UNIVERSITY OF LIVERPOOL

INTERDISCIPLINARY CENTRE FOR SUSTAINABILITY RESEARCH

YEAR 1 EVALUATION FEB–FEB 2025/26

Contents

Introduction

Executive Summary

The Interdisciplinary Centre for Sustainability Research

1. **Strategy 2031**
2. **People, Expertise and Resources**
3. **Activities and outputs**
4. **Pump Priming**
5. **Research culture, capacity building and reputation enhancement**
6. **Risks, recommendations and learnings for the future**
7. **Conclusion / Next Steps**

Annex I

Appendix 1

Appendix 2

Written by Helen Bryant, Katie Atkinson and Lucy Williams

THE INTERDISCIPLINARY CENTRE FOR SUSTAINABILITY RESEARCH
YEAR 1 EVALUATION FEB-FEB 2025/26

Introduction

The **Interdisciplinary Centre for Sustainability Research (ICSR)** has successfully established itself during its first year as a catalyst for interdisciplinary research, collaboration, and external engagement across the University of Liverpool. With **climate research** as its inaugural focus theme, the Centre has brought together researchers from all three faculties, external partners, policymakers, and industry stakeholders to convene new teams to develop innovative solutions to sustainability challenges and expand the University's contribution to the UN Sustainable Development Goals.

The Centre's primary objective is to increase large-scale interdisciplinary research income, targeting **£15 million in funding applications arising from each year's focus theme**. Year 1 has generated a strong pipeline of funding opportunities of which **twenty-three external funding applications worth £6 million** have already been submitted with others still in development. Four pump-priming projects supported by HEIF funding—focused on Net Zero Digital Buildings, Sustainable Building Materials, Microplastics, and the Circular Economy—have enabled researchers to develop pilot data, partnerships, and future funding proposals.

The Centre has made significant progress in fostering interdisciplinary collaboration. Through a launch event, workshops, sandpits, and funding briefings, it engaged **more than 160 participants**, creating new research teams and collaborations that would not otherwise have emerged. Participants highlighted the value of facilitated networking and structured support in developing ambitious cross-disciplinary projects.

External engagement has been a notable strength. Partnerships with organisations that include the Liverpool City Region Combined Authority, industry partners, and community stakeholders have strengthened project relevance, expanded networks, and enhanced pathways to impact. The Centre has also supported researcher development through development of interdisciplinary working, networking opportunities, and access to external stakeholders, helping academics build stronger foundations for future grant success.

Early outputs of the Centre's activities are encouraging, and both the inputs and outputs are being captured within an evaluation framework for annual reporting and sustained development, in alignment with the University's Strategy 2031. The evaluation framework recognises that major interdisciplinary funding bids require longer lead times than smaller bids and that continued support beyond initial events is essential for maintaining momentum. Key challenges identified include the current state of flux of the UK research funding landscape and the need to develop a stronger pipeline of experienced bid leaders. Measures are already underway to address these risks and align activities with emerging national priorities.

Looking ahead to Year 2 activities, the ICSR will continue supporting the development of climate-related projects, while launching a new strategic theme focused on **Reducing Inequalities**. The Centre is well positioned to build on its strong first-year foundations, expand external partnerships, increase major funding activity, and further strengthen the University's leadership in interdisciplinary sustainability research.

Executive Summary

The University of Liverpool launched its new Interdisciplinary Centre for Sustainability Research (ICSR) in February 2025, as part its research development ambitions within its Strategy 2031.

Since its launch, the Centre has been established as a catalyst for interdisciplinary sustainability research across the University of Liverpool, bringing together researchers, policymakers, industry, and community partners to form and commence projects to address major societal challenges directly related to UN Sustainable Development Goals. Focused initially on climate research topics, the Centre has generated a strong pipeline of funding applications, with a number of successful bids emerging, it has fostered new collaborations within and across faculties, strengthened external partnerships, and laid solid foundations for delivering new research impacts that maximise the diverse skills and expertise of our academics, working with our external partners and stakeholders.

Highlights of the first year of activity include:

- Generated a pipeline of interdisciplinary funding applications, including **£6 million of bids developed** and **external funding worth just under £3.5 million already secured.**
- Enabled the convening of four new teams, supported by **pump-priming projects** on the topics of Net Zero Geothermal Energy Systems, Sustainable Building Materials, Microplastics, and the Circular Economy.
- Engaged **more than 160 participants** through events, workshops, sandpits, and funding briefings, creating new cross-disciplinary research teams.
- Established strong local and international partnerships, including with the **Liverpool City Region Combined Authority, industry, and community stakeholders**, enhancing pathways to impact.
- Positioned activity for continued growth in Year 2 through ongoing climate-related activities and the launch of a new strategic theme on **Reducing Inequalities**.

The report that follows provides the details of the activities undertaken in Year 1 of the Centre's operations, outcomes to date and plans for Year 2 and beyond, aligning with the internal institutional strategy and the external environment.

Signed by Katie and Anthony as SLT sponsor.

THE INTERDISCIPLINARY CENTRE FOR SUSTAINABILITY RESEARCH
YEAR 1 EVALUATION FEB-FEB 2025/26

PVC for Research Anthony Hollander, Director of IBM Research Europe (Ireland and UK) Juan Bernabé-Moreno, ICSR Director Katie Atkinson and Vice Chancellor Tim Jones at the launch event for the ICSR in February 2025

The Interdisciplinary Centre for Sustainability Research

The Interdisciplinary Centre for Sustainability Research formally launched in February 2025 during the University of Liverpool's Sustainability Week. The centre, announced in 2024, is an important step the University is taking towards realising its ambitions for expanding Research and Impact intensity, as outlined in the UoL **Strategy 2031**.

The launch featured speaker and collaborative partner Dr Juan Bernabé -Moreno, Director of IBM Research Europe (Ireland and UK) and IBM's Climate and Sustainability Accelerated Discovery Lead. This event promoted the ICSR's mission to strengthen collaboration across disciplines within the University and beyond as a pan-institutional centre focusing on supporting teams of researchers tackling the United National Sustainable Development Goals (SDGs). The ICSR's programme of activities act as a nexus for interdisciplinary research and impact at the University of Liverpool by bringing together researchers from across all areas of knowledge, and a diverse level of experience and skills in order to catalyse novel SDG-focussed interdisciplinary research projects.

