

University of St Andrews Outcome Agreement 2023-24

1. Introduction

- 1.1. With traditions and values rooted firmly in our local community but unparalleled in global reach for its size, Scotland's oldest university has had the honour and privilege of serving our students, people, and worldwide community for generations. Outward-looking, international, and global, but at the same time, small, local, and quintessentially Scottish, we strive to enrich the lives not just of our students and staff but those with whom it is our privilege to share this town, and the wider community of North-East Fife.
- 1.2. Last year, we launched a refreshed University Strategy 2022-2027 to broaden our global influence, with a focus on diversity, building a culture of entrepreneurship, research excellence, and social responsibility. From climate science and sustainable development to energy ethics and grass-roots level action across all our communities in which we operate, sustainability is at the heart of all we do. World-leading research on sustainability is taking place across the breadth of the University with researchers addressing key questions on the defining issue of our generation.
- 1.3. The University continues to cement its reputation as one of the top institutions in the UK. St Andrews was ranked as the top university in the UK in The Guardian Guide 2023, Scottish University of the Year, top in Scotland and 2nd in the UK in The Times and Sunday Times University Guide 2023.
- 1.4. We paid host to visiting academics from Ukraine under our <u>partnership</u> with <u>The National University of Ostroh Academy</u>; we have developed and have recently launched a refreshed <u>People Strategy</u> which will result in significant positive changes to the way we recruit, nurture, and value our staff; we made our first inroads into the <u>Times Higher Impact Rankings</u>, which saw St Andrews emerge amongst the top 10 per cent of the world's universities and were ranked 95th in the <u>2024 QS Rankings</u> of the world's top 1500 universities, a rise of one place from last year, situating St Andrews among the top seven percent of global higher education institutions.
- 1.5. Our innovative travel discount partnership with Stagecoach is helping to cut our carbon output and has saved 900 members of staff over £325,000 in travel costs during a time of cost-of-living pressures. Our University Community Fund approaches an important milestone of £200,00 invested in supporting local voluntary groups and charities that do so much for community cohesion. The University contributes a modest annual amount to the fund, with additional funding secured via donations.
- 1.6. Professor Dame Sally Mapstone FRSE, Principal and Vice-Chancellor, took up her role as President of Universities UK in August, following on from her Convenorship of Universities Scotland. Professor Mapstone will continue to advocate strongly for improved UK and Scottish Government support for higher education as well as effectively promoting the positive impacts and transformation potential of the sector.
- 1.7. We signed off our Financial Plan for the next three-year period, with assumptions around inflationary pressures and the financial picture looks challenging. We, as others, have been significantly impacted by the unprecedented inflationary pressures, which are set to continue, with limited ability to mitigate. Below inflation funding and static tuition fees for over a decade have eroded the real value of resources available to support institutions, students, and staff. However, our high student retention and strong application numbers, provide confidence in our continued attractiveness to the global student market. This is key as we look to expand our reach into the digital education sphere and invest in excellent staff, research, teaching technologies, and the student experience.

2. PRIORITY AREA 1 – Fair Access and Transitions

- 2.1. St Andrews remains steadfast in its commitment to the 2030 COWA targets. Teacher assessed grades during the pandemic contributed to the significant rise of SIMD20 students in 2021-22 and 2022-23. The return to examination-based grades and prevailing cost-of-living pressures impacted our progress towards achieving the 13 per cent target in 2022-23 (where although we recruited additional students from SIMD20 compared with the previous year, this equated to 12.4 per cent of the relevant entrant population). We will achieve at least a 1 per cent increase in 2024 from the SIMD20 areas. We are working to achieve our target from SIMD40 postcodes, although these applications have been similarly impacted.
- 2.2. our <u>Care Experienced pledge</u> has resulted in a year-on-year rise in Care Experienced entrants. In 2021-22, 20 (3.2 per cent) of our Scottish domiciled undergraduate students were from care experienced backgrounds. In 2022-23, we achieved an increase with 26 (3.5 per cent) of our Scottish domiciled undergraduate students having experienced care.
- 2.3. Home Funded places for our <u>Gateway</u> and <u>FE-HE Pathway</u> programmes provide opportunities for young people and mature students to progress from secondary school and FE. Contributing to between 40 and 50 per cent of our SIMD20 entrants each cycle, this figure should increase as attainment falls back to pre-pandemic levels, amplifying the attainment gap and resulting in more pupils being eligible for these programme paths. Anticipating this, we have been focussed on increasing applications through awareness raising initiatives over the last two cycles. This, along with our ongoing commitment to recruitment onto these and the alternative offerings on our supported pathway routes, will contribute to a growth in applications. Peer mentoring, provided in year one, aligns with support provision from our <u>Centre for Educational Enhancement and Development (CEED)</u> and our <u>Careers Centre</u>, ensuring our students are well-placed to achieve positive graduate outcomes.
- 2.4. We have invested significantly in our <u>St Andrews Access Scholarship</u> through support from a number of sources, providing a package worth up to £4,855 per student for each year of their studies. For 2023 entry more than 160 Home Funded entrants will benefit from over £600,000 of non-repayable financial support.
- 2.5. We foster collaboration and share best practice across the sector by actively participating in national groups, including the National Access & Widening Participation Managers Group, <u>UCAS Scottish Policy Group</u>, the <u>National Schools Programme (AHDP) Group</u>, <u>Scotland's Community for Access and Participation Practitioners projects</u>, and <u>NEON</u>.
- 2.6. We are committed to delivering our <u>AHDP (REACH)</u> project and engaging with partners in the SFC Funded National Schools Programmes (NSP) through:
 - collaboration with REACH partners through national groups aligning the relevant funded programmes across Scotland with REACH partners for students on our own AHDP project, following a successful pilot event in March 2023 focused on Medicine;
 - building on relationships with all <u>SHEP</u> programmes and increasing collaboration with regional partners across Fife, City of Dundee, Angus, and Perth and Kinross and supporting our local SHEP programme by contributing to <u>Lift-Off</u>;
 - embedding joint events with <u>FOCUS West</u> into our annual plans, following a successful pilot in June 2023.

2.7. Additional initiatives include:

- committing to the 'GRTSB into Higher Education Pledge', during the coming session;
- evaluating and improving our local community partnership project First Chances Fife, which raises awareness and aspirations to enter HE, with Fife College. Over 800 P7-S6 pupils across Fife have benefitted annually from this programme;



- continuing our Access to Rural Communities (ARC) programme, which requires significant additional resources from the University and provides opportunities for S4 to S6 pupils from rural areas to explore higher education and a free a summer school for 30-40 young people in S4 from rural communities;
- recruiting an increased number of entrants to our <u>Gateway to Medicine</u> programme building on the success of our <u>Experience Medicine</u> summer programme launched in 2022. We expect up to 20 students on this programme in the coming cycle.

