline target **of 2.4%** of GDP expenditure on R&D by 2027. The vision presented includes:

- the world's most innovative economy
- good jobs and greater earning power for all
- a major upgrade to the UK's infrastructure

- the best place to start and grow a business
- prosperous communities across the UK

These are underpinned with the 5 foundations of productivity: Ideas, People, Infrastructure, Business Environment, Places aligned to Grand Challenges. We also note its commitment to a **North Wales Growth Deal** and the recognition of the importance of **nuclear energy** to the region.

Welsh Government's **Prosperity for All: economic action plan** outlines a vision for inclusive growth built on supercharged industries of the future and productive regions. The **Economic Contract** with the associated **Calls to Action** and **National Thematic Sectors** have influenced the development of our offer. Furthermore, the strong commitment to Regional Economic Development, Decarbonisation and working together underpinned by the Well Being of Future Generations Act means there is a clear role for the University in the successful delivery of the action plan.

The **Growth Vision for North Wales** published by **the North Wales Economic Ambition Board** seeks to deliver economic transformation for the region. Centred on the **North Wales Growth Deal** (a £240 million commitment from Welsh & UK Governments) it has an emphasis on Inclusive Growth and 8% uplift in GVA which will lead to 4,363 new jobs and leverage direct investment of £936m. It envisages a:

- Smart North Wales -with a focus on innovation in high value economic sectors to advance economic performance …..“There is ambition for the region to position itself as one of the leading UK locations for energy generation and advance manufacturing - as well as becoming a hub of innovation and technology expertise…...”
- Resilient North Wales - with a focus on retaining young, increasing employment levels and skills to achieve inclusive growth
- Connected North Wales - with a focus on improving transport and digital infrastructure to enhance strategic connectivity to and within the region

Bangor has three flagship projects which are key to delivering this ambition

The findings of the recent **Science and Innovation Audits** have heavily influenced our thinking particularly the economic geography where were our Science and Innovation assets can have significant transformational impact on the region.

- North West Nuclear Arc
- North West Costal Arc for Sustainable and Clean Growth
- South Wales Crucible

Additionally, in our recent response to the Welsh Government's Consultation on Regional Investment the University stressed to following points:

- · Welcoming the move towards a more regional approach, noting the unique opportunity that regional partnership working offers us.

- · Stressed that the case for R&I to be made much more explicit, given that Structural Funds provided 79% of the total funding for R&I in Wales during the 2014-2020 programme.
- · Agreed with the need for more joined-up, place-based working, within the region– whilst emphasising the importance of increasing, not reducing cross-border and transnational working.
- · Welcomed the outlined four strategic priorities for investment but argued that innovation R&I and the role of HE is essential in delivering on these.
- · Our commitment to the themes of equality, sustainable development, gender mainstreaming and Welsh language.

Welsh Government's **Youth Entrepreneurship Strategy** aligned with the principles of the **Be the Spark** initiative has been central to the development of our own Enterprise and Entrepreneurship delivery. We fully endorse the ambition of creating a more visible, simple and connected Entrepreneurial eco-system in Wales and are actively playing our part in its delivery.

Bangor's **Civic Engagement Strategy** which has informed the development of the Civic Mission component of this strategy has itself been developed using the recognised sectoral benchmarks and tools available through National Coordination Centre for Public Engagement.

7. Meeting the requirements of the UK Knowledge Exchange Concordat

Institutions in Wales must demonstrate through their RWIF strategies commitment and alignment to the principles of the UK Knowledge Exchange Concordat. A development stage will take place during 2020-21 to implement a Welsh model.

For this initial stage we are asking institutions to confirm, through their strategies, that they are aware of the KEC principles which were outlined as part of the initial consultation, and that they are committed to alignment through the Welsh model for engagement. Revised RWIF strategies can be submitted annually as part of the monitoring procedure, and this process will be utilised to demonstrate full KEC commitment following the development year.

[500 words]

The KE Concordat is actively supported by Bangor University and a self-evaluation against the eight guiding principles of the KE Concordat and a gap analysis have been carried out. The outcome of this review and our priority actions are attached as an appendix to this strategy, and this will be reviewed annually as part of RWIF processes.