During the launch, the ICSR set out its key objectives and established climate research as the cornerstone of its work for the year 2025. During that year the Centre has convened workshops, sandpits, and collaborative events to identify strengths in climate across the University of Liverpool, align research with key UN Sustainable Development Goals, and catalyse interdisciplinary projects. Through this programme of activity, the ICSR is working to generate significant research income through multiple highvalue grant awards, while also developing ambitious, highimpact proposals that would not otherwise emerge from within individual disciplines. Central to this approach is the strengthening of collaboration both across the University and with external researchers and partners, alongside providing targeted support for impact, reputation enhancement and the attraction and retention of interdisciplinary research talent. Collectively, these efforts position the Centre as a key enabler of an inclusive and sustainable interdisciplinary research environment across the University.

The first year of engagement activities at the Centre focused on research which would have impact within SDG 13, Climate Action. Early activity included workshops aligned with a group SDGs associated with climate topics.

- **6** (Clean water and Sanitation)
- **7** (Affordable and Clean Energy)
- **11** (Sustainable Cities and Communities)
- **12** (Responsible Consumption and Production)
- **13** (Climate Action)
- **14** (Life Below Water)
- **15** (Life on Land))

THE INTERDISCIPLINARY CENTRE FOR SUSTAINABILITY RESEARCH
YEAR 1 EVALUATION FEB-FEB 2025/26

Figure 1: UN SDGs highlighting target areas of the ICSR for year 1.

More focused Sandpit events to scope new projects, and topic refinement meetings led to four pump-primed projects. Looking ahead, the climate topic has transitioned into its second year with continued bid development and support from RPI for the teams that have already been established, while the Centre pivots to a new focus on Reducing Inequalities, SDG 10 for 2026.

Alongside organising and delivering these programmes of activity, the ICSR has been establishing its profile and operational foundations. We have established an extended operational team of Academic and Professional Services staff who support the development of the Centre and enable us to meet our objectives. Expertise from Research, Partnerships and Innovation, the Sustainability Team, and Research Communications has been influential on the Centre's during growth this first year, as well as welcome support from the establishment of a group of Faculty Champions. With the support of these teams, the ICSR aims to enhance research culture at the University of Liverpool by developing interdisciplinary research capability across all areas within the institution.

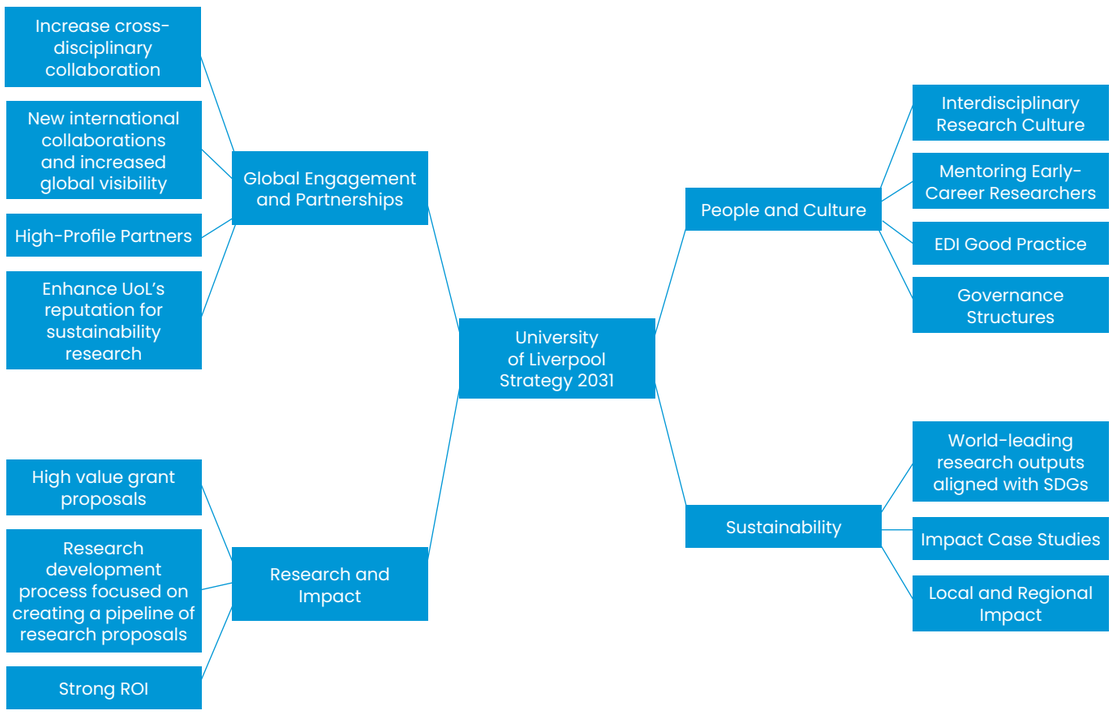
This Evaluation aims to inform our community of the strides we have made over this first year in achieving our goals for the Centre so far and highlight areas for growth as we continue into our second year.

1.Strategy 2031

The Centre will contribute to a set of outcomes and KPIs under Strategy 2031. The Centre expects to have its strongest influence on the Research and Impact pillar, by adding six new impact case studies by 2031 and increasing grant income, with projected total proposal value of £15m per year moving forward.

The Centre will continue to progress growth activities under the Place and Innovation pillar through enhancing our interactions with local partners, supporting cross-disciplinary partnerships, and raising our profile through engagement and impact on the SDGs, as well as enriching the research environment by creating interdisciplinary research opportunities for academics.

