Kemmy Business School Sharing Information on Progress 2022











Table of Contents

Part I: Context	3	Goal 1: No Poverty	33	Goal 10: Reduced Inequalities	50
Letter of Commitment	4	Goal 2: Zero Hunger	34	Goal 11: Sustainable Cities	
Editorial	5	Goal 3: Good Health and Well-Being	35	and Communities	5
History & Context	6	Bright side of work	35	Transport for sustainable cities	5
Organisational Sustainability	8	Equality and Inclusion Practices		Positive City Exchange	52
Diversity and equity	8	in Healthcare Organisations	36	Goal 12: Responsible Consumption	
Social sustainability	10	Talent management in healthcare	37	and Production	53
Environmental and earth sustainability	11	Hospital capacity	38	Consumers in Society	53
Student initiative	12	Goal 4: Quality Education	39	Consuming culture	54
Impact of Covid	13	Access and equity	39	Goal 13: Climate Action	55
pactor corra	.0	Co-creation of materials	39	Goal 14: Life below Water	56
Part II: Principles	14	Goal 5: Gender Equality	40	Goal 15: Life on Land	57
Principle One - Purpose	15	Female entrepreneurs and job quality	40	Goal 16: Peace, Justice and	
Strategy	15	Female entrepreneurs and sustainability	41	Strong Institutions	58
Volunteering	16	Women in Management	42	Banking institutions	58
Social entrepreneurship	17	Getting ahead versus getting along	43	Tax justice	59
Principle Two - Values	15	Goal 6: Clean Water and Sanitation	44	Goal 17: Partnerships for the Goals	60
Challenges and uncertainty	18	Goal 7: Affordable and Clean Energy	45	Principle Five - Partnership	6
Research-led	18	Goal 8: Decent Work and		Local action	6
Pivoting to digital	19	Economic Growth	46	International Spillover	62
Principle Three - Method	22	Technology and the quality of work	46	National impact	63
Postgraduate Modules	23	Policy-making for living standards	47	Working with schools	64
Undergraduate modules	26	Job quality for older women	47	Principle Six - Dialogue	65
SDG Experiential Opportunities	28	Goal 9: Industry, Innovation		Staying connected	6
Principle Four - Research	29	and Infrastructure	48		
KBS Strategy on Research	29	Multinationals and Ireland	48	Part III: Accountability	
KBS Research in Practice	30	Autonomous vehicles	49	and Future Plans	68
				Objectives set in 2020	69
				Future Plans	7





Letter of Commitment

12th December 2022

Re: KBS and PRME

As Executive Dean of the Kemmy Business School I am delighted to reaffirm our long-standing commitment to the six Principles for Responsible Management Education. We have been signatories to PRME since 2008, and active members of the UL & Ireland Chapter since 2013, and the Champions Cohort since 2015. A commitment to responsibility as it translates to social, environmental and governance elements of sustainability underpins our mission and strategy, and so PRME is a core element of our identity.

In this our 7th biennial SIP report, we report on a period marked by the Covid-19 pandemic with all of the turbulence and unexpected impact that had on our students, staff and core operations. Emerging from the pandemic, we look to a future marked by ambition, particularly as shown in our new 2023-2028 Strategic Plan. This commitment to a sustainable future marked by social justice is a legacy of the late Jim Kemmy, for whom our School is named. Jim was a scholar, a stonemason, a trade unionist and tireless campaigner for social justice. It is appropriate that the Business School that carries his name also carries on his legacy in this way.

We look forward to continuing our engagement with PRME, and reaffirming and deepening our commitment in the future.

Yours Sincerely,

Prof. Finbarr Murphy Executive Dean



Editorial

Working to advance the mission of PRME and support the SDGs

The KBS PRME Committee are delighted to present our 2022 SIP. In this Sharing Information for Progress report, we present some details on how we are currently implementing the six principles of PRME, how the Sustainable Development Goals find articulation in our work, and how we plan to progress in the coming years.

This reporting period, from June 2020 to June 2022, was a challenging one, marked by the isolation and uncertainty that came with the Covid-19 pandemic. This brought changes to the way we worked, how we met, how we taught and collaborated, how we researched and how we cared for and involved our students in their own sustainability journeys. Some of the plans we felt confident about delivering in 2020 were no longer feasible in this new landscape. The pandemic, as well as providing a challenge, gave us pause and allowed us to recalibrate our priorities. It brought a deeper focus on the local as a site of action for global initiatives and has informed our renewed focus at a University level on sustainability. As a School community comprising both staff and students, we learned new ways of working and communicating, and developed a resilience that enables us to take on grand challenges. We discuss these factors below.

We view reporting as an important form of accountability, both internally and externally, sharing our ideas and work with our own stakeholders as well as with the PRME community. It is a way of communicating what we do externally, locally and internally, sharing ideas both within

the wider PRME network and with our own stakeholders. This also helps our PRME-related activities and outputs to inform local and national policy, generate debate, and provide positive, actionable outcomes for local communities. In this report, we have made an initial step to analyse our research by reference to the UN Sustainable Development Goals (SDGs) as a frame of reporting. We are delighted to report activity under sixteen of the seventeen goals in what has been a challenging period of pandemic.

The preparation of this report is a team effort, very much reflective of the efforts and ethos of staff all across the School. We would very be happy to enter into dialogue with PRME Schools on any of the initiatives described in this report.

Kemmy Business School PRME Committee:

- Rebecca Gachet
- Briga Hynes
- Sheila Killian (Director)
- Myles Kingston
- Orla McCullagh
- Michelle O'Sullivan
- Annmarie Ryan
- Marta Zieba

Contact: Sheila.Killian@ul.ie

History & Context

The University of Limerick (UL) is a young, innovative university. Founded as the National Institute for Higher Education (NIHE) Limerick in 1972, the university has grown rapidly in the intervening years and has a reputation for innovative teaching and learning delivered to an increasingly diversified national and international student population. From an initial intake of 113 students in 1972, UL is now home to a student population of more than 16,300. Since its foundation, UL has demonstrated a keen awareness of the needs of its changing stakeholders; many initiatives are driven by a desire to respond to the needs of a modern Irish economy and society, which has increasingly looked outwards to Europe and the wider world. The University has placed sustainability and the SDGs at the heart of strategy and was the first Irish University to become a signatory of the UN Global Compact. Situated as it is on a riverside campus of over 133 hectares, the University has a natural appreciation of issues of biodiversity, and a strong environmental focus.

The Kemmy Business School (KBS) within UL is an internationally focused business school. Its values of inclusion, social responsibility and ethical behaviour are encapsulated in the Kemmy legacy. The school is named after Jim Kemmy, former parliamentarian and Mayor of the City of Limerick, whose public life focused on a concern for the common good, a belief in education as key to accessing opportunities and the pursuit of a society built on principles of fairness and dignity. From an intake of thirty business students in 1972, the core student population of KBS has grown to over 3,200 in 2021.

As one of four faculties in UL, the Kemmy Business School (KBS) is a full-service business school, that delivers programmes at



Students at lectures in Plassey House, NIHE 1972-1975

undergraduate, master's and doctoral levels. The mission of KBS is to research and educate to create a sustainable and equitable future for all. This mission is built on the School's core ethos and values, particularly linking to the Kemmy Legacy. Jim Kemmy, for whom our School is named, was an Alderman of Limerick and a national leader on issues of social justice and the drive towards equality. He was also an avid scholar, a socialist and stonemason who believed in the value of education in achieving the Common Good.

PRME also resonates with the strong tradition of connectedness of the School, which has a long tradition of links to local business and community groups as well as international networks. All of our undergraduate students, for example, undertake a semester of cooperative education during which they work in an organization relevant to their career aspirations. This better prepares our students to be changemakers beyond the University and fosters close connections

between the University and external stakeholders, consistent with the PRME Principle of dialogue.

The three-fold vision of the School, informed by these elements, is:

■ 1. Educate

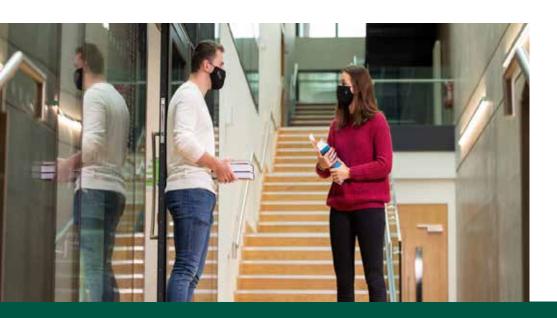
Informed by research excellence, we empower, enlighten and enrich the lives of individuals, communities, and society through education

2. Sustainable

We lead the Earth sustainability agenda through our own actions and initiatives and through our eco-literate programme design, research agenda and collaborations

■ 3. Equality

Equity and opportunity are the hallmarks of the Kemmy Business School, and, with our community, we will prioritise a just transition to a sustainable future with these as guiding principles.



The KBS Strategic Plan 2023-2028 commits KBS to embed sustainability further in our programmes and processes. In parallel, the University of which we are part has recently committed to an ambitious, mission-based sustainability framework running to 2030, with wide-ranging targets impacting all areas of the University's operations. KBS has played a key part in the development of this framework and will be core to its realisation. Our engagements with PRME, at local, national and international levels both support this ambition, and enable us to share our learnings with the wider PRME community.

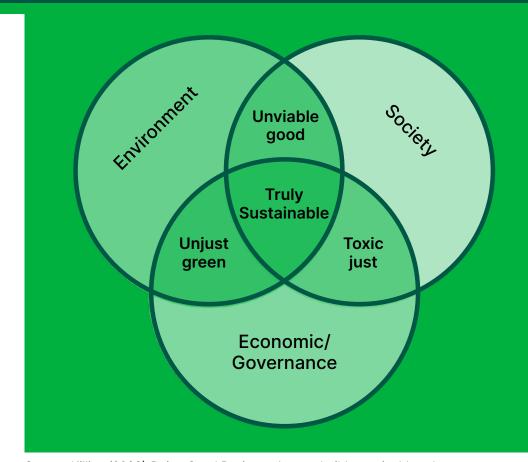
All of that aside, the period covered by this report was a challenging one for the whole community of KBS. In common with other Business Schools and Universities around the world, the Covid-19 pandemic changed the way in which we operated for a far longer period than originally anticipated. In Ireland we faced rolling government lockdowns, changes in the way we taught, collaborated and connected, and the risks to physical and mental health brought on by the pandemic and isolation. Placing the welfare of our students and staff, and the quality of our education as the highest priorities, we needed to change many of our plans at short notice, and to learn new ways of working. Emerging from the pandemic, we aim to hold on to the key learnings from this challenging period and to value the connectedness we are once again more easily able to facilitate. An important and positive learning is that despite all the challenges imposed by Covid, staff and students continued to develop and implement sustainability initiatives. Often these used technology as an enabler and means of connecting with relevant groups and individuals. The methods developed during this time can be continued to apply through hybrid form as we transition into more open personal collaboration.

Organisational Sustainability

KBS aims to embed sustainability and the values originating in the Kemmy legacy across all its academic activities, and actively encourages and celebrates staff and student involvement in achieving these aims. For example, missionaligned engagement with practice and community groups is reported by departments to faculty board meetings and feeds into university records. This contributes to the social sustainability of the city and region and fosters dialogue and partnership with our local stakeholders.

Diversity and equity

From a governance perspective, we prioritise diversity and equity within the School. This is shown, for instance, by our becoming the first Business School in Ireland to achieve a Bronze Athena SWAN award. This award recognises work undertaken to address gender equality, in STEMM, arts, humanities, social sciences, business and law (AHSSBL), and in professional and support roles, and for trans staff and students. KBS engaged in an extensive self-assessment process for the award application, involving a staff attitudinal survey and focus groups of staff and students. This process was both affirming and transformative, confirming KBS as a welcoming and supportive place to work, and highlighting some areas for continuous improvement, which are being actioned on an ongoing basis.



Source: Killian (2023) *Doing Good Business: how to build sustainable value* Gill & Macmillan (2023).

We have also worked within the University to facilitate asylum-seekers and refugees under the University of Sanctuary programme, recognising our responsibilities to those feeling war and persecution. Under the auspices of the University of Sanctuary programme, KBS programmes are available to individuals involved in the asylum application process. The designation commits the university to an action plan with a focus on encouraging, promoting and enabling refugees and asylum seekers to access third-level education through various activities and scholarship programmes. The University of Limerick will also become a key driver in raising awareness of issues impacting on the lives of refugees and asylum seekers as well as promoting a spirit of inclusion and welcome in the university, the city of Limerick and beyond. This programme naturally led on to supporting Ukrainians taking refuge in Ireland from the war in their home country.

We also support student diversity with a focus on socioeconomic background through a highly active Access office, and numerous engagements with local schools. One example is the Academy for Children, spearheaded by a KBS faculty member. The goal of the Academy is to encourage and support primary school children in local disadvantaged schools to reach their full potential and begin their journey onto higher education. The ethos of the Academy is based on a firm belief in partnership and in keeping children at the heart of the decision-making process. Another initiative in this space is the annual BSTAI awards. These are awards made by KBS to high-achieving teenagers in schools across nearby counties. The awards ceremony celebrates their success and brings them on campus with their families, encouraging more of them to consider University as an option when they leave school.



Social sustainability

KBS operates a number of policies that safeguard the social sustainability of our working environment. These include:

- The Dignity and Respect Policy, which commits KBS "to the development and maintenance of a positive working environment, in which all employees have the right to be treated with dignity and respect." To this end, the policy sets out guidelines on preventing bullying, harassment and victimisation and is supported by a comprehensive set of training programmes for all employees and line managers. The Equality and Diversity Policy, asserts that UL and KBS "believe in the principles of social justice, acknowledges that discrimination affects people in complex ways and is committed to challenging all forms of inequality."
- Specifically, the policy sets out nine grounds on which the university is particularly committed to equality in line with national legislation. These are gender, marital or civil status, family status, sexual orientation, religious belief or lack of religious belief, age, disability, membership of the Traveller community, race, colour, nationality or ethnic origin.
- The UL Student Handbook, which includes a code of conduct that sets out the conduct expected of UL students, particularly in relation to respect for people and property, honesty, fraud, compliance with university and national laws, weapons, alcohol, the environment and driving.

■ The code places particular emphasis on the prevention of academic cheating, which is identified as a major disciplinary offence.

The KBS Research Ethics Committee reviews all proposed research by both staff and students that draws on human respondents, ensuring that our research does not impact negatively on the communities which support it, and supporting research integrity. All KBS faculty are required to train in research integrity, further underpinning this process.

UL has long recognised the social and economic transformative power of entrepreneurial and innovative mindsets as a means of contributing to social sustainability, reducing inequality and building environmental protection. Fifty years on as the University of Limerick celebrates its 50th anniversary its strategic plan 'UL@50' reaffirms its commitment to addressing global sustainable development goals (SDGs) and its success is evident in the fact that UL ranked 35th in the world in the Times Higher Education SDG University Impact Rankings in 2019.

Our Entrepreneurial initiatives encourage individuals to evaluate their personal entrepreneurial strengths and uncover how they can apply entrepreneurial thinking to enable the achievement of professional, business (social and commercial), and personal goals. The ethos is about getting students to see and experience that being an entrepreneur 'can be for me' as there are role models to learn from and a support network and infrastructure to navigate students through each stage of the entrepreneurial journey.

Recognition and rewarding this entrepreneurial behaviour currently exist through a arrange of formal educational programmes, student lead competitions and extracurricular activities and this proposed grant awards scheme would further provide important explicit recognition and tangible support that enables students to progress their ideas to the next stage of validation and growth. This type of support offer students a low-risk, high-reward method of trying new things, building self-confidence, and creating a personal brand that makes individuals more attractive to investment and employment



Environmental and earth sustainability

Environmentally, KBS has undertaken a reduction in our own use of paper and uses solar panels to provide some of the water heating in the building. Our campus includes a bird sanctuary, roof garden, apiary and orchard, and the natural biodiversity of the area is prioritised in the management of the 133 hectares of grounds. The University is currently ranked 21st in the world in the Green Metric World University Ranking. This ranking measures a third-level institution's sustainability by evaluating their performance under these headings: energy and climate change, waste, water, transportation, education, and setting and infrastructure. In recognition of its efforts to improve its sustainability, UL's overall Green Metric ranking has improved over the years and is part of a wider drive including multiple ongoing initiatives in place across a range of themes, including biodiversity, waste, water, energy, travel and transport. UL's Framework for Physical Development has sustainability as one of its guiding principles. For example, achieving the Green ICT accreditation saw Buildings and Estates partnering primarily with academia and ITD to refine the processes and procedures to safely dispose of waste electrical and electronic equipment (WEEE) in addition to making energy savings in server rooms. Achieving Green Campus accreditation for waste gave rise to, among other things, the establishment of a waste management group within Buildings and Estates, the roll-out of initiatives aimed at preventing waste (e.g., installation of fit-for-purpose water bottle refill stations), improvements to waste collection and segregation processes, and improved data collection on waste.