8. Well-being of Future Generations Act 2015

Provide specific information on the RWIF strategy will support the seven goals, and five ways of working in the Well-being of Future Generations Act 2015;

Bangor supports the **ONE** sustainable development principle (so institutional activities will demonstrate how they meet the needs of the current generation without compromising the ability of future generations to meet their own needs). To achieve this, our activities and planning will be measured against the **FOUR** pillars, guided by the **FIVE** ways of working, with the **SEVEN** well-being goals as our target:

This strategy respects the **FOUR** pillars – economic, social, environmental and cultural. The Welsh Government's consultation 'Regional Investment in Wales' identifies four priority areas – and these are supported by Bangor's response, see below with examples given (not exhaustive):

1. **Productive and competitive businesses** (**Economy**). For example:
    a. University Collaborate & Innovate for Recovery programme (Uni CaIR).
    b. Further Develop key I&E infrastructure such as the M-SParc, Pontio Innovation and the Bio Composites Centre
    c. Support through KE programmes such as future KESS, Santander SME support etc.
2. **Reducing the factors that lead to income inequality** (**Society**):
    a. Skills support through our Degree Apprenticeships portfolio FE partners.
    b. Develop Community Outreach through key initiatives such as Pontio Arts, MSPARC, schools activities etc;
    c. Widen access initiatives including Santander Universities support.
3. **Supporting the transition to a zero-carbon economy** (**Environment**):
    a. Commitment as an institution to the highest standards of environmental performance (ISO14001)
    b. Supporting collaborative research in Low Carbon domains
    c. Support via NW Growth Deal for LC Energy Centre of Excellence based at MSPARC and Bangor. / North Wales Innovation Crescent
4. **Healthier, fairer, more sustainable communities** (**society/culture**):
    a. Promotion of Active Citizenship and Community cohesion via Student volunteering and widening access via Santander Universities
    b. Founding of Mindfulness Network Charity and the licensing of the Food Dude programme
    c. Support for Welsh Language learning using Cysgliad tools via Canolfan Bedwyr.

9. Impact on Welsh Language

Outline the positive impact RWIF investment will have on opportunities to use and support the Welsh language. Where appropriate you may wish to refer to the themes in the Cymraeg 2050 action plan.
[250 words max]

Bangor University embraces the vision presented in *Cymraeg 2050* completely and is committed to taking ownership of the challenge. Its own Welsh language strategy '**Bangor 2050'** provides a plan to how the institution will contribute to the target of a million Welsh speakers by 2050. Bangor's unique institutional context as the largest provider of Welsh medium Higher Education in the world and the most bilingual workforce in the UK means it can make a significant contribution.

Furthermore, in an age in which all Welsh universities must comply with the national Welsh standards, Bangor University's internal policies sets the bar high thus leading nationally when it comes to Welsh in the HE sector. BU's Sustainability Lab ensures that we frame our work in terms of **The Wellbeing of Future Generations Act**, and Welsh has a central place in this. In the I&E context the following developments are of relevance to those aspirations:

- Technological assets such as globally recognized translation and grammar checking tools and speech recognition software. Support of the translation industry through KTPs and SMART programmes.
- Establishment Medical School in North Wales with a focus on medical education through the medium of Welsh.
- Support of cultural activities; from creative writing to public lectures to support for the development of innovative Welsh language performing arts through Pontio
- Welsh for Adults provision which is returned to HE-BCI under the CPD metrics.
- Extensive portfolio of research in the fields of history, literature, culture, sociology, law, business, neuropsychology of bilingualism, speech and languages technology and healthcare.
- Community outreach initiatives.
- The ethos of 'Welsh is for everyone' and normalising experience of living in a multi-lingual environment.
- As part of Bangor 2050 strategy, establish a new a Language Consultancy / Commercial Research Unit (CYMAR).
- Support for home-grown entrepreneurs boosting the local economy through language and culture.