3. Priority Area 2 – Quality learning and teaching

- 3.1. Our refreshed Education and Student Experience Strategy is clear that 'we will support and endorse our teaching to focus on the student experience, and the successful outcomes of our students by promoting a quality culture throughout the institution, encouraging dialogue between staff and students to ensure that we have a shared goal in the quality assurance, improvement and enhancement of our practices'.
- 3.2. The high-quality learning and teaching, for which St Andrews is globally recognised, will be nurtured as we navigate a changing quality landscape and learning environment, a greater diversity of provision, and diminishing resources. During the transition to a single tertiary quality framework, we will take an evidence and enhancement-led approach in line with Quality Quality Guality Assurance Agency Scotland (QAAS) QUAS) guidance, in order to provide the best possible outcomes for our students.
- 3.3. Our governance processes provide for dedicated committees to monitor outcomes and trends arising from our internal quality processes and initiate enhancement work as necessary. Our <u>Academic Monitoring Group</u> (AMG) annually scrutinises reports on retention and progression, degree outcomes, attainment, complaints, appeals, and academic misconduct. Our Academic Assurance Group oversees risks that may impact the delivery or quality of learning and teaching and scrutinises actions taken to mitigate. <u>AMG (Collaborations and Partnerships)</u> oversees our management of external collaborative provision and partnerships, including arrangements for securing academic standards and enhancing the student learning experience. <u>CELPIE</u> (Community for Evidence-Led Practice in Education) provides a platform and range of events for all staff to share experiences, ideas and good practice.
- Our academic standards and quality are also evidenced via external reference points. Outcomes from our Quality Enhancement and Standards Review in January 2024 will be published on the QAAS and St Andrews University websites. Collaboration with the QAAS and sector colleagues is welcomed as part of the tertiary enhancement topic: 'The future of learning and teaching: defining and delivering an effective and inclusive digital/blended offering'. Enhancement theme activities for academic year 2023-24 include research on how students use lecture recordings to improve their studies, the use of online discussion groups and participation in a digital research study coordinated by the University of Oxford. External Examiner reports and analysis of this feedback at an institutional level are embedded, alongside updates to policy and practice following the publication of External Examining Principles. Annual mapping of policies and practices to the <u>UK Quality Code</u> and participation in external surveys (such as the <u>National</u> Student Survey) demonstrate the quality of provision and identify areas for further enhancement. Schools are required to design and develop curricular provision in line with Subject Benchmark Statements and the Scottish Credit and Qualifications Framework (SCQF). The use of these reference points is explored via institution-led reviews. An analysis of activities, key findings, institutional actions (and their impact) is provided in our annual report to the SFC.



- 3.5. The University of St Andrews works in partnership with students, colleagues, and external agencies to ensure that all students are provided with opportunities to enhance their learning experience, irrespective of level of study, mode of study or discipline.
- 3.6. The Student Experience Strategic Management Group and related governance structures aim to refine the student experience vision, which is delivered through four strategic priority areas: support; systems and services; community and belonging; and skills, opportunities, and relationships. These priority areas are interwoven with and supportive of the five themes in the overall University Strategy.
- 3.7. Student representatives serve our student community with their contribution to decision making processes at all levels, acting as full members on all University-level committees and their subcommittees. School President Forums are chaired by the Students' Association Director of Education and attended by the Vice-Principal Education (Proctor) and Assistant-Vice Principal (Dean of Learning and Teaching) and Provost. Separate forums are held for the postgraduate community. Students are represented at School level via Student Staff Consultative Committees, chaired by School Presidents and attended by academic staff and class representatives.
- 3.8. The Students' Association and the University, supported by Student Partnership in Quality Scotland (sparqs), will continue to progress the Reimagining Representation project, which aims to support student representatives as members of university-level committees.
- 3.9. A new temporary role of Special Projects Officer is in place to support the <u>Students' Association Sabbatical Officers</u>. Their remit includes: implementing a programme of introductions for incoming Sabbatical Officers (setting the tone for joint working, collaboration and partnership); facilitating training on interactions with university committees and how student representation can best function; preparing a new Partnership Agreement; identifying personal development opportunities; and preparing Sabbatical Officers for the job market using sparqs' <u>Outduction Toolkit</u> as a key resource.
- 3.10. We are developing and strengthening partnerships with students at all stages of quality assurance and enhancement including university-led reviews of learning and teaching, professional service units and collaborative reviews, and annual academic monitoring. The University will work in collaboration with the Students' Association for the Quality Enhancement and Standards Review (QESR) and, in particular, support the Student's Association Director of Education to prepare for the review, engage with the review team, and co-develop an institutional action plan following any recommendations made by the Review team.
- 3.11. Ongoing development of new practices and processes following the University's Enhancement-led Institutional review (ELIR) in January 2020 will enhance the student experience. This includes the introduction of a newly approved process that provides greater oversight of School-based training and support for postgraduate students who teach and new induction and training for new and experienced PhD supervisors.

4. Priority Area 3 – Coherent learning provision

- 4.1. Education at the University of St Andrews, delivered by a research-led community of experts, lies at the heart of the St Andrews approach to pedagogy. We recruit a diverse community of students, all with the potential to graduate with excellent degrees. We support their journey to graduate with a broad portfolio of attributes and experiences in addition to their academic ability, and appropriately prepare them for their future through a student experience recognised as being the best in the UK.
- 4.2. <u>Institution-led reviews</u> focused on enhancement, are complemented by <u>annual academic</u> monitoring and a five-stage review method for collaborative provision. A new review process for

new taught postgraduate programmes will be implemented in 2023-24. This new process has been established in recognition of the growth in the size and diversity of the University's postgraduate taught provision and will provide more granular scrutiny of new postgraduate programmes in their first four years of operation (from both an academic and business perspective). Module Evaluation Questionnaires (MEQs), monitored at both school and institutional level, will undergo development in operational and strategic workstreams including students and staff. Quality arrangements related to online provision, short courses, and third-party providers will continue to be developed.

- 4.3. St Andrews uses an evidence-based approach to evaluate learning provision and measure our findings against the rigorous standards to which we, as a world-class university, subscribe. Discussions about curricula development take place at School Strategic Planning meetings. New provision is reviewed as part of our established quality assurance processes, with additional scrutiny where appropriate, such as for the new postgraduate taught programmes (and Awards) review process and 5 Stage collaborative reviews. These take into account evidence and information from internal and external sources. Our learning provision is coordinated at a strategic level through our Education Strategic Management Group. We collect, interrogate, and utilise relevant data customised and deployed to our Schools from internal and external sources, and we regularly review how we best meet the needs of students, industry, and other stakeholders. Our approach considers data from the whole student journey retention, progression, attainment, and completion, across numerous demographics gender, disability, ethnicity, SIMD background, fee status, discipline.
- 4.4. The University of St Andrews embeds consultation with key stakeholders as a matter of course through its governance and committee structures which specifically and by design include our students.
- 4.5. Our medical education embodies the principles of robust coherent provision for Scotland. In collaboration with the Scottish Government, NES, NHS Fife and other health boards we have increased the demand and the number of places on the Scottish Graduate Entry to Medicine (ScotGEM) programme, our innovate collaboration with the University of Dundee. We have adapted our approach to be more inclusive and to appeal to applicants from a wider variety of backgrounds and qualifications who are interested in general practice as a career pathway by incorporating a number of initiatives into our admission processes. For example, we have lowered the minimum grade and credits required in Chemistry and now accept FE college Chemistry modules in lieu of Highers/A-levels and we no longer use the university clinical aptitude test (UCAT) for ScotGEM entry, expanding eligibility for and minimising costs to applicants.
- 4.6. Following Scottish Government support for our collaboration with NHS and NES partners to establish a new Scottish Community Oriented Medicine (ScotCOM) programme, a 5-year MBCHB degree programme is in development tailored to the needs of the NHS in Scotland and delivered within its community facilities.
- 4.7. To address some of Scotland's skills challenges, we are developing our <u>portfolio</u> of personalised online education. These tailored programmes are designed to draw on our academic strengths whilst deploying innovative practice-based delivery to enable learners to expand their knowledge, skills and careers.
- 4.8. We have embedded into our curriculum approaches that instils skills in our student that will be needed for a fairer, greener and more inclusive society.
- 4.9. We are engaging with local colleges and FE providers and have articulation agreements in place with Fife and Dundee and Angus Colleges allowing Year 2 entry into our FE-HE Pathway to the