Student initiative

KBS students are also provided with opportunities to develop their own capacity to reflect on and develop their values and to contribute to the sustainability of the KBS community. One student-led contribution to our organisational sustainability is Anytime of the Month. This initiative sets out to alleviate the effects of period poverty in Ireland and tackles the stigma and lack of education around periods through awareness campaigns, secondary schools' education workshops, network of friendly strangers, workplace ambassador programmes and the provision of period products to those most in need. The need for this social initiative resulted from student experience of period poverty proven through primary research needs assessment revealing that 1 in 3 third level students experience period poverty and that increases to 1 in 2 among secondary school students. 2021 Government reports show that 85,000 people in Ireland are at risk of experiencing period poverty



- who are unable to afford or access period products, with homeless people and those asylum-seekers living in direct provision.

Underpinning Anytime of the Month are the principles of Inclusivity, accessibility and dignity these values inspired the project initiative such as our network of friendly strangers. A friendly stranger wears an Anytime of the Month badge or sticker, like this, which means individuals can approach them if in need of a period product and provide a visible symbol tackling the silent stigma surrounding periods. These badges and stickers are sold on our ecommerce website and are made from recycled materials to ensure environmental sustainability. A pack of two badges generates €5.29 in profit while a pack of three stickers generates €3.71 in profit. Profits from just one sale allows us to donate a pack of period products to those most experiencing period poverty.

Additionally, students designed and deliver a range of 'period positive workshop' for second and third level students to educate students about period poverty and the language around periods. The first of its kind in Ireland, and the innovative workshop has been completed with eleven third-level student unions with each of them now providing free period products to their students. Alongside a collaboration with health professionals the students created a 6-module workshop that provides comprehensive education on menstrual health, once again the first of its kind in Ireland. This model trains teachers to deliver our workshops to students, to permanently remove the stigma surrounding periods within the school environment which was the first in Ireland also.

Impact of Covid

Finally, through the Covid pandemic, KBS took action to safeguard student health, moving teaching and learning online and developing new modes of assessment to minimise exposure to in-hall examinations. This was a challenge for staff and students alike, and one to which the whole community rose in a spirit of solidarity built on the values of the School. Overall, this was a period of rapid innovation and dramatic change in reimagining when, where and how teaching and learning models are implemented. Many of these innovations will be continued in some form beyond Covid.



This period was a crucial point of reflection on what a post pandemic environment would look like, leading to a deeper appreciation of the increasing importance of sustainability and the role and responsibility for educational institutions to embed into curricula.

Despite Covid responsible management related initiatives were maintained and, in some ways, heightened utilising the role of digitalisation as an enabler of their delivery and a means of engaging students, staff and faculty in SDG and sustainable business principles related initiatives as will be highlighted in the examples discussed below and in all subsequent Principles and Goals.



This section describes our progress since June 2020 - June 2022 towards the advancement of each of the six Principles for Responsible Management Education



We will develop the capabilities of students to be future generators of sustainable value for business and society at large and to work for an inclusive and sustainable global economy.

Strategy

The KBS Strategic plan strongly highlights the importance of education as a contributor to social good and contributing to its community of stakeholders in a responsible and sustainable manner. Building on this, the Strategic Plan 2023 -2028 gives explicit focus to the role of the Business School in earth sustainability, social justice, equity and a respect for human rights. Through its Educational Framework, research and external engagement initiatives the School seeks to foster engaged and active citizenship in students and employees who are motivated to take action towards a sustainable future.

Informed by these guiding principles there is an increasing cross disciplinary focus on preparing students for the complexities and interconnectedness of the many sustainability issues and the challenges of SDG goals. Students are provided with knowledge, skills and competencies to take informed decisions and take responsible actions for a balance between environmental integrity, economic viability and a just society for a more inclusive and sustainable future.

Students are challenged to move from their discipline comfort zone to actively participate in this broader societal dialogue to be equipped with the curiosity, determination and skills to actively engage in identifying solutions to social inequalities to enrich the society in which they choose to live and work and lead in.

Students in all years of undergraduate programmes from first to fourth year and across postgraduate programmes have exposure to subjects in responsible management as the objective is to get students engaged and reflecting on their role in areas such as climate change, poverty, inequality, sustainable consumption, health and wellbeing early in their studies and to build on this as they progress through their subsequent years of their study and into working life.

Students develop the personal confidence, problem solving techniques, an acceptance that risk is part of enacting change, understand the importance of being willing to take personal responsibility to embark as employees, employers, entrepreneurs who will have a positive approach to social responsiveness, engage in responsible leadership with a belief that social and societal impacts are central to all business decisions and relate to all disciplines and roles irrespective of the level of status a person has in the organisation – it is all of our responsibilities!

Volunteering

Institutionally at UL level there is a strong culture of embedding a sense of social consciousness and students giving back to contribute beyond their academic studies which is supported and enabled at KBS level. This is evident through the institutional wide recognition is Student Volunteering. The President's Volunteer Award (PVA) at the University of Limerick formally recognises students for their volunteering achievements and their civic and leadership skills alongside their academic attainment as the PVA is included on the student's transcript. The University of Limerick is the only Irish college that acknowledges volunteering work on a student's transcript. The primary goals of the PVA are to harness and foster a culture of volunteering, active citizenship and civic engagement amongst the student population through collaborative projects as well as furthering existing initiatives between UL and its many communities. The Awards programme has three categories to accommodate distinct levels of volunteering. The Bronze category requires students to complete a minimum of 20 hours of volunteering; the silver category has a minimum of 40 hours volunteering and the Gold award requires students to complete a minimum of 60 hours of volunteering. The three categories provide flexibility to students in terms of the amount of time they allocate to volunteering and ensures it is inclusive in nature.

KBS, in partnership with the university's President's Volunteer Award, was involved in recruiting volunteer student ambassadors who volunteer their time and also get an opportunity to work on KBS student ambassador marketing and student mentoring projects witinh KBS. KBS students were a strong cohort among UL Volunteering in year 2020/2021 where 164 KBS students registered for the UL Volunteering awards. Of the 164 students they accounted for

- 22% of total UL award recipients.
- These students undertook 7,843 volunteering hours.
- The majority sixty-six secured Gold Medals, fifteen students received Silver awards and 33 students obtained Bronze medals.
- 50 KBS students were awarded the Covid medal for volunteering.

The student profile consisted of undergraduate and postgraduate students from across the range of BBS programmes.



Social entrepreneurship

Further demonstration of the strong willingness of KBS students to give back and generate tangible social and environmental impact is student engagement in social entrepreneurship as a means of addressing the challenges of disadvantage and poverty (educational, economic and social deprivation.) Within this context students come together with a common passion and apply a mix of their academic knowledge, life experiences and cultural backgrounds to inform their solutions and generate impact and are guided by KBS faculty mentors.

For instance, the UL Enactus group in 2021 led by KBS students and comprising in the vast majority of KBS students worked on six social enterprises and contributed over 11,000 hours volunteering work on these projects, directly delivering impacts and generated €36,000 in revenue and sponsorship which was reinvested back into the expansion of the projects.

Moreover, UL Enactus was crowned the All-Ireland Enactus Competition Winners 2021 after competing against ten other Irish Universities. The team went on to a global stage to represent Ireland in the Enactus World Cup in October 2021 - see World Cup Presentation https://youtu.be/2mUHtufChyl. The social enterprise projects included Anytime of the Month which sets out to alleviate the effects of period poverty in Ireland and tackles the stigma and lack of education around periods through awareness campaigns, secondary schools' education workshops, network of friendly strangers, workplace ambassador programmes and the provision of period products to those most in need. Moyo Nua has developed agricultural seeding planters for smallholder farmers in Africa. The project utilises simplified agricultural technologies that are both ergonomic and environmentally friendly and are validated by the farmers themselves and Sparked project - www.sparked.ie which designs and delivers an online Youth Development Programme to over 286 Transition Year students across a range of school types.

These students display successful models of collaboration between students, academic and business leaders who are committed to solving challenges in local communities by leveraging innovative and entrepreneurial actions. They demonstrate in a very practical manner how future business leaders can extend beyond a purely financial bottom line to a triple bottom line to measure impact in terms of financial, social, and environmental benefits to the community – acting as role models for other students.

In preparing students for work and life in uncertain environment KBS students are provided with the knowledge and have opportunities to personally explore and debate the intersection, tension, conflicts between business, the environment and society and how it will impact on their future role and off future business leaders. Further this knowledge heightens and instils a sense of personal awareness that each student has a responsibility to make a positive difference. The KBS ethos of the linked areas of teaching, learning, research and administration provide a positive and enabling environment where students at all levels to envisage themselves as future agents of change and that their personal and collective roles are critical to make the changes they want to see and that should not be left to the responsibility of others to do.



We will incorporate into our academic activities and curricula the values of global social responsibility as portrayed in international initiatives such as the United Nations Global Compact.

Challenges and uncertainty

The KBS suite of programmes prepare graduates to work and live in a very uncertain landscape characterised by the impact of Covid, climate crisis, increasing consumer demand and expectations as to the role of business in society, greater levels off inequality, political unrest and ongoing role of digitalization. With this context efforts are made both formally and informally to increase awareness and an understanding of the challenges of the SDGs and the role of business can play in addressing them. This combination of modules and initiatives incorporate individual, team and peer learning providing students with the opportunity to extend the learning beyond the classroom through participating in workshops, guest speaker events, working on and in social enterprises and participating in competitions. Through practical engagement and action learning students have the chance to engage in the practice of being socially conscious and affect real change whilst simultaneously developing transferable skills which can be applied to work and personal life experiences.

Research-led

In addition to being informed by practice the PRME related curriculum and related initiatives are also informed by research emerging from funded research projects. For instance, the Consumers in Society research cluster activity informs pedagogic practices by producing a number of research studies specifically relating to pedagogy on a range of sustainability and inclusivity issues such as

- A forthcoming Special Issue on Critical and Creative Marketing Pedagogies: Confronting Rhetoric, Addressing Inequality, Inspiring Change. Guest editors: Teresa Heath, University of Minho, Portugal; Mona Moufahim, University of Stirling, UK & Lisa O'Malley, University of Limerick, Ireland
- Panayiotopoulos, A., & Lichrou, M. (2022). From the streets to the classroom: power analysis as a tool for critical pedagogy. Journal of Marketing Management, 1-16.

Within and across the Accounting and Finance domain the ARC Accountability Research Cluster has a focus on accountability, power and trust within an over-arching frame of the Sustainable Development Goals and the Common Good. Their work addresses issues of social and environmental sustainability, with ongoing projects on expertise in society, the socially constitutive role of accounting, and the way in which accounting and forms of accountability mediate and shape how we understand and respond to risk. Current research within the cluster

addresses these broad themes in domains including tax practice, capital markets, history of the professions, language in mainstream and social media, ethics, expertise and gender issues. The cluster includes research specifically relating to pedagogy linked with broader sustainability and inclusivity issues.

As a further example, Dr Orla McCullagh won competitive funding from the Kemmy Business School Research Seed Funding Competition in February 2022 to conduct research on a project entitled "Mathematical Anxiety in Undergraduate Business Studies Students. She applies the preliminary findings from this work in her own teaching at Masters level.

Through research led teaching students are enabled to bring academic rigor to real world problems, taking the lessons learned in the classroom and applying them to projects that advance the complexities and multifaceted nature of sustainability, investigating beyond the environment to include economic development, social equity and responsibility, political and personal choices and environmental action at all levels.

Pivoting to digital

During Covid and in line with the move to online and blended models of delivery a focus was on how to ensure that student engagement and peer learning opportunities were maintained. To this end some blended and hybrid initiatives were designed and implemented and of relevance to SDG related learning is the Digital Futures Lab.

The Digital Futures Lab is multidisciplinary research network that examines the complex interactions between technology and society where learners will engage in activities that infuse their academic learning with the purpose of realising sustainable purpose across society, markets, and technology.

The Lab, led by Kemmy Business School's Dr Annmarie Ryan, is a futures and foresight research and innovation program designed to imagine regenerative market futures in which technology can act as a driver of positive change. This unique programme combines advances in futures and foresight with market shaping and has developed tools and frameworks to enable participants, stakeholders and industry partners to develop visioning practices to reimagine and shape Limerick's innovation ecosystem and is viewed as an important engine in the driver of sustainable innovation in the Limerick region.

The lab includes students taking part in EULab, an Erasmus+ funded strategic partnership



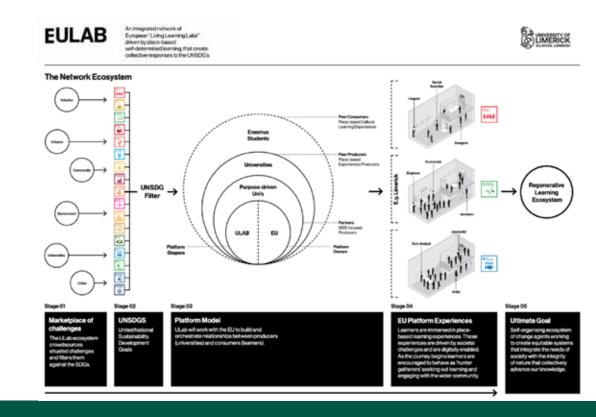
piloting European mission led virtual exchange. This included students from Oulu University Business School and Audencia Business School, both partners on the programme. This international dimension is a novel aspect of the programme and presents useful cross-cultural learning and benchmarking of creating solutions to global challenges.

In 2022 the lab focused on visioning a Circular Food Economy for Limerick, working across several scales, including university campus, metropolitan area, and region. Teams engaged with stakeholders and industry partners to map current systems, envision futures using scenario processes and designed market roles, relationships and devices required to realise these visions.

The ideas discussed and presented by students were extremely innovative. An example of these ideas is a 'City Farm Lab' which aims to allow Limerick public to experience an immersive education in sustainable life. Another team focused on the concept of a 'Smart Farm' using Al technology to create a circular economy in the Limerick and Shannon Region. Teams discussed their aims to introduce zero waste, zero emissions, plastic free campus. Some introduced the topic of the campus becoming self-sufficient through changing catering and providing greater benefits to local producers.

Another innovative idea where teams were focusing on a local Food Lab where experimenting and sharing ideas about food will be to the forefront aiming to get the Limerick public to grow their own food, this aims to get the community involved to drive a change. The students designed an integrated map demonstrating the interrelationships and resource flows between key actors in the proposed future system. Enabled by blockchain the future system will support the sustainable production, transportation and consumption of food across the university campus. For more information:

twitter.com/EULab_Community
linkedin.com/company/eulab/



This integrated and cross disciplinary model of digitally enabled researching, teaching and learning and external engagement enables it to scale and undertake real time learning for students in different countries and generates a sharing of experiences cross culturally.

Further the new professional diploma in Digital Futures and Innovation running from this lab is designed to equip learners to be system change agents and enable them, in cluster-based teams, to understand current system challenges, imagine alternatives and design devices to help bring about change required. The futures and foresight approach alongside introducing systems thinking, enables learners to go beyond current thinking and start to imaging sustainable and even regenerative market futures and importantly design a pathway to its achievement. As a part time, digitally enabled programme for workplace-based learners this programme offers a novel approach to include issues related to the SDGs as part of designing market futures and development of market shaping strategies.

Embedded in the KBS Strategic plan is an emphasis on preparing students to work in increasing uncertain business environment where sustainability and imperative to address the SDG are core drivers and accordingly there is an increased focus on incorporating throughout the curriculum about the general values of global social responsibility. There has been an increase in visibility which has heightened interest and engagement by staff and students. This increased focus and greater selection of modules addressing in some form SDGs results in moving socially responsible management from the periphery to more mainstream within the parameters of business subjects and disciplines. Further the learnings highlight the complexities and overwhelming nature of some of the SDGs and shows that solution development needs to be collective and collaborative approach.





We will create educational frameworks, materials, processes and environments that enable effective learning experiences for responsible leadership.