Section D: financial assurance			
10. Use of Research Wales Innovation Funding			

How is your RWIF allocation 2020/21 being used to deliver the strategy set out in Section B, and what are your anticipated priorities for the use of RWIF funds in future years? [250 words max – or append a table outlining broad investment areas]

The table below presents our initial and longer-term investment priorities mapped against our strategic aims presented previously in the 3 sections of Part B.
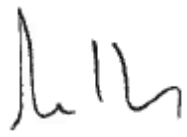
These will be linked to an **implementation** and **spending plan** following the approval of this strategy.

Specific Content	Aims	Initial Investment Priorities	Longer term Investment Priorities
Commercialisation / income generating	1. Winning more competitive Research and Innovation income	• Expand resource dedicated to support UKRI applications • Scope potential for expansion of KTP activity	• Widening the institutional base for UKRI activities with strong emphasis on Innovate UK. • Grow Establishing KTP North Wales Office lead by Bangor with HE and FE partners.
	2. Realising a Placed Based Innovation Agenda (North Wales Innovation Crescent);	• Support resource for North Wales Growth Deal with a focus on business plan development and early stage delivery.	• NW Growth Deal - support implementation, delivery and monitoring • Bring forward proposal for new framework and

			• Gearing up for new regional investment framework (via Shared prosperity Fund) • Utilise opportunities identified through SIAs to develop additional Strength in Places applications. • Scope new regionally significant initiatives.	leverage additional external funding using the Growth Deal investments as a nexus. • Further developing and expanding recognise research strengths for a place-based context. • Pursue additional new regional investment opportunities.
		3. Enhancing institutional KEC performance	• Expand the resource to deliver KEC both in terms business development and uplift in aligned support. • Examine different commercial routes for delivering Consultancy and Commercial Work • Deliver KEC training and networking opportunities for the academic base	• Deploy expanded KEC resource in widened regional role. • New vehicles for Consultancy / Commercial Work. • Expanded KEC active academic base.
		4. Improving our Research & Innovation Infrastructure	• Better integration of existing I&E infrastructure (including, M-SParc, Pontio Innovation, Bio-Composites and our R&I core). • Supporting the core resource delivering Research and Impact support	• Science Hub Deiniol Campus development incorporating shared R&I facilities and business landing spaces. • Realisation of Growth Deal investments and M-SParc expansion. • Enhanced Research and Impact support resource to grow our research and innovation portfolio.
		5. Developing and extending our commercialisation portfolio.	• Strengthen resources required to expand and develop our IP portfolio. • Scope components of a Commercialisation Fund	• More agile and creative approach to the exploitation of the University's IP. • Access additional exploitation routes and funds. • Implement and operationalise BU Commercialisation Fund.
New business growth & skills support		6. Improved levels of Student Employability across the University	• Additional resource to support employer engagement and the delivery of core integrated institutional offer	• Bring forward additional Student Employability initiatives link to I&E strengths • Widened portfolio of strategic important employers.
		7. Promoting entrepreneurship amongst the student body	• Strengthen the existing Discover, Define, Develop, Deliver pathway.	• Bring forward new proposals to expanding student entrepreneurship. • Expanded incubation facilities and start up support progs.