Figure 2: Key priority areas of ICSR mapped against UoL Strategy 2031 priority areas



Pillar	Objective	Centre Objective	2025
Global engagement and partnerships	**1**	Increase cross-disciplinary collaboration within UoL and with external partners	1) Facilitated cross-disciplinary engagement between UoL academics and IBM. 2) Supported external engagement with HEIF funding. 3) Developed and utilised our members database to link external partners with UoL researchers
Global engagement and partnerships	**1**	Support new international collaborations and increase global visibility	1) 1 of the 4 pump primed projects is based in Cameroon and aims to have impact with international stakeholders. 2) Letters of support provided for research projects with international collaborators based in Türkiye
Global engagement and partnerships	**1**	Attract high-profile partners and create opportunities that would not naturally emerge within individual disciplines.	In Y1 ICSR supported the establishment of 17 new partnerships: IBM, Liverpool City Region, CeraPhi Energy, Causeway Energies, Eden Geothermal, Igne, WSP, Ener-Vate, Heatnet Global, Harbour Project management, Global City Futures, TownRock Energy, Midland Net Zero Hub, AGreaT Inc. (renewable energy), Natural England, Environment Agency, and Network Rail.
Global engagement and partnerships	**2**	The communications strategy, as set out in the business case, is enhancing UoL's reputation for sustainability research.	We use Linked In and the UoL website to drive conversation and enhance UoL's reputation for sustainability research.
People and culture	**2**	Contribute to building a sustainable interdisciplinary research culture within UoL.	1) Facilitating interdisciplinary workshops, sandpits and other events across the university. 2) Maintaining membership database.
People and culture	**3**	Early career researchers are being effectively mentored and integrated into interdisciplinary teams.	Early career researchers have been involved with all our events and have included in our pump priming projects.
People and culture	**1**	Equality, Diversity and Inclusion (EDI) good practice is being embedded within Centre teams.	EDI is considered
People and culture	**2**	Governance structures, including the management group, champions network, and RPI partnership, are functioning as intended.	We have implemented a robust governance structure which is functioning as intended.
Research and impact	**3**	The Centre will facilitate the generation of high-value grant proposals and secured major awards.	In Y1, the Centre has facilitated 5 workshops, 2 sandpits, a coffee morning, and held ad hoc research development team meetings with interdisciplinary teams under the climate topic. We hope to start securing awards in Y2/3.
Research and impact	**2**	The Centre will facilitate a research development process (including topic identification, sandpits, and bid development) to create a pipeline of research proposals.	In Y1, we have facilitated 4 new collaborative academic teams through our pump priming scheme which are actively working towards developing research proposals into Y2. These sessions were attended by 66 academics from 24 disciplines across all three facilities (10 HSS, 4 HLS, 10 FSE)
Research and impact	**3**	The Centre is operating effectively, within budget, and delivering strong return on investment.	We are currently within budget and working towards a strong ROI
Sustainability	**1**	Produce world-leading research outputs and impact case studies aligned with the Sustainable Development Goals (SDGs).	Working towards
Sustainability	**1**	The Centre will deliver measurable local and regional impact linked to the SDGs.	Working towards

2.People, Expertise and Resource

The Centre is managed by a Centre Director (Academic) and Centre Manager (Professional Services) dedicated to the day-to-day operations and supported by a team of both Academic and Professional Services experts in other departments. The Centre Manager (.5FTE) oversees the Centre's operations, develops and manages programmes for topic activities and sandpits, and supports the Centre Director in stakeholder management.

Additional staff resources are pulled from existing teams within Research, Partnerships and Innovation, and Communications teams who support activities such as research development and identification of external partnership opportunities, as well as external communications related to branding, webpages and reputation building pieces (writing case studies and press pieces, plus blogs on outputs of the Centre and its approach).

In October 2025 the Centre appointed three Faculty Champions, one representing each of the Faculties at the University. These researchers serve on the ICSR Advisory Board and play a critical role in driving research excellence, coordinating interdisciplinary and challenge-led outputs, and ensuring the delivery of impact outcomes including funding, public engagement, and impact on the Sustainable Development Goals. Their key responsibilities include providing input into the management team's strategic leadership decisions, liaising with the teams on funding opportunities, shoring up support for faculty members participating in ICSR activities, and promoting the Centre and its outcomes, both within the faculties in which they are based and externally. Faculty Champions are appointed for 2 years and help the ICSR Management Team meet the objectives of the ICSR.

The overall success of the Centre relies on the participation of the researchers and external stakeholders who take part in our engagement activities and become members of our network. Through our global membership network, we interact with 13 global universities and a diverse group of other academic and non-academic institutions with an interest and commitment to the ICSRs vision. Our membership network database is a resource for researchers to seek out and engage likeminded interdisciplinary expertise for projects being developed through our facilitated sessions, currently requests to access information from this database is channelled through the Centre Manager with the intention to develop a tool to provide wider access to this in the future.

The Centre Manager oversees the operational management of the Centre activities including the management group and other governance structures.

Centre Director: **Katie Atkinson**

Centre Manager: **Helen Bryant**

THE INTERDISCIPLINARY CENTRE FOR SUSTAINABILITY RESEARCH
YEAR 1 EVALUATION FEB-FEB 2025/26

The Advisory Board is comprised of:

ICSR & Faculty Staff:

- ICSR Director, **Professor Katie Atkinson** (Chair)
- ICSR Manager, **Helen Bryant**
- Head of Research and Environment Development, **Lucy Williams**, RPI
- Head of Research Communications, **Hannah Jefferies,** External Relations

Key collaboration teams:

Support Teams: Research, Partnerships and Innovation (RPI), Research Communications, Sustainability Team, Development and Alumni Relations Team

Faculty Champions for 2025-2027: Sarah Arens (HSS), Anne McArdle (HLS), Annie Ockleford (SCE)

Members: 175

Financial Resources:

The Centre was initially established as a strategic investment with funding from the University of Liverpool's SIF (Strategic Investment Fund) budget, with additional support from HEIF for Pump Priming.

Financial resources have been set out in the original ICSR

Business Case to include budget for staff, facilitation, reputation and workshops. This has resulted in the appointment of a dedicated part-time Centre Manager.

3.Activities and outputs

New interdisciplinary collaborations and groups have been established throughout 2025 that would not have existed without the ICSR's work to convene the researchers. Subsequently, multiple large funding bids are in preparation across a range of disciplines that again would not have come to fruition without the support of the ICSR.

The Centre has been busy raising its profile across the university through a series of open, facilitated activities as well as some more targeted engagements. We opened in 2025 with Climate as our highlight topic for the year. The Centre will be rotating its highlight topics annually to cover all areas of the SDGs as well as give a wide range of researchers and partners the opportunity to engage with us.