Arts. Students who opt to follow this path undertake an evening module that runs from January to May, alongside their HNC qualification. This benefits students by aligning teaching and learning expectations and better prepares them for onward study. Students entering on one of our Supported Pathways Programmes (Gateway to Arts, Gateway to Science, FE-HE Pathway to Arts, FE-HE Pathway to Science) are provided with additional learning support through our Learning Mentoring programme for the duration of Year 1. This programme has a weekly session with a senior student in the subject they wish to study at honours level and provides peer support and soft skills development.

- 4.10. Our entrepreneurial education initiatives within and outwith the curriculum are a key focus. Creating Impact through our Enterprise Education (CItEE) programme is a new initiative to codesign and co-develop curricular and extra-curricular provision/interventions with internal and external stakeholders to address Scotland's challenges. Through the initiative, we are discovering the issues that matter to our students and which will affect Scotland now and into the future. We are looking at ways that we can play in addressing the big challenges, whether that be updating lecture material or working more closely with external partners. As part of our Summer Teams Enterprise Projects (STEP) colleagues work with students on curricular and student experience enhancements.
- 4.11. We have developed and maintain strong relationships with employers and industry. Our Employability Working Group, which includes industry members, and our Entrepreneurial Education Working Group feed into the development of our provision and provide us with valuable information for reviewing policies and with labour market intelligence on industry needs.
- 4.12. We continue to develop our portfolio of programmes eligible for Upskilling funding with the intention that our suite of flexible courses focus on key skills for sustainability, economy, and health, supporting people out of work, those concerned to return or remain in work, or recent arrivals into the area who are looking for work, including refugees and asylum seekers. Given our rural location and limitations to physical growth, within the Digital Theme of our University Strategy, we are rolling out an increasing portfolio of digital courses to extend the reach of our education and training and increase the diversity of our learners.
- 4.13. We monitor student career aspirations and employment outcomes through a Career Registration survey and through <u>Graduate Outcomes</u>, which allow us to understand the needs of both our students and of industry and to align our provision where appropriate. Our Careers Centre is collaborating with our Schools to ensure the employability attributes and the skills students develop, are understood and recognised.
- 4.14. Our students graduate with a suite of identifiable meta skills. These attributes are defined through a process of consultation with employers, industry, students, and staff. Institutional oversight then informs further refinement of the curriculum to ensure that graduate attributes are developed throughout a programme. Students also utilise a Graduate Attributes Platform to collect evidence of skills they have acquired and articulate them through descriptions of curricular, co-and extra-curricular activities, including volunteering.

5. Priority Area 4 – Work-based learning and skills

- 5.1. Recognising that work-based learning activities enable our students to integrate subject and authentic, professional knowledge, St Andrews has developed extensive opportunities for all our students to undertake work-based learning in the co-curricular and extra-curricular student experience.
- 5.2. Opportunities include:



- Learning for Social Change PGT students work with charities on a work-based outcome.
- St Andrews Summer internships and Postgraduate internships working on live projects within professional service units.
- St Andrews Sustainability Internships allied to University sustainability projects.
- St Andrews Undergraduate Research Scheme (StARIS) working on academic research projects with University faculty members.
- Creating Impact through Enterprise Education (CItEE) a new initiative to co-design education interventions with internal and external stakeholders, addressing Scotland's challenges.
- 5.3. Our curricular work-based learning offer currently includes an industrial placement year option in the Schools of Biology, Chemistry, Computer Science, Earth and Environmental Sciences, and Modern Languages. More than 80 students opted to participate in placements during the 2022-23 academic year. During their fourth year, our Biology and Chemistry students benefit from the opportunity to undertake a credited industrial or research placements either in the UK or overseas. Organisations and businesses that have recently hosted St Andrews students include, Edinburgh's Royal Botanic Gardens, GlaxoSmithKline, Sosei Heptares AstraZeneca, the Cornish Seal Sanctuary, the Max Planck Institute, DSM and Helleday Laboratories. Our Modern Languages students who wish to undertake a work placement in a country where Arabic, French, German, Italian or Spanish is spoken have a variety of options including an integrated year abroad in their third year of a five year study programme including the British Council Language assistantships.
- 5.4. We also offer two placement-based modules giving students work experience in local schools as teaching assistants; and Enterprise and Creativity, giving students experience in developing and launching an enterprising idea. These modules sit alongside our award-winning Vertically Integrated Projects, where teams of students work on an ongoing research project, supervised by a member of academic staff.
- 5.5. Over the next three years, we will be developing a new Employability Strategy. Informed by the recommendations in the recent SDS 'Careers by Design' review of February 2022 and the 'Fit for the Future: developing a post-school learning system to fuel economic transformation' (James Withers) report June 2023 we are particularly keen to explore what enhancing curricular work-based learning opportunities might look like in a St Andrews context.
- 5.6. We routinely involve employers and alumni in helping individuals to understand and develop the skills needed for work, including hosting employer events on campus, and engaging employers in co-delivery, for example, in our Your Future Start Now programme, helping students to understand and develop skills for work. We are planning for employer collaboration as part of our new Skills Spotlight Award, which is underpinned by our Graduate Attributes portal. The portal helps individual students reflect on their engagement with our 20 Graduate Attributes, which are also monitored in the curriculum through module evaluations.
- 5.7. Staff across the University are engaged in understanding employer and skills needs via membership of the <u>Institute of Student Employers</u>, the <u>Association of Graduate Careers Advisory Services (AGCAS)</u>, <u>Enterprise Educators UK</u>, as well as ongoing labour market intelligence research, and regular conversations with employers and alumni. The university is also a member of the TayCities Skills Advisory Board, analysing the skills needs of the <u>TayCities</u> region.
- 5.8. As part of the consultation process for the new employability strategy, we plan to engage with employer and alumni stakeholders to understand the changing labour market, develop a more joined-up approach to employer engagement, and build on our current good practice.
- 5.9. The University will continue its well-established modern apprenticeships in Estates and IT Services, and we are now growing our cohort of Digital Support modern apprenticeships. In the last 12 months, we have employed four new graduate apprentices (covering Data Science and

also Business Administration) in our Planning and our Business Transformation teams. The apprenticeship places are funded by the SFC with provider institutions Heriot Watt University and the University of Dundee). We are exploring how this approach might be developed as an employer.

