

Sustainability
Research Institute



UNIVERSITY OF LEEDS

SRI
@21

This celebratory document offers a curated overview of our journey, milestones, and achievements. You can dip into sections of interest or read it as a narrative of our progress. The table of contents will guide you through the key themes of our agenda, as well as reflections that highlight how we’ve grown and where we are heading.

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Introduction

Thank you for picking up SRI@21 – a celebration of 21 years of sustainability research at Leeds and an ambitious look towards what we need to do in the future.

The Sustainability Research Institute (SRI), part of the School of Earth and Environment, is proud to contribute to the University of Leeds' "signature strength" research.

From a small group of committed researchers who created a space for environmental social science alongside environmental science colleagues, SRI is now a group of over 100 researchers, still innovating. We're committed to understanding sustainability challenges more deeply so that we can work with others to tackle those challenges.

SRI is a place for partnerships and collaboration where individual thought and challenge is welcomed, but the focus is on working together. Collaborating, absorbing and reflecting deeply on diverse perspectives, is the only way we can undertake the research that needs to be done, and the only way we can share research so that it can make a difference.

Environmental sustainability is sometimes oversimplified to responding to climate change, but tackling climate breakdown is about more than carbon, it is also about social justice. This illustrates how any attempt to simplify sustainability leads to it springing out of those constraints, a jack-in-the-box of an idea.

And so, as sustainability challenges continue to multiply, SRI must be clear-eyed and evidence-based, not just in describing the crises that people and planet are facing. We also need to be courageous in identifying the underlying causes of those crises and offering ideas to effect change.

The 21 research questions featured in this document have been generated through conversations across SRI as we seek ways to keep our research powerful, relevant and motivating.

SRI today – in size....

In the summer of 2025, SRI employs **115 people** – around **60 academic staff** and **50 research staff** as well as the essential professional services and research management colleagues who enable the research to happen.

In the academic year 2024-25, we had **406** undergraduate students and **180** MSc students on our taught programmes. **45** PhD students kept fresh ideas flowing into the Institute.

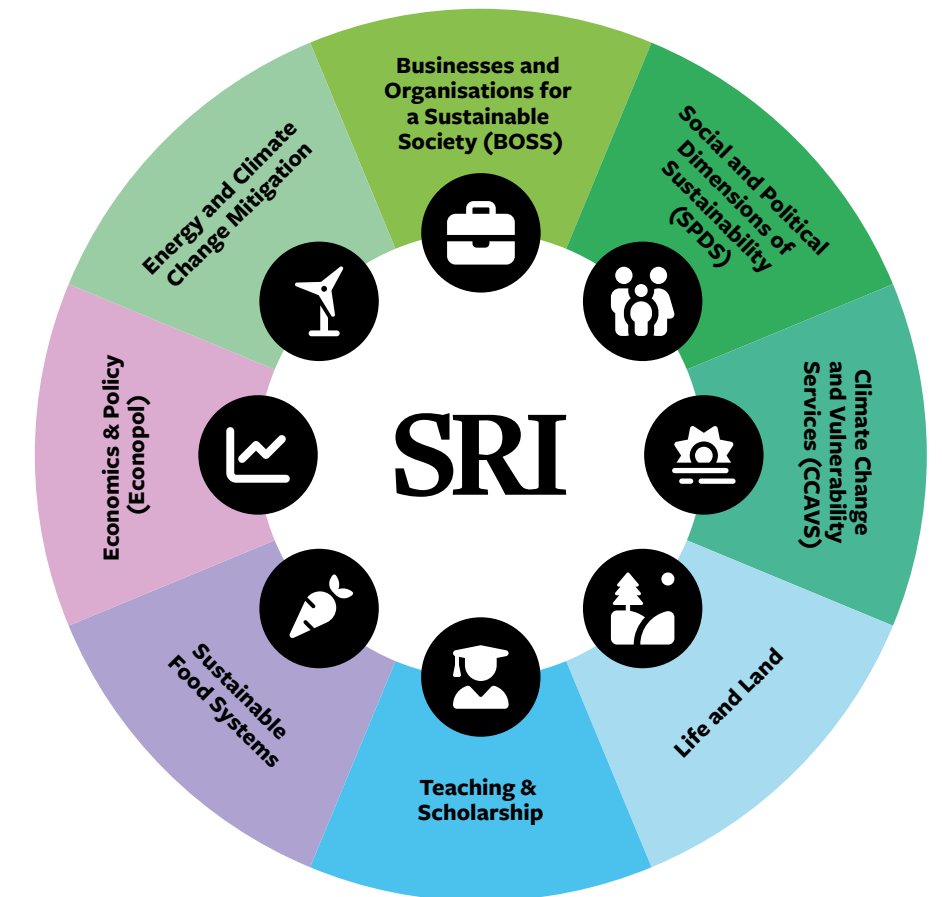
Between 2019 and 2024 our research produced over 1000 research publications, the vast majority of these are 'open access'. Mapping our publication onto the UN Sustainable Development Goals (SDGs), in that period we published work relevant to 15 of the 17 goals, with Tackling Climate Change, Affordable Clean Energy, Zero Hunger and Life on Land as the four goals we speak to most frequently. We produce research with collaborators all over the world.

In 2024-5, we won **£6.2M** of new research funding for future years which will grow our current annual research spend of **£2.9M** even more.

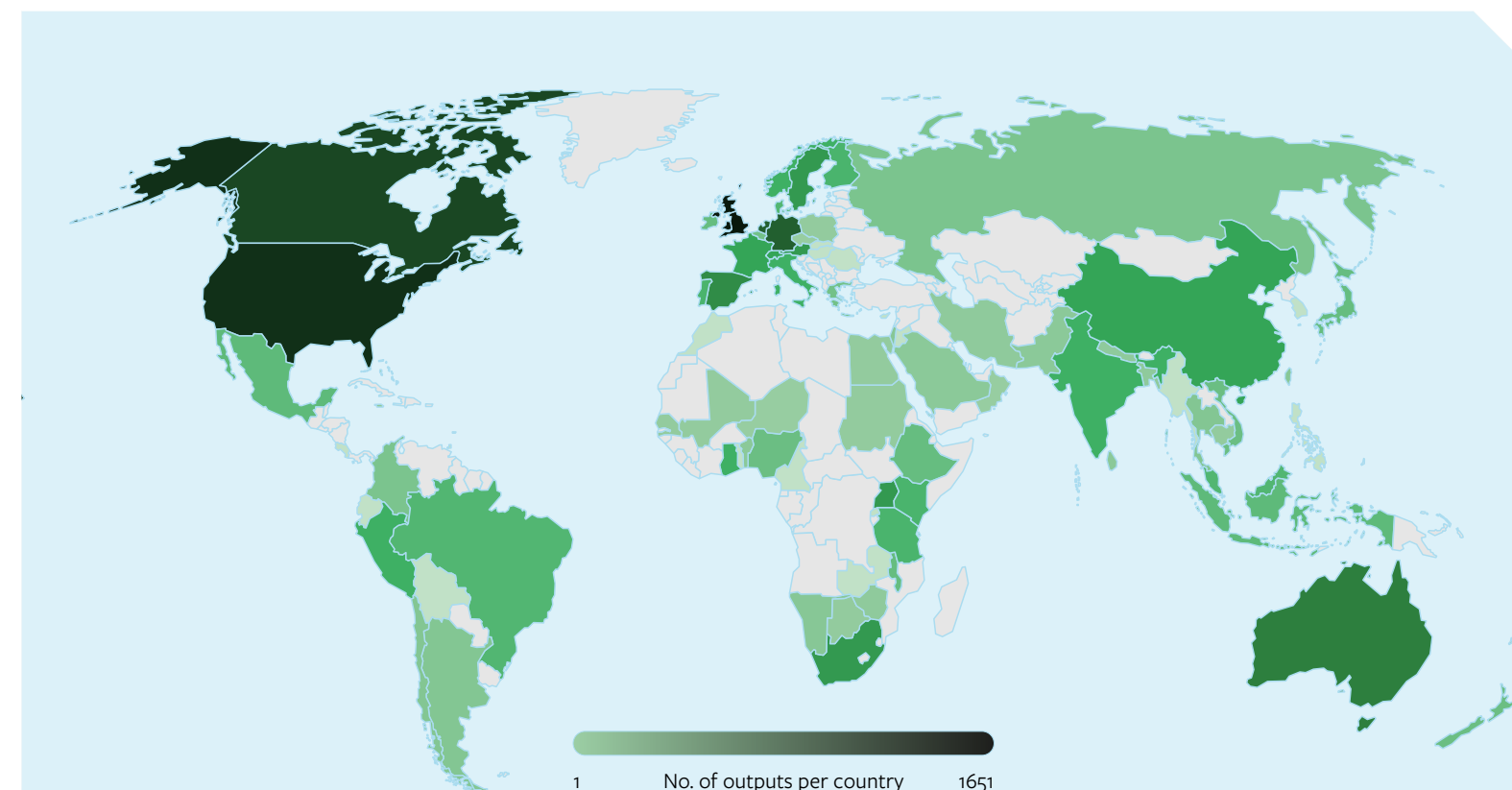
Our research outputs are numerous, our 'esteem indicators' varied and everyone is busy. We are committed to being useful and effective.