	8. Increasing the level Graduate start-ups and anchoring them in the region as part of Innovation and Enterprise eco-system.	• Expand the resource to support Graduate start-ups	• New support initiatives to further grow start-ups, improve survival rates and anchor in the region.
	9. Innovative skills provision for the regional economy	• Increase support and improve access for regional important skills provision.	• Enhanced and expanded regional skills offer
	10. Explore options for a KESS 2 replacement which build on significant contribution of the programme.	• Consider options for KESS replacement and a suite of industrial PhD and Fellowships.	• KESS replacement operational. • New portfolio of industrial PhD and Fellowship opportunities.
Civic Mission & Public Engagement	11. Support local communities overcome economic and social challenges arising from COVID-19;	• Continue and widen the impact from current initiatives. i.e. Welsh Language Software for home working & schooling, PPE production, student volunteering.	• Bring forward longer term proposals to support social and economic recovery for post COVID environment.
	12. Enriching the bilingual, cultural, health, social and economic prosperity of our region;	• Sustaining existing contributions and identifying new approaches for post COVID environment. • Support of existing Social Enterprises (based on Bangor IP) • Explore Digital enhancing existing Community Learning provision	• New initiatives including regional public understanding of science projects (e.g. Welsh Mountain Zoo, Mon Geo Park and Earth Project). • Support for the creation of new Social Enterprises both based on Bangor IP and by student start-ups. • New Digital enhanced Community Learning provision
	13. Further develop Community Outreach through flagship initiatives;	• Better integration of existing community outreach initiatives with enhanced digital delivery components for delivery in the new norm.	• Enhanced Digital provision including TEDx Talks series. • Further strategic development e.g. Treborth Botanical Gardens, I&E related School Outreach programmes. • Further expanded community outreach activities to include new initiatives.
	14. Continued recognition as the Sustainable University.	• Ensure Cross Cutting themes are integrated into new post Brexit activity. • Identify opportunities Post-COIVID to improve sustainability practices and performance.	• Lead on regional sustainability initiatives. • Enhanced oversight and promotion role for Sustainability Lab ensuring wider integration of CCT theme and the WBFG Act seven goals and five ways of working.

Indicative financial allocations against activity / aims for Year 2 Anticipate potential year on year variance between headings of between 10-20%	Aims	Amount (£k)
Capacity Grant	1 - 14	250
Supporting Research & Innovation Excellence / UKRI Support	1, 3, 4	
Placed Based Innovation / Regional Economic Regeneration	2	1,500
Commercialisation, IP and Tech Transfer	5	
Student & Graduate Enterprise, Employability and Skills	6 – 10	550
Civic Mission and Public Engagement	10 – 14	150
Reporting, Data and Output Management - Research and Innovation	1 - 14	150
Total		**2,600**

Section E: Regulatory Requirements NB: HEFCW may request further information / clarification on any of these areas	
i) Welsh Language Standards (2018) [Use the drop down menu]	This strategy complies with Welsh Language Standards 2018
ii) Equality Impact Assessment [Use the drop down menu]	This strategy has been Equality Impact Assessed
iii) Well-being of Future Generations Act (2015) [Use the drop down menu]	This strategy will contribute towards the aims of the WFG Act 2015
Signature: Vice Chancellor	Professor Iwan Davies
Date	28/09/2021

Name of Institution:	Bangor University		
Research Wales Innovation Fund lead:	Prof. Paul Spencer	Email:	p.spencer@bangor.ac.uk

All institutions in Wales are signatories to the principles of the KE Concordat, and have agreed to align to this commitment through their RWIF strategies. As part of your RWIF strategy you should undertake a self-evaluation against the eight guiding principles of the KE Concordat and conduct a gap analysis. The table below should be used to summarise your findings, highlighting your top five priority actions. This table will be included as an Annex to future published RWIF strategies. HEFCW will ask institutions to review this table, and report on progress against the key priority actions, annually as part of RWIF processes.

Key Priorities (500 words)