The ICSR aims to have a new strategic research topic each year for at least the first three years. To define topics of the right scale, we will hold an annual early-stage workshop to speculatively work up ideas and respond to relevant developments in the external environment. To ensure focus and alignment to the UN Sustainable Development Goals and UoL Strategic Objectives, the Centre will convene an annual meeting of the Advisory Group to establish and confirm the research objectives for the following year. These objectives should be centred around the Sustainable Development Goals and require an interdisciplinary approach. The early-stage workshops will include participants from across 3 faculties at the University of Liverpool, participants will be invited to share and discuss potential themes linked to the SDGs and make suggestions on overarching grand challenges which encompass multiple areas. The following boundaries must be considered:

1. Interdisciplinary potential: topics should be of the scale that they can only be addressed with contributions from multiple disciplines (crossing all 3 Faculties).
2. Solution Focussed: suggested topics should start with a challenge and have the potential to address real-world applications and/or influence policy.
3. Alignment with SDGs: topics should align with one or more United Nations Sustainable Development Goals with potential for global impact.
4. Funding Opportunities: high likelihood that collaborative projects arising from the topics can attract substantial external funding.
5. Scale: topic should be of the breadth and scale to attract 20-30 academic colleagues to collaboratively identify 3-4 significant research opportunities which could ultimately lead to significant funding applications of scale £2M-3M per topic.
6. Collaborative Potential: topics should have the appeal to engage high profile external partners – industry, government, 3rd sector and international researchers.

Topic selection will be based on a mix of top-down topics linked to university priorities and bottom-up ones drawn from the early-stage workshops. Criteria for assessment will include consideration of the internal strengths and capabilities; external environment from scanning potential funding opportunities and competitor analysis; the level of opportunity to draw in key external collaborators; potential impact and likelihood of delivering on outcomes on the SDGs.

After our launch in February 2025, we announced our first workshops to take place in March/April 2025. The first set of workshops were an open opportunity for researchers from across all three faculties to meet in the ICSR HQ, where we discussed what interdisciplinarity looked like in Climate research. Due to popular demand from our researchers, the ICSR held three of these sessions. During these sessions we were able to start identifying key themes that resonated with the researchers we had engaged. This fed into our climate sandpit series, two facilitated day long sessions held in June and July. One of these sessions was facilitated by the Horizons Institute based at the University of Leeds and the second was facilitated by the Centre with support from RPI. Here is where we started to narrow focus within the topic to identifying research questions and areas of interest.

Moving into the autumn of 2025, we held additional targeted meetings under the subthemes identified during the sandpits in order to further focus areas of research questions. These were: Renewable energies, Knowledge Systems, Floods and Pollution. As a result of the work that we did with these groups, we were able to offer HEIF-funded pump priming for projects coming out of these sessions which is being used to catalyse engagement with industry and undertake preliminary research which will support larger funding applications.

Overall, these sessions were attended by 66 academics from 24 disciplines across all three faculties (10 HSS, 4 HLS, 10 FSE). Nine teams have formed, four of which have received pump priming. The teams receiving pump priming will likely result in around seven large funding applications being submitted in 2026/27 academic year.

Activity

- The ICSR formally launched in February 2025
- Showcase at the LCR AI Summit in October 2025 of demos undertaken by IBM and UoL researchers on AI and climate data for local sustainability topics.
- January 2026 workshop forthcoming with IBM/ICSR/LCR to expand the collaborations on AI for climate resilience and sustainability
- Recruitment of Faculty Champions for the ICSR who will play a supporting role within their faculties in helping the ICSR to drive research excellence, coordinate interdisciplinary and challenge-led outputs, and delivery of impactful outcomes.

Events

Workshops on climate held in March and April 2025 to identify areas of strength and opportunity across UoL, focus on related SDGs (6, 7, 11, 12, 13, 14, 15).

3 Workshops held with a total of 45 attendees

2 sandpit events held in June and July 2025 to scope groups and topics to take forward for identifying new projects and funding bids. Identified key themes within the topic to take forward to the next set of topic refinement meetings. 52 attendees

Coffee morning – informal networking opportunity for collaboration and engagement with the centre.

Topic refinement meetings held between September and November 2025 for groups to develop their ideas in more detail, with bid development following.

- 1 session on 'Knowledge Systems' and 'Renewable Energies'
- 1 session on 'Land use' and 'Pollution'
- 1 session on 'Microplastics'

This activity resulted in four supported research projects through our pump priming scheme.

Feedback

Feedback from the sandpit shows mixed progress in developing interdisciplinary research ideas. Some participants had already formed or were actively building collaborative groups around topics by the end of the session, while others were yet able to establish teams. These individuals cited they still benefited from attendance through gaining valuable awareness of potential collaborators and their expertise. Across discussions, several research areas and gaps were identified, including limited understanding of microplastics' environmental and health impacts, broad and unfocused challenges in land use and climate change, links between poverty and overfishing in coastal systems, and emerging concerns around equity in transport electrification. However, a common theme was that topics were often too broad, making it difficult to define clear, fundable research questions or prioritise specific gaps.

When asked how the Centre could further support them, participants highlighted a need for help to move ideas forward, including guidance on developing interdisciplinary proposals, access to experienced mentors, advice on identifying funding opportunities, and more flexible or longer-term pump-priming funding. The most valued aspects of the sandpit were the opportunity to meet new colleagues, explore overlapping interests, and engage in interdisciplinary discussion. However, several challenges were noted, including restrictive formats, pre-defined themes that did not suit all attendees, limited flexibility to move between groups, and insufficient time for networking and refining ideas. Suggestions for improvement included sharing project ideas and participant information in advance, allowing more flexible engagement during sessions, narrowing the focus earlier to support research question development, and increasing opportunities for networking. Overall, while the event was viewed positively, many felt further structural support is needed to translate initial discussions into concrete research proposals. This feedback has influenced how the ICSR has structured its Y2 topic activities.