...and shape

SRI's eight research clusters enable everyone in SRI to have a place in a smaller, slightly more focussed research community. Most people belong to more than one cluster, which we encourage, to build thoughtful connections that enable our research to stay innovative.



Below: Map showing number of SRI outputs by country of collaborating institutions. SRI is producing research with collaborators from all over the world.

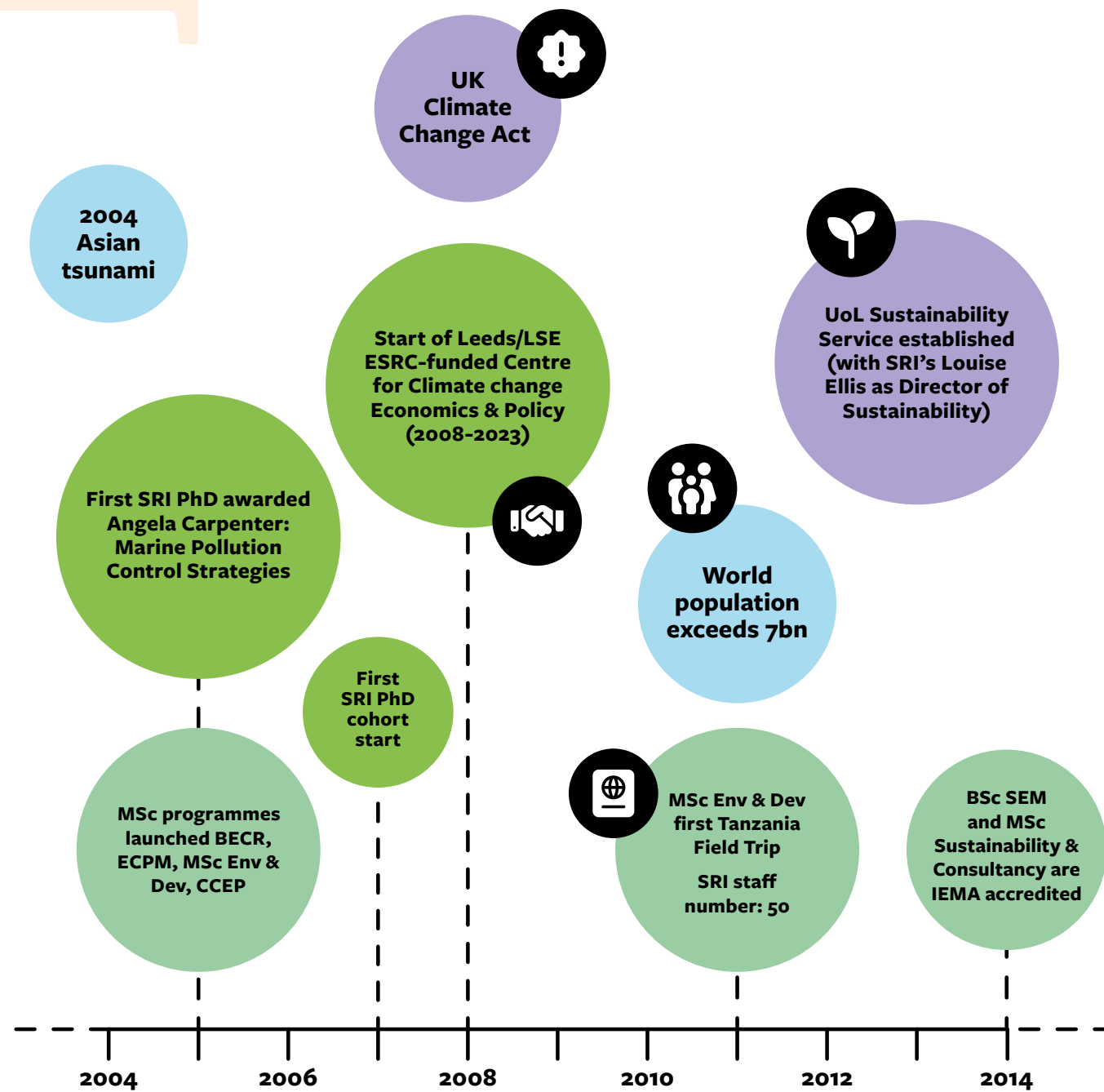


1 No. of outputs per country 1651

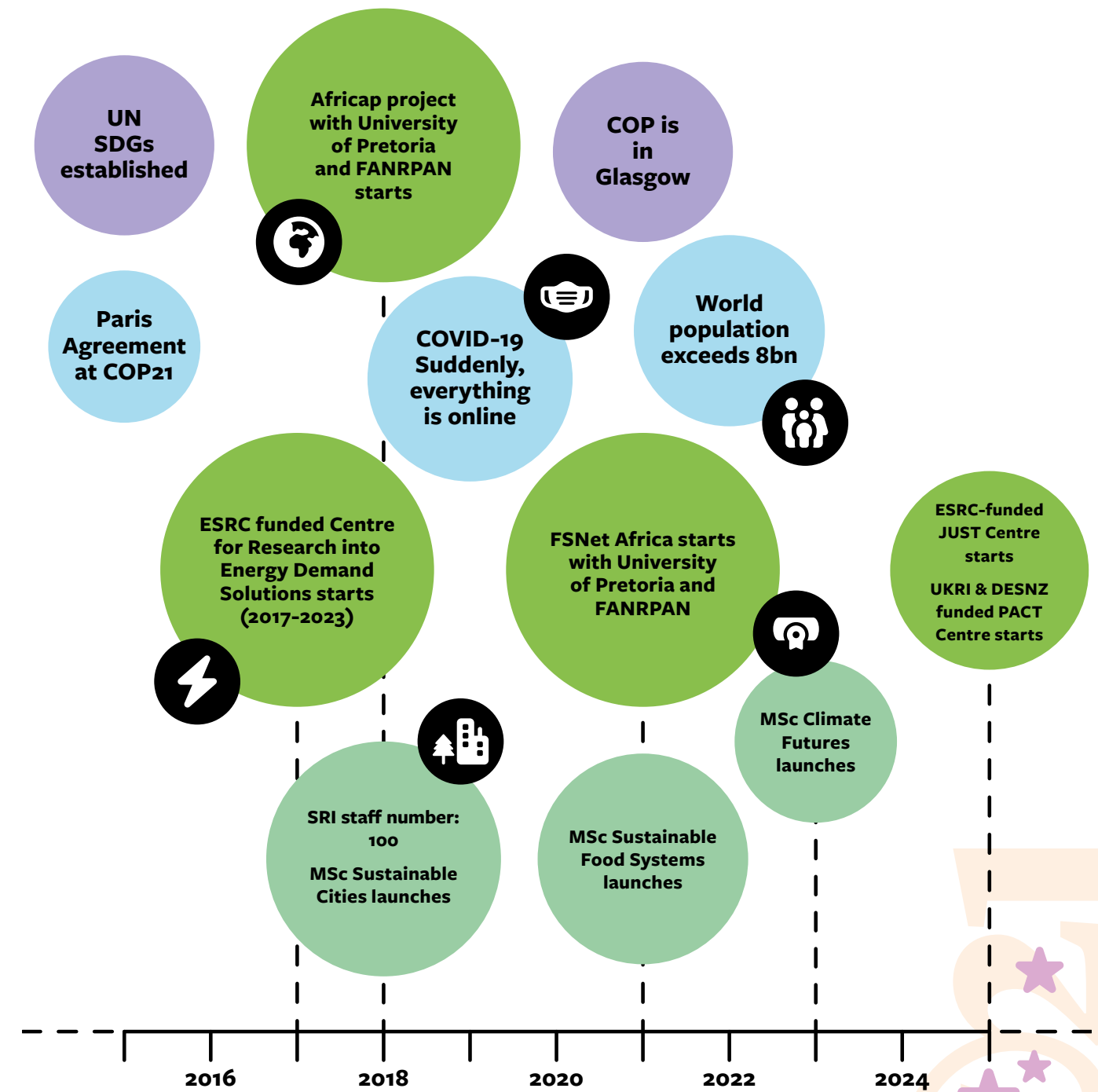
SRI, The Story So Far...

This timeline puts some of SRI's achievements and developments alongside some of the events that have shaped thinking, research and action about sustainability over the 21 years since SRI was founded.

Sustainability was a challenge before 2004. It's still a complex, urgent challenge and in SRI we want to play a role in what comes next.



Key:



A research agenda, not *the* research agenda

Generated by SRI members over 2024/2025, this sustainability research agenda is not a comprehensive survey or an exhaustive list. Instead, it represents the tip of the iceberg of ideas generated from our experiences and enthusiasms.

As we developed our “top 21” questions, we were all too aware of the important areas of research that are not in the foreground – powerful work on emissions reductions, financing sustainable development, urgent biodiversity crises and more.

With those caveats noted, here is an agenda for sustainability research in three parts:

Part 1: How do we make progress towards a sustainable future?

We start our research agenda with questions still needing exploration, despite decades of work on future scenarios and the UN Millennium, then Sustainable Development goals (SDGs). How do we create credible scenarios and visions for a sustainable future that generate individual and collective action [01]?