Informed by our purpose of capacity building and our values of global social responsibility, *Principle Three: Method* is how we put this into action. With our deepening experience of PRME in the Kemmy Business School, we are evolving from the individual redesign of modules to have a sustainable and social responsibility dimension to an ecosystem of responsible education initiatives in teaching and the redesign of our educational framework as evidenced by the school's strategic plan. This embeds confidence, fosters ambition, and builds momentum to strive for social responsibility learning in all aspects of our teaching, processes, assessment, and educational frameworks.

Furthermore, as research in responsible management and SDG-related initiatives grows, an increase in practice-facing initiatives has created possibilities for students to engage personally in action and experiential learning. What is emerging is a multifaceted approach to socially responsible education that is cross-functional across the different disciplines in the school from each of the four departments: Accounting and Finance, Management and Marketing, Economics, and Work and Employment Studies. It is this diversity that we showcase in the range of modules that have committed to embedding one or more of the SDG principles.

This demonstrates recognition of the necessity to approach sustainable development holistically and shows a growth in understanding the transformative role of responsible management education across all aspects of business education. Furthermore, we recognise positive spill-over effects in service modules taught to non-business students.



Postgraduate Modules

This multifaceted approach is demonstrated at postgraduate level, where the following examples provide a sample of the diversity of modules across the core discipline areas of the business school that effectuate responsible management education.

- Corporate Social Responsibility (SG6002) a module on corporate social responsibility and sustainability is taught across most Masters-level programmes in KBS, as a core for students studying financial services and risk management and as an elective for others. The module addresses sustainability in a holistic way, involving the students in debate, independent research and critical analysis of corporate and policy actions in the areas of labour, human rights, environment, consumer and operating practices, governance, stakeholder engagement and leadership. There is a particular focus on respect for diverse perspectives, and on the development of values within the Kemmy legacy of the school.
- For the MBA module Strategic Leadership Practices (MG6014) there is a focus on ethical Leadership Students are introduced to the theories of ethical leadership and discuss how ethical leadership is all about the right and the wrong choices made by leaders as they interact with their organisations and with society. We consider many well know organisations that have succumbed to unethical leadership and how these organisations can act as lessons or case studies both for the students own individual leadership development and the leadership of their organisations.
- Financial Issues for SMEs (AC6062) introduces non-specialist entrepreneurial students to the financial principles as they relate to the management of small and medium enterprises. Sources of funding (public and private) for new and growing businesses are evaluated, with discussions of Angel Investors, Venture Capital funding and alternative sources of finance (crowdfunding). Class discussions explore the tensions between sustainability goals and the need to be profitable to survive and grow. The class discussions also involve the relevant UNSDGs, including but not limited to gender equality and sustainable economic growth and innovation.
- Entrepreneurial and Innovative Thinking for Researchers (MP8002) is delivered to PhD students and focuses on viewing research as an innovation with commercial and social impact. Students are challenged to consider in their projects how successful research and creative innovation not only have immense potential to stimulate economies, but improve health, society, culture, public policy, the environment and the overall quality of life and wellbeing of individuals.
- Students in module Relationship Marketing (MK6003) on the Executive MBA programme worked with a client to develop sustainable business models within the circular economy.
- As part of module Global Business Strategy Module (MG6032), students worked in groups to derive scenarios for a chosen organization's contextual environment in 2040 and are required to critically discuss the efficacy of the organisation's sustainability strategy.

 Within the leadership Modules –Strategic Leadership (MN5131); Strategic management (MG4037) and Strategic leadership (MG6014)

 Corporate Social Responsibility is taught as a core element as it applies to strategic leadership and strategic management. For example, discussion takes place on how many organisations today are adopting socially responsible strategies and how having CSR (Corporate Social Responsibility) initiatives as an explicit part of an organisation's strategy suggests that leaders of an organisation understand both the

positive or negative effect of their product or service on the world. Students discuss how CSR has developed in recognition of the fact that organisations today are both responsible for and are powerful enough to make significant changes in this area. In the module the students take a critical look at CSR initiatives and how organisations and leaders are working towards driving these principles by making them part of their organisation's strategy. One of the main assignments for these modules is designed around the public health system in Ireland, in particular students look at how organisation science and management principles can be applied to enhance the public healthcare system. Another core element taught on in Strategy (MG6041) and Strategic leadership Practices (MN5131) relates to Gender and leadership where students develop an understanding of the process through which women develop into leadership roles as well as how the systems and structures support or deny that ascension which is of significant concern to researchers today.

The Digital Futures Lab (MI6103) is a 12-credit module on the MSc in Business Analytics. As an immersive module the students work in a challenge-based environment to respond to the SDGs in the context of place based, wicked problems. The module was designed to be an in-person studio-based module and was launched in May 2020. Due to Covid the module was redesigned as a digitally enabled online

module, making use of MSTeams (channels) and Miro (web based interactive white board for collaboration) to mimic the studio learning environment. DFL2020 focused on the theme of Covid response, with students being introduced to a series of tools across current system mapping, futures and foresight and regenerative market shaping. Teams developed a range of solutions to challenges to both business and society presented by Covid, taking a market system change perspective. In DFL 2021 the programme further developed including a partnership with Limerick City and County Council, in conjunction with CityXChange to look at visions for a decarbonised Limerick by 2050.

Teams explored solutions such as policy sandbox to enable system level changes and biophilic cities. DFL22 continued in this vein with the Mission of designing a Circular Food Economy for limerick with teams working at the UL campus level, the city and the wider region. Building on the 3-week immersive studio-based methodology, the programme continues to develop its partnership-based approach with the city and region, equipping students to tackle and propose re-designs of complex market systems to enable the realisation of regenerative futures.



Some of the postgraduate programmes have a range of modules where a number of themes of responsible innovation and management are incorporated and one such example is the Masters in International Entrepreneurship Management one year programme which promotes social innovation and social entrepreneurship in parallel to establishing commercial enterprises.

- In this programme for the module Establishing New Ventures (MP6031) where in 2021, students developed a therapeutic game (titled Hot and Cold) designed specifically to help people who are neurodivergent and/or have physical and/or intellectual disabilities. The aim of this enterprise is to improve both the mental and physical health of people with disabilities by focusing on the social and psychological aspects of the biopsychosocial model of health, using innovation to solve persistent and unmet needs in an often-overlooked area of healthcare in society. This project was shortlisted for UL Foundation Entrepreneurship & Innovation Awards (2021) and was successful in securing a place on the Student Inc.
- Accelerator programme (www.studentinc.ie) to further develop this idea. New Venture Marketing and Sales (MP6041) wherein students on the Masters in International Entrepreneurship marketing complete a marketing strategy for a local SME where students must include a focus on sustainability and ethics of marketing practices suggested for the company. To support this, students engage in a formal in-class debate on the Ethics of Marketing: Do we practice what we preach? which is facilitated by a marketing consultant. This requires students to reflect on their ethical and sustainable behaviours as consumers and if this feeds into and supports directly and or indirectly company ethics in marketing and sales.
- Internationalising New Ventures (MP6042) addresses the ethics of internationalisation decisions for a small firm in the context of the broader cultural, regulatory, and political factors of the country.



Undergraduate modules

At undergraduate level, we are creating a baseline understanding of the issues facing sustainable development to build students' social consciousness early in their studies and ensure they perceive this as an integrated part of their programme of learning as opposed to being a bounded subject. Through our taught undergraduate modules, the Kemmy business school demonstrates a multifaceted approach to embedded responsible leadership education. Here are a few examples to illustrate this diversity of approaches taken within the different disciplines of the business school.

- EP4007- Enterprise Management & Growth This module focuses on growing and developing existing small ventures through effective business modelling. Students select a commercial or a social enterprise for investigation to evaluate the enterprises' current operations identifying critical success factors for future sustainable scaling and growth. Examples of recent social enterprise projects focused on providing recommendations to create a more sustainable approach for enterprises operating in the sectors of fashion, food and beverage, and construction industry. Moreover, students also provided recommendations on the social enterprise Ava Housing (https://www.socialentrepreneurs.ie/michelle-moore-ava-housing/).
- Macroeconomics (Non-Business) (EC4112) a module delivered to non-business undergraduate students with new topics introduced which include the Measurement of Green GDP and its importance for the overall economic development as well as the discussion on the Circular Economy.
- International Economics (EC4014) a module delivered to undergraduate business and BA students (year 3) which includes the addition of a new topic 'Impact of International Trade on the Environment').
- In the assessment for Marketing Leadership (MK4017), students were charged with the responsibility of developing marketing strategies to promote responsible electronics recycling practices.
- International Political Economy (EC4437) module delivered to undergraduate business students (year 3). In this course, we discuss some countries that developed very quickly, like Singapore, South Korea and Ireland. We are also looking at countries that have not and still have very sigificant poverty rates. The lectures also discuss the effectiveness of overseas aid and the foreign direct investment (FDI), and it covers.
- Contemporary Issues in the Global Economy (EC4108). module delivered to undergraduate business and BA students (year 4) which covers a wide range of topics which relate to current global economic issues, such as income inequality, the recent mass EU 'migration', and the current global Covid-19 health crisis. This module also discusses the economic performance and problems confronting less developed countries, the development prerequisites and the importance of aid from rich countries. The module also discusses the SGDs agenda.
- Insurance Organisations and Markets (IN4427). This module focuses on carrying out research with final year business studies students on the role of Insurance and Reinsurance actors in addressing climate risk. The role of the Insurance industry is potentially profound

because (a) Insurance is embedded into global markets and controls significant wealth and (b) Insurance is also a proven successful tool in managing behaviour at populous scales and can act as a governance instrument to incentivise positive social behaviour. Financial Institutions and Markets (FI4407). This module examines the role of financial institutions in society; how they are governed, make decisions, and are aligned to prevailing economic philosophies. Furthermore, the module explores how financial markets can become disengaged from the needs of society.

- Principles of Accounting (AC4001). This introductory module focuses on the development of financial statements and introduces the premise of maximising shareholder wealth in the context of agency theory. The module then introduces the notion of potentially competing strategic sustainability sub-goals of environment, social and corporate governance (ESG). The students are introduced to the new non-financial reporting standards for sustainability produced by the International Sustainability Standards Board.
- The fourth-year module The Psychology of Career Success (PM4108) enables students to develop career self-management knowledge and skills to help ensure their future employability. As well as setting goals and developing strategies to achieve career success, they learn the importance of being adaptable and resilient, so they are prepared for future labour market volatility.
- Innovation in Management for Health and Social Care (CT6042/CT4012). This service module offers students the opportunity to explore management perspectives and to develop innovative solutions to enhance the delivery of health and social care, covering topics such as health service management and leadership, entrepreneurial and innovative behaviour for a changing healthcare landscape and profession, the healthcare professional innovator, innovation process for healthcare start up and intrapreneurial context.



In addition to embedding the SDG principles in taught modules, the school facilitated a number of practical initiatives designed to engage students in further opportunities for experiential learning in responsible management and sustainable development. These opportunities challenge students to link and apply the theoretical and principles of the various subjects in responsible management to determine their fit and bring new practical perspectives. These initiatives are both student led as well as faculty lead and present a tangible sense of the interest and importance students are placing on addressing social inequity and adding the challenges of the SDG goals as described below in a sample of initiatives.

SDG Experiential Opportunities

- Students on the MSc in Project Management recently participated in a global hackathon organised by the Project Management Institute. The Theme of the Make Reality challenge was "Disruption for Social Impact." Teams considered problems related to the SDGs and proposed creative solutions using Citizen Developer Tools. Over 10,000 students competed and developed applications to address sub-themes problems including Covid19, Climate Change, Smart Infrastructure, and Education. The KBS team was awarded second place in Europe for their app design which targets project managers, encouraging them to explore sound management practices and to explore their existing knowledge of sustainable management.
- Students in the Consulting & Entrepreneurship Society assisted a non-Profit NGO called Youth4Jobs to empower disabled youths across India and Bangladesh to work for large multinationals like Amazon by creating a Social Impact Strategy and Social Impact KPIs through a collaboration with CSRN, Deloitte, and Accenture using best-practice industry models for social innovation and scaling.
 Faculty ran a series of Idea Generation and Design Thinking workshops with undergraduate and postgraduate students undertaking entrepreneurship modules where students were challenged to generate ideas around the SDG goals.
- Entrepreneurship faculty facilitated and coordinated initiatives such as 'Innovation Hustle' 'Student Entrepreneurship (Social and Innovation Competitions) in association with the Entrepreneurship Society and UL postgraduate society. Consistent across these initiatives is the focus on getting student teams to develop product/service/process innovative solutions for challenges based on the SDG's.
- KBS is conscious of creating a learning environment in which students can meaningfully learn about responsible management by providing an increasingly integrated ecosystem of modules and opportunities for experiential learning. This ensures students understand the relevance of SDGs to their future careers irrespective of their role or function in business. Students engage in problem-solving techniques and critical thinking that questions the status quo and are more realistically informed on the complexities of making practical and realistic decisions to address SDG related problems.



We will engage in conceptual and empirical research that advances our understanding about the role, dynamics, and impact of corporations in the creation of sustainable social, environmental and economic value.

We will engage in conceptual and empirical research that advances our understanding about the role, dynamics, and impact of corporations in the creation of sustainable social, environmental and economic value.

KBS Strategy on Research

The KBS Strategic Plan 2016-2022 sought to embed a research culture that is industry-relevant, pedagogically informed and impactful on a range of stakeholders and which spoke to the UN SDGs. Research which focuses on issues of sustainability and societal good has been brought to the fore in the most recent iteration of the Strategic Plan. The mission of KBS, as declared in its Strategic Plan 2023-2028, is the following:

"We research and educate to create a sustainable and equitable future for all"

The school's vision is to engage in a research agenda and collaborations which lead the Earth-sustainability agenda, and which prioritises a just transition to a sustainable future. The Strategic Plan envisages investment in action-oriented interdisciplinary research focused on sustainability and social responsibility. In addition, research will continue to encompass the values embodied by the late Jim Kemmy, former politician, trade unionist, historian and local councillor, which centred on inclusivity and social justice.



KBS Research in Practice

There is clear alignment between the aspirations of the school and the practice of research. In terms of structures, KBS hosts nine Research Clusters spanning the gamut of business fields and their function is to encourage collaboration in research between faculty and PhD students in areas where there is a constellation of expertise. The Research Clusters are tabulated below, and their research focus illustrates how each is committed to advancing the overarching school values of integrity, sustainability and impact.

