

The Pentland Centre for Sustainability in Business

Annual Report
1 Jan 2022 – 31 Dec 2022

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Introduction to the report



I am delighted to present the 2022 Annual Report which, this year, should be read alongside the *Transforming Tomorrow* research and impact report that we have recently published. The two reports complement each other and profile Pentland Centre activities. In particular, the *Transforming Tomorrow* report provides a snapshot of some of the research and impact work undertaken by Pentland Centre members. You can download [*Transforming Tomorrow*](#) from our website. This annual report provides details of our activities for the year, our plans for the next year, our financial report and the publications generated by Pentland Centre members.

In outline, the Pentland Centre seeks to bring three aspects together.

First, the Centre has a vision for a world where business understands, acts upon, and furthers sustainability outcomes. These outcomes include rebuilding the integrity of the ecological systems that provide the basis for fulfilling peoples' needs, and which absorb wastes from our activities. This ambition is articulated by the United Nations' Sustainable Development Goals and is underpinned by the Paris Climate Agreement. Using these ambitions as a benchmark, it is clear that we are collectively far from being sustainable.

Second, we seek to achieve this vision through bringing together colleagues from across Lancaster University who wish to work together to further develop knowledge and its application with policy and practice communities. Ultimately, the purpose of the Pentland Centre is to create more impact than could be achieved through our members working alone.

Third, all this activity is underpinned by financial support provided by our sponsor, the Rubin Foundation Charitable Trust: a Foundation run by the owners of Pentland Group plc. This financial contribution is enhanced through the guidance provided by our Advisory Board, as well as support from our network of external partners.

As the Centre's Director, it is my job to create the enabling environment in which members can realise these ambitions, across challenge areas that motivate them. This year has been especially exciting as we have opened up membership of the Centre to Professional Services colleagues (from Lancaster University Management School as a pilot project) and this has further embedded and integrated members' work into Lancaster University activities.

I hope you find this record of our activities and the outcomes of this work interesting. If you wish to work with us it would be fabulous to hear from you as we continue seeking to bring sustainability to the heart of business.

A handwritten signature in black ink that reads "Jan Bebbington". The signature is fluid and cursive, with a long horizontal flourish at the end.

Professor Jan Bebbington
Director, Pentland Centre for Sustainability in Business



Foreword from the Chair of the Advisory Board

While the Pentland Centre has been busy working on a range of sustainability challenges and establishing a reputation for excellent research, impact and engagement, it has (along with everyone else) been affected by the ongoing effects of Covid, rampant inflation (fuelled in part by the Russian invasion of Ukraine) and the knock-on cost of living crisis.

This combination of disruptive forces, experienced at the same time, has made it extremely difficult for business to concentrate on sustainability outcomes when its immediate cash flow is threatened, which in turn threatens the existence of businesses. However, both Pentland Group and the Pentland Centre believe that if we are to succeed at a time when so many are closing their doors, we need to remain focused on our sustainability goals. Perhaps it's like the well-intentioned individual who is determined to buy eggs only from free range as opposed to battery hens until the price differential becomes too meaningful. We all accept that quality lasts longer, but the life of an egg is rather short, so it is difficult to take this into account. I believe that in difficult times it becomes more essential to work together and to develop responses to the present crisis and secure a sustainable future. There are no easy answers.

On a macro level, the Pentland Centre leads a group of people who support the UN Sustainable Development Goals and the targets in the Paris Agreement. On a micro level we know that large oak trees start as little acorns, so we need to progress a step at a time, however frustrating this is. Especially when times are difficult it is important to carry on: rather like the marketing department cutting the advertising budget to obtain increased short-term profitability at the cost of long-term growth. We all know the temptation to concentrate on the short term but with sustainability we are talking of the very future of our descendants and humanity more broadly.

The Pentland Centre continues its journey to curate the most robust research and to develop the most impactful way to craft the message that sustainability in business is necessary. We are interested in any ideas that you, the reader of this report, may have and we are not too proud to add, alter or change anything we do for the common good. But we can only do this if you share your ideas and doubts with us. Together we can alter the habits of many lifetimes and ensure that those who come after us have the wherewithal to flourish within the capacity of the planet to sustain us all.

It is particularly appropriate that Pentland is partnering with Lancaster University to achieve a sustainable world. Both of us have our origins in the Northwest of England and both of us intend to be around for the long term: hence the battle for sustainability! In this Pentland Group is aided by the fact that as a privately run family company it can take a long view of the future, not controlled by quarterly (or even monthly) reporting. In other words, we can be resilient to the forces of external pressure and help to do what is right for the future. The Pentland Centre is also focused on the foundations we can put in place now for future prosperity and to build resilience now in the face of economic, social and ecological volatility.