Guarding against a normative expectation that change happens from a top-down vision, the second area of this research agenda [02] is concerned with the narratives that help us think about futures. These are an important complement to the desire to imagine more sustainable futures.

Next, we acknowledge that incremental change is insufficient to achieve truly sustainable outcomes. We need to explore what are the implications of radical transformation [03]. That leads to a need for research that enables decisions at all scales and by all actors that lead to more sustainable outcomes [04].

These deep challenges and decisions that reflect multiple areas of expertise require systems thinking [05]. The challenge of how to understand and measure progress towards sustainability [06] continues to adapt as our ambitions for truly sustainable outcomes develop.

These research areas are not technocratic, they are socio-ecological and socio-technical, so the complexities of how decisions are made and who takes those decisions [07] will always be a question that SRI researchers pursue.

Part 2: What challenges are not being addressed by solution-focussed research?

This research agenda doesn't cover everything that needs research; it reflects SRI colleagues' current priorities. We start with topics, particularly concerned with different ways of understanding success, that need to be conceptualised and understood, such as 'sufficiency' [08, 09]. Other topics already feature in research but need to be connected to other ideas to move sustainability thinking, and action, forwards [10, 11, 12].

Then there are ideas for connecting theoretical advances into real-world processes and practices, such as deep decarbonisation of enterprise [13], supply chains [14, 16], and resilience in a time of constant change [15, 16].

Finally, this section contains a recognition that working at the frontiers of sustainability research brings critiques of the concept of sustainability itself [17].

Part 3: Sustainability as a project for all

We know that sustainability is not yet the inclusive, effective set of ideas that it needs to be. SRI researchers want to identify and face up to challenges and critiques of the progress towards sustainability that we have seen thus far.

Issues of inclusion and justice were not high profile in the sustainability research agenda when SRI was founded, but as we think about the research needed to progress towards sustainability 21 years on, questions of inclusion, power and agency are at the forefront of our minds [18, 20]. Closely allied to these questions, we also want to interrogate where knowledge comes from and what forms of knowledge are valued and used [19].

Finally, this research agenda recognises that as we draw together our ideas and hopes for a sustainable future for SRI@21, the world is full of conflict; sustainability work cannot progress isolated from these realities [21].

01. Envisioning future societies

Driving Question: How can we create, describe, and communicate appealing scenarios that drive positive change?

Action needs purpose

We need individual and collective action to create a more sustainable and fairer future. Action without a clear purpose or intent risks wasting effort and slowing down the progress we need.

Action for sustainability can often be driven by being “against” something, like rainforest destruction, or ocean pollution, biodiversity decline, climate change. While it’s important to understand and explain what damage is being caused, and what this means for people, it can be more motivating to work actively towards creating a better situation. A shared view on what sustainability action could produce, in terms of our lives, environment, communities and society makes sustainability action positive. We are interested in different, plausible futures more than forecasting from projected trends.

Every individual will have a different view on what a good future looks like. To create shared visions that motivate people to act, we need to strengthen connections between groups and different areas of knowledge [04], finding ways to include different voices and ensuring that existing power structures are not replicated.

Working with scenarios and avoiding top down approaches

Creating scenarios is one way of generating visions of the future. We need scenarios that work with different forms of data. Although quantitative data remains important, we need to use stories, images, and experiences to share what a future worth working for would be like. We need to be able to break that down so that individuals and groups can see how that looks like for them.

It’s vital that we find ways to bring local voices to national and international arenas in envisioning futures, which means finding ways to empower local communities to participate in visioning and managing their environments, as SRI researchers do in collaboration with very different agricultural and land management communities in Ethiopia and Tanzania. This means creating connections across scales, domains and sectors to bring together and value all forms of expertise, allowing visions of the future to support decision making [04].

We also need to be wary of research and visions which imply top-down modes of governance or ways of acting that affect rights and freedoms. How do different kinds of visions support a more bottom up – or democratic – approach to governance [02]?

02. Narratives of transformation

Driving Question: How do we develop, share, and listen to stories about change that lead us to a more sustainable future?

The narratives that help us think about futures are an important complement to the desire to imagine more sustainable futures [01].

Visions need stories

The range of stories we can tell defines the imaginative space within which we explore possible futures and narratives of transformation. Transformation is not only about reaching an end point; transformation is about the processes that enable people, organisations and institutions to move towards change. Sustainability transformations are a transitional state always in the act of becoming.

It’s too easy to frame moving towards sustainability with a narrative of deficit. The need to use less resources is interpreted as a need for hardship, not for alternatives that contribute more to wellbeing. SRI has a group of “degrowth” economic scholars who want to change that narrative by working through the practical implications of radical change. Similarly, SRI’s track record of exploring routes to a greater resilience in the face of climate change seeks to find routes to a hopeful future, rather than doubling down on defending the way that we live our lives now.

Participatory work holds the key

Many SRI researchers express frustration about the difficulty of generating truly transformative ideas, with collective support, from established research methods. Participatory work is vital, especially when this offers a way to foreground marginalised groups and perspectives. Participatory foresight and future methodologies are particularly valuable where

they include complexity and uncertainty. There is appetite in SRI for much greater use of creative and arts-based methodologies, including fiction and narrative non-fiction, audio work, and videography.

We’re alert to the risks of thinking that one narrative might work for all. Cultural context is essential for understanding which stories speak to people and enable change and SRI wants to increase the diversity of voices that are heard and seen in sustainability research [19].

“In the GCRF-AFRICAP project, we focussed our Tanzanian fieldwork in the East Usambara Mountains – a context where we have built trusting relationships with communities and local government over many years. We built on the PhD work of Marta Gaworek-Michalczenia to explore the social and ecological impacts of Climate Smart Agriculture (CSA) intervention funded by the European Union. To explain why it impacts farms, families and individuals differently, we worked with smallholder communities on ecological studies on the farms, household surveys and an ethnographic approach with individuals. Our findings have been fed back to practitioners and communities, having a direct impact on agricultural practice and feeding into the capacity development of the Muheza District CSA Learning Alliance”.

— Dr Susannah Sallu, Environment & Development GCRF AFRICAP Co-Investigator and Tanzania Country Lead

03. Radical transformation

Driving Question: How do we shift institutions, infrastructures and collective behaviours at scale?

Incremental change is insufficient

Individual and collective behaviours need to be wholly different in how we use resources, make decisions and interact with each other and with the world. These behaviours are shaped by social and physical infrastructure, institutions and norms, or ‘rules of the game’ which all need to change too. That’s what we mean by ‘radical transformation’. It’s a daunting task.

SRI researchers’ starting point is in understanding where we are now. We have a lot of data about current lifestyles, energy use, the condition of many of the planetary systems.

As an Institute, we want to focus on the structures that constrain transformation: institutions, ideology, and power processes like governance. There may be aspects that individuals can change, but a focus on agency to match the attention to structure would be most welcome.

There are many routes into research in this area

We can learn from historical analyses of radical change. We can use rich data to develop simulations of possible futures, testing out how different interventions may lead to real change. We can focus on how shaping personal spheres enables collective transformation, connecting grassroots and non-state thinking and action into the structures where power currently lies, as SRI research on heating and cooling in the UK and in India does.

But there are challenges.

We (SRI and research more broadly) are embedded in a system that makes it near impossible to have meaningful debate about major changes e.g. discussing degrowth or post growth, in the sphere of economics.

04. Supporting better decision making across domains

Driving Question: How do we draw on multiple areas of knowledge to create outputs which help decision makers create more sustainable outcomes?

There is always more than one point of view

Too often, decision makers rely on a single perspective or source of information to identify what options are available. Responding to the challenges of sustainability requires synthesising data across multiple issues and impacts, so we need to be able to connect across domains – of knowledge, methods, stakeholders, sectors and data – to support decisions that lead to more sustainable outcomes and a more sustainable future. By ‘more sustainable outcomes’ we mean results that are socially equitable, and which protect environmental resource, satisfying societal wellbeing in the broadest sense.

We know it’s extremely unlikely that government – at any scale – will break out of the current silos and organise around sustainability, so we need to start where we are. We need to understand decision processes and find ways of introducing new participation. Understanding what kind of information will be used by decision makers at different points means we can work out how to produce that information, drawing on all the voices that need to be heard.

There’s a need to link a holistic understanding of individual wellbeing (with a range of indicators) with broader decision-making processes that add up to societal wellbeing. Working across different domains may enable us to make sure that the

societal outcomes are greater than the sum of the individual outcomes. This is made more likely when we understand the system as a complex system rather than examining its individual parts [05].

The Climate Evidence Unit brings together world-leading experts from the University of Leeds to deliver independent trusted insight to help achieve a resilient, net zero nation. Researchers from across disciplines deliver timely and robust evidence on issues like the co-benefits and trade-offs from climate action, aiming to inform complex decisions.

— Professor John Barrett, Climate Evidence Lead for the Priestley Centre

05. Systems Thinking

Driving Question: Does systems thinking enable or inhibit our ability to work across domains?

It's a well-established truism that tackling the complexities of sustainability requires systems thinking. As well as seeking to enable and use systems thinking, through our research on food, land use, cities, energy and more, SRI researchers are also asking what kind of systems thinking really helps with systemic change.