Outputs

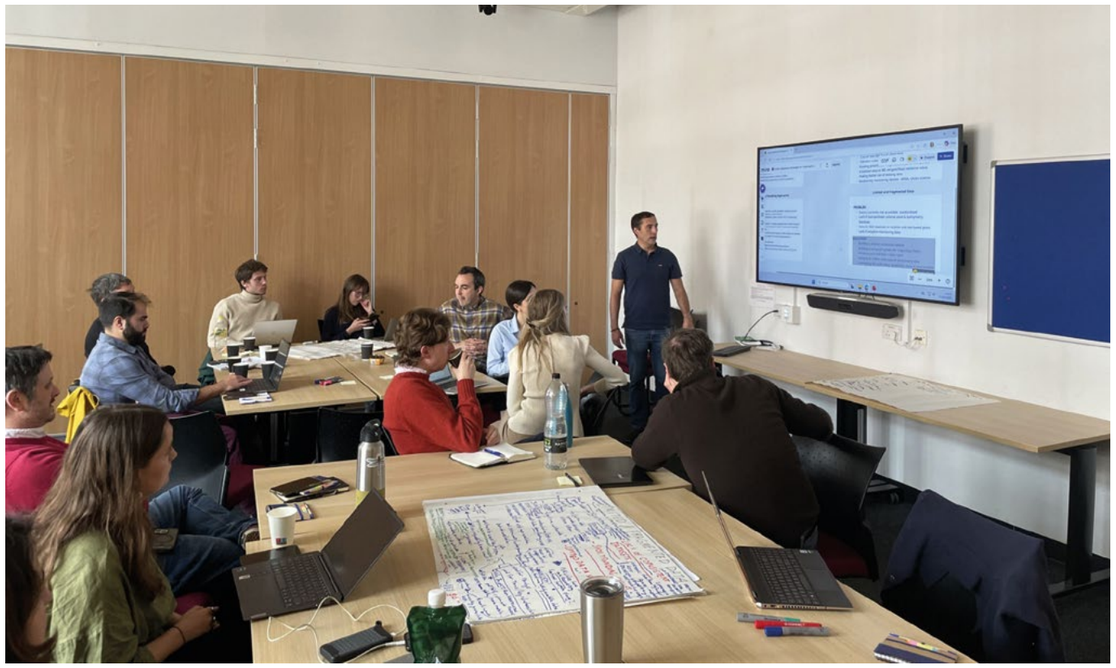
There have been 23 external funding applications (approx. £6 million) submitted in Y1 as a result of ICSR engagement activities. Funders applications have been submitted to include:

- World Cancer Research Fund (UK)
- Arts and Humanities Research Council
- Engineering & Physical Sciences Research Council
- The British Academy
- Medical Research Council
- European Commission
- Henry Royce Institute (UK)
- Advanced Research and Invention Agency (ARIA)
- Research England
- Defence Science and Technology Laboratory (UK)
- The Wellcome Trust
- The Leverhulme Trust
- Natural Environment Research Council
- Royal Society
- Gates Foundation
- Economic and Social Research Council

Though the value of these applications has not yet reached the level we aim for as a submission arising from the Centre's annual activities, the number of applications has met our aims and expectations for Y1. The first viable opportunity to start submitting applications only arose after the July sandpits and therefore it is expected that this number will increase once the pump primed projects from October 2025 finish in July 2026, and preparations for their large funding applications commence.

THE INTERDISCIPLINARY CENTRE FOR SUSTAINABILITY RESEARCH
YEAR 1 EVALUATION FEB-FEB 2025/26

Speaker Samantha Aspinall from the Horizons Institute facilitating one of the ICSR Sandpit Sessions on Climate.



ICSR Pump Priming recipient Wayne Dawson speaking at one of his project workshops in Spring 2026.

4.Pump priming

In this first year, we received 6 applications for internal pump priming (total funding pot of £20K of HEIF funding) with 4 projects funded.

Microplastics in Construction: Understanding environmental and health risks to guide policy and public awareness

Description:

This project brings together academics from all three faculties to address micro and nano-plastic pollution into our waterways from the construction industry and their effects on human health. The team was initially funded through pump priming to identify key partners and perform initial data gathering on the presence of microplastics in liver microphages.

Research Team members:

Ainhoa Mielgo (PI- Dept. of Molecular and Clinical Cancer Medicine), Rudi Palmieri (Communication and Media Studies), Stewart Plaistow (Evolution, ecology and behavioural studies), Xue Yong (Electrical engineering and electronics), Mohad Mousavi Nezhad (Civil and environmental engineering), Hanmei Chen (Architecture), Gareth Abrahams (Geography and planning), Steve Paterson (Evolution, ecology and behaviour), Biqiong Chen (Chemistry).

Target for external follow-on funding:

This group has already submitted an application to the World Cancer Research Fund (UK) and will be working toward applying for funding to a number of schemes, including Wellcome Discovery Awards, Nuffield and NERC.

Industry partners included in this project:

Peel Ports

SDG target indicators: 3.9, 6.3, 12.4, 12.6

Co-Creating Geothermal Sustainable Heating

Description:

This project brings together a sizable team from across the university including researchers, Professional Services staff, and industry to address the energy needs of the Liverpool City Region. The team received pump priming from ICSR to hold a workshop which in April 2026, brought academics, government, and industry partners together to co-develop a shared research agenda for advancing geothermal heating in the Northwest.

Research Team members:

David McNamara (PI- Geothermal Energy), Emma Michie (Subsurface Imaging), Richard Worden (Sedimentary Reservoirs), Pete Burgess (Sedimentary Reservoirs), Zhibin Yu (Geothermal Technology), Catherine Queen (Community Engagement), Richard Dunning (Heat networks), Xue Zhang (flow modelling), Amanda Hughes (material science), Yuan Shi (Urban heat dynamics), Dan Faulkner (reservoir geomechanics), Rachael Hanmer-Dwight (sustainability development), Benjamin Parker (sustainability development), Mohaddeseh Mousavi Nezhad (fluid dynamics), Paul Shepley (geotechnical / heat performance), Barnabus Calder (architecture / history of heat), Shantanu Banerjee (financial analysis of climate initiative), Robert McKenna (science communication ethics and strategies)

Target for external follow-on funding:

UKRI, Innovate UK demonstrator schemes.

Industry partners included in this project:

Liverpool City Council, CeraPhi Energy, Causeway Energies, Eden Geothermal Ltd., Igne, WSP, Ener-Vate, Heatnet Global, Harbour Project management, Global City Futures, TownRock Energy, Midland Net Zero Hub.

SDG target indicators: 7.1, 9.4

THE INTERDISCIPLINARY CENTRE FOR SUSTAINABILITY RESEARCH
YEAR 1 EVALUATION FEB-FEB 2025/26

Feasibility study for renewable energy solutions in coastal ecosystems and fisheries

Description:

This project explores the feasibility of transitioning fisheries and wood-harvesting communities towards renewable energy solutions, mitigating environmental degradation, and improving health outcomes. Bringing together researchers from two faculties and an industry partner specialising in renewable and solar energy, this project will work directly with communities in Cameroon as a pilot.

Research Team members:

Kennedy Osuka Edeye (PI – Earth Oceans and Ecological sciences), Dan Pope (Institution of Population health/ public health), Tim Veal (Physics), Oliver Menoukeu Pamen (Mathematical sciences).