Stephen Rubin

Chair of Advisory Board, Pentland Centre for Sustainability in Business

Our plans – a summary

What we planned to do in 2022 and how we got on

Membership development	38 new members joined the Pentland Centre in 2022 of which 15 were professional staff members who joined as part of a pilot project within LUMS. At the end of the year our membership stands at 77.
Members' community and capacity building programme	Our writing programme continued until the end of March 2022 and has expanded to include residential writing retreats (both are facilitated by a writing coach). Retreats support members to become better at writing and also to enjoy writing more. We also used the opportunity to continue community-building. Further retreats will be held in 2023. The reading group continued throughout the year. In addition, we had our first 'Away Day' in July where members were able to brainstorm future work that we can do together.
Seminars, workshops and annual symposium	This year we've held 14 different events, enabling Pentland centre members to interact around topics of common interest – see below for more details.
Impact focused interactions	Impact focussed events have centred primarily around the launch of new strands of work in business, nature and biodiversity as well as resilience and family business.
Develop capacity within Lancaster University more broadly	We supported the preparation and publication of the LUMS Principles of Responsible Management Education Action Plan with implementation being ongoing. We continue to support the Management School as it takes this forward. Lancaster University is also exploring what a Sustainability Institute crossing over all academic disciplines would entail and we have been actively involved in these conversations.
Communications	We've developed our use of social media this year, drawing on paid student interns who did social media takeovers. Our LinkedIn page (launched in 2021) continues to grow in followers and is the main way we communicate our work with peers. To build our communications capacity, the Centre Co-ordinator attended a science communications masterclass at the University of the West of England.

What we plan to do in 2023

Membership development and members services	We expect our membership number to grow organically as colleagues across the University are drawn to our activities. Likewise, we will continue to offer developmental opportunities around writing and expand these to include capacity building around communicating with diverse audiences in the media and understanding how to articulate impact of research. During 2023 we will formally evaluate the professional services member's scheme.
Seminars and workshops	We will continue to offer a varied programme of events with a strong emphasis on bringing people together to discuss topics of interest as a way of sparking new collaborations that advance the Centre's mission. We will return to many of the themes that we have already explored, focusing on: expressing values in business, stewardship and its many manifestations, responding to the climate emergency and understanding the qualities of businesses who have stood the test of time.
New programme of work	Building on the impact focused interactions of 2022 the Centre is opening a programme of work around business and biodiversity. This is an area that is rapidly changing in terms of policy expectations with the health of the biosphere significantly declining. We will create dedicated resource to support the capability of colleagues to understand businesses needs as well as create a learning community of businesses.
Developing inter-disciplinary partnerships	We will work with members across the University to develop new educational and research offerings that deal with the inter-disciplinary challenges that pursuing sustainability requires. Obtaining funding for inter-disciplinary activities is difficult, but this is one of the keys to success in leveraging the impact of the Centre and the role of business in sustainability.



Activity highlights

Programme of Events

The Pentland Centre uses several formats for advancing thinking and practice in sustainability in business, including:

Virtual common rooms – an entirely online format where two or three key people discuss a topic area for around 15 minutes as a prelude for a wider conversation with other participants. We use these to gauge interest in a subject area and to uncover something of the dimensions of the topic.

Seminars of up to two hours duration are used to hear about and discuss a topic of interest in a fairly formal setting. We often use this format when we have visiting speakers as it allows a line of argument or insight into a topic area to be developed and then discussed further.

Learning day(s) help us to draw together groups of people to discuss a topic of mutual interest where there is a desire on behalf of all parties to learn more about the topic area. They generate insight that can be further developed as well as creating new relationships to support more in-depth engagement.

Workshops of one- or two-days duration where a particular topic is developed in more depth. They might include a mixture of scholars and practitioners and are more likely to have a number of external people involved. These are collaborative events where we aim to develop shared understandings of a topic area.