Systems thinking is crucial, but to truly strengthen connections across domains we may need other complementary frameworks and entry points that allow us to think outside of systems. For example, in terms of structures, can our work on resources, emissions and consumption take a broader political economy approach that turns attention to the prevailing economic structures (within which systems exist) and their governance and politics?

Systems thinking focuses our attention on complexities, interconnections and feedback loops, helping us break out of siloes and think about cause and effect, relationships, compatibilities and trade-offs between changes that are happening across contexts, timescales, and sectors. Systems thinking can also reveal new opportunities and leverage points for sustainable transformations and shed light on potential injustices or maladaptive pathways.

Is system thinking also limiting our research?

However, a systems approach requires the setting of system boundaries (geographical, sectoral, disciplinary, temporal) and the drawing or modelling of a finite number of connections. The unavoidable frustration for the systems thinker is knowing that everything is (infinitely) interconnected but

conceding that only a subset of those connections can be conceived and considered at any one time.

Let's also recognise and rise to the challenge that there is no single system that can be described with absolute truth. Individuals (and organisations) have a contextualized understanding of the ways in which people experience the world and can participate and affect change. Individuals' experiences and frames of reference are bound, but each is unique to that individual; if they were to draw their own system or network, each would look different.

Complexity, systems thinking, and limitations

There's a plurality of approaches in SRI, both in using systems thinking and also on critical analyses of how far this takes us, and we're starting to build this into our teaching and organisational development work.

An approach that focuses on people and individuals has the potential to remove arbitrary siloes of research, even if in research there are still normative and pragmatic decisions to be made about what space is created for participation, who participates and how.

The first step is for us to learn from each other as we all bring perspectives from so many other worlds.

06. Measuring sustainability

Driving Question: How can measuring sustainability lead to accelerating action and change?

Part of imagining sustainable futures [01], is knowing what markers we need to reach to achieve those futures. We must be able to measure sustainability to do that – putting imagined futures into more concrete goals.

There's an industry dedicated to indicators and measuring sustainability. In the corporate world, Environmental, Social, and Governance (ESG) reporting affects value [13]. The UN's 17 Sustainable Development Goals (SDGs) have a suite of more than [200 indicators](#) to help track progress towards them.

Marking progress towards sustainability

Sustainability pressures ebb and flow, so measures of progress must reflect changes to sustainability aims. New insights emerge and affect how progress is measured; for example, measures of whether planetary boundaries are respected are different to measures that assessed where limits to growth might be. It might also be helpful to explore how measures of historic change inform sustainability priorities in future.

We are not investigating sustainability as a product of technological progress; we want to understand what drives sustainability in values and behaviours. Researchers who focus on biodiversity ask how to integrate value plurality in metrics so that conservation action works with the grain of societal beliefs and values.

This critical social science sits alongside pragmatic approaches which means that researchers want to understand the gap between what is measurable, and meaningful sustainability progress. The ESG reporting already mentioned is increasingly formalised into standards and indicators, but

these are not necessarily strongly linked to the underlying values that drive decision making.

Measuring sustainability isn't all about progress made elsewhere, by others. We'd also like to understand the impact of our own practice, especially in student education.

As well as these big challenges, we want to be part of getting specific measures accepted so that they drive change; scope 3 emissions is an example.

As SRI marks 21 years of sustainability research, it seems as important as ever to look back at where we started, at what values underpinned our understanding of sustainability, and how this changed over time.

The Local Authority Consumption Account (LACA) tool is an online platform allowing Local Authorities to view and compare their carbon footprints. The project was funded by the ESRC Place-Based Climate Action Network+, London Councils and the Greater London Authority and the outputs have been used by the London Boroughs where 'reducing consumption-based emissions' has been identified as one of the priority areas in their Joint Statement on Climate Change.

— Associate Professor Anne Owen, developer of the LACA tool

o7. Governing sustainability

Driving Question: What forms of governance are needed to include marginalised voices, respond to rapid changes, and still support sustainable futures?

Governance doesn't mean government. When we talk about governance, we mean those structures that shape and enact decision making, across multiple individuals, areas or organisations.

Governance guides decisions

At the moment, governance results in decision making – by individuals, organisations and states – which does not help us move towards greater sustainability.

Governance for sustainability needs to work at many scales. There needs to be an alignment between what an individual can do and what local, national and international levels allow. New ways of working, or new technologies, sustainability innovations that start in small pockets need to find routes through to becoming norms and expectations.

A major challenge of governance is including all voices. We know that current governance leads to unsustainability, so we must find ways of changing, and in some cases perhaps breaking, power and structures to bring more marginalised voices into the mainstream. SRI recognises that governance for sustainability needs to serve the global south rather than perpetuating existing patterns of resource use and social inequality. Sustainability research has already made progress in exploring the roles of “non-state actors” (like businesses, or NGOs) in sustainability but there is more to be done in analysing how those roles affect the fairness of decision making and the path we take towards sustainability.

Effective governance for sustainability will also require us to support the work of envisioning futures that people want [o1] and imagining how such futures might be made real [o2].

The Centre for Joined-Up Sustainability Transformations (JUST) aims to address the urgent need to translate research insights into effective and sensitive responses to the social and political barriers to the UK's net zero agenda.

The JUST centre has an empirical focus on the North of England, working with ‘left behind’ areas. The North of England is an important geographic focus, due to the historical ‘North-South divide’ in economic performance, employment, and socio-economic marginalisation; and the sense of a need for devolution and ‘levelling up’ between North and South. In JUST the North of England is a living lab, with the intention of learning from left behind places in the north, to better understand the possibility for JUST throughout the UK.

— Professor Lucie Middlemiss,
University of Leeds project lead

o8. Sufficiency

Driving Question: How can sufficiency be reflected in different aspects of SRI's work?

This is the first of SRI's routes into thinking about different ways of understanding success. Throughout 2025, three of our research clusters (Econopol, SPDS and ECCM) have been exploring different angles of how sufficiency can help achieve sustainability, and what we can do to understand and move towards sufficiency as an attractive vision for our future [o1]. This element of the research agenda is about generating insights, exploring connections and developing our own understanding of those connections.

What is sufficiency and why is it important for sustainability?

To help us grapple with the idea, we're defining sufficiency as achieving an absolute reduction in resource use and emissions, while also supporting wellbeing, through redistributing access to resources and services.

Sufficiency aims to meet universal needs while eliminating excess; it is a strategy of “enough”. As an idea, sufficiency will mean different actions in different contexts. For Global South countries and people in poverty, “enough” can mean “more,” while for resource-intensive countries and social groups, it means “less” in material terms.

Some of the questions include: How can sufficiency be understood in business and organisational contexts? What does modelling – particularly economic and resource modelling – for sufficiency look like?

We also recognise the importance of developing an understanding of how sufficiency can lead to better lives [o2], rather than understanding sufficiency as only negative and constraining.

SRI's size and diversity gives us a unique opportunity

We are a large group with a collaborative reflex. SRI researchers readily form partnerships with other groups of researchers – in transport, food, international relations, business and many more, in Leeds and beyond. Exploring sufficiency gives us the opportunity to identify synergies and disagreements within SRI, strengthening our collaborative work. We want SRI to be a leading UK research centre on sufficiency.

09. Embedding efficiency into sufficiency

Driving Question: What institutions can support a transition toward provisioning within limits beyond the local scale?

Efficiency is important, but sufficiency provides the limits within which efficiency can be applied rationally, ensuring that efficiency does not serve meaningless or structurally unsustainable purposes.

“Ecological modernisation” and “green growth” strategies tend to focus on optimisation – of markets or technologies – without questioning societal goals. Focussing on efficiency improvements risks exacerbating social and ecological crises by prioritising cost reduction and productivity while ignoring systemic issues of overproduction and overconsumption on one hand and deprivation on the other.

Examining institutions is particularly important because sufficiency is not about individual lifestyle changes, it is about a different societal organisation. Institutions encompass the regulations and norms that shape individual lives through the collective ‘rules of the game’. As well as identifying what might work, we also need to analyse institutional barriers and coalitions that work against embedding sufficiency.

What are the entry points to this area of research?

While recognising that all systems are connected [05], researching what sufficiency looks like in systems that provide distinct services and are essential to wellbeing helps to uncover tangible examples of how institutions need to reform. For SRI, as part of a University, the systems of education are where we have understanding and some legitimacy [see: [21 Years of Sustainability Education](#)]. What are the implications for learning beyond fossil-fuel focused education?

Food production and consumption is another system where SRI researchers are already deeply engaged in the complex, global web of institutions and the effects on nutrition and health. In mobility, connecting the carbon-focussed debates about technology with what is the social outcome we are trying to achieve means gathering, interrogating and sharing new data. For example, considering the importance of electric vehicles (EVs) in a low carbon transport system, we also need to consider EV production costs, emissions, and waste alongside air quality data, and how transport systems enable or constrain different societal groups.

10. Wellbeing and Regeneration

Driving Question: How can the broad societal (wellbeing) benefits from regeneration be accounted for, and shared?