Target for external follow-on funding:

The funders identified for this project are the Green Climate Fund or International Climate Initiative. The team has also explored European Research Council funding (synergy grants) and has already applied for seed funding from The Conservation, Food & Health Foundation.

Industry partners included in this project:

AGreaTE Inc. (renewable energy)

SDG target indicators: 3.9, 7, 9.a, 11.6, 14.1, 14.2

Green Adaptation Strategies for Flood Resilience in Infrastructure, ecosystems, health and wellbeing

Description:

This project will look at how environmental and biological knowledge can be used to strengthen the resilience of infrastructure to climate change driven flooding risk and the health and social consequences. It will explore how ecological and biological drivers act as a consequence of climate change and impact flood risk; how green adaptation can be used to strengthen the resilience of infrastructure (such as bridges, energy and digital infrastructures) against heightened flood hazards; and the health and societal impacts of preventing catastrophic infrastructure failure. This project will start with bringing together the research team with industrial partners such as Natural England, Environment Agency, Liverpool City Council, and Network Rail in May 2026. into a workshop.

Research Team members:

Nicoletta Leonardi (PI – Geography and Planning), Wayne Dawson (Evolution, Ecology and Behaviour), Eda Majtan (Civil and Environmental Engineering), Anna Head (Public Health Policy and Systems)

Target for external follow-on funding:

Horizon Europe, EPSRC and ARIA

Industry partners included in this project:

Natural England, Environment Agency, Liverpool City Council, and Network Rail.

SDG target indicators: 9.4, 13, 14.2, 15.1

5.Research culture, capacity building and reputation enhancement

The ICSR approach to research development is centred around a team convening model, bringing researchers from across the University together to explore common topics and themes linked to the UN SDGs in order to co-create 'oven ready' research projects. Though the primary aims of the ICSR are to increase funded research activity at the University of Liverpool, our approach allows us to explore freely our academics and partners' novel research ideas.

With the support of our pump priming, our research teams have been able to explore their research ideas beyond the scope of our facilitated workshops and sandpits, giving the time and resources to do pilot work and explore partnerships which are required to make their ideas a success. The ICSR operates a supportive process in which they coordinate support from the Partnership and Research Development teams, who monitor and inform on funding opportunities as well as facilitate conversations with external stakeholders. We also provide access and coordinate relationships between research teams and networked stakeholders in order to fill expertise gaps required for the research.

Due to the nature of our methods, it is not sufficient to stop support for one research topic once we have moved on to another topic of facilitated activity. For the first 12 months, our facilitated activities were linked to our highlight topic of Climate. As we have moved on in year 2 to another set of facilitated activities, our pump primed projects under climate are still operating. Hence, continued support for these projects is necessary, albeit it in a different manner, and will follow the timeline below. Although there will no longer be any facilitated activity linked to Climate at this time, we will continue to meet with and facilitate connections for our pump primed projects in order to increase the likelihood of successful large funding applications.

Communications strategy and comms outputs

The ICSR contributes to the University's wider communications strategy, which is fully aligned with **Liverpool 2031**. In order to maintain consistent messaging, the ICSR liaises with the research communications team and press team to ensure there isn't duplication and that the appropriate channels are used for specific content.

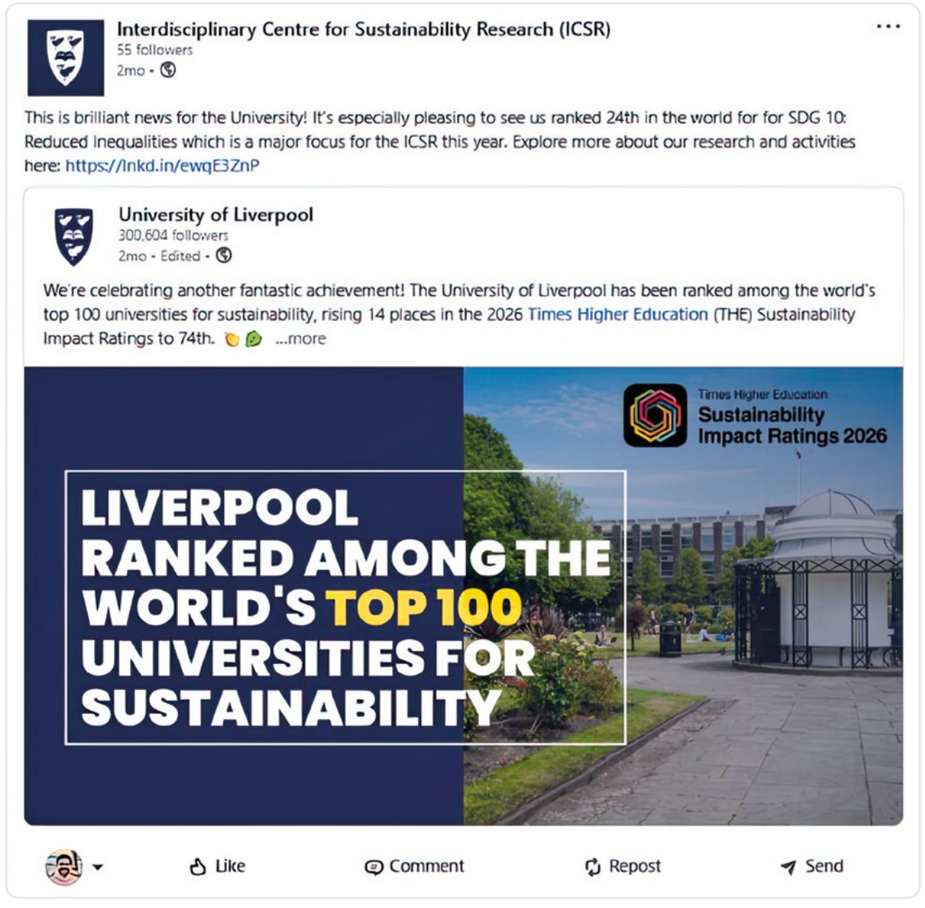
Our audience includes both internal and external academics, industry partners and professional services staff who have an interest in interdisciplinary collaboration and the UN SDGs. We also communicate and build relationships with external partners such as funders, policymakers, UK businesses/industry, partners within the LCR, international stakeholders (business, academic and policy related), news media and companies producing rankings [THE].