- **23 Feb 22:** *How do we account for ESG-linked instruments and why do we care?* An in-person seminar presented by Dr Argyro Panaretou, bringing together colleagues from LUMS.
- **30 Mar 22:** *The changing landscape for conveying sustainability information to markets and stakeholders.* An in-person 1-day workshop involving colleagues inside and outside Lancaster University, and presentation of new research data.
- **26 Apr 22:** *Socio-ecological Accounting Group Seminar.* One day workshop bringing together an international group of accounting scholars.
- **28 & 29 Apr 22:** *Resilience and Family Business Workshop.* A two-day workshop bringing together many stakeholders in family business to explore ideas around resilience and sustainability. [Workshop report and webpages available online.](#)
- **6 Jul 22:** *Virtual Common Room: changing landscape of corporate reporting and financial systems governance with respect to sustainability.* Led by Dr Argyro Panaretou, Prof Mark Shackleton and Prof Jan Bebbington.
- **27 Jul 22:** *Virtual Common Room: Stewardship, organisational leadership and sustainability.* Led by Dr Marian Iszatt-White and Prof Jan Bebbington.
- **31 Aug 22:** *Future Normal - An Exploration of Questions and Concepts.* Guest seminar by Professor Nick Barter, Griffith University, Australia, seeking input and challenges to a new area of work.
- **5 Sep 22:** *Taking responsibility scholarship forward.* Two day workshop exploring the development of 'responsibility' and its future trajectory in business/management studies.
- **26 Sep 22:** *Reflections on running an interdisciplinary research body.* Guest seminar by Professor Richard Gordon, former CEO of Manaaki Whenua - Landcare Research, covering the development of Manaaki Whenua.



- **28 & 29 Sep 22: Business & Biodiversity Learning Days.** Over 2 days, a group of academics and practitioners met to explore routes to include biodiversity in business reporting. Led by Duncan Pollard, who has produced a [Navigation Guide](#) to this area of work.
- **29 Sep 22:** Jan spoke about 'Accountants as Changemakers' to a gathering of the Chartered Institute of Management Accountants (CIMA).
- **1 Nov 22: How to change the world – unusual collaborations to solve challenges in the Anthropocene ocean.** Guest seminar by Frida Bengtsson of Stockholm Resilience Centre.

The seminar was recorded and [can be viewed online](#).

- **10 Nov 22: Sanitising Stewardship: Exploring the hidden practices of the reuse process in organisations.** Pentland Centre members Dr Katherine Ellsworth-Krebs and Dr Lucy J Wishart presented their ethnographic work on a University reuse project, and their conclusions.
- **14 Nov 22: Hiding in plain sight - inclusive and sustainable finance.** Professor Atul Shah talked about how the basis of sustainable finance can be found in diverse communities and cultures around the world.

Community Building

A key element of our work is to build and strengthen connections between our members, and also with the rest of the University. Here are three examples of activities we have undertaken to build community.

Professional Services members pilot project: One of the Pentland Centre's strategic aims is to 'identify and articulate business models to support a transformation of business-as-usual'. In this instance the business is Lancaster University. The business model is one in which all groups of staff understand a broad range of climate and sustainability issues, and understand how their roles and ways of working can contribute to the Sustainable Development Goals. On this basis we launched a pilot project with LUMS, and invited Professional Services staff in the School to join the Pentland Centre. The project will be evaluated next year, but early indications are that membership of the Centre is proving beneficial for Professional Services staff who have engaged with us. Highlights include:

- Adam's grand adventure – LUMS Head of Marketing, Adam Mitchell, travelled to a professional conference in the Netherlands via cycle/ferry to draw attention to the carbon impact of work travel. This included a series of blogs on our website explaining and reflecting on the experience
- Professional Services members have engaged with our reading group (more detail below), engaging in and enriching conversations about numerous publications on sustainability.
- Professional Services members contributed significantly to the production of the LUMS PRME report.

Pentland Centre Away Day: We held our annual away day on 6 July 2022 at Forrest Hills. This was a day packed full of conversation about what the Centre might consider and achieve over the next 12 months. All of the sessions were facilitated by members, and resulted in new activity possibilities being identified.

Writing programme and retreats: As part of community building, during the reporting period we completed a writing programme, working with an external writing coach Laura Premack to support individual members to write. This year we also introduced a series of residential writing retreats (which will

continue into 2023), focussing initially on working with individuals/pairs of members who wanted space and time to work on writing publications.

Reading group: During term time a fortnightly reading group gather online to read and discuss various publications on sustainability in business. It is particularly valuable in an interdisciplinary group to gain greater understanding of sustainability challenges and potential areas of work through considering key works in each others' subject areas.

Selected examples of engagement

Prof Jan Bebbington along with colleagues from Lancaster Environment Centre, and supported by LUMS Partnership Development Manager and Pentland Centre member Stephen King, have recently been funded for a Knowledge Transfer Partnership with Lake District Farmers Ltd. The project aims to develop a viable route map for progressing towards a net-zero meat product for selected case study farms that supply Lake District Farmers and to highlight the use of livestock production in creating sustainable and regenerative environments.