Closely linked to “provisioning systems” [11], this research question uses the idea of wellbeing as a driver of action to complement SRI’s interest in understanding the implications of sufficiency, rather than efficiency [08 & 09]. By coupling wellbeing with regeneration, we’re thinking through how to change existing systems like cities, or agriculture, rather than starting anew from a blank canvas.

Health and wellbeing – both important, but not the same

While ‘health’, for all, is a vital outcome from pursuing sustainability, coupling health and wellbeing is challenging. Conceptualising wellbeing as an outcome, a goal to be achieved, misses the potential of exploring how wellbeing acts as a driver of action and a precursor of change. Wellbeing provides a broader alternative narrative to challenge dominant social and economic worldviews; it’s a way to convey why regeneration matters, and a way of speaking to people, including people who can make or influence decisions in policy.

Furthermore, wellbeing opens space for new knowledges and methods where societies need to change attitudes, behaviour, and processes to overcome existing – and emerging – social and environmental problems. For example, thinking about how adapting to climate contributes to wellbeing, both in the process of adaptation and in achieving the healthy lives that adaptation supports [15], offers a chance to reframe climate adaptation away from a negative, all

about managing risk, into something that must be done to help communities live better.

To grapple with putting wellbeing central to regeneration, we must deploy systems thinking [05], connecting aspects of systems that are overlooked in technocratic and outcome-focussed design, for example, poverty must be recognised as a constraint to sourcing or buying food. The complexity of these systems means that we also must work with sub-systems (soils, water, food) that together can create regeneration.

“Varied social and environmental challenges mean there are competing priorities for food system change in eastern and southern Africa. Bringing together different disciplines and sectors is crucial for building an evidence-based understanding of the implications of food system changes in the region”.

— Professor Stephen Whitfield, Primary Investigator for FoSTA Health

11. Provisioning Systems

Driving Question: How can provisioning systems enable healthy people and communities while respecting planetary boundaries?

Provisioning systems—for example, housing, energy, transport, and food—mediate resource use to achieve social outcomes. They are structured differently depending on sector and location and consist of related elements working together to transform resources to achieve specific social outcomes. These elements include:

- 🌱 Physical components: Infrastructure, technology, resources.
- 🌱 Social components: Socio-cultural norms, political-economic institutions, and regulations.

Challenge focussed and interdisciplinary: SRI's natural way of working

SRI has a track record of rethinking how systems can be reconfigured to support more sustainable outcomes. A new wave of research which analyses specific provisioning systems will allow us to bring together interdisciplinary research and diverse interests under a common framework. There are two perspectives to work on provisioning systems:

- 🌱 Physical and Macroeconomic perspectives which examine the infrastructure and system connections of using resources to provide services.
- 🌱 Institutional, Socio-Cultural, and Political Economic Dimensions which seek to understand how governance [07], cultural norms, lobbying and political dynamics shape, and are shaped by, a shift to thinking about provisioning systems.

These two perspectives are connected, of course. For example, asking what resource footprints different provisioning systems generate, what are their distributive and cost implications,

are questions which generate evidence that could advance the politics of sustainability.

Scale matters too. Research in this area needs to move between global and local and back again. To illustrate why this is needed, SRI researchers working on local or national food systems may identify potentially disastrous impacts on biodiversity, but globalised systems may lack resilience and not support the most disadvantaged producers or consumers. We must continually deploy systems thinking [05] to see, and respond to, such connections.

Provisioning systems are closely related to 'sufficiency' [08, 09] as a provisioning systems approach can help us integrate demand and supply-side interventions from a sufficiency perspective. The energy sector is a case study of the challenges and opportunities within provisioning systems, integrating physical infrastructure, socio-cultural challenges, political dynamics, and institutional frameworks at multiple levels.

12. Reimagining Markets

Driving Question: How can markets be reimagined to support sustainability in areas like sufficiency and post-growth or degrowth?

"Shifting Investment-Driven Consumption Emissions (Shift-ICE), is a collaboration with the Stockholm Environment Institute, and is funded by FORMAS, the Swedish research council for sustainable development. The project asks which measures would be both effective and equitable for addressing consumption emissions, but with a focus on investment. This is important because much consumption is 'locked-in' because of past investments, so individuals and households have limited scope to reduce emissions on their own".

— Dr Eric Kemp-Benedict, Associate Professor of Ecological Economics

Central and inescapable – ripe for questioning

Markets are central to today's provisioning systems [11], yet their design, purpose, and outcomes vary widely across contexts. While there are debates about the role of the state and communities in achieving sustainability, there is little exploration of how markets could be reimagined in a transformed society or how they could contribute to the transformation.

Markets rely on and are created through political decisions, legal frameworks, and institutional arrangements. What is often called a free market is, in fact, a highly regulated market, governed by economically liberal rules and institutions, particularly private property rights and their enforcement.

Bartering, price-making, or price setting based on justice and ethics are some of the varied concepts which could help to explore this re-imagining of markets as places for the exchange of goods and services, while still keeping in mind ideas of sufficiency [09] which can help us move away from a reliance on more and more consumption. If markets incorporated ideas of wellbeing [10] then they might provide a route to meeting needs, without exploiting underpinning natural resources and systems to the point where those systems cannot function any more.

13. Making all businesses low or zero carbon

Driving Question: Can we find ways for every business, or organisation, to be low or zero carbon and sustainable?

SRI researchers want to challenge the status quo and be part of rethinking how our physical, political and social systems work [08, 09, 10, 11] but we are also pragmatists, keen to engage with organisations and starting where we are.

Business and enterprise shape resource use

While policy and the state establish many of the rules and norms for society's and individuals' goals, business and enterprises dominate the practice of how we use resources and meet human needs. Enterprises include profit and non-profit organisations; they may have many missions and purposes with varying alignment to achieving sustainability.

Low or zero carbon operation can be achieved through displacing fuels and processes that produce greenhouse gas emissions; through new products and services which make reduced resource demands and also reduction of intensity and throughput. These pathways will need different kinds of business models that support the goal of sufficiency [08, 09].

Research beyond technology and resource use

SRI research must cover more than a focus on resources. Sustainability requires a “just transition”, where the livelihoods of vulnerable workers and communities are protected. This means that we need research to understand and share the social and economic impacts of a rapid transition to low and zero carbon businesses. The energy

sector has been a major focus of just transition business research, and SRI researchers would like to connect this with what net zero agriculture food systems could look like, where justice for both producers and consumers is important and sometimes pulls in different directions.

“The H3 project's work on improving resilience in supply chains brings together researchers in SRI (Steffen Hirth and Anne Tallontire) and Leeds University Business School. Reliance on food imports through just-in-time supply is increasingly vulnerable while climate change, biodiversity loss, and poverty remain largely unmitigated. The status quo, in which retailers squeeze suppliers on price, results in a dilemma where low prices appear to be necessary. The notion of civil food resilience transfers the system purpose to provision for citizens rather than corporate interest. Longterm resilience requires deep systemic change at the intersection of food system and economic system”.

— Professor William Young, Chair of Sustainability and Business and UKRI Healthy soil, Healthy food, Healthy people (H3) programme co-investigator

14. Resilient and Sustainable Supply Chains

Driving Question: What strategies can simultaneously enhance supply chain resilience and improve sustainability outcomes?

Supply chains are a significant source of carbon emissions and societal impacts

Supply chains have developed to be responsive to demand and consumption, but this can result in environmental degradation and social inequalities at the sites of production and along logistics operations.

Resilience and sustainability need to be coupled rather than being seen as in tension. Most existing research looks at resilience and sustainability as two separate topics in the context of supply chains. There is a need to know more about how resilience can support sustainability, and vice versa [15].

An engineering approach to resilience, i.e. reducing recovery time after disruptions, often strengthens the status quo rather than opening opportunities for change. This is where SRI researchers can contribute, connecting individual and community wellbeing, reducing environmental impacts so that supply chains can be reconfigured.

Identifying opportunities is not the same as understanding how change can be effected. Research is also needed to clarify who is, or should be, accountable for impacts in the supply chain, and how could such accountability be used as a lever for change?

SRI researchers' access to data and a variety of analytical methods means we are well-placed to evaluate the links between environmental and social impact and consumer demand, together with where to locate impact along supply chains.

Supply chains are local, and global

Analysing today's supply chains means constantly switching between scales of understanding and recognising how impacts are distributed amongst different sub systems. SRI recognises the interconnectedness across places through supply chains. We have current projects exploring the links between UK/EU food policy and food security in southern Africa; these links are extensive, ranging across regulation on food quality or safety, deforestation, organic methods and soil health, livelihoods, food availability and access, and waste generation and management.

15. Adaptation and Resilience

Driving Question: How do we connect adaption and resilience as constructive ways of accepting change and living well in a constantly changing world?

Environmental and social systems will continue to change

Climate change is a major part of adaptation and resilience research in SRI, although the principles that we use for thinking about climate change adaptation and resilience apply equally to responding to other crises such a land degradation, water scarcity, or biodiversity decline.

We need to think about adaptation that also helps address these to different types of changes. Catastrophic or acute shocks, such as a flood event, require a different sort of response compared to that demanded by more long-term, incremental change, such as slow diminution of an aquifer and water supply.