Research Cluster	Research Focus	SDG Alignment	Sample research 2020-2022
Human Rights Development and Practice	This cluster focuses on organisational practices and forms of organising in the international development, human rights promotion/protection, and humanitarian assistance sectors.	16 Mag agrice of the control of the	Lannon, J. and Walsh, JN. (2020) 'Project facilitation as an active response to tensions in international development programmes', <i>International Journal of Project Management</i> , 38(8): 486-499
Accountability	This cluster has a focus on accountability, power and trust within an over-arching frame of the Sustainable Development Goals and the Common Good. Our work addresses issues of expertise in society, the socially constitutive role of accounting, and the way in which accounting and forms of accountability mediate and shape how we understand and respond to risk.	7 GLA INFORMATION 10 MONETO TO MICHAEL AND THE PARTY OF	Killian, S., O'Regan, P., Lunch, R., Laheen, M., Karavidas, D. (2021) 'Regulating Havens: the Role of Hard and Soft Governance of Tax Experts in Conditions of Secrecy and Low Regulation.' Regulation & Governance, 16(3), 722-737. Sorola., M. Karavidas, D., Laheen, M. (2020) 'Addressing Gender Issues through the Management of Tax Talent.' Journal of Tax Administration, 6 (1) Fallah, N; Fitzpatrick, C; Killian, S; Johnson, M (2021) 'End-of-Life Electric Vehicle Battery Stock Estimation in Ireland through Integrated Energy and Circular Economy Modelling.' Resources Conservation and Recycling, 174 McCullagh O.; Cummins M.; Killian S. (2022) 'Decoupling VaR and regulatory capital: an examination of practitioners' experience of market risk regulation.' Journal Of Banking Regulation, (2022) 1-16 O'Regan, P; Killian, S (2021) 'Beyond professional closure: Uncovering the hidden history of plain accountants.' Accounting Organizations and Society, 94 Killian S.; O'Regan V.; O'Regan P. (2022) "Uncomfortable territory': personal and organisational values in the tax profession.' Accounting Forum, DOI 10.1080/01559982.2021.20 04633

Research Cluster	Research Focus	SDG Alignment	Sample research 2020-2022
Emerging Risk	The cluster is devoted to enhancing the state-of-the-art in ethics, risk management, actuarial science, machine learning, cybersecurity, and smart mobility.	3 me wante	Jannusch, T., Shannon, D., Völler, M., Murphy, F. and Mullins, M. (2021) 'Smartphone Use While Driving: An Investigation of Young Novice Driver (YND) Behaviour, Transportation Research Part F: Traffic Psychology and Behaviour, 77: 209-220. Cunneen, M. (2020) Could Autonomous Vehicles Become Accidental Autonomous Moral Machines? Culturally Sustainable Social Robotics, 335: 563-569.
Quality of work	The cluster investigates the significant features of workers' experience in performing their jobs. Research encompasses people's lived work experiences and the regulatory and institutional context within which work takes place. The goal of the clusters' work is to advance decent work.	8 SECON MORE AND	O'Sullivan, M., Turner, T., Lavelle, J., MacMahon, J., Murphy, C., Ryan, L., Gunnigle, P., O'Brien, M. (2020) 'The Role of the State in Shaping Zero Hours Work in an Atypical Liberal Market Economy', Economic and Industrial Democracy, 41(3), 652–671. Ryan, L. and Turner, T. (2021) 'Corporate social responsibility and independent employee representation: An ethical contradiction', Employee Relations, 43(3): 742-756.
Consumers in Society	This cluster embraces the multidisciplinarity required to advance research on the impact of consumption on identity projects, place-making and sustainable living. We encourage critical and reflexive research approaches that address the priority areas of UN Sustainable Development Goals	12 HOUSE IN THE PARTY OF T	Casey, K. O'Malley, L. and Lichrou, M. 2020. Prefiguring Sustainable Living: An Ecovillage Story. Journal of Marketing Management, 36(17-18), 1658-1679. Davies, I., Oates, C.J., Tynan, C., Carrigan, M., Casey, K., Heath, T., Henninger, C.E., Lichrou, M., McDonagh, P., McDonald, S., McKechnie, S., McLeay, F., O'Malley, L. and Wells, V. 2020. Seeking Sustainable Futures in Marketing and Consumer Research. European Journal of Marketing, 54(11), 2911-2939.
Economics of Innovation and Policy	The cluster responds to the acute need for robust evidence on the precise impacts of public policy interventions, involving public funding being allocated to private firms. The research cluster also focuses on innovation processes in the arts and sciences.	9 NOTIFIC THE STATE OF THE STAT	Garrido-Prada, P., Lenihan, H., Doran, J., Rammer, C., & Perez-Alaniz, M. (2021). Driving the circular economy through public environmental and energy R&D: Evidence from SMEs in the European Union. Ecological Economics, 182: 10688 Perez-Alaniz, M., Lenihan, H., Doran, J., & Hewitt-Dundas, N. (2022). Financial resources for research and innovation in small and larger firms: Is it a case of the more you have, the more you do?, Industry and Innovation, doi.org/10.1080/13662716.2022.2036597

Research Cluster	Research Focus	SDG Alignment	Sample research 2020-2022
Healthcare Management Principles and Policy	The cluster seeks to enhance population health both nationally and internationally through research and application of business principles designed to target the challenges faced by healthcare organisations today.	3 ECCHELIN	Harnett C, Ryan N, Hynes B. (2022) 'Protocol for establishing and evaluating a public and patient panel for organisation science and management principles in healthcare', BMJ Open, 12 (10).
Privatisation and PPP	The cluster researches the economic and social effects, and corporate governance, of policy issues across infrastructure sectors, including privatisation, de-regulation, market liberalisation, and public private partnerships (PPPs).	9 MORTH MONATOR	Palcic, D., Reeves, E., Flannery, D., Geddes, R. (2022) Public-private partnership tendering periods: an international comparative analysis, Journal of Economic Policy Reform, 25(2): 156-172 Albalate, D., Bel, G., Gradus, R. and Reeves, E. (2021) Remunicipalization of Local Public Services: Incidence, Causes and Prospects, International Review of Administrative Sciences, 87(3): 419-424.
Economic Efficiency and Productivity Analysis	The cluster publishes and disseminates applied research in the measurement, analysis, and drivers of efficiency and productivity in several areas of economics – particularly, long-term care in health, and cultural, education and manufacturing sectors.	3 CODE REALTY AND WILL STATE	Devitt, N., Zieba, M., Dineen, D. (2022). Technical efficiency in Irish public hospitals: a multi-output distance function SFA approach, International Journal of Computational Economics and Econometrics, in press. DOI: 10.1504/IJCEE.2022.10051477 Castiglione, C., Infante, D., Zieba M. (2022). Public support for performing arts. Efficiency and productivity gains in eleven European countries, Socio-Economic Planning Sciences, Available online first. doi.org/10.1016/j.seps.2022.101444

Two core strengths of research in KBS are its collaborative nature, particularly with industry and community groups, and in its impact in informing industry practice and in policy making. These help to support the Dialogue and Partnership principles of PRME, and to ensure that our research has an organic spillover to our external stakeholders.

The remainder of this section illustrates how research at the Kemmy Business School maps on to the Sustainable Development Goals, in support of Agenda 2030 and PRME's mission:

"To transform management education, research and thought leadership globally, based on the Principles for Responsible Management Education and the United Nations' Sustainable Development Goals."



Goal 1: No Poverty End poverty in all its forms everywhere

Dr Maika Ryan (with UL colleagues Dr Martin J. Power and Prof. Eoin Devereux) examined a specific public campaign by the Department of Social Protection in Ireland, titled 'Welfare Cheats, Cheat Us All' (original emphasis), that encouraged citizens to report welfare fraud. The repeated circulation of antiwelfare discourses has served to encourage limited and often incorrect public understandings of issues pertaining to welfare. Central to these processes is the social construction of notions of 'deservedness' and 'undeservedness.' Dr Ryan's research sought to examine the shaping of the campaign including the dominant discourses evident in the campaign itself and the inhouse discussions in the lead up to it. The study showed that this Irish campaign rehearsed a familiar international discourse which follows distinct patterns or rules, and in keeping with other moral panics, the spurious nature of the data being used to exaggerate the scale and extent of welfare 'fraud'.

• Power, M., Devereux, E., & Ryan, M. (2022). Framing and Shaming: The 2017 Welfare Cheats, Cheat Us All Campaign. Social Policy and Society, 21(4), 646-656.

Prof. Deirdre O'Loughlin is the 2022 International Research Fellow with the Centre on Household Assets and Savings Management (CHASM) in University of Birmingham. Prof. O'Loughlin is collaborating with CHASM's Dr Caroline Moraes to explore the enduring effects and recurrent nature of crises such as austerity and COVID-19, which have highlighted the critical importance of investigating financial insecurity and the need to develop innovative strategies and policies to help support financial equality and welfare and alleviate

poverty. The study aims to investigate, identify and compare household and stakeholder perspectives on the nature and extent of current financial insecurity in post-austerity UK and Ireland, as both countries begin to emerge from the global pandemic.

Prof. O'Loughlin and colleagues are currently editing a book on the challenges of poverty and the political measures that perpetuate it. It adopts a cross-disciplinary approach to covering relevant theories, methodologies and policy-oriented research, highlighting the interlinkages between poverty and austerity that have resulted since the global financial crisis. The book presents quantitative and particularly qualitative studies in the contexts of food insecurity, unemployment, homelessness, modern slavery and poor health. The book explores the impacts and responses relating to poverty and austerity and considers implications for key areas including social policy, marketing and consumption, economic policy and public health.

Prof. O'Loughlin's research has also sought to advance current resilience theory in marketing through developing persistent resilience from a context of austerity influenced consumption. Prof. O'Loughlin and colleagues have developed a conceptualisation of persistent resilience which differs to previous conceptualisations that focused on people's ability to 'bounce back' and the research argues that the longevity and range of deprivations of austerity imposed following the global financial crisis require a different conceptual base from which to analyse people's behaviours.

• Szmigin, I.T., O'Loughlin, D, McEachern, M., Karantinou, K., Barbosa, B., Lamprinakos, G. and Fernández-Moya, M.E. (2020), Keep calm and carry on: European consumers and the development of persistent resilience in the face of austerity, European Journal of Marketing, Vol. 54, No. 8, pp. 1883-1907 https://doi.org/10.1108/EJM-04-2018-0253



Goal 2: Zero Hunger

End hunger, achieve food security and improved nutrition and promote sustainable agriculture

Dr Majka Ryan has engaged in research aiming to explore the experiences of food poverty in Ireland from the perspective of the users of a Mid-West Simon Community food bank and to gauge whether the food bank should expand its services to include a Social Grocery store. The function of Social Grocery stores is to offer a wide range of food products (such as vegetables, meat, fish, cheese etc.) at reduced prices, in addition to those products that are already offered, free of charge, through the existing food bank. The research included a survey of 131 food bank users and interviews with twenty-nine participants. The goal of this second phase of the research was to explore and understand the everyday subjective realities of those who are availing of food bank services; their reasons for availing of food charity; whether the service fulfils their food needs; and the impact of the service on the service users' grocery shopping requirements. The study found that most food bank users reported the need to avail of food support due to low income and a significant proportion need to use the food bank due to disability and unemployment. For others it was a low income from their pension, high rent, social welfare being refused or cut down, sickness, and caring for a family member. In terms of accessing food, over half of survey participants periodically experience lack of sufficient access to food. Interviewees reported struggling financially due to their income being disproportionate to the prohibitive cost of living and all reported limited ability to purchase food. All interviewees expressed interest in shopping in a social grocery

store. In their view, the ability to purchase food at discounted prices would have a positive impact on the quality and quantity of accessible food and the freedom to choose what they eat. They spoke about the ability to save money and how it would afford them an opportunity to buy clothes for their children and take them for holidays. Interviewees also argued that if they were able to shop at discounted prices, they would not have to avail of a soup kitchen which they found degrading.

- Ryan, M. (2021) 'Determinants of food poverty in Ireland', Presentation at the 15th European Sociological Conference, Barcelona, Spain, 31 Aug-3 Sep.
- Ryan, M., Power, M. Devereux, E. (2021) 'Understanding Food Poverty in Ireland', Presentation at The European Network for Social Policy Analysis, Leuven, Belgium.



Goal 3: Good Health and Well-Being

Ensure healthy lives and promote well-being for all at all ages

Bright side of work

Dr Deirdre O'Shea is one of the five founders of the international "Bright Side of Work" research group, who are European leaders in workplace intervention research, and specifically on the design and evaluation of psychological interventions using daily diary research designs.

These interventions focus on the when, how and for whom psychological interventions lead to improved employee health and well-being. Dr O'Shea and colleagues have published research on how mindfulness and positive activities at work impact motivation-related constructs, sleep quality and fatigue; on reducing employee exhaustion through positive reflection; and on resilience at work.

In addition, Dr O'Shea contributes to the translation of this research into practice through engagement with organisations, delivery of seminars and workshops to industry, and through engagement with the national media, radio and news outlets to promote evidence-based research on occupational health and well-being interventions. For example, Dr O'Shea presented seminars to senior civil servants and to the professional body for human resource managers.

- Dundon, T., O'Shea, D., McCarthy, J. and Pagoni, M. (2022) 'Engagement Through Disruption: Rhetoric, Reality and 'Reimagining' Wellbeing at Work' in A. Kinder, R. Hughes, and C.L. Cooper (eds) Occupational Health and Wellbeing. Challenges and Opportunities in Theory and Practice. London: Routledge.
- O'Brien, S., Galavan, E. and O'Shea, D. Developing a competency framework for managers to address suicide risk in the workplace, Human Resource Development Quarterly, 33(2): 157-178.
- Butler, C.G., O'Shea, D. and Truxillo, D.M. (2021), "Adaptive and Proactive Coping in the Process of Developing Resilience", Harms, P.D., Perrewé, P.L. and Chang, C.-H. (D). (Ed.) Examining and Exploring the Shifting Nature of Occupational Stress and Well-Being (Research in Occupational Stress and Well Being, Vol. 19), Emerald Publishing Limited, Bingley, pp. 19-46.
- Clauss, E., Hoppe, A., Schachler, V. & O'Shea, D. (2021) Occupational self-efficacy and work engagement as moderators in the stressor-detachment model, Work & Stress, 35:1, 74-9
- Knoll, M., Götz, M., Adriasola, E., Al-Atwi, A. A., Arenas, A., Atitsogbe, K. A., Barrett, S., Bhattacharjee, A., Blanco, N. D., Bogilović, S., Bollmann, G., Bosak, J., Bulut, C., Carter, M., Černe, M., Chui, S. L. M., Di Marco, D., Duden, G. S., Elsey, V., . . . Zacher, H. (2021). International differences in employee silence motives: Scale validation, prevalence, and relationships with culture characteristics across thirty-three countries. Journal of Organizational Behavior, 42(5), 619–648.

(Continued)



Equality and Inclusion Practices in Healthcare Organisations

Dr Nuala Ryan undertook a systematic review on the Equality and Inclusion Workplace Practices in the Healthcare Sector. While there is considerable research carried out on equality and inclusion practices in the delivery of patient care, little has been done to date to systematically review and synthesis equality and inclusion workplace practices for staff in the healthcare sector. This systematic review is designed to focus solely on staff equality and inclusion workplace practices, making the evidence available to healthcare practitioners to inform an evidenced based approach in the development of trustworthy equality and inclusion practices for their staff.

- Harnett C, Ryan N, Hynes B. (2022) 'Protocol for establishing and evaluating a public and patient panel for organisation science and management principles in healthcare', BMJ Open, 12 (10).
- Ryan, N., Berkery, E., O' Malley, B., O' Donnell, C. and Purtill, H. (2022) "A stakeholder informed evidenced based approach to understanding and informing talent management practices for nurses and midwives in the Irish healthcare sector- Developmental Paper" presented at the British Academy of Management, Alliance Manchester Business School, Manchester, 31st August 2nd September.

- Dundon, T., O'Shea, D., McCarthy, J. and Pagoni, M. (2022) 'Engagement Through Disruption: Rhetoric, Reality and 'Reimagining' Wellbeing at Work' in A. Kinder, R. Hughes, and C.L. Cooper (eds) Occupational Health and Wellbeing. Challenges and Opportunities in Theory and Practice. London: Routledge.
- O'Brien, S., Galavan, E. and O'Shea, D. Developing a competency framework for managers to address suicide risk in the workplace, Human Resource Development Quarterly, 33(2): 157-178.
- Butler, C.G., O'Shea, D. and Truxillo, D.M. (2021), "Adaptive and Proactive Coping in the Process of Developing Resilience", Harms, P.D., Perrewé, P.L. and Chang, C.-H. (D). (Ed.) Examining and Exploring the Shifting Nature of Occupational Stress and Well-Being (Research in Occupational Stress and Well Being, Vol. 19), Emerald Publishing Limited, Bingley, pp. 19-46.
- Clauss, E., Hoppe, A., Schachler, V. & O'Shea, D. (2021) Occupational self-efficacy and work engagement as moderators in the stressor-detachment model, Work & Stress, 35:1, 74-9
- Knoll, M., Götz, M., Adriasola, E., Al-Atwi, A. A., Arenas, A., Atitsogbe, K. A., Barrett, S., Bhattacharjee, A., Blanco, N. D., Bogilović, S., Bollmann, G., Bosak, J., Bulut, C., Carter, M., Černe, M., Chui, S. L. M., Di Marco, D., Duden, G. S., Elsey, V., . . . Zacher, H. (2021). International differences in employee silence motives: Scale validation, prevalence, and relationships with culture characteristics across thirty-three countries. Journal of Organizational Behavior, 42(5), 619–648.

3 GOOD HEALTH AND WELL-BEING

(Continued)

Talent management in healthcare

Dr Nuala Ryan completed a stakeholder informed evidenced based approach to understanding and informing talent management practices for international nurses in healthcare organisations – Healthcare systems globally are facing substantial challenges in the recruitment and retention of nursing staff. WHO states that nurses and midwives account for nearly 50% of the global health workforce and the world is about 5.9 million short of what it needs.

In response to this challenge healthcare organisations are designing and implementing talent management frameworks, more commonly seen in the business world, to get ahead of the vacancy curve. Talent management as an integrated strategy acknowledges human capital as an organisation's greatest asset. It is the effective use of focused activities to attract, identify, develop, and retain individuals who are talented based on an inclusive ideology.