Prof Mark Shackleton participated in as a judge in two categories in the ESG Investment awards 2022 – Best Sustainability Reporting: Industrial, and Best Sustainability Reporting: Property. Mark said “In a crowded field, it was great to see so much interest in up-to-date reporting methods and especially those focussed on ESG. This was true across a great number of business segments. The challenge now is to remain focussed on improving reporting quality further and measuring positive impacts. “

Dr Alison Stowell was on the steering group of a transdisciplinary research event on Plastic Waste and Microplastic Research. The event took place in July 2022 and pulled together multiple strands of research from across Lancaster University, and engaged external practitioners and academics, including representatives from UK Circular Plastics Network and Ocean Generation. Community engagement was built into the event, with the first day starting with a series of public lectures under the [Gaia](#) sculpture at Lancaster Priory, and attendees also took part in a beach clean in Morecambe Bay.

As part of LUMS sponsorship of the Ethical, Responsible and Sustainable Tourism Award at the Lancashire Tourism Awards, centre members Dr Allan Discua Cruz, Dr Katherine Ellsworth-Krebs and Dr Anthony Hesketh were part of the judging team for nominated finalists. The award winners will be announced in February 2023.

Professor Jan Bebbington attended the United Nations Oceans Conference in Lisbon between 27 Jun and 1 Jul 2022. This is the second time that countries across the globe have gathered to advance the sustainable utilisation of the oceans and included a 'side event' where academics, policy makers and practitioners worked together to better contribute to ocean solutions.

Professor Steven Young and Dr Mahmoud Gad authored a ground-breaking report – [Modern Slavery Reporting Practices in the UK](#) - for the Financial Reporting Council, in conjunction with the UK Anti-Slavery Commissioner, which concluded that there are significant shortcomings in the quality of UK companies' modern slavery reporting.

Dr Divya Jyoti Contributed as a Revision Board Member for the industry publication by Transformers Foundation. [Fashion's chemical certification complex. Needlessly complicated, woefully ineffective](#) was released in Nov 2022. She also participated in a [podcast conversation](#) – debate on definition and metrics of worker wellbeing, released in May 2022.



Appendix 1 - People

Pentland Centre staff

Nadine Andrews	Visiting Researcher
Rod Bain	Visiting Researcher
Jan Bebbington	Centre Director, Rubin Chair of Sustainability in Business
Sarah Jones	Student Intern
Trang Kowalkowska	Student Intern
Desna Mackenzie	Centre Co-ordinator
Anya Nanning Ramamurthy	Casual Events Assistant
Duncan Pollard	Honorary Professorial Fellow
Caitlin Rees	Student Intern
Lucy Wishart	Visiting Researcher

Lancaster University Management School

Jimena Alvarez	PhD Candidate
Kostas Amiridis	Senior Lecturer
Salma Atcha	Business Networks Officer
Sue Atherton	Head of School Administration
Richard Baguley	Honorary Teaching Fellow
Shantanu Banerjee	Professor of Finance, Accounting & Finance
Becky Bawden	Faculty Resources Manager
Jodie Bawden	Project Administrative Support Officer
Lenka Brunclikova	Research Associate
Mohammed Cheded	Lecturer
Ophelia Chidgey	PhD Candidate
Emma Connolly	Project Manager
Darren Dalcher	Professor in Strategic Project Management
Rory Daly	Head of Careers
Dakshina De Silva	Professor, Economics
Allan Discua Cruz	Senior Lecturer, Director of Centre for Family Business
Quynh Do Nhu	International Lecturer in Logistics & Supply Chain Management
Sylvia D'Souza	International Lecturer in Business Management
Marta Ferri	PhD Candidate
Mahmoud Gad	Lecturer
Magnus George	Professor in Entrepreneurship
Victor Giannandrea	Entrepreneur in Residence
Charlotte Hadley	Research Associate
Noor Hashim	Lecturer, Accounting & Finance
Matt Healey	PhD Candidate
Linda Hendry	Professor of Operations Management
Anthony Hesketh	Senior Lecturer
Marian Iszatt-White	Senior Lecturer
Meng Jia	PhD Candidate
Divya Jyoti	Lecturer
Steve Kempster	Professor Leadership Learning and Development
Joanne Larty	Senior Lecturer
Lingxuan Liu	Senior Lecturer in Sustainability