Adaptation and resilience are two constructive responses to the range of changes that are occurring. While adaptation foregrounds how

to update systems or behaviours to enable continued functions in new ways, resilience focuses more on the ability to absorb shocks, managing risks and minimising impacts. Resilience may mean finding ways to return to a previous state as quickly as possible where adaptation accepts that processes must change.

The flipside of examining resilience is understanding vulnerability. Which locations and groups of people are most at risk from the impacts of change? We need to connect this analysis with intersectionality [20] to make research on adaptation and resilience point to actions which are fair.

As SRI researchers, we connect theory and practice, and in this area of research that means examining the (dis)connectedness of what we define (academically) as adaptation science and what happens in the real world in adaptation practice.

16. Transforming urban food systems

Driving Question: Who has the power, and agency, in cities and their catchments to develop sustainable food systems as a foundation of regeneration?

Regeneration and development need new approaches to move towards sustainability [10]. This part of the SRI@21 research agenda moves from this broad recognition to exploring what that means for the systems of cities and food.

Cities are where most people live, and people need food

Most people live in cities, and cities are reliant on the health of areas beyond their administrative boundaries so that those people can have healthy supplies of food and water. As well as being dependent on their catchment or hinterlands, cities also have agency in those spaces while rural areas are disempowered, despite their importance.

There are plenty of small enterprises and ‘living lab’ projects seeking to re-invigorate urban food provision, but those enterprises can be powered by a start-up mentality, as well as optimism about what technology can deliver and there are very few examples of where such small projects are able to scale up to make a difference for whole communities – urban or rural. SRI researchers want to be part of creating shared visions of what could be achieved through different practices in urban, peri-urban, and rural areas to offer healthy, local, seasonal food to all.

Of course, food systems are connected to many other systems [05] such as water, soil

health, community, and education. These connections need to be made visible, so that individuals and groups feel able to be part of improving outcomes across all aspects.

“Our collaborative research project with Foodwise, Leeds City Council, the Food Foundation, third sector organisations, and community groups, explored how Food Hubs and other community-led, place-based food initiatives address food insecurity, sustainability, and resilience in the UK. Through surveys, interviews, site visits, and a bespoke co-produced evaluation toolkit, we captured Hubs’ social, environmental and economic impacts and developed 20 best practice case studies. The findings inform local and national policy, helping scale and replicate successful models that strengthen local food systems, reduce inequality, and improve access to nutritious and sustainable food”.

— Dr Effie Papargyropoulou, Associate Professor in Sustainable Food Networks

17. The right of the environment to be healthy

Driving Question: What does “healthy” mean for nature and how can the right to be healthy be enforced?

Working at the frontier of law and environment

There’s a developing body of law related to the rights of physical entities in the environment (rivers, mountains) and SRI is not full of lawyers. But the ideas around the need for such laws are where SRI can play a role. SRI researchers want to explore whether identifying rights for nature helps us in removing damaging human practices, such as polluting air, land and water as a result of manufacturing and using materials and products. Essentially, this area of research expands the principle of “do no harm”. One of the challenges here is that the harm may not be noticeable to humans; for example, the damage on micro-organisms from pollution, so how do we identify the events that trigger a lasting change in perspective?

To start with, SRI’s work in this area will be connecting our different perspectives on law, economics, biodiversity, and justice.

There are existing narratives in different communities and geographies which recognise non-humans as persons and respecting those narratives would bring more voices into the discussion and plans for action [18]. Without abandoning a holistic view, can we identify individual rights that are part of the right to be healthy?

Considering the right of the environment to be healthy is a future-oriented topic, ensuring the ability of the environment to prosper, and providing answers to questions about why and how non-humans should have legal rights.

“Riverkin starts from the recognition that water was originally understood as part of an extended kinship network in which people cultivated nurturing relationships with nature, as they do with family. Such networks have been foundational to creating societies compatible in the long-term with a thriving living world. Through the historical processes of colonial modernity, water has, in many parts of the world, come to be understood as an object, a potential and actual commodity. This exploitative relationship is an important reason for the terrible state of our waters today. Reigniting reciprocal relations of care and responsibility with water will, we argue, be a vital part of any long-term solution. Through engaging with a range of partners, from community groups, to scientific organisations, local residents and water utilities, the Riverkin project aims to give a practical meaning to riverkinship in the UK”.

— Professor Julia Martin-Ortega and Dr Joshua Cohen, Water Values Research Group with Water@Leeds

18. Inclusive methodologies and projects

Driving Question: How do we identify and tackle issues of voice and representation that are relevant to our work?

Past practices won’t create a sustainable future

Historic and current ways of working, with their embedded privileges of who can take action and whose benefits are prioritised, has got us to the current situation, and will not be feasible to move us forward to a sustainable future. Part of working towards sustainability has to be empowering marginalised voices and ensuring that our research processes and outputs represent all communities and offer ideas and interventions that include all communities or can be targeted in different ways to reach all communities. For example, SRI researchers are actively working to ensure no-one is left behind in the transition to lower carbon lives powered by renewable energy.

Other research on land use engages local communities in the management of their environments, so that it works to secure their needs and wants, rather than only serving others’ purposes. We acknowledge that inclusive working will look different in different geographic contexts. The data that we gather for research and use to guide decision making needs to reflect these distinctive contexts. Different data sources and analysis can also help us to identify left-behind, hard-to-reach communities and areas that are at risk from not being able to participate. We need to address how accessible this data is to different groups, with the responsibilities and opportunities of gatekeeping such knowledge so that marginalised voices can access these resources [19].

Inclusivity is not only concerned with geographic variation and community engagement. SRI also seeks to understand intergenerational justice on environmental issues, finding routes to youth empowerment to direct change.

Beyond inclusivity in action, and knowledge sharing, we recognise that how we construct visions of a sustainable future [01] depends on whose ideas and voices drive the blueprints shaping our collective thinking about sustainability. The ‘inclusivity of imagination’ is an important concept.

Honesty in looking at ourselves

In SRI we know that as an institute we do not reflect the communities our research seeks to support, despite our commitment to participatory research. We want to gather and share data on, for example, racial (and other) differences in staff representation and promotion, plus student retention and attainment.

19. Tackling decolonisation and epistemic injustice

Driving Question: Where are the risks in sustainability research perpetuating historical injustice through not recognising diverse forms of knowledge?

In sustainability research, our priorities and understanding of issues have grown from a particular tradition of what knowledge is considered useful and valid. The roots of how we decide what knowledge matters lie in how our social structures have developed, and the dominance of knowledge which reflects western or global north framings reflects the way in which empires have grown and spread, displacing other systems, norms and knowledge. Tackling this dominance, to bring in perspectives which have been ignored, is part of the drive for decolonisation.

The dominant ways of working and understanding are part of why we face so many sustainability challenges today. To respond to those challenges, we cannot continue to think and act in the same ways; we need to seek out, welcome and foreground more inclusive sustainability narratives, including non-western contexts.

Without facing this, sustainability is a normative term, and sustainability research risks reproducing gross historical injustices that continue to persist.

We also recognise that sustainability in one area can lead to inequalities and injustices, something that needs to be understood and reflected in governance for sustainability [07]. This applies to research and teaching [see: [21 Years of Sustainability Education](#)], as well as the institutions that we work within.

It's important to start work in this area of research

This part of the sustainability research agenda poses more questions than it answers. It can also be an uncomfortable area for many of us to tackle, uncertain of what we carry, perhaps fearful of how to express that uncertainty. We are committed to starting on the path to improving epistemic justice. As well as wondering what a truly decolonised SRI would look like, we also want to acknowledge where the limits of this might be, and how these might change further in the future [18].

20. Intersectionality and Sustainability Research

Driving Question: How do we embed intersectionality into sustainability research?

Intersectionality is a framework for understanding how different attributes of people or groups interact to create unique experiences of advantage or disadvantage. Attributes might include race, age, gender, class, and sexual orientation, amongst others.

Race, class, gender and other social characteristics shape human experience

Sustainability, as we research it today, is rooted in human experience and flourishing, although we recognise that work to explore sustainability from the non-human perspective is also needed [17]. Human experiences, priorities and capability for action on sustainability are configured by social characteristics, like race, class or gender. Using intersectionality theory can integrate, and potentially remake, how we think about and move towards sustainability, through attending to, for example, feminist, anti-racist, Indigenous, and postcolonial justice perspectives.

The use of intersectionality is methodologically complex, requiring understanding and use of core guiding principles, and applying those principles in research from design to analysis and outputs. While intersectionality is linked to the need to decolonise knowledge and learning [19], intersectionality demands separate focussed attention in how it is built into sustainability research methods and processes, to create stronger and fairer research outputs.

21. Sustainability in times and places of conflict

The 2020's feel like a time when conflict is everywhere, fueled by many causes, including resource scarcity and climate change impacts on energy, water and food. There are actual physical conflicts between countries and communities with members of SRI directly affected by military action in Ukraine, the middle east and south Asia. This affects both the research we are able to do and, vitally, the research partners and partnerships we seek to support.

At the same time, we see public debate, and quasi private interactions, e.g. on social media, characterised by increasing polarisation. It can feel like there is no room for nuance, or for the context-specific research that identifies what works for particular groups and individuals. The only way to be right is to prove someone else wrong.