KE concordat principle	To what extent does your HEI meet this principle (e.g. on a scale of 1-4, where 1 is 'not at all' and 4 is 'entirely')?	Where gaps have been identified in the self-evaluation exercise, provide details of your improvement plan for meeting the requirements of this principle. Please indicate the resources to support the plan.	Please identify the top five priority actions for your higher education provider. These five priority actions should be taken across the eight principles (five in total). Please note where priority actions are cross-principle.	Please provide examples of innovative practices that demonstrate how your higher education provider meets this principle. Provide at least one example for each principle, with five as a maximum per principle.	What timescales are needed to implement the relevant improvements (e.g. 0–6 months, 6–12 months, 12-18 months, 18-24 months, 24+ months)?
1. Clarity of mission	3-4	Recently, the University has published its new ten-year Institutional Strategic Plan: Vision 2030 A Sustainable World For Future Generations that sets out the following vision for Bangor *"a globally connected University, realising opportunities for success through transformative, innovative, impact-driven research and teaching, with a focus on sustainability: safeguarding the environment, revitalising society's health, and promoting economic, social, bilingual, and cultural vibrancy."* Subsequently a Research & Impact Strategy and Framework has been developed to provide the strategic planning framework for research and impact. This represents n important shift in both focus and approach and integrates what were previously several partially connected agendas of research, impact, business and enterprise engagement. A similar approach is being taken the Civic Mission component of the new strategy.	1. **Update and align RWIF strategy in light of Strategy 2030 and accompanying Research & Impact (R&I) Strategy and Framework.**	The University had a developed an accompanying meeting architecture to ensure that KE is embedded into the wider R&I effort. The new IRIS structure is made of three teams (Business and Skills, Commercialisation and Impact) which ensures that KE has visibility across IRIS' work. This will be further enhanced with establishment of three new research institutes for each of the University's Colleges (Arts, Humanities & Business, Environmental Sciences & Engineering and Human Sciences) leading to consistence of approach and ever closer alignment of KE activity with other R&I work. The University's KEC Panel (Knowledge Exchange and Commercialisation) oversees operational issues and reports the Executive through the Research, Innovation and Impact Task Group. A similar approach is taken Civic Mission Task Group which oversees the wider civic mission agenda in the institution. Furthermore, a cross University RWIF Stakeholders group has been established to oversee the RWIF strategy process and oversee reporting and performance.	0-6 months

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		Alongside this the University had undertaken a major restructuring of its Professional Services result in a significantly reduction the number of units. As part of reorganisation a new unit was established within Corporate Services, IRIS (Integrated Research & Impact Services) and it is within IRIS where the responsibility for the implementation of the RWIF strategy lies. Our gap analysis shows that implementation of the new institutional strategy and the operationalisation of the new structures are central to this principle. In particular the following: • Updating the RWIF strategy to meet the changed operating environment and new institutional vision and priorities. • Operationalising the new IRIS structure including appointment to new RWIF supported posts, there and across the University.			
2. Policies and processes	3	Bangor has established policies for KE. These include Consultancy and Intellectual Property policies and a wide range of collaborative and contract research agreements. The University has identified a number of these policies and procedures need to be reviewed and updated (including Consultancy, Commercialisation and IP, Business Engagement Strategy). Many of these were developed for a different operating context and need to be refreshed and aligned with the new structures both in professional services but also within the academic domain. This will be led by IRIS with appropriate support input from academic colleagues and professional services. Additionally, the these will be better aligned to support the delivery of institutional KPIs and new operating practices (i.e. Digital First) as well as reflecting the wider culture change sought by *Strategy 2030*	2. **KEC related policy and process refresh including optimisation to support growth and strategy alignment**.	The University's KEC Panel will be increased to ensure cross college representation and ensure alignment with new College Research Institute. A number of trailblazer projects will inform developments. For example the University has commissioned Grahame Guilford & Co to undertake a report on the University developing a more commercial approach to its R&I activities which will provide recommendations for further consideration.	12-18 months
3. Engagement	3	Bangor has built up effective relationships with external partners across the institution including regional working, successful	3. **Adoption of a new Business Engagement policy underpinned by an institutional CRM**	Furthermore, opportunities to engage needs to be better shared across the institution and outside our existing Collaboration Hub	6-12 months