Rebecca Liu	Senior Lecturer
Jan Maskell	Senior Teaching Fellow
Katy Mason	Professor Markets, Marketing and Management
Adam Mitchell	Marketing Manager
Clare Mumford	Senior Research Associate
Dermot O'Reilly	Senior Lecturer in Management Learning and Leadership
Libby Packham	Alumni Officer
Argyro Panaretou	Senior Lecturer
Jekaterina Rindt	Lecturer
Matteo Saltalippi	Research Associate
Anita Schiller	Lecturer
Michael Scotney	PhD Candidate
Kostas Selviaridis	Senior Lecturer
Mark Shackleton	Professor
Dasha Smirnow	Lecturer in Accounting
Valerie Stead	Professor
Mark Stevenson	Professor of Operations Management
Alison Stowell	Senior Lecturer
Debbie Stubbs	Post-graduate Programmes Officer
Paul Turner	Content Manager – Research and Engagement
Savita Verma	Research Associate
Di Wang	Lecturer in Accounting
Georgie Watson	Industrial Liaison Manager
Rose White	External Accreditation Manager
Jane Wigston	Undergraduate Co-ordinator
Chelsea Yao	Senior Lecturer
Steve Young	Professor
Zoe Zhu	International Teaching Fellow in Management

Faculty of Science and Technology (Lancaster University)

Alona Armstrong	Senior Lecturer & Director, Energy Lancaster
Patrick Bigger	Honorary Researcher
Adrian Friday	Professor of Computing and Sustainability
Ben Neimark	Senior Lecturer
Paul Young	Senior Lecturer
Jing Zhang	PhD Candidate

Faculty of Arts and Social Sciences (Lancaster University)

Katherine Ellsworth-Krebs	Senior Research Associate – Sustainability, Faculty of Arts & Social Sciences
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Other areas of Lancaster University

Danny Cairns	Senior Faculty Finance Assistant, Finance
Stuart Foy	Development Manager, Facilities
Stephen King	Partnership Development Manager, Research & Enterprise Services
Heather Taylor	Policy Analyst, the Work Foundation

External institutions

Yuka Fujimoto	Professor / Associate Dean, Sunway University
Stephen Homer	Lecturer, Sunway University
Peter Watt	Lecturer, Lancaster University Leipzig

Advisory Board Members

Stephen Rubin	Chair of the Pentland Group plc
Sara Brennan	Positive Business Director, Pentland Brands
Edwin Charnaud	EMEA Chairman for Aon M&A and Transaction Solutions
Linden Edgell	Global Sustainability Director, ERM
Chris Loughlin	Member of LUMS Dean's Council
Tom Trezise	Chairman, Patient Privacy Rights

Appendix 2 - Publications

All the members of the Pentland Centre have 'academic homes' either in specific departments at Lancaster University, at other higher education institutions or with external organisations. The publications listed below are an indication of how their work aligns with our aims. It is not that we are claiming credit for these publications. Rather, this represents the insights that Pentland Centre members have brought to the business/sustainability literature that may be of interest to you. If you see something interesting here, please be in touch with Pentland Centre members directly.

Akhter, N., **Discua Cruz, A.**, Mukherjee, K., Parada, M. J., Pihkala, T., Rautiainen, M. / *Growing, Developing, and Performing Family Business Groups: Introduction to the Handbook*. In: The Palgrave Handbook of Managing Family Business Groups (eds. Rautiainen, M., Parada, M.J., Pihkala, T., Akhter, N., Discua Cruz, A., Mukherjee, K.) Cham: Palgrave, 2022. pp. 1-12

Ali, M., Koh, S.C.L. , **Liu, L. , Zhang, J.**, Roberts, W., Robins, D., Cooper, D. / *Assessing pre-pandemic carbon footprint of diet transitions in UK nations and regions*. International Journal of Production Research. 2022

Andrews, N. / *The Emotional Experience of Members of Scotland's Citizens' Assembly on Climate Change*. Frontiers in Climate. 2022, Vol. 4.

Asokan, D., Huq, F., Smith, C., **Stevenson, M.** / *Socially Responsible Operations in the Industry 4.0 Era : Post-COVID-19 Technology Adoption and Perspectives on Future Research*. International Journal of Operations and Production Management. 2022, Vol. 42, No. 13. pp. 185-217.

Banerjee, S., Homroy, S. & Slechten, A. / *Stakeholder Preference and Strategic Corporate Social Responsibility*. Journal of Corporate Finance. 2022. Volume 77, 102286.