Studies indicate that better talent management practices in the public healthcare sector can lead to positive patient outcomes, more productive staff and better return on investment. Without talent management practices, our ability to attract and retain 'the best and the brightest nurses' is hindered (Elkady et. al, 2019, pp. 1). The aim of this work is to develop and complete a research study designed to understand and inform talent management practices for international nurses in the healthcare sector, as they are a strategically important group.

By gathering and analysing the relevant data, a stakeholder informed evidence-based approach to talent management for this cohort can be informed, as a way of improving performance of healthcare providers.

The following are additional publications undertaken by faculty on various aspects of well-being.

- Furxhi, I., Kia, A.N., Shannon, D., Jannusch, T., Murphy, F. and Sheehan, B., 2021. Associations between mobility patterns and COVID-19 deaths during the pandemic: A network structure and rank propagation modelling approach. Array, 11, p.100075. DOI: https://doi.org/10.1016/j.array.2021.100075
- Furxhi, I., Arvanitis, A., Murphy, F., Costa, A. and Blosi, M., 2021. Data Shepherding in Nanotechnology. The Initiation. Nanomaterials, 11(6), p.1520. DOI: https://doi.org/10.3390/nano11061520
- Furxhi, I., Koivisto, A.J., Murphy, F., Trabucco, S., Del Secco, B. and Arvanitis, A., 2021. Data Shepherding in Nanotechnology. The Exposure Field Campaign Template. Nanomaterials, 11(7), p.1818. DOI: https://doi.org/10.3390/nano11071818
- Gummerus, J., O'Loughlin, D., Kelleher, C. and Penalosa, L (2021) Shifting Sands: Actor Role and Identity Reconfigurations in Service Systems, Journal of Business Research, Vol. 137, December, pp. 162-169 https://doi.org/10.1016/j.jbusres.2021.08.001
- Kelleher, C., O'Loughlin, D., Gummerus, J. and Penalosa, L. (2020) Shifting Arrays of a Kaleidoscope: The Orchestration of Relational Value Cocreation in Service Systems, Journal of Service Research, Vol. 23, No. 2, pp. 211-228 https://doi.org/10.1177/1094670519882495
- A.J Koivisto, A. Spinazzè, F. Verdonck, F. Borghi, J. Löndahl, I. K. Koponen, S. Verpaele, M. Jayjock, T.Hussein, J. L. de Ipiña, S. Arnold, I. Furxhi (2021) Assessment of exposure determinants and exposure levels by using stationary concentration measurements and a probabilistic Near-Field/Far-Field exposure model. Open Research Europe. Open Research Europe 1(72). DOI: 10.12688/openreseurope.13752.1
- O'Sullivan, V., Maher, B. Feeney, J., Gonet, T. & Kenny, R. A. (2021). "Indoor Particulate Air Pollution from Open Fires and the Cognitive Function of Older People." Environmental Research, 192: 110298.
- O'Sullivan, V., 2022 May 5th. The Effect of Smoky Coal Bans on the Lung Health of Older People. Irish Economic Association Annual Meeting. Limerick.
- O'Sullivan, V., 2022 7th April The Effect of Smoky Coal Bans on the Lung Health of Older People. Population Association of America Annual Meeting. Atlanta Georgia.
- Mulligan, K., Zieba, M. (2020). Well-being and unemployment during the Great Recession: an empirical analysis across UK local authority districts. Regional Studies, Regional Science, 7 (1), 267–287.



Hospital capacity

Research by the Economic Efficiency & Productivity Analysis research cluster has examined the efficiency of Irish public hospitals and the ability of the system to meet the current needs of society.

The spending across the Irish health sector is comparatively high, while at the same time Ireland has the lowest level of hospital beds per capita in the OECD countries. The research found that Irish public hospitals operate at high technical efficiency levels, but they also should reduce inpatient stays in favour of outpatient visits and daily care – a policy approach that would minimise the average length of stay, increase the hospitals' resource efficiency, and hence decrease costs at least in the short run given their capacity constraints. This research offers some policy insights such that the government needs to be mindful that increasing funding to expand community services risks exacerbating the current dynamic of an expensive general health system and an underresourced hospital system.

• Devitt, N., Zieba, M., Dineen, D. (2022). Technical efficiency in Irish public hospitals: a multi-output distance function SFA approach, International Journal of Computational Economics and Econometrics, forthcoming: 10.1504/IJCEE.2022.10051477





Goal 4: Quality Education

Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Access and equity

KBS faculty undertook an evidence-based evaluation to inform on the progress of the PATH 3 programme across the three Higher Education Institutions in the Mid-West of Ireland to explore the effect of the HE- and community-based preentry and post-entry initiatives on access, progression, and completion of third-level education.

The report evidences the lived experiences of educational exclusion, struggles to access, transition and progress through Higher Education embedded in the everyday multifaceted disadvantage that impoverished communities endure. It points to the important impact that the PATH 3 Mid-West Cluster's programmes have on those under-represented groups and their journey through education.

It also highlights the incredible resilience of the learners, and their families, in achieving their educational aspirations. The report also reveals the unbreakable community spirit and support offered by the education and community stakeholders, as well as the staff of the PATH 3 projects and wider Access programmes in UL, MIC, and TUS.

• Ryan, M. (2022) 'Evaluation of the Programme for Access to Higher Education (PATH), Strand 3 initiatives across the Mid-West Cluster', Mid-West Cluster: Limerick.

Co-creation of materials

Prof. Elaine Doyle, Dr Patrick Buckley and Dr Brendan McCarthy have examined the impact on academic performance of students creating course content in two distinct ways. The literature acknowledges that deeper comprehension of content can be realised when students actively create their own learning materials. However, studies measuring the impact of students co-creating content on their academic performance are limited.

Using an experimental design, the study involved students using an e-learning platform to develop multiple choice questions based on course content and students using a range of audio-visual tools to create streaming videos that explained module content to their peers.

The research found that both co-creation assignments had a statistically significant impact on academic performance. We also examine whether students' learning styles have an impact on the effectiveness of content co-creation finding that reflective (versus active) learners and sequential (versus global) learners gain more from co-creation.

• Elaine Doyle, Patrick Buckley & Brendan McCarthy (2021) The impact of content co-creation on academic achievement, Assessment & Evaluation in Higher Education, 46:3, 494-507.



Goal 5: Gender Equality

Achieve gender equality and empower all women and girls

Several strands of research by researchers across KBS have sought to further our understanding of the experiences of women in business and have highlighted the barriers they face in terms of equality but also have investigated the potential links between women and sustainable business. They align with UN SDG 5 on Gender Equality, SDG8 on Decent Work and Economic Growth and SDG9 on Industry, Innovation and Infrastructure. The three strands are explored below.

Female entrepreneurs and job quality

One strand by Dr Claire Harnett sought to examine the interrelationship between entrepreneurship, female entrepreneurship, and job quality in order to examine the relationship between an entrepreneur's gender and the quality of jobs they create. A two phased mixed method approach to addressing the identified research gap was undertaken. Phase one, a quantitative phase, comprises of a survey of Irish entrepreneurs who are employers. The second phase comprised of semi-structured interviews to identify factors that account for such differences. The study found that that female entrepreneurs were more likely to use more precarious forms of work arrangements for their employees such as zero hours type contracts and less than full time hours. While this indicates that using objective measures, female entrepreneurs offer more precarious work, it is important to consider a number of varied factors such as the needs of the employees and the business context. When looking at employee needs it

emerged that employees do not always see part-time hours as precarious. Several entrepreneurs, particularly in the retail sector, reported that while they would prefer to have full-time employees, their employees requested a shorter working week.

Following the research in 2021, Dr Harnett organised and hosted an online seminar entitled EFFECT (Empowering Future Female Entrepreneurs: Challenges and Triumphs) which was funded by the Irish Research Council. The event aimed to provide support and guidance to aspiring female entrepreneurs, or those who were planning to grow their business further. Speakers included a Senior Lecturer in Entrepreneurship at the University of Limerick, the Entrepreneurship Manager with Enterprise Ireland (the state agency responsible for supporting business), the Senior Enterprise Development Officer with Limerick Local Enterprise Office, the Chairperson of the Irish Small and Medium Enterprise Association (ISME) and CEO if the Hair and Beauty Industry Confederation (HAIBC), and two female business entrepreneurs.



Female entrepreneurs and sustainability

An interdisciplinary group of KBS academics (Dr Antoinette Flynn, Douglals. A. Adu, Dr Colette Grey, Dr Briga Hynes, Dr Yvonne Costin) have collaborated with national and international colleagues (Dr Josephine Igoe- University of Galway, Prof. Naomi Birdthistle - Griffith University, Australia, Prof. Patrice Braun - Federation University Australia) on diverse research projects with a common gendered theme. The research spans the spectrum of firm size from research that examines the impact of women's human capabilities on growth in Irish SMEs, to research that tests female executives' influence on sustainable business practices in publicly listed UK companies. Some of the group have also contributed to various projects on entrepreneurship policy for women, as part of the Global Women's Entrepreneurship Policy (Global WEP*) network. The policy implications of the SME study highlight that female entrepreneurs' human capabilities can be leveraged to maximize financial growth, but generally not employment growth. Therefore, where employment growth is used as a qualifying criterion for entrepreneurial supports, it represents a barrier to access policy supports and initiatives for female entrepreneurs. Furthermore, for listed companies, the research shows that gender as a measure of diversity in executive profiles has a positive impact on sustainable business practices in the form of reducing actual greenhouse gas emissions and reducing the gap between actual and self-reported measures of greenhouse gas emissions. Finally, some of the group contributed to an OECD report on the scope and effectiveness of entrepreneurship policies for women in a global study. Issues addressed include fostering a gender-sensitive entrepreneurship culture, building entrepreneurship skills for

women, improving women's access to financial capital, supporting networks for women entrepreneurs and creating supportive regulatory environments.

- Adu, D.A., Flynn, A., & Grey, A. (2022) 'The effect of executive and non-executive female roles on sustainable business practices in UK firms? In Irish Accounting and Finance Association Conference, Maynooth, Ireland, June 2022
- Adu, D.A., Grey, C, and Flynn, A., (2021) 'Gender diversity, environmental performance and sustainable business practices', Academy of Sustainable Finance, Accounting, Accountability and Governance (ASFAAG) Conference, (Online/Virtual), UK, December 2021.
- Adu, D.A., Flynn, A., and Grey, C. (2022). Psyche, gender and professional experience diversity: board selection as a means of achieving sustainability goals. Global Business and Management Research: An International Journal [Accepted July 2022, in press].
- Costin, Y.; Igoe, J.; Flynn, A., Birdthistle, N., Hynes, B. (2021) 'Human Capabilities and Firm Growth: An Investigation of Women-Owned Established Micro and Small Firms in Ireland'. Small Enterprise Research, 28 (2):134-152.
- Braun, P., Birdthistle, N., and Flynn, A. (2021), 'Australia', in Entrepreneurship Policies through a Gender Lens, OECD Studies on SMES and Entrepreneurship, OECD Publishing, Paris. http://dx.doi.org/https://doi.org/10.1787/71c8f9c9-en Global WEP*

https://globalwep.org/about#:~:text=The%20Global%20Women's%20 Entrepreneurship%20Policy,of%20more%20inclusive%20 entrepreneurship%20policies



Women in Management

A third strand has focused on women in management positions in organisations. Recent research has indicated that in Ireland, the percentage of women on ISEQ-20 boards has more than doubled over the six-year period to 2021, when the 30% milestone of women on boards of the ISEQ 20 was surpassed (Balance for Better Business, 2021). Despite this significant increase, women do still not have the same representation as men on boards. Hence, the research team decided to explore whether women on boards have the same experiences as their male counterparts. KBS faculty who lead the KBS' Work Futures Lab sought to understand the experiences of women in management positions. They developed a 'Creating Work Futures' survey in 2021 which attracted over 1,000 responses from people working in a wide variety of industries in Ireland. Their key findings were that:

- · As women move up through the hierarchical levels in the organisation, their macro-decision authority is lower than their male counterparts. Macro-decision authority refers to the level of influence one has over decisions at the team or department level.
- · Women experience a greater workload to their male counterparts as they into more senior roles in the organisation.
- · Women report higher levels of burnout in comparison to men as they move up through the hierarchical levels in the organisation.

This research was presented at the XII International HRM Conference in Cadiz, Spain in 2022 where it received the best paper award (Harnett, C., Cross, C., Kieran, S., O'Shea, D., Ryan, L.; MacCurtain, S. & Ryan, N. 'Gender Differences in Management: Decision Authority, Workload and Burnout').

Faculty also examined the role of risk in leader identity development for women by identifying processes women leaders employ to overcome perceived risk. The study involved an 18 -month longitudinal qualitative study of women leaders in the healthcare sector who took part in an identity-based leadership development programme. The research identified four key processes in addressing risk focused on aspects of the structural elements (perceiving and mitigating structural risk) and agency of the leader (accepting agentic risks and developing agency). These involved both individual reflective processes and social interactive processes which highlight the importance of both individual interventions and social structures to facilitate leader and leadership development.

• Ryan, N.F., Hammond, M., MacCurtain, S. and Cross, C. (2021), "Overcoming risk for women in leader identity development", Journal of Managerial Psychology, 36 (1):75-88.



Getting ahead versus getting along

Dr Deirdre O'Shea and colleagues in Dublin City University and Technological University Dublin were awarded funding by the Higher Education Authority in 2022 to investigate how gender stereotypes are contributing to gender inequality in higher education institutions in Ireland. Despite decades of gender equality initiatives, there is still a need to make meaningful strides in balancing the gender scales.

It remains more difficult for women to experience the same level and pace of success in academia as their male counterparts. Gender role stereotypes mean that the same behaviours and performance exhibited by men and women are interpreted differently. This has led some researchers to advocate that we need to "fix the game, not the dame", specifically in terms of how we evaluate leadership. However, past attempts to 'fix the game' such as introducing gender quotas have only been marginally successful.

To change the system, we need to change gender stereotypes, which follow from a societal division of labour whereby women have traditionally tended to be concentrated in communally demanding roles and men in agentically demanding roles. People's inferences of communal and agentic characteristics that underly typical work role behaviours

of men and women yield gender stereotypes, which can be likened to the distinctions of 'getting along' versus 'getting ahead' as performance criteria, with 'getting ahead' performance criteria being more associated with leadership emergence and the stereotype of leaders as masculine. Dr O'Shea and colleagues propose that getting ahead performance criteria are emphasised to a much greater extent in academic performance and promotion contexts, thus disadvantaging women.

This has substantial implications for how performance, promotion and hiring decisions are made about academic roles. Primarily, it means that male and female academics are not evaluated in a similar way for the same behaviours. It also means that when faced with performance criteria that emphasise more stereotypical masculine (agentic) behaviours, females are disadvantaged.

If they display more communal behaviours, they are perceived to not meet the performance criteria, and if they display more agentic behaviours, they are perceived to act out of line with their gender stereotypes and are also disadvantaged. The project will investigate these issues in a series of experimental studies.



Goal 6: Clean Water and Sanitation

Ensure availability and sustainable management of water and sanitation for all

Getting ahead versus getting along

Research by KBS scholars has led to a machine learning (ML) tool that successfully predicts the antibacterial capacity of nanoparticles (NPs). The emergence and rapid spread of multidrug-resistant bacteria strains are a public health concern.

This emergence is caused by the overuse and misuse of antibiotics leading to the evolution of antibiotic-resistant strains. Nanoparticles (NPs) are objects with all three external dimensions in the nanoscale that varies from 1 to 100 nm. Research on NPs with enhanced antimicrobial activity as alternatives to antibiotics has grown due to the increased incidence of nosocomial and community acquired infections caused by pathogens.

Machine learning (ML) tools have been used in the field of nano informatics with promising results. Because of evident achievements on a wide range of predictive tasks, ML techniques are attracting significant interest across a variety of stakeholders.

The data were compiled after a literature review of sixty articles and consist of key physico-chemical (p-chem) properties and experimental conditions (exposure variables and bacterial clustering) from in vitro studies.

Following data homogenization and pre-processing, we trained various regression algorithms, and we validated them using diverse performance metrics.

Finally, an important attribute evaluation, which ranks the attributes that are most important in predicting the outcome, was performed.

The attribute importance revealed that NP core size, the exposure dose, and the species of bacterium are key variables in predicting the antibacterial effects of NPs based on their p-chem properties and diverse exposure settings. This concept also aids the safe-by-design paradigm by incorporating functionality tools.