6. Priority Area 5 – Net zero and environmental sustainability response

- 6.1. In 2022, St Andrews elevated 'sustainability' to a main theme in our University Strategy 2022-27 with the ambition of advancing our whole-institution approach to the climate emergency. All key areas of activity have been brought together under new governance structures (launched in May 2023). These structures combine leadership with reach across both the Schools and Professional Units of St Andrews with our students continuing to be well represented in all parts of this governance. The Leadership Group of Sustainable St Andrews now takes direct responsibility for compliance with the Scottish Government public sector carbon reporting and reduction guidance, as well as for organisation-wide net zero and sustainability plans.
- 6.2. Our Carbon Net Zero Pathway is aligned to the <u>Science Based Target initiative (SBTi)</u> which aims to keep global heating to within a 1.5°C limit. For Scope 1 and 2 emissions, we intend to reduce these from the 2019 base line of 18tCO2e to 5.5tCO2e in 2035. We are on target to reduce our Scope 1 and 2 emissions, and projects that would significantly increase the University's access to renewable energy and will have a positive impact on our Scope 1 and 2 emissions are currently being assessed. We intend to reduce scope 3 emissions from 57tCO2e in 2019 to 30tCO2e in 2035.
- 6.3. Although our Scope 3 emissions are currently above our reduction trajectory, we are investigating a number of re-alignment strategies. These include the introduction of new policies and practices around, in particular, our travel, procurement, and construction activities. Work is underway to review our travel policies and we are collaborating with our major suppliers to reduce emissions. Our processes for developing and approving Estates projects are also being refreshed to ensure that sustainability including carbon targets on major development projects, is a key consideration.
- 6.4. The University's policy for the management of our funds and endowments, which already prohibited investments in fossil fuels, has been refreshed to enable investments in funds and projects that promote sustainability.
- 6.5. Successful learning and teaching initiatives, such as Training in Environmental Sustainability Action (TESA) which all students take as a compulsory part of matriculation to the University, and the Golden Dandelion Prize, which recognises teaching innovation and excellence in sustainability, will enter their third year in 2023-24. A project to map our educational programmes against the United Nations Sustainable Development Goals purposed to make it simpler for students to select courses focused on sustainability, is in progress. An online MSc programme in Data Literacy for Social and Environmental Justice has been launched.
- 6.6. We encourage the adoption of wider sustainability skills by offering sustainability training for both students and staff. This includes training specifically for managers; climate conversations; specialist training in sustainable procurement; and sustainability-related courses with our training provider <u>LinkedIn Learning</u>. These materials will be further consolidated into a harmonised portfolio of training for the benefit of all members of the University community.
- 6.7. To address the scope and complexity of research challenges in sustainability and the climate emergency, St Andrews advances our support for interdisciplinarity in this field. Over 2022-23 a series of cross-University workshops were held to advance 'Big Ideas' in sustainability research,

- supported by, the <u>St Andrews Network for Climate, Energy, Environment and Sustainability</u> (<u>StACEES</u>), as well as our research services.
- 6.8. St Andrews leads the way in sustainability innovation and entrepreneurship. The University's Eden Campus is a growing centre of excellence for the creation of entrepreneurial solutions to tackle the climate emergency. Future developments will support research in carbon capture, hydrogen, power to x and sodium-ion battery storage. Space has also been created for innovative companies working in areas such as sustainable food and sustainable fuels for the marine sector.
- 6.9. Our students have been enabled to progress a series of sustainability projects, including on support for eco-anxiety and to enhance the sustainability of merchandise sold in our University shop. The student community continues to lead activities during <u>University Green Week</u>, and in 2022-23, a series of events on Green Careers took place during this week. The University offered over a dozen internship opportunities in sustainability for our students.
- 6.10. The University established the local net zero network and continues to lead in bringing together a large number of local businesses and stakeholders to support the local community in key areas such as waste reduction, and low carbon travel.

7. Priority Area 6 – High Quality Research and Innovation

- 7.1. The University of St Andrews is one of the UK's foremost research-intensive universities. Our research is world leading, global in reach, and is increasingly interdisciplinary. We are committed to the highest research values and are ambitious for the quality and for the very real impact of our research. We will direct and shape our research to ensure that we make a positive difference to people's lives.
- 7.2. As well as maintaining our known areas of excellence, we are continuing investment in our flagship Eden Campus, which is at the forefront of the University's strategic goal to reach net zero by 2035. Eden Campus welcomes industry, community and business to engage with our research and together create a global research and innovation hub to help deliver a low-carbon future.
- 7.3. To ensure the financial sustainability of our research activity, we are supporting interdisciplinary activity in emerging priority areas including peace, conflict and security; cultural understanding; evolution, behaviour and environment; materials for the modern world; sustainability; engineering; and health, infectious disease and wellbeing. This will allow us to identify and mobilise resources readily in order to maximise funding opportunities.
- 7.4. In 2020, the University of St Andrews signed the Concordat to Support the Career Development of Researchers and we are committed to meeting our continuing responsibilities as a signatory. Our latest annual report addresses four key development projects that focus on our environment and culture, employment, and professional and career development responsibilities. These areas were developed through a robust consultative approach with our research community.
- 7.5. We will remain compliant with the <u>Concordat to Support Research Integrity</u> and continue to build our support for 'Trusted Research'. Our Research Integrity Committee and Trusted Research Working Group coordinate operational activities in these areas with oversight from the Research Integrity, Ethics and Governance Assurance Group (including members of Court and the Principal's Office).
- 7.6. It is a strategic priority of the University of St Andrews to undertake world-leading research and we recognise that this is dependent on a wide range of factors that define the environment and culture in which our staff, whether PGR, ECR, tenured or our professional staff, work. Our