Sustainability will not emerge from such a zero sum game.

Sustainability researchers already flag issues that lead to conflict and this research, connecting the dots between environmental pressures and the human conflict that results, can reach further perhaps as an extension to looking at what shapes action on resilience [15]. Research in this area can also explore what conflict means for sustainability in terms of which activities must be prioritised by people living with physical conflict, and whether sustainability can feature in those situations, potentially even offering a route out of and away from conflict and towards a hopeful and sustainable future [01].

Sustainability challenges are multiplying and issues are ever more tangled.

Sustainability research must reflect this.

21 Years of Sustainability Education

SRI has been teaching sustainability courses for 21 years, longer than almost any other UK institution. Student education is a core part of SRI's activity and identity, with teaching, research and practice activities closely intertwined.

For SRI@21, we asked ourselves:

What does it mean to be a higher education sustainability teacher, and how has this changed over the last 21 years?

How has learning at SRI shaped the sustainability practitioners our students have become?

As sustainability specialists, our approach to sustainability in education has been sustainability-first. We see sustainability as a subject tied to pedagogies that challenge students to recognise the complex nature of sustainability challenges and try out solutions through fieldwork, problem-based learning, and skill building.

We hail from many different disciplines and worldviews, and we are united in our recognition of the need to tie them together through social science lenses, to lead transformative change.

Whilst we recognise the significance of Education for Sustainable Development (ESD) – after all, education is a key enabler for meeting sustainable development goals – ESD has not had the transformative impact needed in Higher Education.

Building a sustainability curriculum

When SRI began, undergraduate sustainability courses did not exist. Bringing evidence-based and system-level critiques alongside practical solutions was unique.

21 years later, all undergraduate learning must speak to and recognise sustainability. SRI has long provided “discovery” modules for students in other disciplines, and SRI staff are now central to the University of Leeds programme to develop a Sustainable Curriculum.

“The Sustainable Curriculum principle of the University’s ‘Climate Plan’ commits to giving all students the opportunity to engage in sustainability through their course and community, now and into the future. We have cultivated a broad and dynamic web of collaborations across the University, including partnerships with other Climate Plan principles, the Sustainability Service, Curriculum Redefined, Global Opportunities, and the Leeds Institute for Teaching Excellence. Beyond the University, we work closely with strategic partner institutions to position sustainability as a key enabler of high-quality University education. We have also co-created with students a range of co-curricular learning opportunities, such as Jams and Hackathons, that equip students with sustainability competencies, support their academic growth and professional readiness”.

— Dr Vasiliki Kioupi,
Lecturer in Sustainable Curriculum

Student education that is fit for the future

We have seen a huge amount of change since we launched our first MSc sustainability programmes in 2005. The programmes have changed, and our student cohort has transformed.

The University’s “Curriculum Redefined” programme has reshaped many aspects of our teaching, with changing teaching methods, more student participation, and co-developing learning. We need to keep evaluating the impact of the curriculum changes on student learning by asking our students and alumni what they found useful and powerful. We want to equip our students to be ‘change agents’ contributing to sustainability.

For this, the partnerships we have with organisations across Leeds and the world are essential. Partners offer innovative student projects, have our alumni as leaders, and feed into our programme content, keeping them cutting-edge.

MSc Sustainability & Consultancy, originally the MSc in Environmental Consultancy and Project Management, has always had an applied sustainability project with an external organisation in place of a conventional research dissertation. Around 400 graduates from the programme now work with organisations including international consultancies, infrastructure operators, and local and national governments.

Equality, diversity, and inclusion

‘Widening participation’, that is, diversifying our undergraduate cohort, continues to be a priority across the University.

While the challenges of equality, diversity and inclusion are not unique to teaching sustainability, they are challenges to which sustainability teachers must work to respond.

We want to enable students to be their authentic selves when they study with us, which means we need to recognise and accept neurodivergence and a range of backgrounds and cultural experiences which shape the student’s capacity for learning in a variety of ways.

Reflect and project

SRI researchers have identified four connected areas of challenge to reflect upon as we go about the daily business of supporting students to learn through our current set of courses.

01 Teaching sustainability so that students get to think about transformative change, and doing so in a way that students can use a big vision in their future lives and careers.

02 Teaching sustainability for more than work. Enabling students to be effective in rewarding, meaningful and impactful work is important, but sustainability practices for citizens, not just workers, are vital too.

03 How to teach transformative sustainability when we sit within an institution and cultural system that shapes or limits which learning activities are prioritised, such as the focus on employability.

04 Teaching and supporting sustainability learning that overcomes the nature-culture dichotomy and the ways that the Global North prioritises some forms of knowledge to the detriment of other ways of knowing.

Connecting Theory and Practice

The University of Leeds currently **employs over 9,000 people, educates over 39,000 students, and owns an estate spread across 98 hectares**, plus a farm and a woodland that contribute to the University's Climate Plan.

Established in 2013, the University's Sustainability Service's team of 25 sit within the University's Facilities Directorate. The Service collaborates with staff and students – including from SRI-, as well as local partners to develop solutions to campus, community, and global sustainability challenges.

So SRI researchers are far from the sole champions for sustainability at the University of Leeds.

What can we do together?

The environmental management aspects of sustainability are easier to operationalise. Improving recycling rates, avoiding use of harmful materials, all the things that the University's robust environmental management system aims to improve, are important activities and connecting these to our student education is vital.

Being a civic university means that research, teaching, and operations must be closely connected. With the University's Net Zero Cities principle of the Climate Plan, programmes such as Positive Impact Partners, which intertwine research, community participation, and student education, contribute to the University's sustainability performance.

Similarly, the Living Labs programme – including the planting and maintenance of Gair Wood,

the Roger Stevens pond, and the Geothermal project – brings together students, staff, and regional partners to explore sustainable solutions, enhance our curriculum, and tackle local and global challenges.

“Positive Impact Partners taught me that physical spaces and community momentum exist in a reciprocal relationship. The energy and organisation of a community often precedes the space; the community creates the conditions for the space to be possible. But if that space doesn't arrive when it's needed, the movement that the space was meant to support can stall. While the full impact of the work is still emerging, the opportunity to collaborate locally with people whose lives have been impacted by these spaces has already been a wonderful learning experience, and the Positive Impact Partners programme helped us do that”.

— Dr Rebecca Brunk, Positive Impact Partners, University Sustainability Service

It's essential to support each other through advocacy, making sure that researchers and professional services staff feel empowered in our shared sustainability missions.

Where can we make more connections?

The Sustainability Service works with schools and services across the University to create a sustainability community. Through learning and connecting research and practice more, perhaps

we can help individuals navigate their individual pathways towards more sustainable lifestyles and make their distinctive contribution to sustainability. This means helping staff and students find out more about the sustainability issues that affect their lives and helping them work together, through structures such as the Blueprint programme.

There must also be opportunities to collaborate to find new funding, in times of financial and resource pressures, to create opportunities for research and action, benefiting our people, and our institution through creating new action research on the practicalities of sustainability.

Where are the limits?

It is also important to delineate where we don't connect as easily, to understand what is possible and practical to put into action.

The research that responds to grand challenges of our time is difficult to operationalise at local scale. Research that looks at systemic change, for example, to escape continual economic growth, is difficult to make manifest at the scale of a single institution.

It may be 'too theoretical' to apply at university level, but it's vital research for SRI to undertake. By fostering strong transdisciplinary relationships and communication between our colleagues, we can ensure that professional service colleagues have insight to global, systemic, and theoretical research that could foster innovative and curious approaches to local solutions.

While we recognise major issues of injustice that challenge systemic moves towards sustainability, it's difficult to design meaningful and appropriately scaled responses to such issues. The University operates not in isolation but in a context which such injustices in access to resources, in power and agency are real, and we cannot fully escape those bounds by operating alone.

We need the same humility when thinking about behaviour change. Research that helps us understand the drivers of unsustainable behaviours, and what enables people to act in more sustainable

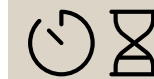
ways is difficult to translate into practical action, beyond the design of on-campus systems.

The **challenges** of academic and professional service staff working together in a single institution and sector include:



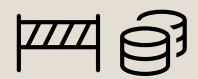
Professional differences

Academics are typically focused on research, publications, teaching, whereas professional services focus on service delivery, compliance, and efficiency



Timescales

Research may be long-term, while operational projects may have shorter deadlines



Institutional barriers

Staff may have different appetites for risk, different budgets, and face the challenges of bureaucracy

Ongoing work

We're still working out where SRI can best play a role in the institutional change that drives the Sustainability Service. How do researchers in one institute in one School, legitimately and usefully influence University strategy and action, and the University's engagement with local partners?

Maintaining relationships between individuals and teams in research and in operations is not an optional activity. Understanding and valuing different perspectives deserves time and effort. This will always remain a work in progress.

SRI@21: research that makes a difference

In Autumn 2024, members of SRI identified and prioritised the topics and themes that they felt should be a part of SRI@21. More than half of them said **‘research that makes a difference’** was their top priority.

What do we mean by research that makes a difference, and how do we compare it to research impact and research engagement?

What is research that makes a difference?