• Mirzaei, M., Furxhi, I., Murphy, F. and Mullins, M., 2021. A Machine Learning Tool to Predict the Antibacterial Capacity of Nanoparticles. Nanomaterials, 11(7), p.1774. DOI: https://doi.org/10.3390/nano11071774



Goal 7: Affordable and Clean Energy

Ensure access to affordable, reliable, sustainable and modern energy for all

Dr Sheila Killian of KBS was part of an inter-disciplinary research team led by Prof Colin Fitzpatrick of the Department of Electronic and Computer Engineering at UL addressing reuse and recycling of both batteries used in electric vehicles and solar panels.

The project was funded by the Irish Environmental Protection Agency. As well as academic outputs, the project involved frequent reports to government and government-mandated bodies, increasing the policy impact of the work. The findings of this project and the associated report to the funder have the potential to streamline and make more efficient Ireland's strategy in this area.

• Fallah, N; Fitzpatrick, C; Killian, S; Johnson, M (2021) 'Endof-Life Electric Vehicle Battery Stock Estimation in Ireland through Integrated Energy and Circular Economy Modelling'. Resources Conservation and Recycling, 174





Goal 8: Decent Work and Economic Growth

Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Technology and the quality of work

A research team from the Department of Work and Employment Studies (Michelle O'Sullivan, Caroline Murphy, Jonathan Lavelle, Lorraine Ryan, Juliet MacMahon and Tony Dundon) has engaged in a research partnership with the Financial Services Union to investigate the impact of technology on job quality in the financial services sector. The research, involving interviews and a survey of over 1,000 employees, traversed the period before and after COVID and took place in a context of significant organisational restructuring and job loss in banking.

The research has led to three reports: employees' experiences of remote working during COVID on employees, employees' experiences and attitudes towards technological surveillance of their work; and the impact of technology on skills, workload and job security.

The research found concerns over work extension which refers to the encroachment of work on private time through ever-present connectivity and this influenced the union's objectives and organising initiatives including a campaign seeking regulation on employees' right to disconnect from work technology.

The unions' lobbying successfully led to the Government launching a Code of Practice on the Right to Disconnect in 2021. The Code of Practice is a statutory set of guidelines which provides employees with a right to disengage from work and work-related electronic communications and a right for them not to be penalised for refusing to attend to work matters after normal working hours.

Other findings from the research were that employees were positive about remote working but were concerned about the lack of employer financial support towards expenses of working from home and the union has initiated a campaign seeking employers to provide financial assistance to employees.



Policy-making for living standards

Dr Ciaran Casey from the Department of Economics published the book 'The Irish Department of Finance, 1959-1999' which examines the transformation of the Irish economy over four pivotal decades.

In 1970, Irish living standards were just over half those of its neighbours. It had suffered repeated economic crises, and policymakers saw little prospect of achieving sustained growth. By the turn of the millennium, it had caught up with the rest of Western Europe, with enormous social and economic benefits. The book gives unique access into the policymaking process in Ireland's most powerful policymaking body, and new insights into how it achieved this historic shift. The details of the book are available here:

The Irish Department of Finance1959-99 (ipa.ie)

Job quality for older women

KBS faculty have undertaken important research on the job characteristics of a cohort we know little about - older female part-time workers. To date research on female part-time employment has mainly focused on younger women with few studies addressing part-time employment by older women. These workers are of interest as they have high employment rates and explored whether older female part-time workers are likely to be more vulnerable because of the combination of age, gender and employment status. Findings reveal notable differences between this cohort's job characteristics compared with those of other part-time workers and older women working full-time. These job characteristics include low-wage employment in poor-quality jobs, suggesting that job quality is influenced by age, gender and employment status, raising concerns regarding the likelihood for precarious employment among this cohort. In addition to individual-level consequences, this study's findings have major implications for public and organisational policy on part-time labour market participation, highlighting the need for a new research agenda on older workers. The findings contribute to advancing our knowledge of issues related to SDG 5 and SDG 8.

- O'Sullivan, M., Cross, C., & Lavelle, J. (2021). 'Good or bad jobs? Characteristics of older female part-time work'. Industrial Relations Journal, 52 (5), 423–441.
- O'Donnell, N., Shannon, D., Sheehan, B., 2021. Immune or at-risk? Stock markets and the significance of the COVID-19 pandemic, Journal of Behavioral and Experimental Finance. June 2021, p.100477. IF: 1.37. Q1 Finance. DOI: 10.1016/j. jbef.2021.100477



Goal 9: Industry, Innovation & Infrastructure

Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

Multinationals and Ireland

For over 20 years, University of Limerick scholars have conducted highly regarded empirical research on multinational companies (MNCs) in Ireland including on the factors that contribute to their location in Ireland and the impact of labour and human resource management (HRM) practices on the attraction and retention of foreign direct investment. Ireland is a unique site for the study of MNCs because it is one of the world's most FDI-intensive economies, hosting most of the global leading medical devices, pharmaceutical, information technology and financial companies. A recent project by scholars (Prof. Patrick Gunnigle, Dr Jonathan Lavelle) has explored how subnational institutional actors facilitate location capital for firms and found that that subnational location capital, defined as the economic and social assets accessible through relationships within a subnational location, enable firms to derive advantages via subnational engagement.

- Monaghan, S., Gunnigle, P. & Lavelle, J. (2020) 'Subnational Location Capital: The Role of Subnational Institutional Actors and Socio-Spatial Factors on Firm Location'. British Journal of Management, 31 (3), 618-635.
- Lavelle, J., Gunnigle, P. and Monaghan, S. (2020) "HR function at MNC subsidiary level: Mediating challenges and tensions" in T. Dundon and A. Wilkinson (Eds) Case Studies in Work, Employment and Human Resource Management, Cheltenham: Edward Elgar.
- Ryan, L. and Lavelle, J. (2021) 'Human Resource Management within a Trade Union Context' in E. Parry, M.J. Morley and C. Brewster (Eds) The Oxford Handbook of Contextual Approaches to Human Resource Management, New York: Oxford University Press.



Autonomous vehicles

Autonomous vehicles (AVs) challenge technology and design in many ways. Their deployment on roads raises urgent legal, liability and ethical questions. Members of the Emerging Risk cluster in KBS undertake research in risk and liability that addresses these challenges. Their research impacts industry competitiveness and expanded industry networks with numerous public and private partners through three EUfunded projects.

- Sheehan, B., Murphy, F., Kia, A., Kiely, R., 2021. A quantitative bowtie cyber risk classification and assessment framework, Journal of Risk Research. DOI: 10.1080/13669877.2021.1900337
- Murphy, Finbarr, Ainaz Alavi, Martin Mullins, Irini Furxhi, Arash Kia, and Myles Kingston. "The risk perception of nanotechnology: evidence from Twitter." RSC advances 12, no. 18 (2022): 11021-11031. Additional research contributing to SDG9:
- Palcic, D., Reeves, E., Flannery, D., Geddes, R. (2022) Public-private partnership tendering periods: an international comparative analysis, Journal of Economic Policy Reform, 25(2): 156-172
- Albalate, D., Bel, G., Gradus, R. and Reeves, E. (2021) Remunicipalization of Local Public Services: Incidence, Causes and Prospects, International Review of Administrative Sciences, 87(3): 419-424.
- Garrido-Prada, P., Lenihan, H., Doran, J., Rammer, C., & Perez-Alaniz, M. (2021). Driving the circular economy through public environmental and energy R&D: Evidence from SMEs in the European Union. Ecological Economics, 182: 10688
- Perez-Alaniz, M., Lenihan, H., Doran, J., & Hewitt-Dundas, N. (2022). Financial resources for research and innovation in small and larger firms: Is it a case of the more you have, the more you do?, Industry and Innovation, doi.org/10.1080/13662716.2022.2036597



Goal 10: Reduced Inequalities Reduce inequality within and among countries

Reduced inequality through tax policy reform

The ARC Accountability Research Cluster has a strong focus on the role of the tax system in addressing inequality, both through wealth concentration and redistribution, and as a source of funding for government to deliver on the social contract. In large part, this core strength was resourced by an international project funded by the EU's Horizon 2020 addressing inequality through the reform of tax policy and practice. The University of Limerick team, based in the Kemmy Business School, addressed the role of tax practitioners and advisors in delivering on responsible and ethical tax systems. Further work is in development on gender issues in tax practice, and on ethics among tax professionals.

- Killian, S., O'Regan, P., Lynch, R., Laheen, M., & Karavidas, D. (2022). Regulating havens: The role of hard and soft governance of tax experts in conditions of secrecy and low regulation. Regulation & Governance, 16(3), 722-737.
- Killian, S., O'Regan, P., Lynch, R. and Laheen, M. (2021) Tax Experts' Response to Regulatory and Institutional Triggers, In Combating Fiscal Fraud and Empowering Regulators Bringing Tax Money Back into the COFFERS; BRIGITTE UNGER, LUCIA ROSSEL, AND JORAS FERWERDA(Ed.) Oxford, United Kingdom: Oxford University Press pp. 215-235
- Killian S.; O'Regan V.; O'Regan P. (2022) "Uncomfortable territory': personal and organisational values in the tax profession'. Accounting Forum, (in press). (ABS 3-star)
- Killian, S. (2021). Sovereign or not sovereign: Tax policy, Ireland and the EU. In Ireland and the European Union (pp. 43-56). Manchester University Press.



Goal 11: Sustainable Cities and Communities

Make cities and human settlements inclusive, safe, resilient and sustainable

Transport for sustainable cities

The arrival of technologically-advanced- and self-driving vehicles (CAVs) to the road transport ecosystem will fundamentally change the way in which we drive, and the way in which vehicles will collide. Although this changing ecosystem will introduce significant safety, fuel efficiency, and economic growth benefits, it will also introduce new challenges that have so far gone underexplored. Research by a team of KBS researchers (Dr Darren Shannon, Dr Tim Jannusch, Prof. Finbarr Murphy, Prof. Martin Mullins) sought to explore the impact these vehicles will have from i) a risk perspective, and ii) from a liability perspective. Their investigations on smartphone behaviours amongst young drivers revealed that riskier behaviours in this context, like speaking on a hand-held phone, were associated with egregious behaviours in a wider driving context, such as overtaking on the inside of the car ahead, speeding, driving without a valid licence and driving while intoxicated.

Their research was publicised in twenty-five international news outlets and led to a number of regional radio interviews with a combined listenership of over 300,000. The investigations on road safety forecasting methods proposed a new way of forecasting crash rates over the coming years that outperformed conventional methods, which could be used by policy officials seeking to set reasonable yet optimistic safety targets. Dr Shannon was invited on to a world-leading Data Science podcast ('Data Skeptic') to speak about how his findings could benefit local and regional authorities worldwide. Lastly, the team sought to investigate the impact that self-driving cars could have on insurance being charged to motorists. Using a swathe of statistics on insured losses for humans vs. autonomous vehicles, they formulated reasonable scenarios for how insurance may evolve as an industry. The paper became one of the journal's most highly cited studies for 2021.

- Jannusch, T., Shannon, D., Völler, M., Murphy, F., Mullins, M. (2021) Smartphone Use While Driving: An Investigation of Young Novice Driver (YND) Behaviour Transportation Research Part F: Traffic Psychology and Behaviour, 77, pp.209-220. DOI: https://doi.org/10.1016/j.trf.2020.12.013
- Shannon, D., Fountas, G. (2021) Extending the Heston Model to Forecast Motor Vehicle Collision Rates, Accident Analysis & Prevention, 159, p.106250. DOI: https://doi.org/10.1016/j.aap.2021.106250
- Shannon, D., Jannusch, T., David-Spickermann, F., Mullins, M., Cunneen, M., Murphy, F. (2021) Connected and Autonomous Vehicle Injury Loss Events: Potential Risk and Actuarial Considerations for Primary Insurers, March 2021, Risk Management and Insurance Review. DOI: https://doi.org/10.1111/rmir.12168
- Jannusch, T., David-Spickermann, F., Shannon, D., Murphy, F., Völler, M., Mullins, M. (2021) Cars and Distraction: How to Address the Limits of Driver Monitoring Systems and Improve Safety Benefits using Evidence from German Young Drivers, Technology in Society https://doi.org/10.1016/j.techsoc.2021.101628
- Cunneen, M. (2021) Could Autonomous Vehicles Become Accidental Autonomous Moral Machines? Culturally Sustainable Social Robotics, DOI: 10.3233/FAIA200958
- McDonnell, K., Murphy, F., Sheehan, B., Masello, L., Castignani, G. and Ryan, C., 2021. Regulatory and Technical Constraints: An Overview of the Technical Possibilities and Regulatory Limitations of Vehicle Telematic Data. Sensors, 21(10), p.3517. DOI: https://doi.org/10.3390/s21103517
- Tsui, W., Murphy, F., Xu, Xian and Xing, W. (2021) Dynamic Communication and Perception of Cyber Risk: Evidence from Big Data in Media, Computers in Human Behavior, DOI: S0747563221001746
- Mullins, M., Holland, C., Cunneen, M. (2021) Creating Ethics Guidelines for Artificial Intelligence and Big Data Analytics Customers: The Case of the Consumer Insurance Market, Patterns, Volume 2, Issue 10. DOI: https://doi.org/10.1016/j.patter.2021.100362
- Jannusch, T., David-Spickermann, F., Shannon, D., Murphy, F., Cunneen, M., Furxhi, I., Mullins, M. (2021) "Vehicle automation, Surveillance and Privacy Beyond the Panopticon. An exploration of 720-Degree Observation in Level 4 ADAS Systems.", Technology in Society, 66, DOI: 101667.10.1016/j. techsoc.2021.101667
- Jannusch, T., Shannon, D., Völler, M., Murphy, F., Mullins, M. (2021). Young Novice Drivers (YND) Smartphone Use: Understanding and managing the risk. 53rd annual meeting of the Universities' Transport Study Group (UTSG).



Positive City Exchange

The Department of Economics, through their involvement in the +CityxChange H2020 project, contributed to publications on energy citizenship as part of a cross-European group of researchers exploring how to decarbonise Europe's energy system. Energy citizenship is proposed as a new mode of active citizenship to emerge through implementation of Europe's clean energy for all Europeans package – the energy rule book designed to deliver the EU's Paris Agreement commitments to reduce greenhouse gas emissions.

- van Wees, M., Revilla, B. P., Fitzgerald, H., Ahlers, D., Romero, N., Alpagut, B., Kort, J., Tjahja, C., Kaiser, G., Blessing, V., Patricio, L., Smit, S. (2022). Energy Citizenship in Positive Energy Districts—Towards a Transdisciplinary Approach to Impact Assessment. Buildings, 12(2), 186.
- van Wees, M., Revilla, B. P., Fitzgerald, H., Ahlers, D., Romero, N., Alpagut, B., Kort, J., Tjahja, C., Kaiser, G., Blessing, V., Patricio, L., Smit, S. (2021). Energy citizenship in new energy concepts. Environmental Sciences Proceedings, 11(1), 27.
- Ryan, Annmarie, and Gayle McPherson. "Legacies of failure to win the city of culture: Liminality, civicism and change." City, Culture and Society (2022): 100488.
- Nic Ghabhann, Niamh, Annmarie Ryan, and Stephen Kinsella. "Limerick City Stories: The European Capital of Culture Bid Process and Narratives of Place." Festivals and the City. University of Westminster Press: Westminster (2022): 169. Additional research contributing to SDG11:
- Casey, K. O'Malley, L. and Lichrou, M. 2020. Prefiguring Sustainable Living: An Ecovillage Story. Journal of Marketing Management, 36(17-18), 1658-1679.



Goal 12:

Responsible Consumption and Production

Ensure sustainable consumption and production patterns

Consumers in Society

The Consumers in Society research cluster engages with and contributes to Sustainability discourse and policy. Dr Maria Lichrou and Prof Lisa O'Malley are involved in research projects with a focus on sustainable production and consumption (SDG12) and Sustainable Cities and Communities (SDG11). Research examined the potential of sustainable communities as spaces where alternative modes of production and consumption are modelled. Joining conversations on sustainable futures within marketing and consumer research, the research highlights the role of experimental and discursive spaces in imagining and practicing a sustainable society. The prefiguration of sustainable living enables experience and moves possibility beyond rhetoric, because people understand what they can see, feel, and taste.

This perspective contributes to an understanding of sustainability beyond either a narrow focus on individual consumer behaviour or an abstract focus on macro-level structures.

Funded research projects by the Environmental Protection Agency and CIRCULÉIRE (the national platform for circular manufacturing) examine the use and disposal of consumer electronics and the mainstreaming of the circular economy. Research on consumer electronics provides insight into consumer and business practices towards waste from electrical and electronic equipment (WEEE).