- recently launched <u>People Strategy</u> reflects our commitment to developing, valuing and supporting our people. We will create a culture and environment in which everyone can thrive and perform at their best both individually and collectively.
- 7.7. PGR students are the lifeblood of research and are instrumental in our ability to produce cutting-edge, impactful work. As such, we include our PGRs in all aspects of a research culture which is underpinned by principles of collegiality, fairness, integrity and transparency. Even so, we face considerable challenges in relation to PGR funding. Difficulties in securing sufficient and sustainable funding for a required PGR cohort faced by smaller-scale, research-intensive universities such as St Andrews are exacerbated by the diminishing funding opportunities including the lack of funding we are allocated for Centres for Doctoral Training (CDTs). In mitigation we are supporting our PGR students', research excellence and research culture:
 - 7.7.1. We have created initiatives to ensure that our Schools, applicants, and students have the appropriate support to make the most of funding opportunities and by supporting involvement and further participation in overseas schemes, including any eligible EU funding or engagement with other overseas funding and PGR scholarship bodies. This includes collaboration opportunities with institutions in the UK and across the globe, as well as with partners outside academia.
 - 7.7.2. We offer a range of internally funded scholarships for PGRs, most notably our Handsel scheme (a tuition fee scholarship available to support suitably qualified PGR students from anywhere in the world), our World- Leading Scholarships scheme (for PGR students of exceptional ability looking to complete a doctoral degree in an area of research aligned with the University's research strategy) and Global PhDs (supporting PGR students in collaborative programmes with partner institutions).
 - 7.7.3. We provide travel support (both through scholarships and in-study awards and stipends) for conferences, fieldwork, and research projects.
 - 7.7.4. We provide support for interdisciplinary research across academic fields, as well as enabling collaboration and placements within entrepreneurial settings. This support is underpinned by the <u>Graduate School for Interdisciplinary Studies</u>, which fosters interdisciplinary postgraduate education and scholarship. By strengthening our Global PhD programme, through which doctoral students undertake research at both St Andrews and a nominated partner institution and with two or more academic supervisors (co-tutelles), we encourage wider research collaboration. These also provide for an international focus whilst making the most of subject-matter expertise from a range of partners. The programme is supported by our Global St Andrews Doctoral scholarships programme, which offers fully funded scholarships and supports collaborative projects with non-academic partner organisations, such as our participation in the <u>East of Scotland Bioscience Doctoral Training Partnership (EastBio DTP)</u>, which includes compulsory placements in non-academic partners through the Professional Internships for PhD Students (PIPS) scheme.
 - 7.7.5. Our PGR students are encouraged to become involved in the activities of the Entrepreneurship Centre which offers tools, contacts, and confidence to facilitate the entrepreneurial journey and to realise commercial potential. We support our PGR students to explore research collaborations that may lead to Commercial Licensing and Commercialisation of Technology through our Technology Transfer Centre (TTC), which can further support PGR students and projects through the translation of knowledge and intellectual property (IP), offer Translational Funding and encourage University spinouts (such as Sololed).
 - 7.7.6. We have an ongoing review of the PG student journey, ensuring seamless transitions and support from our dedicated teams. We foster a vibrant and intellectually stimulating

postgraduate community, with additional funding for community-building activities provided by <u>St Leonard's Postgraduate College</u>. St Leonard's provides for the use of dedicated PGR space including bookable rooms for independent and group study, meetings, and workshops, as well as informal spaces for relaxing and social events. It offers comprehensive, bespoke training programmes that advance the academic, professional, and personal development of our PGR students. By expanding our PG-dedicated employability programme of activities which prepares PGR students for the job market, we equip them with employer relating training beyond their subject. We are focusing on the wellbeing of PGR students by providing dedicated support from our Student Services team and offer workshops and events in areas pertinent to PGR students (e.g., on impostor syndrome).

- 7.8. Our postdoctoral researchers and professional services staff are similarly recognised as crucial to our research. All are influential members of the University's committee that oversees research culture. Our Research Culture Survey Report 2021, captures the successes and challenges of our research culture for all job families. On securing follow-on funding, the findings will inform our ongoing work to identify purposeful and appropriate actions that would support the development of a positive culture that speaks to all across our diverse research contexts.
- 7.9. Issues of relevance to research are considered at our <u>Research Staff Forum</u>, an open forum in which researchers and key Professional Service leads meet regularly with the Vice-Principal Research, to influence relevant developments at the University.
- 7.10. We are an engaged signatory of the <u>Technician Commitment</u> and are committed actively to ensuring visibility, recognition, career development, and sustainability for technicians across all disciplines.
- 7.11. In addition colleagues are also engaged in the <u>Teaching</u>, <u>Research & Academic Mentoring</u> <u>Scheme</u> offers a unique, 7-way cross-institutional mentoring opportunity for postdocs, and the professional staff mentoring scheme.
- 7.12. Upcoming and ongoing activities that address research culture for these cohorts include developing institutional guidance on recognition of contributions to published research from all staff and students; and reformulating the committee and working group structure, practices and relations to ensure balanced and appropriate involvement from all areas.
- 7.13. The Research Excellence Grant (REG) remains key to our ability to support a vibrant research environment. The REG enables us to provide and enhance various professional support services including Research and Innovation Services, Libraries and Museums, and Organisational and Staff Development Services. A proportion of REG funds is directly distributed to academic schools as part of their operational budgets to support research, based on their REF performance and in accordance with the SFC's distribution approach. Our Research Postgraduate Grant (RPG) will be used in 2023-24 to enable and develop PGR students by providing targeted scholarship schemes, increasing diversity or interdisciplinary research, matching PGR funding for Doctoral Training Partnerships (DTP), support for research projects with PGR involvement, crossinstitutional collaborative incentives, support for co-tutelle arrangements, and training. A portion of the Research Postgraduate Grant will be distributed to Academic Schools to invest in their research environment and developing the researcher pipeline by supporting the development and progress of their PGR students (e.g., through stipends to attend conferences, fieldwork, research trips, purchase of research equipment and materials).
- 8. Priority Area 7 University Innovation Fund (UIF)



- 8.1. Our ambitious five-year strategy identifies five distinct but equally important themes including Entrepreneurial St Andrews. The Entrepreneurial theme, further developed from the previous Strategy, demonstrates the significant value that the University continues to place on this area. The UIF funding, together with additional external and internal funding, is a critical enabler for the University to drive and accelerate our ambitions for Entrepreneurial St Andrews.
- 8.2. The University commits to fully matching the UIF funding and to utilising the uplift to deliver a step change in supporting innovation activities.
- 8.3. We have defined Entrepreneurial as identifying potential in existing and future activity and to translate that into enterprise for the benefit of wider society. Entrepreneurial St Andrews is rapidly gaining prominence as a mainstream activity in the University, enabling regeneration locally and transformation nationally. We will encourage our entrepreneurial ecosystem, securing increased funding for research, integrating entrepreneurial and enterprise education, and stepping up external engagement. Entrepreneurial St Andrews will encourage a culture of innovation and create an inclusive entrepreneurial ecosystem to enhance our impact on society and diversify and grow our research funding streams. This ecosystem will be created through the interactions of students and staff, through enterprise and entrepreneurial education, and through strong engagement with business, government, the third sector, and other funders.

8.4. Outcome 1: Demand stimulation

- 8.5. Our Entrepreneurship Centre has run a range of entrepreneurial training courses since September 2021. In 2023-24 we will expand the portfolio and we expect to support an increased number of attendees comprised of students, staff and external users. In 2023-24 the courses will be funded by the UIF uplift and will once again be provided for free to all participants.
- 8.6. We regularly engage with external stakeholders including the Research and Knowledge Exchange Committee (RKEC), Research and Commercialisation Directors' Group (RCDG) Converge and the SFC's UIF Collaboration Manager. These strategic engagements continue to help inform our KE&I training and development.
- 8.7. We will increase our engagement with <u>Interface</u> enabling us to focus on extending strategic engagement between academia and industry. This partnership will grow the demand and quality of engagement from businesses and the public sector for university services.
- 8.8. In 2023-24 we plan to substantially increase our Innovation voucher applications. This activity stream will be funded by the uplift.
- 8.9. In 2022-23 we ran an engagement day with the Innovation Centres to explore improvements to our collaborations. In 2023-24 we plan to utilise these learnings to increase our work with the Innovation Centres. We are also committed to participating in the UIF collaborative groups as part of influencing future strategies and ever stronger relationships.
- 8.10. Since 2016 we have provided internal funding for Knowledge Exchange, Impact and Innovation activities. Over recent years we have improved and iterated this internal fund to seed or amplify impact work stemming from our research. In 2023-24 we will double the internal funding for these projects and will use UIF monies to support this.