Barbosa, K., **De Silva, D.**, Yang, L., Yoshimoto, H. / *Auction Mechanisms and Treasury Revenue: Evidence from the Chinese Experiment*. In: American Economic Journal: Microeconomics. 2022; Vol. 14, No. 4. pp. 394-419.

Bebbington, J., Larrinaga, C. / *The influence of Power's Audit Society in environmental and sustainability accounting*. Qualitative Research in Accounting and Management. 2022.

Bebbington, J., Rubin, A. / *Accounting in the Anthropocene: a roadmap for stewardship*. Accounting and Business Research. 2022, Vol. 52, No. 5. pp. 582-596.

Beech, N., **Mason, K.**, Mackintosh, R., Bartunek, J. / *Learning from Each Other: Why and How Business Schools Need to Create a 'Paradox Box' for Academic-Policy Impact*. Academy of Management Learning and Education. 2022.

Blaydes, H., Gardner, E., Whyatt, D., Potts, S. G., **Armstrong, A.** / *Solar park management and design to boost bumble bee populations*. In: Environmental Research Letters. 2022; Vol. 17, No. 4.

Bojovic, N., Garud, R., **Cheded, M.** / *Cultural Entrepreneurship In Legitimizing Social Innovation: Cultural Reconfiguration Of Sex-Tech*. Cultural Entrepreneurship In Legitimizing Social Innovation: Cultural Reconfiguration Of Sex-Tech. Academy of Management Annual Meeting Proceedings, 2022.

Booker, D., Walker, G., **Young, P.**, Porroche-Escudero, A. / *A Critical Air Quality Science Perspective on Citizen Science in Action*. Local Environment: The International Journal of Justice and Sustainability. 2022

Brennan, S., Discua Cruz, A. / *UK: Pentland Brands Limited. Family Businesses on a Mission: Attaining the 2030 Sustainable Development Goal of Decent Work and Economic Growth*. (Eds. Birdthistle, N., Hales, R.). Bingley: Emerald Publishing Limited, 2022. pp. 17-34.

Burton, N., Vu, M., **Discua Cruz, A.** / *Our social legacy will go on : Understanding outcomes of family SME succession through Engaged Buddhism*. Journal of Business Research. 2022, Vol. 143. pp. 105-118.

Cheded, M., Liu, C.L., Hopkinson, G. / *Dead metaphors and responsibilised bodies-in-transition: The implications of medical metaphors for understanding the consumption of preventative healthcare*. Journal of Marketing Management. 2022, Vol. 38, No. 5-6. pp. 544-568.

Chircop, J., Gagnon, J., **Young, S.** / *Capital market response to high quality annual reporting: evidence from UK annual report awards*. Accounting and Business Research.

Corvellec, H., **Stowell, A.**, Johansson, N. / *Critiques of the Circular Economy*. Journal of Industrial Ecology. 2022, Vol. 26, No. 2. pp. 421-432.

Cronin, J., **Hadley, C.**, Skandalis, A. / *Plastic : a passengerial marketplace icon*. Consumption, Markets and Culture. 2022. Cronin, J., Piacentini, M., Skandalis, A., Hardy, J., **Stowell, A., Hadley, C., Verma, S., Hendry, L., Ferri, M., Saltalippi, M.** / *The Little Book of Plastics in Everyday Life*. Lancaster: Imagination Lancaster, 2022. 40 p. (Little Books).

Couzoff, P., **Banerjee, S.**, Pawlina, G. / *Effectiveness of Monitoring, Managerial Entrenchment, and Corporate Cash Holdings*. Journal of Corporate Finance. 2022.

Cox, C., Fidler, N. and **Cruz, A.D.** (2022) UK: *George Cox & Sons Ltd, Family Business on a Mission: Attaining the 2030 Sustainable Development Goal of Climate Action* (Eds. Birdthistle, N. and Hales, R.), Bingley: Emerald Publishing Limited, pp. 57-68.