Consumers tend to store devices that are no longer in use, and disposal takes place at "critical moments" with a high "push factor" for materials to enter complementary streams. Recommendations include increasing the convenience and visibility of recycling solutions to normalise the practice of WEEE recycling; provide repair, "preparation for reuse" and reuse opportunities to assist consumers and businesses to make connections to appropriate treatment rather than waste avoidance through storage; explore incentives and penalties to facilitate mandatory handover and the direction of WEEE to appropriate recycling systems from skip hire companies, waste collectors and scrap metal facilities.

Research on the mainstreaming of circular economy aims to detail current approaches to circularity; review different business models; understand the role of the end user; develop a case study exemplar; extrapolate the key implications for mainstreaming circularity in the Irish context.



Consuming culture

Research on the economic and productive performance of the live performing arts firms in eleven EU countries finds that the total productivity improvements in this sector are possible through both increasing resource efficiency but also through innovation and technological progress in the cultural sector. Moreover, in contrary to the common wisdom on its negative effects on firm efficiency, public spending on culture contributes to higher resource efficiency, and hence to the sustainable production and consumption in the live performing arts sector.

• Castiglione, C., Infante, D., Zieba M. (2022). Public support for performing arts. Efficiency and productivity gains in eleven European countries, Socio-Economic Planning Sciences, available online first: https://doi.org/10.1016/j.seps.2022.101444

Additional indicative publications contributing to SDG12:

- Davies, I., Oates, C. J., Tynan, C., Carrigan, M., Casey, K., Heath, T., & Wells, V. (2020). Seeking sustainable futures in marketing and consumer research. European Journal of Marketing, 54(11): 2911-2939
- Casey, K., Lichrou, M., & O'Malley, L. (2020). A Reimagining: Prefiguring Systems of Alternative Consumption. ACR North American Advances.
- Ryan-Fogarty, Y., Casey, K., Coughlan, D., Lichrou, M., O'Malley, L., & Fitzpatrick, C., Report No 366: An Investigation into WEEE Arising and Not Arising in Ireland (EEE2WEEE). Environmental Protection Agency, February 2021.



Goal 13: Climate Action

Take urgent action to combat climate change and its impacts

Uganda is a country significantly impacted by climate change, resulting in increased drought, floods and landslides. This poses challenges for agriculture in Uganda, with a knock-on effect on food security and rural life.

The agricultural field in Uganda is remarkably diverse, with many smallholders as well as larger farmers, and diverse forms of expertise ranging from foreign NGOs to local herbalists. With the immediate threat of climate change, knowledge-sharing between this diverse groups urgently needs to be improved. KBS PhD Scholar, Rebecca Tumwebaze addresses this issue in her PhD research.

Rebecca is part of the Human Rights and Development Research Cluster. Her core research question is how to enhance knowledge sharing and co-creation of contextual sustainable agriculture knowledge among the heterogenous agriculture actors of Uganda. She has undertaken an ambitious study drawing on 232 respondents in Uganda including government officials, international NGO staff, local herbalists, small and large farmers and agricultural advisors and experts.

Based on this, she has used Multiple Correspondence Analysis to map the connections and flows of information between these diverse groups and is in the process of developing a model showing free flows and blockages to communication and learnings which will build towards a better system of information flow.

This will empower Uganda's farmers to take more effective action within their own spheres of influence to address that impact of climate change on their work.



Goal 14: Life below Water

Conserve and sustainably use the oceans, seas and marine resources for sustainable development

Over the reporting period, there were no active research projects in KBS relating to Goal 14.





Goal 15: Life on Land

Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

Dr. John Garvey is Principal Investigator on a project that investigates new financial arrangements that are intended to incentivise land use change on the island of Ireland. Achieving net-zero GHG emissions from the AFOLU (agriculture, forestry and other land use) sector by 2050 will be immensely challenging.

A set of indicative, stylised land use change scenarios for AFOLU suggests that there is almost certainly no pathway to net zero GHG emissions that does not involve all of the following actions: effective abatement of livestock emissions (circa 30% emissions decoupling) plus ruminant livestock number reduction (up to 30% considered), ambitious organic soil rewetting (up to 90% of drained organic soils considered), large areas of afforestation (up to 875,000 ha of new forest by 2050 considered).

FINIFOR examines the structure of environmental impact bonds to nudge Irish landowners from intensively managed grasslands, towards afforestation. Aspects of behavioural economics are drawn upon to further understand how new financial arrangements should be framed to accelerate AFOLU transition.

This project is funded by the Department of An Taoiseach through the Shared Island Initiative. Collaborators include Queen's University Belfast, Newcastle University and John Hopkin's University as well as industry participation from farmer representative organisations (ICMSA, Rep of Ireland, UFU, Northern Ireland) and financial institutions (Swiss Re, European Investment Bank).



Goal 16: Peace, Justice and Strong Institutions

Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

Banking institutions

A functioning, stable banking system acts as a valve for the availability of credit to the economy. Given ongoing crises relating to climate, war, and political uncertainty, fuelling financial and social frailty, bank regulation effectiveness ensuring stability has never been more significant. The failings of bank risk management were laid bare in the events of the financial crisis (2007-2009), including under-capitalisation, excessive leverage, and neglect of liquidity risk. Critics argue that a form of bank self-regulation prevailed. Regulatory capital is designed to act as a buffer so that bank losses are absorbed and do not spill over into the domestic economy. However, the experienced nationalisation of some private banks and the socialisation of bank losses significantly damaged the credibility of the bank regulatory framework. This prompted a major overhaul of bank regulation. We examine the effectiveness of this regulatory reform to deliver a sustainable and stable banking system, with accountability to both societal and economic interests.

- McCullagh, O., Killian, S. and Cummins, M., (2022). Decoupling the internal and regulatory role of VaR. Journal of Banking Regulation, https://doi.org/10.1057/s41261-022-00199-z
- McCullagh, O., Cummins, M. and Killian, S., (Accepted 2022). The Fundamental Review of the Trading Book: Implications for portfolio and risk management in the banking sector. Journal of Money, Credit and Banking.

The World Bank developed the Pandemic Emergency Financing Facility (PEF) to provide 'surge funding' to developing countries for health finance in the event of a pandemic. We argue that PEF is a form of financialisation that creates financial solutions for areas of society previously not considered marketisable. We examine whether the accounting technology underpinning this structure is value-leaden, embedding economic rationalities that normalise economic rationalities and the speculative characteristics of financial markets. Furthermore, we examine the accountability of the PEF structure and by extension, the supporting institutions.

This type of financial vehicle attempts to make the catastrophe of a pandemic calculable and in so doing, must also make actors accountable. We examine how the accounting technology allocates risks, benefits, and costs using a technologies of humility framework that recognises the precarity of the populations addressed within this structure.

• McCullagh, O. (2021) 'Critical evaluation of the World Bank Pandemic Emergency Financing Facility (PEF) structure' 33rd IAFA Annual Conference, Munster Technological University (MTU), Cork



Tax justice

Prof. Elaine Doyle has sought to re-examine tax practitioner research. The role of tax practitioners has been explored in the tax compliance literature, but to date has not featured prominently in tax justice discussions. Taxation serves a vital role in any economy. Though challenging to measure, the estimated loss in global tax due to non-compliance is extensive and it results in considerable damage to society at a global level.

One important dimension of noncompliance - the questionable tax conduct of large, high-profile multinational companies – has historically generated little attention outside the tax field. In recent years, however, public awareness has grown, in some cases leading to public protests, and tax compliance behaviour has generated increased interest from the media and NGOs. Among the most critical harms from noncompliance now drawing careful consideration is its impact on "tax justice". Large scale aggressive tax avoidance and tax evasion which undermine national tax revenues lie at the heart of tax injustice.

Tax practitioners, as the intermediaries that sit between taxpayers and the tax authorities, are frequently identified as the architects of the convoluted transactions that lead capital to flow from higher to lower tax jurisdictions or that exploit loopholes in domestic legislation to reduce clients' tax burdens. Thus positioned, tax practitioners are critical actors in the tax compliance process and therefore central to any debate on international and domestic tax justice.

Prof. Doyle's research supports new insights and recommendations for enhancing tax justice both nationally and internationally. Relatedly, the paper incorporates work on whistleblowing and corruption in the context of tax practitioners to flesh out promising options for supporting tax justice.

• Doyle, E. (2022). Encouraging Ethical Tax Compliance Behaviour: The Role of the Tax Practitioner in Enhancing Tax Justice, Law and Contemporary Problems (Duke Law), forthcoming.

Additional research advancing the goal of strong institutions:

- Flynn A., Birdthistle N. (2021), 'The Netherlands'. In: Bustamante S., Pizzutilo F., Martinovic M., Herrero Olarte S. (eds) Corporate Social Responsibility and Employer Attractiveness. CSR, Sustainability, Ethics & Governance. Springer, Cham. https://doi.org/10.1007/978-3-030-68861-5_7
- Birdthistle N., Flynn A. (2021) 'Ireland'. In: Bustamante S., Pizzutilo F., Martinovic M., Herrero Olarte S. (eds) Corporate Social Responsibility and Employer Attractiveness. CSR, Sustainability, Ethics & Governance. Springer, Cham. https://doi.org/10.1007/978-3-030-68861-5_21
- Ruth Lynch won competitive funding from the Kemmy Business School in 2022 to conduct research on a project entitled "The perceived trustworthiness of Irish charities, and the impact of good corporate governance adherence in the non-profit sector".



Goal 17: Partnerships for the Goals

Strengthen the means of implementation and revitalize the global partnership for sustainable development

Dr Annmarie Ryan has conducted extensive international research with international partners on modes of partnership between academic institutions and the private sector, within a PRME framing. Some recent outputs from the work include:

- Hauser, Christian, and Annmarie Ryan. "Higher education institutions, PRME and partnerships for the goals: retrofit labelling or driving force for change? "Sustainability Accounting, Management and Policy Journal (2021).
- Ryan, Annmarie, and Christian Hauser. "Reflecting on the role of academia–private sector partnerships in moving forward with the SDGs." Transitioning to (2020): 83.





We will interact with managers of business corporations to extend our knowledge of their challenges in meeting social and environmental responsibilities and to explore jointly effective approaches to meeting these challenges.

KBS engages with variety of stakeholders, communities and other groups ranging from our students to our external partners and collaborators. This cooperation takes place at the local, national and international levels. In reflecting on the nature and scope of partnership activity within the school we see a range of bottom up as well as top down supported institutionally driven work (Ryan and Houser, 2020)

Local action

Several valuable partnerships have been created in the hinterland of the Business School, some of which are centred on research, while others focus on social impact, social inclusion and community engagement in Limerick City and County and the broader Mid-West Region. The first prominent example of such collaboration is Social Impact Ireland (www.socialimpactireland.ie). This is a consortium to help the creation and growth of businesses for social impact consisting of Nexus, Kemmy Business School, Ludgate Hub, Kerry, Clare Local Development Company, and corporate partners.

This collaboration resulted in securing of funding under Regional Enterprise Innovation Scoping Scheme (REISS) 2022 for innovative initiatives that have the potential to make a significant impact on enterprise development in a region, across regions or nationally. The focus of our funded project is an 'Bridging the 'Impact Space' between traditional and social businesses to further advance financial return & investment.'

This collaboration also secured funding under the Government funded Awareness Raising Initiatives for Social Enterprises (ARISE) with the objective of enhancing the awareness of social enterprises and their multiple impacts as a means of solving the challenges of the SDGs. This resulted in the creation of an Impact Trail workshop sessions around Ireland and a series of promotional and awareness creation workshops for students and those interested in starting social enterprises.

Another example is Paul Partnership (www.paulpartnership.ie) which is a multi-sectoral partnership company promoting social inclusion in Limerick City. Dr Briga Hynes sits on the Research and Evaluation Group Advisory Committee providing input and oversight on a range of research projects in the areas of homelessness, disadvantaged youth projects, after school support for pupils and families, migrant population needs etc. Similarly, Limerick City Build (LCB) is a social enterprise based in Limerick City and it engages with local communities that have been disadvantaged by high unemployment. It is led by Dr John Heneghan from the Department of Accounting and Finance in KBS. In the past two years the activities of LCB have upon reflection by the board of directors now deemed to be aligned with the UN Sustainability Goals. Although LCB has a small employment base of eight

employees and a limited annual budget of €45,000, its activities can now be described under the umbrella term of Environmental Social and Governance and presented as indicators of sustainable performance. LCB has been fortunate to receive assistance from local organisations who recognise and support its ethos. LCB embraces the Ruskin's motto of "Local is logical".

Moving into the health sector and collaborating with members of Allied Health in ULHG and the Heath Sciences Academy, Dr Nuala Ryan in the Department of Management and Marketing in KBS, co-designed and delivered an Interprofessional Education Pilot running on 12-13 April, 2022 which was exploring shared and distributed leadership practices.

The relationship with the Limerick local authority further provides a platform for subsequent engagements between faculty and council staff. For example, in the Digital Futures Lab 2021 the team worked closely with CityXchange and representatives from LCCC who acted as client for the lab, framing the challenge of 'Decarbonising Limerick by 2050".

Alan Dooly, Director of Digital Strategy at LCCC has since collaborated with Dr Annmarie Ryan further in co-designing a live challenge on a similar thematic of decarbonisation this time on a newly designed module to support the development of T-Shape capabilities which included over 60 learners from across 6 post graduate programmes (KBS + Science and Engineering faculties). This evidences an example of cross faculty engagement with a focus on the making a positive impact on the city and region.

Other partnerships are contributing both to the research and community development by providing the environmental-friendly solutions to make cities and human settlements inclusive, safe, resilient and sustainable. Limerick City and County Council have partnered with the Department of Economics in KBS on a series of research projects (https://citizeninnovationlab.ie) that explore how Limerick city can become climate neutral. The Positive City Exchange (+CityxChange) H2020 project, now in its fourth year of implementation, focuses on the development of a structured approach to city clean energy transitions through the creation and replication of Positive Energy Blocks and Districts.

International Spillover

The +CityxChange project views these transitions as complex socio-technical transformations, where progress towards city climate goals depends not just on the development and adoption of new technological solutions, but also on how society organises around these. For this reason, the +CityxChange consortia has worked closely with municipalities across Europe, to develop approaches to engage citizens and urban stakeholder in this process of change.

Helena Fitzgerald, a Research Fellow at the Department of Economics, led an action research process with the Smart City and Communities lighthouse cities Limerick and Trondheim (Norway), Fellow Cities, Alba Iulia (Romania), Pisek (Czech Republic), Võru (Estonia), Smolyan (Bulgaria) and Sestao (Spain), and other partners, to develop CommunityxChange – six frameworks to enable top-down and bottom-up processes of engagement.

CommunityxChange focuses on meaningful and continuing engagement to allow stakeholders from across society to participate and develop the sense of ownership needed to become a sustainable, climate-neutral economy and society by 2050.

The CommunityxChange approach addresses inclusive and sustainable urbanization as one of the targets of the SDG11. In addition, through +CityxChange implementation in Limerick, an open innovation ecosystem and a geographical area for experimentation known as an Innovation Playground was initiated and is now incorporated in the city's Decarbonisation Zone. Implementation of the +CommunityxChange Bold City Vision framework by Limerick City and County Council included localising the UN SDGs and aligning policies contained in the City and County Development Plan 2022-2028 to the SDGs.

Technology outcomes of the project include a digital twin of Limerick city centre which incorporates a Decision Support Tool (DST) to model decarbonisation scenarios to 2050; a novel tidal turbine to generate renewable energy in the shallow tidal waters of the Shannon; and an EMaas App in alpha form. These innovations have emerged through the implementation of the CommunityxChange citizen-centric approach to innovation, a tangible outcome of which is the Citizen Innovation Lab, described later in this report.

National impact

KBS has a long-standing partnership with the Revenue Commissioners, Ireland's taxing authority. The partnership facilitates dialogue on sustainability and responsibility in a tax context and enables progress towards efficient and fair tax collection, which supports sustainable public services for Irish society. The work done with the Revenue Commissioners through the KBS National Centre for Taxation Studies covers a wide range of issues, enabling Revenue staff to better understand and predict taxpayer behaviour, use data analytics to assess risk, identify and implement key corporate governance initiatives and understand key national and international taxation trends. Students on the partnership programmes are enabled to respond to the changing international taxation landscape and contextualise developments at the UN, OECD, European and wider international levels, all of which have an impact on the Irish tax system and its administration.