8.11. Outcome 2: Simplification/Commercialisation

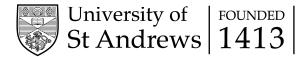
8.12. We are committed to the IP Commercialisation Peer Network group which provides us with a excellent base to develop ideas and discuss best practice with our colleagues in the Scottish sector. In 2023-24 we will focus on how best to collaborate on the implementation of the Scottish Government's Innovation Strategy and National Strategy for Economic Transformation.



- 8.13. In 2023-24 we will focus on a step change improvement in our digital and physical front doors to deliver a simplified single entrance to our Entrepreneurial support teams. We will also communicate our entrepreneurial pathway mapping to enable our stakeholders to understand the cohesive support provided at every juncture.
- 8.14. Outcome 3: Simplification/Greater Innovation
- 8.15. In early 2023-24 we will open our Rapid Prototyping Centre on The Eden campus. The centre will provide a resource to startups, SMEs and the campus community. With the latest 3D modelling and CAD software, electromechanical engineering tools, additive printing technology, laser cutting facilities and large-scale CNC machines, the space will enable innovators to rapidly design, build and test prototypes. In 2023-24 we will use UIF monies to fund a competition to utilise these resources without cost to develop a defined innovation. The competition will be open to all and run via our Entrepreneurship Centre.
- 8.16. We proactively engage with key stakeholders, including Innovate, SFC, Interface and the Scottish Government, to help influence policies with a focus on those aimed at better engagement between Universities and local businesses.
- 8.17. In 2022-23 we employed an industry lead for the first time and this post has helped refine our industry innovation engagement approach and delivered a step change in activity. We have welcomed the recent increased investment in Knowledge Transfer Partnerships (KTP). We plan to further utilise the KTP framework in order to increase our engagement with Scottish businesses. This engagement will help drive and deliver more local Innovation and Impact.
- 8.18. We will revisit our Institutional strategies in 2023-24 with a view to alignment with the NSET, Innovation strategy and Entrepreneurial Campus strategy.

8.19. Outcome 4: Entrepreneurialism

- 8.20. Our Entrepreneurial strategy provides a clear focus on supporting our staff and students to make the best of the ideas they generate by providing inclusive opportunities to engage with entrepreneurship through the core curriculum, co-curriculum, the Entrepreneurship Centre, and professional skills programmes. This firm commitment will underpin a transformative increase in entrepreneurialism at the University. In 2020-21 we launched our first Vertically Integrated Projects project-based interdisciplinary learning programme and since then we have seen a steady growth in student numbers (from 97 in 2020-21 to 229 in 2023-24). In 2022-23 we piloted our first capstone Enterprise Projects for final year students. Our second year interdisciplinary Enterprise and Creativity module attracts over 100 students each year and provides postgraduate students with coaching opportunity while supporting student teams to develop business ideas.
- 8.21. In 2022-23 we launched our Innovation Fellowship pilot. The St Andrews Innovation Fellowship is a competitive internal opportunity that provides one year of buyout support from teaching commitments so that the fellow can focus on entrepreneurial activities. In 2023-24 we will use UIF monies to support two fellowships. We will also fund four new fellowships to commence in August 2024.
- 8.22. We participate in the Enterprise Support Group (ESG), a formal subgroup of RCDG, which focuses on spinout and start up support and development in Scottish HEIs. We utilise the quarterly meetings to share best practice, deliver collaborative initiatives and engage with the latest strategy and policy initiatives. This engagement drives improved service delivery, increasing number and quality of new enterprises and leads to increased impact on regional and national economic growth.



- 8.23. In recent years we have increased our engagement on the Converge awards culminating in securing the overall Converge Challenge winner in 2022-23. This marks the first time that St Andrews has won this prize and is testament to our ongoing commitment to supporting new business ventures.
- 8.24. Since 2021 we have been awarding an Enterprising Mind of the Year Prize to a student who has developed an enterprising idea inspired by a taught module. We continue to support and recognize achievements of our entrepreneurial students.

8.25. Outcome 5: International

- 8.26. Our *World Leading University* theme links with our *Entrepreneurial* theme to provide a joint commitment to promote and engage Scotland Internationally. We continue to work closely with RKEC, RCDG, government agencies and other sector organisations to share both opportunities and best practice to drive our shared ambition to promote Scotland on the International stage.
- 8.27. Through engagement with RCDG, we will seek to engage with the new Research Commercialisation Framework for Scotland, as proposed in Scottish Government's Innovation Strategy. This collaborative approach will enable the sector to have a strong voice in the development of the framework.
- 8.28. In 2022-23 we rebranded our Entrepreneurial support vehicle to St Andrews Innovation. Through this process we engaged with a wide spectrum of internal and external stakeholders in order to inform the branding. In 2023-24 we will invest significant resources into the promotion of this brand to our external audience.
- 8.29. In 2022-23 we launched a project to establish networks which provide opportunities for friends and alumni actively to advise, mentor, and support entrepreneurs, and create opportunities for alumni and supporters to promote fledgling ventures in new markets. In 2023-24 we will improve, iterate and expand this activity significantly.
- 8.30. In 2022-23, our Head of Technology Transfer was invited by the British Council to travel to Kenya to support the Kenyan Innovation week and delivered four sessions focused on international exchange of best practices related to knowledge exchange. We plan to engage in this initiative again in 2023-24.

8.31. Outcome 6: Inclusive growth and social impact

- 8.32. We have utilised the Tay Cities Deal Funding of £26.5m to deliver the first phases of development at the Eden Campus. The development to date includes an award-winning biomass plant and district heating scheme, solar park and a 450-person professional services hub. In 2022-23 we opened a dry laboratory for research and testing battery cell technologies, which will be the first of its kind in Scotland. The campus is a key enabler for our vision to support a transition to a green economy. It also demonstrates the value in linking battery technology, district heating and photovoltaic power on the path to Net Zero.
- 8.33. The Eden Campus provides physical estate and associated infrastructure that enhances external collaborations and community impact whilst also working towards a low carbon future. The Eden Campus is a catalyst for innovation activity and a perfect location for University and Industry to engage. Our Rapid Prototyping Centre opened in August 2023 to provide a service to both the University and external businesses.
- 8.34. The Entrepreneurship Centre delivers a range of courses and activities focused on creating strong, scalable, and sustainable businesses that make a positive contribution to society. We have supported a range of social enterprise activities in recent years. In 2021-22 we developed and launched our FastStart Changemakers training course which is designed to create positive impact on a societal or environmental problem through social entrepreneurship. In 2023-24 we

will run this throughout the year to increase engagement and will also offer bookable coaching sessions and an opportunity to pitch for cash prizes each semester.