SRI’s research sits at the ‘applied’ end of a spectrum from blue-sky through to practical impact. We conceptualise the social impacts of sustainability, question fundamental socio-economic ideas, and work with practitioners and communities to bring these questions and answers to life.

If you only looked at journal articles, sustainability research could easily appear to be about describing problems in deeper and deeper detail. There is no shortage of challenges to address. We see environmental crises like climate change and biodiversity collapse closely entwined with the social ills of poverty, poor health, limited livelihoods and fractured communities.

Describing the challenges is not enough for SRI researchers. Since 2004, we have described ourselves as a ‘problem-focused research institute.’ We seek greater understanding so that we can identify routes through current dilemmas – solutions which could be system wide. We are interested in creating space for new conversations, building tools to support decision-making, and amplifying the voices of impacted communities. This is upstream research impact.

“The LiLi project, in the supportive and creative environment of SRI allowed us to go where no researchers had gone before, exploring the full spectrum of links between energy use and well-being: in terms of international and intra-national inequality of energy footprints, exploring the empirical connections between energy and well-being from the household level to the global, from Zambia to the UK. We were able to dig deep into the political economy and structural reasons (i.e. the provisioning systems) that trap us into high energy use, and we were able to model, for the first time, global energy requirements of well-being if everyone had decent living standards delivered using the most efficient technology possible (i.e. more equal and better provision)”.

— Professor Julia Steinberger, Principal Investigator of the Living Well Within Limits (LiLi) project funded by the Leverhulme Research Leadership Award

How does interdisciplinarity make a difference?

For SRI, interdisciplinarity means the ability to be challenge-led. We can focus on the challenge itself, collecting and deploying various data, methods, analysis, and insights to find the best ways to tackle it. The UK Government aims to work in this way with its ‘missions’ focus, but it can be difficult to translate these broader projects into tangible societal or systems change.

Even with a desire to be interdisciplinary, everyone has a disciplinary background. This can be useful in siloed areas of other organisations, as SRI researchers adapt to these ways of working and continue to make a difference.

Disciplinary backgrounds can provide firm foundations from which to springboard into new spaces, where impact often arises. Taking research insights into new forums sparks ideas, connections, and new research challenges that require innovative thinking and application. We can only do this if we are able to cross disciplinary boundaries, using language and concepts that help us be heard wherever we are.

How do engagement and impact interact?

Engagement can happen regardless of novelty or pushing research frontiers. In SRI, we might lead with the engagement, which helps us to identify the places we can make the biggest impact before beginning that research. Engagement improves our research, bringing new perspectives onto a problem or generating new data.

“My work aims to reduce emissions associated with buildings, focusing on the role of builders and the construction industry in making those reductions. This means gathering data by talking to SME builders and taking that information and analysis into trade bodies, like the Federation of Master Builders, or the UK Parliament’s Environmental Audit Committee. This builds new collaborations, such as recent work with Skipton Building Society on what they as mortgage providers can do to help their customers retrofit their homes”.

— Professor Alice Owen

Research that makes a difference requires trust and relationship-building, which takes time and commitment. There’s a ladder of engagement, where small collaborations can build trust, relationships and shared ideas, creating larger projects and bigger ideas.

Many members of SRI are active on advisory boards and committees for projects, working with policymakers, practitioners, non-government organisations, and affected communities. This allows us to make a difference in several ways. Understanding the typologies of impact can help us work out where our focus should be: is it instrumental, capacity-building, or legislative? What about the scale of the impact – is it local or global?

Peer-to-peer dialogue is also important; not all ideas can spring from structured activities. Some are born out of casual conversations and hearing about other people’s work. Creating time and space for those connections is an important aspect of enabling SRI to do research that makes a difference.

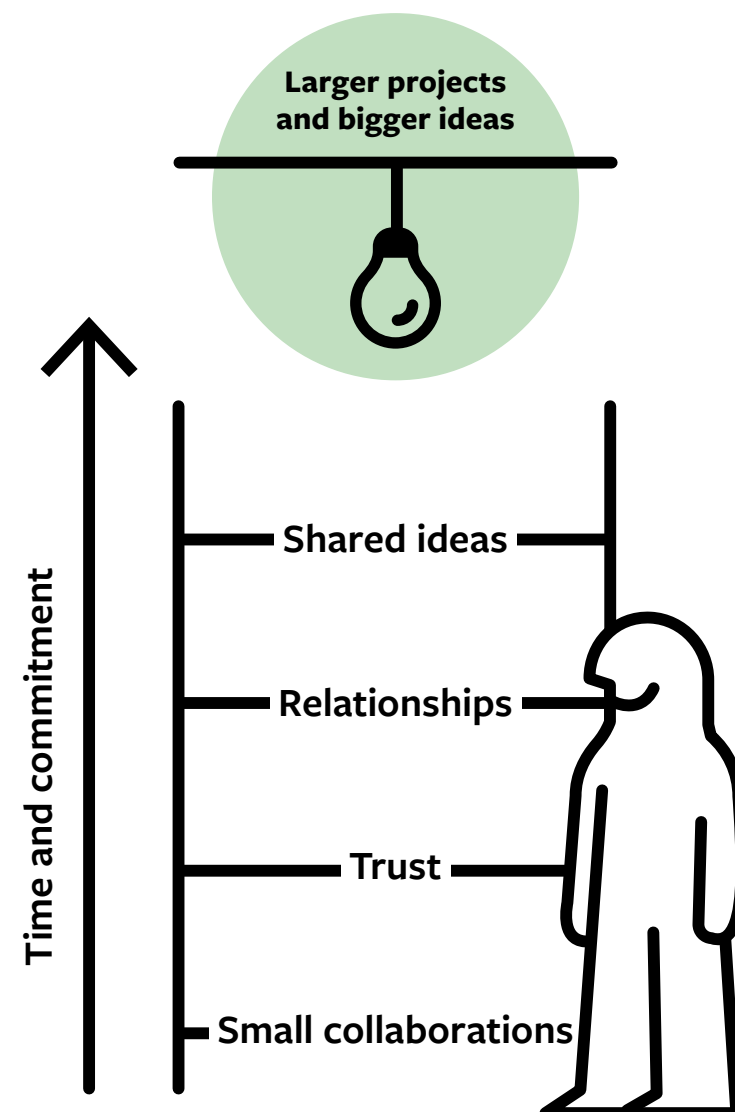
Important engagement happens in the teaching space – the scale of student education led by SRI means that much of the impact of our research comes from how we use it in our teaching, where we train some of the next generation of sustainability researchers, practitioners, and thinkers.

Confidence is key to doing research that makes a difference. Open communication can help to build this; for example, asking what other people want and need from the partnership. However, the outcomes of engagement are not always predictable, positive, or fit into the timescales of funded research. It's important to keep a balanced perspective on the ways that impact happens.

“Impact is like playing billiards – or pool. Hitting one ball against another does change what’s on the table. But it’s not always linear, predictable and impact isn’t necessarily positive! Identifying causal relationship between what you do and what happens”.

— Dr Ajay Bhawe, Lecturer in Environment and Development

Research that makes a difference remains a guiding motivation for SRI.



Reading SRI's ideas, arising from reflecting on our 21 years, you will have more ideas.

We want to work across boundaries, with other researchers and partners who share our passion for making a difference.

We look forward to collaborating with you.

Contributors and acknowledgements

While Alice Owen must take responsibility for the idea to develop the SRI@21 sustainability research agenda, it would have remained just an idea without the inspiration, discussion and hard work of many people. Following the process of developing SRI@21 from September 2024, the people who have had a hand in creating this report include:

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SRI@21 development started with an away day in September 2024, which Jose Barbero and Luis Sanchez shaped and led with creativity and humour. Participants in that event, and the conversations that ran through to the end of 2024 with a dozen working groups meeting several times, included:

Ajay Bhavé; Alice Damiano; Ana Rita Domingues; Ankitha Manohar; Anne Tallontire; Ardo Purba; Beverley Searle; Charley Nussey; Claire Gribben; Claire Quinn; Claudia Pollen; Damian Howells; David Dawson; David Williams; Diana Ivanova; Eric Kemp-Benedict; Frin Bale; George Holmes; Harriet Thew; Helen Mort; Jenny Hodbod; John Barrett; Jon Kedwards; Jonathan Busch; Joseph Hamm; Katy Roelich; Laura Smith; Lucie Middlemiss; Marie Meyland; Mathilde Rainard; Monica di Gregorio; Muriel Bonjean Stanton; Noleen Chikowore; Paul Jensen; Peter King; Peter Taylor; Pip Wilson; Piroska Lorinczi; Rebecca St Clair; Richard Bärnthaler; Richard Itaman; Roger Cremades Rodeja; Rory Padfield; Rosa Foster; Rosario Michel Villarreal; Sai Ma; Sally Russell; Sam Herbert; Sheridan Few; Suraje Dessai; Susi Lorenz; Susie Sallu; Teodor Kalpakchiev; Vanessa Schofield; William Young; Yim Ling Siu; Zihong Chen

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So many people have helped to turn an idea into the document you are reading now and this list is bound to be incomplete. Our apologies if your name is not recognised here and thank you for your part in SRI@21.

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