The Centre's main form of communication is through its website: **www.liverpool.ac.uk/research/interdisciplinary-centre-for-sustainability-research/** and via email through a designated email inbox. The website has seen a healthy number of users throughout the year, 6,251 unique users totalling 11,990 views within the 12 months. Of which 44.8% were from organic searches, 34.2% were from direct access, 7.3% were referrals, 3.5% followed an email link, 3.4% were paid search, 1.1% from social media, and 5.7% were 'other'.

THE INTERDISCIPLINARY CENTRE FOR SUSTAINABILITY RESEARCH
YEAR 1 EVALUATION FEB-FEB 2025/26

The Centre holds its own social media accounts which are used to communicate externally about activities and engagement opportunities. We intend to rely on a mix of people, from the management group, academics engaging with the Centre and external partners to produce and submit content to be shared through the ICSR website and social media outlets.

In the first 12 months of the ICSR we have published 4 blogs with 111 unique reads, and 5 social media posts with 2,298 views. The University of Liverpool Research Communications team has separately posted about the ICSR and other social media accounts which has resulted in a further 32,180 impressions, 622 reactions, 15 comments over LinkedIn and Facebook accounts. We are currently reviewing our communications strategies to ensure we are using the most effective communication for our stakeholders without wasting resources.



6.Reflections, Recommendations and learnings for the future

The ICSR has identified a few risks to delivery at the end of Y1, which has affected timelines on ROI and impact against KPIs. There is currently activity in place to address these points going into Y2.

Changing funding landscape

The ICSR is currently facing a changing funding landscape, with UKRI pivoting their research support to highlight the Government's 2025 Industrial Strategy. In order to ensure that we are still able to target relevant funding schemes, we have mapped the projects currently in development through the Centre to the priority areas of the Industrial Strategy :

Clean Energy: Aims at increasing development and up take of clean energy industries, manufacturing and decarbonisation. We have two pump priming projects underway looking to catalyse activity in this sector. The strategy aims to double investment in frontier Clean Energy Industries, over £30 billion annually.

Life Sciences/foundational industries and supply chains**:** Our Microplastics project looks at the potential negative impact of leaching micro and nano plastics from the construction industry have on our health. Though there are no direct links between this project and the interventions already laid out in the industrial strategy under the life science priority, there is scope to further develop our partnerships with construction industries and have impact on the government priority to support foundational industries which includes construction.

Foundational industries and supply chains: This priority area includes support for infrastructure projects, the Flood Resilience project addresses coastal flooding risk to infrastructure, ecosystems and wellbeing.

The ICSR team convening approach operates over a longer development timescale, focusing on building novel, interdisciplinary research teams and shaping ambitious research ideas rather than working backwards from a specific funding call. While we support teams to develop an awareness of the funding landscape and potential opportunities, tight funder deadlines rarely allow sufficient time to establish strong interdisciplinary collaborations from scratch once a call is announced.

By investing early in team and project development, ICSR enables research groups to be better positioned to respond strategically and flexibly as opportunities emerge.

Meeting funder requirements

As the ICSR team convening method is not led by a specific funding call, projects arising from the Centre's activities sometimes may not tightly align with funder requirements. For example, some teams are targeting bids at Horizon Europe calls; this works well when team members already have in place a network of European partners to bring into a bid. However, for groups that wish to target Horizon Europe, where a strong consortium is not already in place, sufficient time needs to be allocated to establishing the right partners prior to full bid preparation. This requirement is being flagged to teams arising from the Reduced Inequalities sandpits early on in their engagement with the Centre.

Readiness to apply for research funding

Due to the nature of our programme so far and our focus on convening new teams that have not previously worked together, there is often a longer development period before teams are ready to submit major funding applications. Many teams are focusing on building up their collaborations with seed fundings and smaller grants. These early-stage activities enable teams to develop shared research agendas, build collaborative track records, and generate preliminary data, laying the foundations for future large-scale, competitive funding applications. Fifteen external funding applications have been submitted in Y1 to support some of the early-stage activity totalling £3.6m. We continue to support Y1 teams into Y2 as they build up the foundations of these new collaborations and projects and expect more funding applications to be submitted.

Pipeline of people willing to step up and lead bids

One challenge to delivery has been ensuring engagement from academics with the appropriate leadership experience and capacity to lead large scale funding applications. Successful progression to major bids depends on involving individuals positioned to drive complex, large-scale proposals forward. Operationally, the ICSR seeks to further engage Faculty Leaderships Teams in order to encourage more engagement in our future topics from academics who are ready to lead on large funding applications.

7.Conclusion / Next Steps

In this first year, the ICSR has established itself as a new catalyst for pan-institutional interdisciplinary collaboration, impactful research, and external engagement.

Through workshops, sandpits, and pump priming activities, the Centre has mobilised diverse expertise across faculties and industry to address pressing challenges. With a growing pipeline of bids expected to exceed £15m. In this first year the climate theme has laid a robust foundation for long-term impact while strengthening alignment with the UN Sustainable Development Goals and working towards our KPIs against UoL Strategy 2031. As the Centre transitions into its second year, the focus is shifting toward sustaining bid development and launching the new theme on Reducing Inequalities, ensuring that ICSR continues to drive research excellence while addressing both national priorities and global sustainability challenges, and nurturing new interdisciplinary collaborations internally.

Annex I

Additional activity and support

- Letter of support from the ICSR provided to Haniyeh Mohammadpourkarbasi (PI) application to AHRC Cultural heritage and climate change networks to drive policy change titled ARCHWAY: Adaptive Retrofit and Cultural Heritage Workflows for Policy, The Climate Heritage Retrofit Network. This project is a collaboration between academics and industry partners from the UK, EU and Türkiye.
- IBM Studentships, 2 funded studentships minimum cash funding of £58.5k over four years for each studentship, one on Air Quality Monitoring and AI has commenced on 1st December 2025.
- Co-hosted ACRES Workshop on Protecting Biodiversity, Water Quality, and Flood risk with a mix of academic and industry partners.
- Invited Speaker at interdisciplinary events such as ICOMOS-UK symposium -Heritage in Transition: Skills and Approaches for Sustainability in May 2025 and the HSS Interdisciplinary Research Group for the Liverpool City Region workshop for interdisciplinary research, teaching, and scholarship.