8.35. Outcome 7: Equality and Diversity

- 8.36. As an international and world-class university, our stated ambition is to be a beacon of inclusivity. We will achieve this through an approach that empowers our whole community through a combination of deliberate steps and a determined shift in culture that ensures everyone is embraced, from students, academic and professional staff, to our alumni. We have embedded a strong approach to equality, diversity, and inclusion (EDI) throughout our activities, aligning with the requirements of Athena Swan and REC.
- 8.37. The Scottish Knowledge Exchange & Innovation Mentoring (SKEIM) pilot was launched in 2022-23, establishing 27 Mentor-Mentee partnerships between KE&I professional services staff in 12 HEIs. The stated aim of SKEIM is to support KE&I Professionals to gain knowledge and build networks through coordinated engagement with colleagues in other institutions, to support the sharing of best practice between institutions, and enhance the existing culture for collaboration across Scottish HEIs. We have four live Mentor-Mentee relationships through the scheme and we are committed to providing support and resource to enable these relationships to thrive in 2023-24. We will strongly support the proposed initiative to continue the scheme, following completion of the pilot, and will encourage our colleagues to participate as both Mentors and Mentees.
- 8.38. We recognise that the UIF collaborative activities enables us to benefit from the diversity of the sector. In 2023-24 we will work closely with both SFC and RCDG to identify strategic workstreams that contribute to the top priorities of the Innovation strategy and a transition to a net zero carbon society.
- 8.39. We fully endorse operationalising the Entrepreneurial Campus Strategy to enable the levelling up of provision across all Scottish Institutions, such that every student, staff member, and alumni, from every HEI can benefit from entrepreneurial opportunities.

<<ENDS>>

9. Case Studies - Outcomes for Students

- 9.1. Case Study Fife Rape and Sexual Assault Centre (FRASAC) Support Worker at the University of St Andrews
- 9.2. The University Equally Safe committee works on Equally Safe: Scotland's strategy for preventing and eradicating violence against women and girls (Scottish Government, 2016). One aim of this work is to improve institutional responses to and support for students and staff who disclose experience of gender-based and sexual violence.
- 9.3. In 2020 the University identified the need for specialist, on-site, crisis support for students affected by any form of sexual violence to complement and expand existing support and wellbeing services available within the University. The University approached local specialist support agency, FRASAC, to employ a FRASAC Sexual Violence Support Worker to provide this support.
- 9.4. The University funds a 0.6 full-time equivalent FRASAC Sexual Violence Support Worker to support students of all genders. The Support Worker started in October 2021, providing ringfenced St Andrews based support to students.
- 9.5. The Support Worker's key responsibilities include:
 - To provide one to one crisis and early intervention support services to survivors of sexual violence within St Andrews University
 - To offer support to friends and other supporters
 - To provide information and support to access advocacy, sexual health, forensics and information on a needs led basis
 - To develop and facilitate group work in response to client need and request
 - To promote and publicise the service to existing and potential referring agencies in Fife
 - To develop information materials if and when required
 - To establish and actively participate in partnership working with University of St Andrews. Attend relevant meetings and training when required
 - To establish and maintain effective liaison with appropriate voluntary and statutory agencies
 - To ensure clear, accurate and confidential records relevant to the work of the post are kept
 - To produce regular reports on activities as required
 - To attend and contribute to FRASAC Team Meetings and Reflective Practice
- 9.6. Support can be delivered in person or remotely via video, telephone or email and will integrate into and complement existing wellbeing pathways and services delivered by the University. Students can be referred to FRASAC by Student Services or may self-refer if they do not wish to involve the University.

| Period | Number of Students |
|------------------------|--------------------|
| April 2021-March 2022 | 33 |
| April 2022 – June 2022 | 13 |
| July 2022- Dec 2022 | 23 |
| Jan 2023- March 2023 | 14 |
| April 2023-June 2023 | 21 |
| Total | 104 |

- Number of students who received support up to date: 104
- Average number of sessions attended: 16
- Largest number of sessions attended: 25

9.7. Feedback from students

'I am able to recognise things that upset/trigger me and am able to find ways that will make me feel better in these situations. I am kinder to myself. I recognise that I am allowed to take up some space-I am not taking this opportunity away from someone who needs it 'more'.'

'It has completely changed my mindset around all aspects of my life and has allowed me to support myself. Allowed me to process difficult events as I have been able to understand them better.'

'I feel like I can breathe now. For so long I have had this feeling of being anxious, worried. I now realise I am in control. I can determine my thoughts and feelings, I can do what I want on my terms, what a relief to say this.'

'I am very, very satisfied, this really helped me, words can't begin to describe how helpful this was. This service fills a real need. I like the space, in this wee room at the back, I see it as my space. I really liked the booklets Alice gave me they really helped, if they had been online, I probably would not have looked at them as get so much stuff online its more personal and comforting to have something that I can write on and is mine. The time given to me was important and I truly thank you for all you have done. You have changed me, and I thank you'.

'I really appreciate the service, it's helpful and nice to go to a real room and meet with someone. A big thanks for all that's been available to me, and the support has been excellent.'

'The support definitely eased my feelings of sadness and made me more comfortable going about my life.'

'I have a lot of self-belief now; I can go out and relax.'

'I have learnt to trust people a bit more now.'

'The sessions have helped me to talk to my friends and ask for help when I need it. This has made me feel safer.'

'Think the most important aspect is the way I see myself and the decisions I made which were not all bad but good I now have a sense of self-worth which makes me feel safer.'

- 9.8. Feedback from our survey
- 9.9. All respondents reported that FRASAC helped with 'managing difficult emotions'. Student feedback included comments that FRASAC provided:
 - Expert advice, including legal advice
 - High quality counselling support
 - Useful help to process trauma
 - A safe, non-judgemental and comforting environment
 - An easy to access location on University premises
 - Online services
- 9.10. The agreement with FRASAC was renewed for another year in September 2022.



Case Studies - Outcomes for economic transformation and social renewal

9.11. Case Study: The Eden Campus

- 9.12. In the last year, the Eden Campus has developed into a vibrant hub of economic activity. It serves as a site for companies to locate and grow (for example, our tenant Eden Mill who are developing a new distillery on the site, or the medical sciences company with whom we have recently signed an agreement), but also for companies to engage in short-term projects with university staff, testing and developing new products.
- 9.13. Two new buildings, funded through the Tay Cities Deal, house facilities for R&D in low carbon technologies, including the first battery scale-up facility in Scotland, a hydrogen fuel cell development and manufacturing suite, a rapid prototyping workshop, and lab space for technology-based companies.
- 9.14. These facilities provide a focus for a range of engagement and knowledge exchange activities with external companies; many, but not all, operating in low carbon technologies. Working closely with researchers, supported by University staff in Business Development and Technology Transfer, can lead to new products being developed and brought to market, and bottlenecks in R&D addressed.
- 9.15. To promote the work of the Eden Campus, we have developed an Industry Club as a network of companies, academics and public bodies. With a mailing list of over 150 individuals, this network is a basis for events, activities, and engagement with the needs of private companies.
- 9.16. The University's Entrepreneurship Centre, offers support and advice to start-ups and growing companies, working with students who are interested in an entrepreneurial career, university spin-out companies commercialising the products of research, or companies locating at Eden Campus in need of support and advice.
- 9.17. The Campus' new Enterprise Hub is currently under development. A project undertaken in partnership with Fife Council, this will offer over 600m2 of start-up and grow-on space for companies and will fill a gap in business location provision in NE Fife.
- 9.18. The growth of the Eden Campus has brought substantial socio-economic benefits to the village of Guardbridge, including much-needed jobs following the closure of the paper mill which formerly occupied the site. Access to the site for recreation, cafe facilities and closer links with the Community Council and Primary School has all flourished over the past few years. We take our responsibilities as a site owner very seriously and consult with the local community on major developments. We also ensure that local community representatives are invited to major events on the campus for example, local schoolchildren attended the official opening of the campus' solar PV array by Kate Forbes MSP, in October 2022.