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- Discua Cruz, A.**, Reyes Hernandez, J. M., Arias Arevalo, C. / *Mind the queue: Understanding challenges of introducing e-government policies for entrepreneurs during Covid-19 in a Latin American country*. Information Technology and People. 2022.
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Appendix 3 – Financial report

Donation

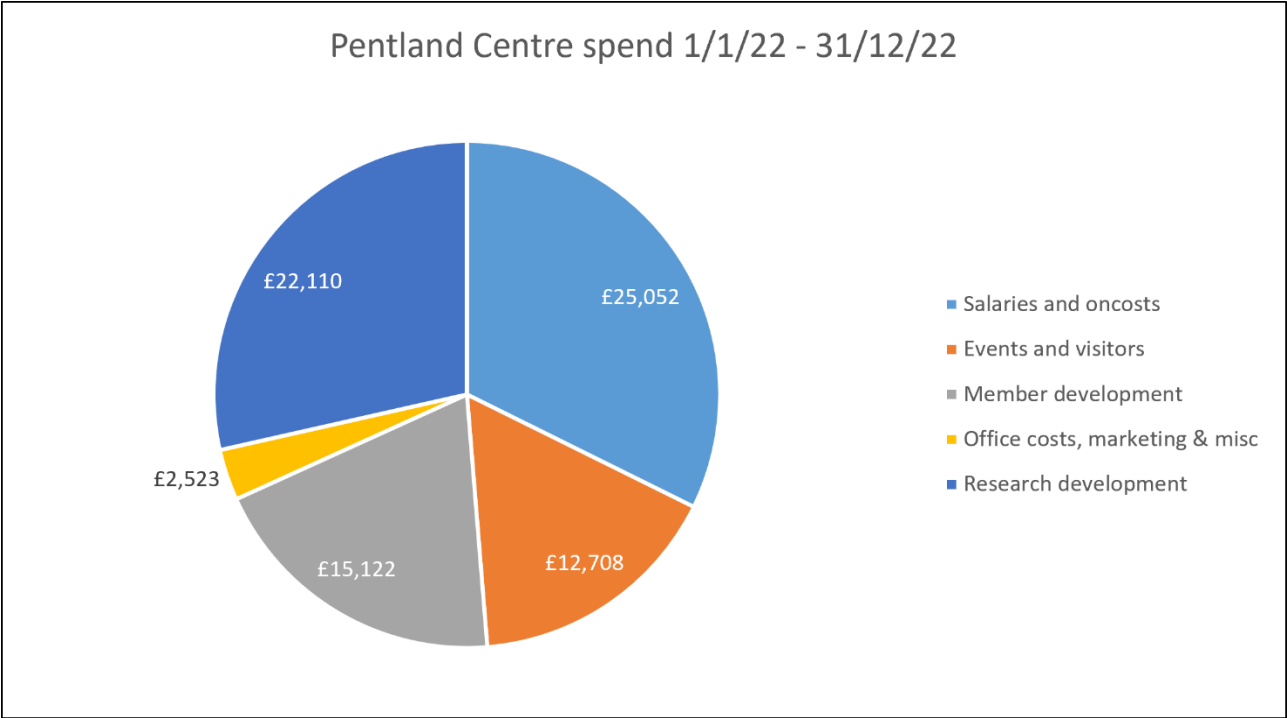
The Pentland Centre is funded via a philanthropic donation from the Rubin Foundation Charitable Trust. The core grant was £100K per annum (2015-20), rising to £125K per annum (from 2021 for five years).

Spending

In this reporting period £77,515 was spent, with about one third of this being salaries and oncosts for the Centre Co-ordinator and our interns. Other key items of spending were investment in gathering research data via Yougov, member development activities (including the writing retreats and the away day), a varied programme of events and external visitors, and various office costs.

Spending this year is approx. 65% above the 2021 spend reflecting a continuation of the post-COVID increase in activity. Given we have returned to a full in-person programme from June 2022, we anticipate our spend on events will rise in the next year.

In 2023 we will be investing in a new, strategically important, stream of work in business and biodiversity, for which much preparatory work has taken place during the reporting period. In addition, we will be undertaking pilot work in how to create integrated environmental social science insights. As we expand the number of staff using our offices, we will also make an investment in refreshing our ICT equipment. A website update is also planned.