Appendix 1

UNIVERSITY OF LIVERPOOL

INTERDISCIPLINARY CENTRE FOR SUSTAINABILITY RESEARCH

🌍 OUR MISSION

The ICSR is a dynamic hub for interdisciplinary research that brings together diverse expertise from across the University and beyond.

Our mission is to support teams of researchers who can collectively tackle the United Nations Sustainable Development Goals (SDGs).

We will periodically focus on specific thematic SDGs. This will require innovative collaboration to identify tractable research opportunities.

🌱 HOW WE WORK

✅ Connect expertise
We unite specialists from different fields to create holistic research teams capable of addressing complex sustainability problems.

✅ Accelerate impact
We focus on generating tangible breakthroughs and real-world solutions that contribute to global SDG progress.

✅ Build strategic partnerships
We co-create research with international collaborators, industry partners, funders, and stakeholders to amplify reach, secure funding, and enhance impact.

✅ Sharing best practice
By working collaboratively across disciplines and methodologies, we enable sharing and blending of different research techniques, which enrich our members with collective learning opportunities that support innovation.

liverpool.ac.uk/research/interdisciplinary-centre-for-sustainability-research/

🤝 GET INVOLVED

We welcome internal and external members who are committed to using interdisciplinary approaches to address the UN Sustainable Development Goals (SDGs).

Membership is open to academic and non-academic colleagues aligned with the ICSR vision.

🔓 MEMBER BENEFITS

Members will join our mailing list and receive updates on Centre activity, news, and opportunities.

We can support you through:
- Promoting your SDG research via our website, social media, and University channels
- Endorsing interdisciplinary initiatives
- Connecting you to a growing network of researchers, partners, and collaborators
- Delivering workshops and sandpits to spark new interdisciplinary projects.

🧠 LEARN MORE

You can hear Professor Katie Atkinson discuss the ICSR, its goals, and its role in the universities broader strategy on the **THE Connect podcast**.

Who to contact
Helen Bryant, Centre Manager
icsr@liverpool.ac.uk

⭐ MEMBER TESTIMONIALS

"The ICSR has been instrumental in convening expertise from across the University to tackle the impacts of micro- and nanoplastics on human health and ecosystems. Its support has enabled us to establish a diverse, mission-driven team working collaboratively to address this emerging global issue."

Professor Ainhoa Mielgo Iza, Department of Molecular and Clinical Cancer Medicine

"Being part of the ICSR has enabled collaboration with colleagues from disciplines I would not otherwise have engaged with, united around pressing climate challenges. The Centre's pump-priming support has strengthened our interdisciplinary team and positioned us to pursue ambitious external funding."

Professor Nicoleta Leonardi, Department of Geography and Planning

"Engaging with the ICSR has helped me transform sustainability-focused ideas into clear, actionable research plans. Through its support and pump-priming funding, I've been able to build a strong cross-sector team spanning academia, industry and government, bringing me significantly closer to delivering genuinely ground-breaking science."

Dr David McNamara, Department of Earth, Ocean and Ecological Sciences

liverpool.ac.uk/research/interdisciplinary-centre-for-sustainability-research/

Appendix 2

Interdisciplinary Centre for Sustainability Research (ICSR)

Inputs	Activities	Outputs	Short-term Outcomes (Year 1-2)	Medium-term Outcomes (Year 2-3)	Long-term Outcomes (by 2031 and beyond)
People and expertise • Centre director (0.5 FTE) • Centre Manager (0.5 FTE) • RPI support (0.3 FTE Y1-Y3) • Comms support (0.1 FTE) • Established the Faculty Champions Network • 15 Early Career Researchers involved with events **Financial resource** • Total spends, Staffing, facilitation and hospitality 51% of it's allocated budget • HEIF Funding allocated £20k **Infrastructure** • Physical space on campus, Foundation Building • Linked In group profile, University of Liverpool website University reputation, networks and existing strengths (e.g. Climate Futures, Digital theme)	**Topic/Programme identification** • 3 early-stage ideas workshops • 2 sandpits, and 5 topic workshops • 1 Advisory group meeting, weekly team meetings, and quarterly Faculty Champions meetings • 4 sub-topics within Climate identified resulting pump priming projects **Collaborative programme delivery** • 66 academic participants across 24 disciplines. • Activities resulting in 9 interdisciplinary teams **Bid and partnership development** • 4 teams supported with HEIF funding to pump priming collaborative workshops. • 15 applications submitted at a value of £2.6m • Secure involvement of international high-profile partners **Culture and capacity building** • Establish interdisciplinary Faculty Champion's network • Development and monitoring team convening approach **Reputation enhancement** • Took part in 4 enhancement externally organised events	**Programme and engagement outputs** • 1 significant focus topic area identified per year - Y1 Climate • 4 pump primed projects supported. • 3 early-stage ideas workshops • 2 1-day sandpits • Interdisciplinary Faculty champions network established and active **Bid development outputs** • 15 proposals submitted **Partnership and collaboration outputs** • New collaborations with partners in industry/policy/ NGOs etc. • Growth in cross-disciplinary interactions and teams **Reputation outputs** • Communications materials: biogs, case studies, news stories shared on Linked In and our ICSR website • Increased visibility via events, web presence, rankings contributions, 6,000 users engaged	**Research and funding** • 4 Strong interdisciplinary teams assembled • 15 High-quality proposals submitted • Clear pipeline of SDG-focused research topics established **Collaboration and culture** • Increase in cross-disciplinary connections, 24 disciplines across all 3 Faculties • 66 Researchers across career stages engaged in interdisciplinary training and mentoring, 12 ECRs engaged • Greater awareness of UoL's sustainability research strengths across the University established **Partnerships** • New collaborations formed with external and international partners with the support of HEIF funding • External thought leaders operationally engaged in workshops **Visibility and reputation** • Launch of Centre in February 2025 • Improved visibility of interdisciplinary sustainability research internally and externally • Growth in SDG-aligned communication outputs	Working towards	Working towards

Goal: The University of Liverpool becomes a recognised global centre for world-leading, interdisciplinary sustainability research, delivering major funded programmes, high-impact outputs and real contributions to achieving the UN Sustainable Development Goals (SDGs)

Interdisciplinary Centre for Sustainability Research (ICSR)
University of Liverpool
Liverpool
L69 3BX

Email: **icsr@liverpool.ac.uk**
Web: **liverpool.ac.uk/research/interdisciplinary-centre-for-sustainability-research**