Another project which builds on the results of +CityxChange is Smart Building Living Lab (SMARTLAB) that aims to explore the adoption of a Smart Readiness Indicator (SRI) for Ireland's buildings. The SRI was included in the 2018 revision of the European Energy Performance of Buildings Directive. It measures the capacity of buildings to take up smart services that can optimise building performance and energy efficiency, respond to signals from a future decarbonised energy grid and improve how buildings can respond to occupant need. The project addresses Targets 7.1, 7.2 and 7.3 of SDG7. The Department of Economics in KBS secured funding for SMARTLAB in December 2021 through the Sustainable Energy Authority of Ireland's Research, Development and Demonstration programme. They lead a consortium that includes Limerick City and County Council and industry partners. Prof. Stephen Kinsella of the Department of Economics in KBS is the Principal Investigator of both +CityxChange and SMARTLAB. Implemented as a policy living lab through the Citizen Innovation Lab, SMARTLAB will work directly with building owners and occupiers, and with other stakeholders to generate data and insights to inform SRI adoption in Ireland. It will examine financial and technical barriers to the deployment of smart building technologies, create a framework for upgrading existing buildings to be smart, and explore the use of DIY sensor installations and off-the-shelf components to maximise the accessibility of these technologies. 50-100 buildings in Limerick's Decarbonisation Zone will have sensors installed and will demonstrate smart services, including an energy management service to deliver an anticipated 10% reduction in energy use.

Working with schools

Student engagement is essential part of KBS commitment to responsible, ethical and sustainable education. At the KBS Exploration Day, the School welcomed primary school pupils (8 -11years) from socially and economically disadvantaged communities to participate took part in an interactive session on Entrepreneurial and Creative Thinking - be an Entrepreneur for a Day. Students were given an overview of ways to generate innovative ideas through fun team exercises and were tasked with generating and presenting ideas for their own product and company. This provided pupils with a set of transferable skills in being creative, problem solving, building confidence and self-esteem and showing them what they are capable of despite economic and social barriers. Furthermore, KBS and Nexus collaborated with UL Access Office delivered an Entrepreneurship and Creativity immersive bootcamp to over 20 Transition Year students from DEISS schools in 2021 and 2022.

The programme taught students the fundamentals of entrepreneurial and creative action and provided guest speakers and mentoring from KBS faculty and students from the Consulting and Entrepreneurship Society to help them ignite their own ideageneration toolkits and pitch their ideas to a judging panel.

Another excellent example of student work is Sparked project (www.sparked.ie) which designs and delivers an online Youth Development Programme to over 286 Transition Year students with a priority focus on DEISS schools, schools designated that status under the Governments Delivering Equality of Opportunity in Schools (DEIS) across a range of school types. In addition, SparkED provides a range of CV building workshops, building confidence and presentation skills workshops to TY students and work in tandem with teachers and corporate sponsors. Adapting to change and pressure of Covid and an intensifying need for the services of Sparked SparkED our youth leadership programme adapted into an e-learning platform, providing 286 TY students, across seven secondary schools with essential leadership skills. Additionally building on their service innovation the students have created a series of Career talks to provide second level schools with insights into the various career paths.

The above examples illustrate that KBS faculty have developed a range of external partnerships which relate both to research and teaching, and also to numerous community engagements. Indeed, this spirit of connection with the local community and giving back is core to who we are as a business school. Taking a longer-term view, our active engagement with primary and second level students generates a confidence among this cohort that they can be sustainability changemakers.

These are the years in which young people develop values, attitudes and habits which may be long lasting. By exposing them to the narratives and language of sustainability and cementing its importance early on in education, we hope to inform the career choices of these young pupils, and to empower them to take an active role in creating a more sustainable and equitable society.



We will facilitate and support dialogue and debate among educators, students, business, government, consumers, media, civil society organisations and other interested groups and stakeholders on critical issues related to global social responsibility and sustainability.

Kemmy Business School (KBS) is an internationally focused school, and our aim is to foster the communication and collaboration among the faculty members, students, business, government, civil society organisations, and other stakeholders.

Staying connected

Despite the challenges caused by the Covid-19 pandemic, throughout the 2021 and early 2022, numerous conferences and symposia were organised in an online format by KBS faculty members, and these events encouraged further debate among various stakeholders and our school. One good example of such initiatives is the third biennial CSEAR Ireland conference, hosted online in October 2021 by Accountability Research Cluster (ARC) in KBS, chaired by Prof. Philip O'Regan and Prof. Sheila Killian.

CSEAR is an international research network focused on accounting and reporting on social and environmental sustainability issues. Over one hundred participants from twenty-one countries attended, with papers on a wide range of social and environmental accounting and accountability issues including pandemic measures, the role of trust in tax client relationships, accounting for nature and rewilding, accounting and inequality, etc. A highlight was an excellent panel discussion on accountability, inequality with Professors Charles Cho (York University, Toronto), Kathryn Haynes (Northumbria) and Ben Philips, UN advisor and civil society activist, author of How to Fight Inequality. The whole event was very much within the Kemmy ethos, and indeed Jim Kemmy was referenced several times during the day. The quality of attendees is also indicated by the fact that editors or section editors of nine leading accounting and business ethics journals were present, making this a great opportunity for presenting early-stage research. As well as members of the Cluster, several other KBS faculty also presented papers at the conference.

In November 2021, the Kemmy Business School (KBS) at UL hosted the seventh biennial International Symposium on Cross-Sector Social Interactions (CSSI 2020). Due to COVID-19, the conference moved online and was hosted virtually reaching a large gathering of experts (academic and practitioner) on cross-sector social partnerships in Ireland. CSSI 2020 came to Ireland for the first time at a pivotal moment for the UN's sustainable development agenda and the future of cross-sector partnerships. The event played host to over one hundred academics from more than twenty countries, as well as to a range of practitioners, including partnership brokers, NGOs and directors of corporate social responsibility (CSR) in a range of multinational organisations. One of those to speak at the conference was high-profile Ugandan activist and colleague of Greta Thunberg, Vanessa Nakate, who spoke of why Black voices matter in the collective response to the climate crisis. An important aim of the conference was to

enable practice-theory dialogue and harness the expertise of academia to advance practice in this field. The specific theme of the 2020 conference in Limerick was Partnership and Place. "Greater sensitivity to how place constrains and enables organising around issues like climate change can enrich both theory and practice of cross-sector partnerships in settings experiencing inequality and fragility," explained Conference Chair, Dr Annmarie Ryan. Irish Aid was the main sponsor of the event and has focused its support on investing in the next generation of scholars in this field through the provision of a new bursary scheme for doctoral and early-career researchers. The bursary scheme will focus specifically on the role of partnerships in localised responses to the COVID-19 crisis.

Prof. Christine Cross hosted the 14th Annual International Women's Day Conference in the University in 2022 in collaboration with leading employers including Northern Trust, Dell Technologies, Johnson & Johnson and Bank of Ireland. Prof. Cross led panel discussions on 'Breaking the Bias' with female leaders from the engineering and social entrepreneurship fields and on the 'Influence and Power of the Media' with female leaders in national organisations including The Menopause Hub and the Rape Crisis Network. The conference also hosted the foremost clinical psychologist on the topic on gender, resilience and emotional competency and it welcomed the CEO of the Open Doors Initiative, an organisation which provides opportunities to marginalised members of society, who was the keynote speaker on mental illness and barriers to employment.

Dr Briga Hynes in the Department of Management and Marketing in KBS, and colleagues Felicity Kelliher (Munster Technological University) and Dr Ziene Mortimer (Technological University Dublin) organized for the first time a dedicated Social Enterprise Symposium as part of the 2021 Irish Academy of Management (IAM) Annual Conference, Waterford Institute of Technology. The title of the symposium is 'Building a better tomorrow – Bridging the disconnect between policy, practice, education and research in social enterprise symposium.' The objective of this interactive panel session was to explore social entrepreneurship from a multidisciplinary and multi stakeholder lens/perspective by hearing views from different stakeholder perspectives to bridge the divide and identify core areas of concern from policy, research and educational viewpoints.

It consisted of national and international speakers who will guide the development of more integrative studies for funding purposes. In addition, Dr Briga Hynes was invited to act as an evaluator of funding submissions for the Rethink Ireland Impact Regional Funding Programme for the Munster region in 2020 and 2021. This involved evaluating a selection of the social enterprise projects which sought funding from Rethink Irelands Impact Funding Programme which in total was worth €750,000. In addition to cash prizes, the successful applicants are eligible to secure a place on Rethink Ireland's accelerator programme and access a bespoke non-financial supports package that uses expert consultants to help strengthen and scale awarded projects.

In 2021, Limerick's Citizen Innovation Lab was initiated through the Positive City Exchange (+CityxChange) H2020 project collaboration with Limerick City and County Council. Focussed on decarbonisation and sustainable digitalisation, the Lab creates a space where stakeholders from across society can meet and take part in activities to co-create a sustainable future for the city. Located in UL's City Campus, the operation of the Lab is based on a framework for innovation labs developed by Dr Helena

Fitzgerald, a Research Fellow in the Department of Economics. A member of the European Network of Living Labs (ENoLL), the Lab runs a programme of engagement focussed on the city's innovation agenda and operates as a collaboration with the city through the +CityxChange project. In February 2022, shortly after its opening, the Citizen Innovation Lab was the venue for a Symposium on Climate, Investment, and Resilient Cities hosted by Prof. Stephen Kinsella and programmed as part of a visit by the European Investment Bank to Limerick. This event was attended by Master students from the Department of Economics and from the Technological University of the Shannon. There were interesting contributions from the European Investment Bank and Ireland's Department of Finance, at a time of mobilisation for both towards the delivery of the European Green Deal and Ireland's National Climate Objective. Observation of the Citizen Innovation Lab's operation to date indicates a convening function, supporting cross-sectoral dialogue that can explore and activate responses to the societal challenges that we face.

Decarbonising Together is a Creative Climate Action project funded in 2021 by the Department of Environment, Climate and Communications through Creative Ireland. Led by Limerick City and County Council, Decarbonising Together has initiated creative collaborations between community partners and creative practitioners using an open call process developed through the +CityxChange H2020 project. The Department of Economics leads the project within KBS. The five participating communities include Garryowen Community Development Project, Limerick Civic Trust, Limerick Island Community Partners, Meadowbrook Residents Association, and the Munster Indian Cultural Association. The collaborations explore an aspect of decarbonisation relevant to the day-to-day lives of people in Limerick and focus on making and doing together to build capability to enable effective climate action. Implemented through the Citizen Innovation Lab, the project builds on the community-led open innovation approach developed in +CityxChange and it addresses improving education, awareness-raising and human and institutional capacity on climate change mitigation as one of the targets of SDG13.

The highlighted examples of the initiatives, undertaken by faculty members from various departments in KBS, demonstrate the strong commitment of our school to support dialogue and debate in areas related to global social responsibility and sustainability, considering various social and environmental issues.



Part III: Accountability and Future Plans

Accountability and Future Plans

As previously noted, the period covered by this report was dominated by the unexpected duration and severity of the Covid-10 pandemic in Ireland, with resultant government lockdowns and severe limitations on gathering in person. The abrupt move to online teaching and learning, and the need to improve all our processes and practices in this area to achieve scale without compromising pedagogical values was a significant challenge.

Prioritising student wellbeing and learning while pivoting to new ways of working meant that many of the plans we had for this period had to be deferred. At the same time, reflecting on the values of the School through the changes brought on by the pandemic and associated socioeconomic factors have led to some shifts in focus. We learned a great deal through the pandemic and hope to bring these learnings to bear on our focus on sustainability in the new 2023-2028 Strategic Plan.

This section initially explains how our previous plans were delivered, modified or adapted throughout the pandemic period covered by this report, and then sets out our ambitions for the period to 2024.

Objective set in 2020	Progress/evolution
We aimed to undertake a series of mapping exercises as part of the recent move by the University of Limerick to bring the UN Global Goals central to its strategic direction. The original plan was for each faculty, department and centre to be tasked with identifying and building upon existing work to address the UNSDGs and identifying areas where we can impact most. This also involved an ambition to move towards an evidence-based evaluation of SDG impact and will engage in discussion and development of appropriate metrics in this regard.	The focus on SDG implementation across the University has moved to a mission-led approach and KBS faculty, notably Dr. Annmarie Ryan, have contributed significantly to the development of these missions.
Regarding our external partnerships, we planned to explore the PRME Partnership Sweetspot model by Ryan and Hauser (2020) as a framework to map our external engagements.	We continue to explore this model, adapting our process to consider the new modes of collaboration with external stakeholders that have arisen as a result of the pandemic.
We planned to further conduct research on our alumni and the impacts of KBS RME curriculum has had on their careers.	This project was deprioritised over the pe-riod of the pandemic, but the School remains focused on strengthening links with our Alumni, and the recent appointment of a Business Development Manager will assist in this process.

Objective set in 2020	Progress/evolution
We planned to run a one-day workshop for our faculty on writing research-led teaching cases, focused on multi-stakeholder and multidisciplinary business issues related to the Sustainable Development Goals (SDGs).	A series of sessions including brown bag lunches and online meetings were held for KBS faculty to enhance capability in teaching and writing cases relating to the SDGs.
KBS has recognised strengths in foundational areas of enterprise and innovation – opportunity recognition, firm formation, technology feasibility, start-up finance, innovation ecosystem design and development enterprise creation and development, regulatory systems and network building. We planned to lead a UL wide strategic initiative in SDG focussed innovation, enterprise, and entrepreneurship. The aim was to design programmes of teaching, research, commercial and social enterprise that explicitly provide positive direct benefits in economic, social and environment areas simultaneously.	The delivery of Entrepreneurship and Innovation activities adopts a collaborative approach led by KBS and the Nexus Innova-tion Centre working with the Technology Transfer Office, School of Science and Engineering, Education and Health Science, and Arts and Humanities. There is also input from the Consulting and Entrepreneurship Society (ULCES) and UL Enactus student group. Our Entrepreneurship programmes and modules in UL are intercollegiate and trans-disciplinary with modules delivered to students on undergraduate and postgraduate programmes such as International Business; Technology Management; Biomedical Engineering; Aeronautical Engineering; Mechanical Engineering; Equine Science, the MSc Occupational Therapy; MSc Physiotherapy; MSc Speech and Language Therapy and the BSc in Physiotherapy programmes at undergraduate and postgraduate levels.
We planned to deepen our involvement with PRME, and the PRME champions group specifically and to involve more faculty with PRME activities and initiatives.	We have delivered on this plan, with deeper engagement with PRME across faculty, and KBS faculty taking a lead role in the PRME UK & Ireland Chapter (steering committee membership) and the PRME Champions group.
We planned further work to align PRME into all areas of the school's activities, making it core to the organisation and mirrored in our structures. This is part of our ongoing work to build on our Kemmy legacy, to forge our unique identity as Business School.	As noted above, the School's mission and practice continues to align to PRME principles, and these principles inform the strategy of the school, nd the increasing sustainability ambition.

Future Plans

Over the coming two to five years, KBS plans to focus on environmental and social sustainability as a central imperative in our Strategic Plan, 2023-2028. Our plans are to improve our processes internally, with a focus on carbon; with our students through our curricula and student engagement and by partnering in a way that leverages our research potential to address issues such as biodiversity, social inequities and earth sustainability.

In the shorter term, over the coming two years, our ambitions include the following:

- Building on the significant involvement of KBS faculty in developing UL's mission-led approach to SDG-focused sustainability, we will actively contribute to the evolution and delivery of these missions within UL.
- We will complete our submission for Athena Swan Silver Accreditation, a higher level than our current Bronze level, during the next reporting period, further underscoring our commitment to gender equity and inclusion.
- Together with our international partners, we aim to develop and refine the Futures Lab methodology with activities to deploy digital tools and methods to deliver quality and inclusive education on the SDGS through online/virtual means centred on the idea of a cosmo-local approach.
- We will work with the PRME i5 Learning in Leadership Education Programme though its second pilot phase in 2023, exploring with other Champion Schools ways of making our students' learning an experience characterised by meaning, active engagement, a social focus, playfulness and joy.
- We will expand and deepen our SDG-focused research, with an emphasis, post-pandemic, on revitalising and expanding our range of international collaborations.
- We remain both committed to and empowered by the Kemmy legacy, and aim to play our part in social, environmental and global challenges that may present themselves over the coming two years report, and then sets out our ambitions for the period to 2024.



Advancing the cause of responsible management education not only in our own institution, but worldwide.