		business collaborations (with both SMEs and multinationals as well as with Government, the public sector and social enterprises. We have multiple, but clear routes for organisations and individuals to access initial contact although we recognise more is needed to be done to improve this and further highlight opportunities. *Strategy 2030* provides the strategic context for these improvements. In the transformational theme *'Economic, Social and Civic Impact',* sits the priority '*an accessible University'* (alongside *Social and economic prosperity, Supporting business and skills* and *Cohesive, resilient communities*). Our gap analysis has shown that to improve the delivery of this principle that several things need to happen. These include: • Addressing varying engagement practices across the University, standardised procedures and better intelligence sharing. This will be addressed in part by the development in principle 2., RWIF investments in underpinning systems (such as a shared CRM) and the new organisational structures include IRIS and the College Research Centres. Ensuring best practice is shared and adopted, cross-institutional opportunities are maximised. • A share core message centred on access to Knowledge and Talent which will be at the heart of all external engagements and will be used to deepen new and existing relationships. • Ensure feedback from external partners and users is sought and informs future approaches.		webpages are to be further enhanced to provide a unified entry point for knowledge and talent enquiries. Additionally, our sponsoring and hosting of the Daily Post's annual Achievement Wales Business Awards has facilitated one of the premier events in the North Wales Business calendar, welcoming business and business leaders from across the region to the University to celebrate their many achievements. Discussion are underway for hosting the event again post-covid. Additionally, the University is proactively its levels engagement with both Westminster and Cardiff Governments as it develops its placed based agenda. This has culminated in a number of ministerial visits recently by both Governments to the University and flagship projects such as the DSP Centre, M-SParc and the North Wales Medical School.	
4. Working transparently and ethically	3	As a University we communicate to our partners our responsibilities as a Higher Education Institution and the regulatory environment in which we operate and is underpinned by the contractual agreements we put in place for specific KE activities. We have a published policy on intellectual property and consultancy and use non-disclosure agreements to respect partner confidentiality. We have comprehensive and		A suite of IP, Commercialisation and Consultancy template agreements for KE active staff are available on the University's internal website. These are supported by internal professional development sessions and training. The University has recently appointed an Assistant -PVC for Research Governance which will include of oversight of KE interactions as part of a wider R&I brief.	12-18 months

		publicly available policies, procedures and structures relating to research ethics and governance. MoUs are in place with key strategic partners and signed agreements are in place for regionally important bodies such as the North Wales Economic Ambition Board. Our gap analysis shows the need to further harmonise KE into wider R&I activities and supporting a wider appreciation of how KE supports wider R&I ambitions and the convergence of R&I, engagement and enterprise. Furthermore, the approaches discussed in principles 2 & 3 will further compliment efforts in this section.			
5. Capacity building	**3**	Going forward the University's KE support within IRIS, which is an integrated service which blends KE into the wide R&I piece. Capacity is to be enhanced with a series of RWIF supported appointments in IRIS but more widely across professional services and academic structures. This will be further augmented by investment in new systems such as the worktribe (a R&I grant management system). In addition, the RWIF support will provide match-fund research infrastructure requests and maintenance, address research governance, provide some PhD studentships and pump-prime funding for major initiatives, support capacity building across the piece. We have established approaches for supporting staff (professional and academic) and students to engage in KE related activities. We are active member of the WILO network an important forum to share best practice and to learn about innovative approaches. We are also members of PraxisAuril (the KE professional body for the UK) and participate in their conferences and training provision. We actively engage with networks established through regional partnerships	4. **Implementation of new IRIS structure with associated RWIF supported appointments made to strengthen R&I support capacity and accelerate delivery of strategic objectives.**	The KESS 2 programme provides an excellent example of how the dial has been moved at Bangor and capacity built. KESS has result insignificant addition PhD and Research Masters numbers. This provision is delivered collaboratively with external organisations part sponsoring the scholarships. This in turn has lead to wider culture change and greater capacity to undertake additional and complimentary collaboration. The University's Science Park, M-SParc has also resulted in a significant growth in capacity which has opened up a range of new KE opportunities including IP and Commercialisation, Internships, Degree Apprenticeships, Skills Development, Student Enterprise and Community Engagement to identify a few.	0-6 months