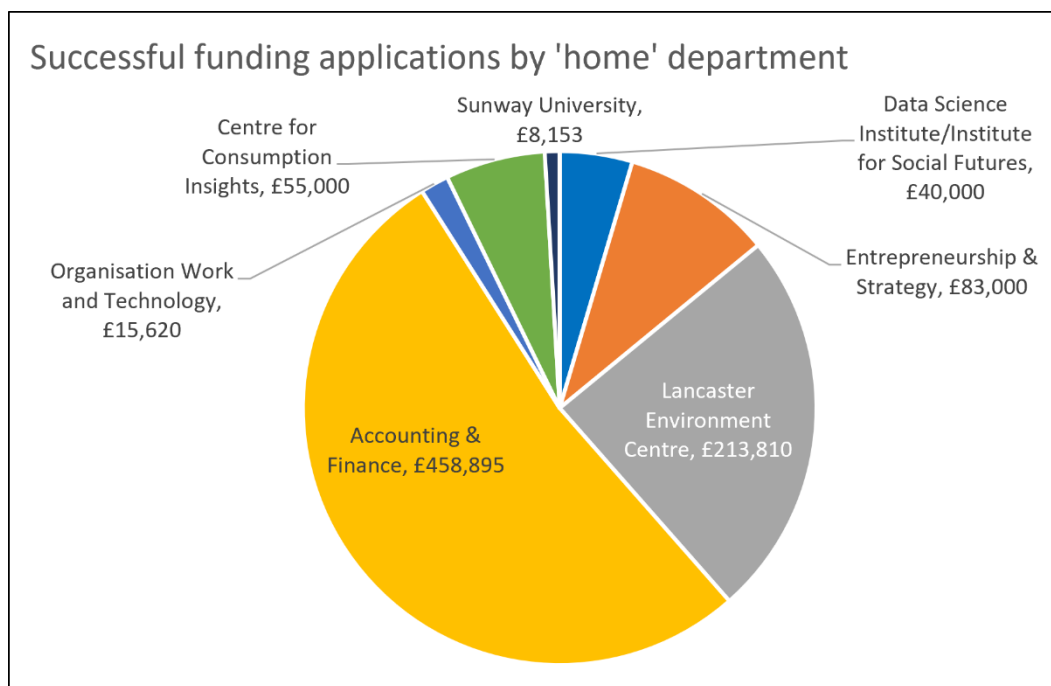
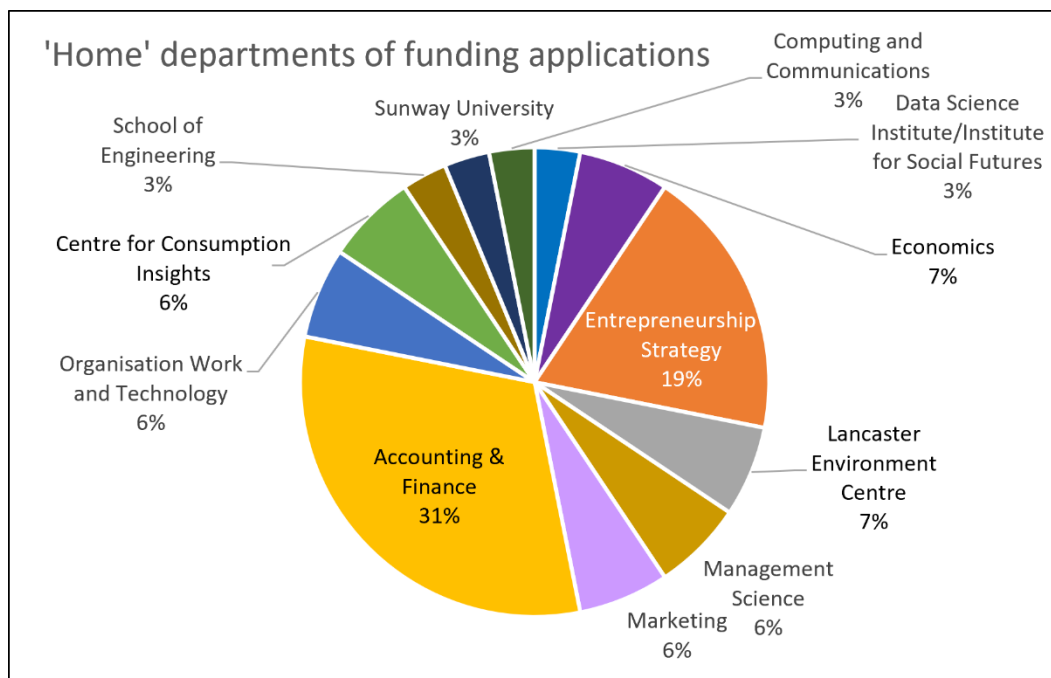
Research funding

The Pentland Centre focuses on creating a network of academic and professional services colleagues focussed on sustainability in business, and seeks to add value above existing activity elsewhere in the University. In particular, we have invested in capacity building and impact activities related to sustainability in business.

We don't hold any research funding ourselves, but Pentland Centre members are actively

bidding for and are successful at being granted research projects, which are held by their 'home' departments. The graphs below show applications and bids by Pentland Centre members during the reporting period, linked to their 'home' departments or institutes.

In addition to these figures, £6,000 of funding has been brought into the Centre by our Centre Director through a consultancy project.





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