- 10. Case Studies Research Excellence Grant (REG)
- 10.1. Case Study 1 Internal impact and innovation funding delivering on Scottish Government's priorities
- 10.2. Since 2016, REG funding has contributed £1.3m to the internal Impact & Innovation Fund (IIF), which has supported over 258 projects. The IIF prioritises activities that would not be eligible for, or covered by, other avenues of impact funding, with the Social Science, Arts & Humanities making up 53 per cent of projects. The IIF was a pipeline for work contributing to REF 2021, with 35 of 68 submitted Impact Case Studies seeded and/or augmented by this funding (£215k).
- 10.3. The IIF's aim, to apply research to create positive change in society, aligns with Scottish Government's priorities by helping to:
 - Foster a strong, sustainable, fair society;
 - Support local communities;
 - Tackle inequality; and
 - Empower teachers, colleges and universities to deliver an education system that gives all young people the chance to reach their potential and achieve their ambitions.
- 10.4. Two examples of work currently supported by the IIF include:
- 10.5. Research into mobile and technologies with the School of Computer Science, helps to produce culturally educational content, enabling more than 30 museums in 21 countries to articulate community heritage to local and global audiences via digital reconstructions and virtual worlds.
- 10.6. Virtual Museums infrastructure was developed, empowering heritage organisations to create virtual reality and multi-modal digital content. This enables deployment of city-wide digital reconstructions, 3D digital artefacts and spherical media throughout the web, on mobiles and in exhibitions, through screens, projections and headsets.
- 10.7. To date, the work, supported by £25k of REG funding via the IIF, has produced over 320 reconstructions, 3D digital galleries, virtual tours and has collaborated with more than 20 Scottish SMEs, such as the Timespan, Shetland, Eyemouth, Perth and Taigh Chearsabhagh Museums, and heritage sites, such as Edinburgh Castle, St Andrews Cathedral, North Isles Landscape Partnership and Berwickshire Marine Reserve. The work has enabled 32 immersive exhibits, numerous school workshops, 18 'museum without walls' apps and 67 virtual museums to help people of all walks of life to engage with heritage.
- 10.8. As of 2020, there were 82.4 million forcibly displaced people on the planet. The children represent a small section of a rapidly increasing humanitarian crisis which estimates the number of people to be forcibly displaced by 2050, due to climate change alone, to be from 200 million to 1 billion.
- 10.9. A book, *The Waiting Place*, written by School of English Lecturer Dina Nayeri, offers an unflinching look at ten young lives, aged from 5-17 years old, suspended outside of time as they await processing in Katsikas, a refugee camp outside Ioannina, Greece. It tells how these real-life children cope in a refugee camp, showing how joyful, fun, and resilient children are, even in The Waiting Place. The book offers a reminder of the humanity found in refugee camps and offers a compelling argument for why we should change the way we talk to children about home and safety, reflecting the complex associations these words can have for others in our community.
- 10.10. Working with two on-the-ground charities, Dina, with support from the Tay Charitable Trust and an Impact and Innovation Fund award of £30k, has been visiting 100 schools in Scotland and across the UK, distributing free copies of her book and informing children of all backgrounds of the experiences of people who could one day become their neighbours, thus fostering empathy for displaced people from an early age. The book is accompanied by a discussion guide, providing

the resources to ensure that the discussion is handled sensitively and at an appropriate level for the students' age-group. The talks invite children to think about and discuss complex topics, such as displacement and the refugee crisis, alongside more fundamental ideas including welcome, empathy, and home. Dina's campaign to capture national and international interest in her vital message also includes promotions via, radio, internet, podcasts and television and was more recently featured on BBC News.

- 10.11. Case Study 2: REG funding contributing to post-graduate research work with potential benefits to the Scottish whisky and drinks industry.
- 10.12. The Fraud Advisory Panel recently reported that counterfeit alcoholic beverages cost UK industry over £200m in lost sales annually, and 25 per cent of global alcohol supply is believed to be illicit and possibly dangerous. When HMRC investigators raided an illegal distillery in Glasgow in 2021 they seized 400 litres of fake vodka and 12,000 litres of industrial spirit. While numerous methods can chemically profile a sample of alcohol, only optical means can be utilised without needing to breach the bottle.
- 10.13.In our School of Physics and Astronomy a through-bottle Raman spectroscopy of alcohols project employing a Postdoctoral Research Associate (PDRA) whose salary is part-funded by REG through the IIF and REG contribution to core funding for the school is a pilot study to carry out industry-identified key demonstrations of the capability to identify alcoholic beverages through their unopened bottles. This would fulfil a long-standing need of the alcohol industry to ensure the contents of a bottle are a genuine product, and to apply technology to anti-counterfeiting and quality control measures. This work, spearheaded by Prof. Kishan Dholakia and Dr Graham Bruce, is supported by Scottish whisky companies as well as other European drinks companies.
- 10.14. The aim is to demonstrate the identification capabilities over a range of genuine alcoholic products, showing the discrimination capability between suppliers, brands, blends, ages, alcohol strengths and even batches, to test the device with actual and lab-prepared counterfeits and to demonstrate that the product is not damaged by such measurements. Future benefits of this work include:
 - **impact on health:** quality control management on production lines and identification of bottles with hazardous contents will prevent cases of, e.g., methanol poisoning.
 - Impacts on commerce and economy: shorter term, a new business which provides a measurement service to industry for anti-counterfeiting would help to reduce lost revenue and protect brand reputation. Longer term, the creation of a new device would generate economic benefit to industry.
 - **Impacts on law:** interrogating spirits non-invasively and non-destructively allows preservation of an uninterrupted chain of custody in the case of counterfeit identification.
- 10.15. This project is translating advanced <u>photonic research</u> to provide industry with new techniques and technology to increase profitability, reduce counterfeiting and, for wider society, to reduce the damage caused by contaminated drinks products.

Outcome Agreement between The University of St. Andrews and the Scottish Funding Council for AY 2023-24

On behalf of The University of St. Andrews

Signed: 1 94 / 4/

Print name: Professor Dame Sally Mapstone

Position: Principal and Vice-Chancellor

Date: 27 October 2023

1 / formar

Print name: Ray Perman

Position: Chair

Signed:

Signed:

Date: 30 October 2023

On behalf of the Scottish Funding Council:

Print name: Karen Watt

Position: Chief Executive

Date: 15 January 2024