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		(Economic Ambition Boards and Regional Skills Partnership). Our gaps analysis shows that new RWIF support appointments are critical in order to further build capacity and operationalised new structures. Once achieved there are a number of additional steps to be taken. This includes: • Greater KE/R&I training for all staff and alignment with the Research Development Concordat. • Greater use of undergraduate, postgraduate and graduate talent to enable KE collaborations and in doing so build KE capacity, enhance employability and retain expertise regionally.			
6. Recognition and rewards	3	Progress is being made on this Principle, in particular embedding an Impact and Engagement pathway for academic staff promotions criteria. This can be evidenced by range of evidence including successful collaborations with external organisations, contributions to policy briefs, patents and appointment to external roles. Looking forward *Strategy 2030* is underpinned by a *'people and talent'* transformational theme which includes as a priority '*Rewarding Talent'*. Additionally, the new *R&I Strategy and Framework* includes a chapter on Culture Change and Consistency with a commitment to provide an environment and culture that support and rewards R&I performance. As part of our gap analysis we have identified a number of further steps to be taken. These include: • Monitoring use of I&E promotion pathway for academics and access if it adequately reflects activity and success on the ground. • Promote a culture of success which celebrates and publicises achievements both internally and externally.		The University seeks to recognise and celebrate it KE successes and has impressive track record over a number of years. The most recent achievement was the success of Pai Language Learning at the recent Wales Start Up Awards. Pai Language Learning, is a company created by Bangor University graduates Josef Roberts and Simon Parry-Williams winning the Graduate Start-Up Award, sponsored by Universities Wales. Pai have received significant support from M-SParc, the B-Enterprising service, Santander Universities and the Welsh Government-funded Big Ideas Wales and became M-SParc tenants via the Santander Universities Incubator co-working Space. They have since graduated into their own small office, with exciting plans for the year ahead to launch their innovative language-teaching technology. Also, recently Bangor University's innovative multidisciplinary extra-curricular course, Enterprise by Design, won the Enterprise Catalyst category of the National Enterprise Educator's Awards. The Enterprise Catalyst category is for an individual or team from HE or FE who are delivering exceptional enterprise education or practice inside or outside the curriculum**.**	6-12 months

		• Consider re-introducing the University's annual Research and Innovation Awards. • Refresh consultancy policy and associated reward mechanisms.		
7. Continuous improvement	3	*Strategy 2030* sits at the top of the hierarchy of our new strategy framework, providing a long-term vision for our medium-term strategic themes (sub-strategies) and our annual business planning that will articulate how we will operationalise our long-term strategic vision. These are supplemented by strategic initiatives or 'quantum leap projects' – significant initiatives (such as the North Wales Medical School) which are identified to accelerate the realisation of our strategic vision. Our commitment to continuous improvement in this context will be focused through a series of steps. improvement of the data collection and analysis across the HE-BCI survey tables. Active engagement with partner and stakeholder feedback through evaluations to improve activities and inform the design of new KE activities. Examine and evaluation of KE and R&I approaches at peer institutions and actively participate in related networks (e.g. WIN). Regular review of progress against the eight KEC principles and update plans accordingly.		The University's new a R&I Strategy and Framework includes a commitment to continuous improvement across all aspects of R&I activity span the pre and post award, academic performance and professional services support underpinned data analysis and cascaded KPIs at a University, College, School and Team levels	
8. Evaluating success	3	*Vision 2030* include a commitment to progressing strategic goals through a framework of targets and key performance indicators, aligned to the four strategic pillars and four transformative themes, which will be aligned operationally through the University's annual business planning round. The annual analysis of HE-BCI survey performance will further augmented by benchmark against other HEIs. This will critically assess performance against national I&E measures as well as identifying	5. **Embedding RWIF related KPIs into wider institutional planning and reporting.**	Gaps identified in our gap analysis occurred around better capture of KE related data to show broader impacts of our KE and how it informs and supports our broader R&I ambitions. The current HE-BCI analysis enables us to identify areas area of success (as well as areas requiring improvement) enabling smart investments to support improved performance. Going forward this process will be enhanced by close integration with core institution performance analysis as well as a longer-term appraisal of the impact of	0-6 months

		issues to address. These will be surfaced through the KEC Panel and RIISG to the University's Exec. Our new organisation structure will ensure greater ownership if KE related KPIs through embedding them in the wider institutional planning round. The annual business planning process will then determine the allocation of resource which will be aligned to delivery of the University's KPIs, goals and long-term strategic vision, and will enable collaboration and consistency between academic and professional service areas.		our KE activity particular those funded by structural funds.	