UTS Institute for Sustainable Futures

ISF's approach to research impact

Impact at ISF

ISF's mission is to create change towards sustainable futures through impact-driven research and engagement. We don't just seek to drive change – we also aim to be transformational in all that we do.

Our research areas include energy futures, water futures, resource stewardship, international development, and healthy environments.

We achieve impact in these research areas by:

- **informing and influencing** through the generation of evidence
- **taking meaningful actions** that resonate with our partners, clients and wider stakeholders
- **building strong relationships** within the sustainability community and beyond
- **drawing on our diverse disciplinary backgrounds**, combining depth and breadth of expertise, and bridging theory and practice.

Impact is also central to the UTS research ethos and the university's commitment to fulfilling its public purpose.

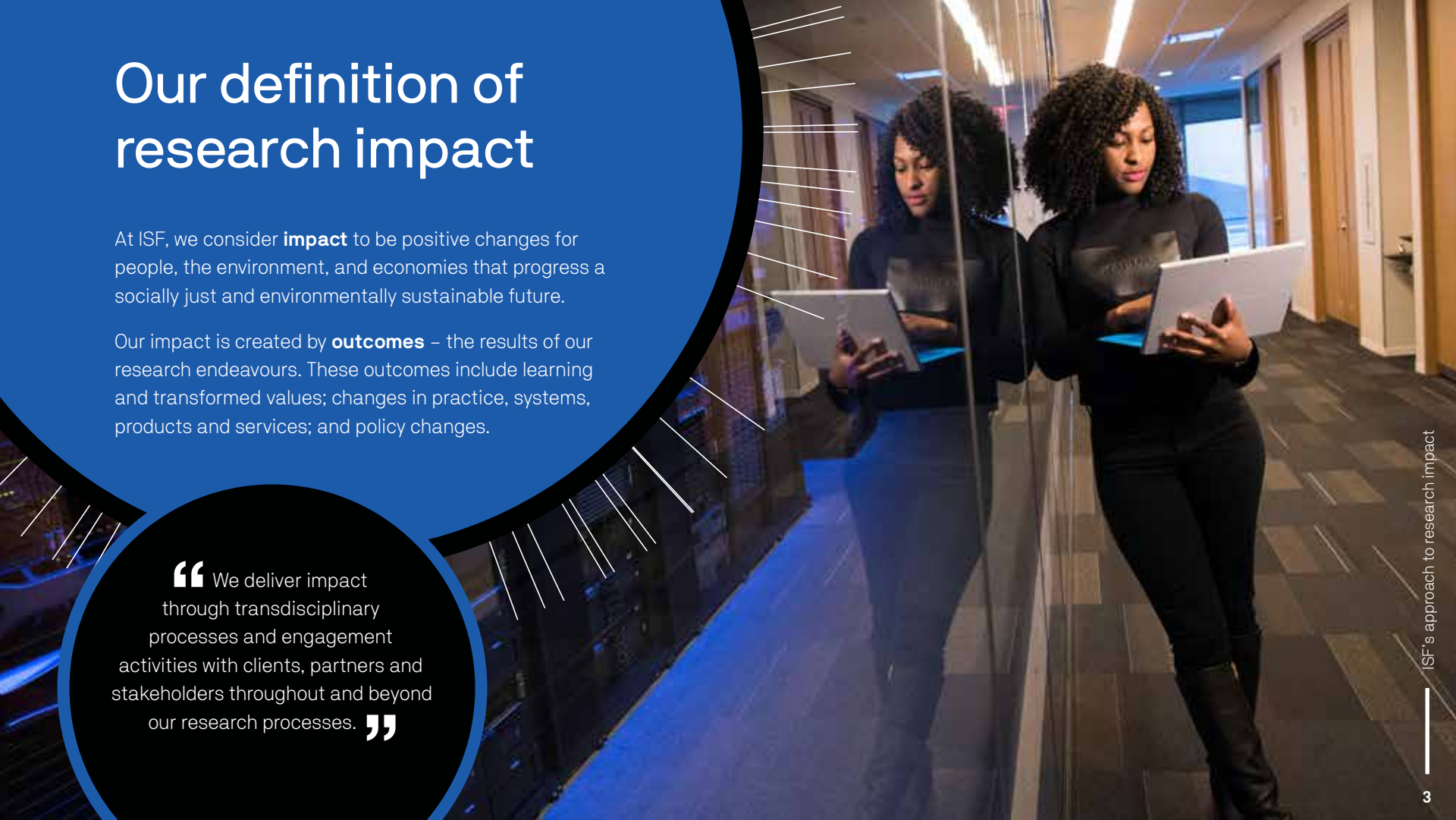
> "Through our role as a public university, we task ourselves with ensuring that our research outcomes benefit our communities and more broadly the economy, environment and society, in alignment with the UN Sustainable Development Goals."
>
> UTS Research Strategy

Our definition of research impact

At ISF, we consider **impact** to be positive changes for people, the environment, and economies that progress a socially just and environmentally sustainable future.

Our impact is created by **outcomes** – the results of our research endeavours. These outcomes include learning and transformed values; changes in practice, systems, products and services; and policy changes.

> “We deliver impact through transdisciplinary processes and engagement activities with clients, partners and stakeholders throughout and beyond our research processes.”



Real-world impact, real-world outcomes

We asked some of our partners to describe the impact our collaborations have made. Here's what they said.

"The new APCO Annual Reporting Tool has provided Nestlé, and industry, a much clearer mechanism to understand and track overall packaging sustainability performance and support this with evidence-based outcomes. The automated action plan has simplified the development process by identifying opportunities to improve our performance based on the Reporting Tool inputs. Most importantly, the Reporting Tool encourages industry to collaborate across the value chain to reduce the impact of packaging on the Australian community."

Jacky Nordsvan, Packaging Specialist FAIP at Nestlé Australia

"NSW has a cleaner local environment because of the successful Container Deposit Legislation which is now being copied throughout Australia. And the reason we have a container deposit scheme is because of the excellent policy work and advocacy led by the Institute for Sustainable Futures at UTS... Without the Institute for Sustainable Futures, Container Deposit legislation in NSW – and by extension across Queensland and now Victoria – would probably never have been introduced."

The Hon. Rob Stokes, NSW Minister for Infrastructure, Cities and Active Transport (former NSW Environment Minister)

"I am currently finalising my design for an upcoming build based on [ISF's] Your Home. I think it is a great resource provided free of charge by the government. It demonstrates how relatively simple and cost-effective it can be to build a healthy, comfortable, efficient and affordable house."

Your Home user on Facebook

How we create impact

ISF's impact framework outlines our pathway to impact, and how we integrate 'impact thinking' throughout our research processes.

Engagement

Our engagement with end users and research partners is critical to maximising impact. Their involvement in research conception and design ensures relevance to their situation and strengthened ownership of outcomes.

Research outputs

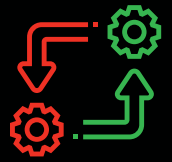
We produce a wide range of research outputs, from tools and guidance to training, pilots and prototype testing. We design these outputs to maximise accessibility, uptake and use, with a view to progress outcomes and impact.

Outcomes

As a knowledge-based organisation, we produce meaningful outcomes for our research partners – including government agencies, private sector and non-government organisations. Learning outcomes, those that transform the knowledge and values of our stakeholders, are an important part of our impact pathway. Equally, so are changes in practice, systems, products, services and policy.

Impacts

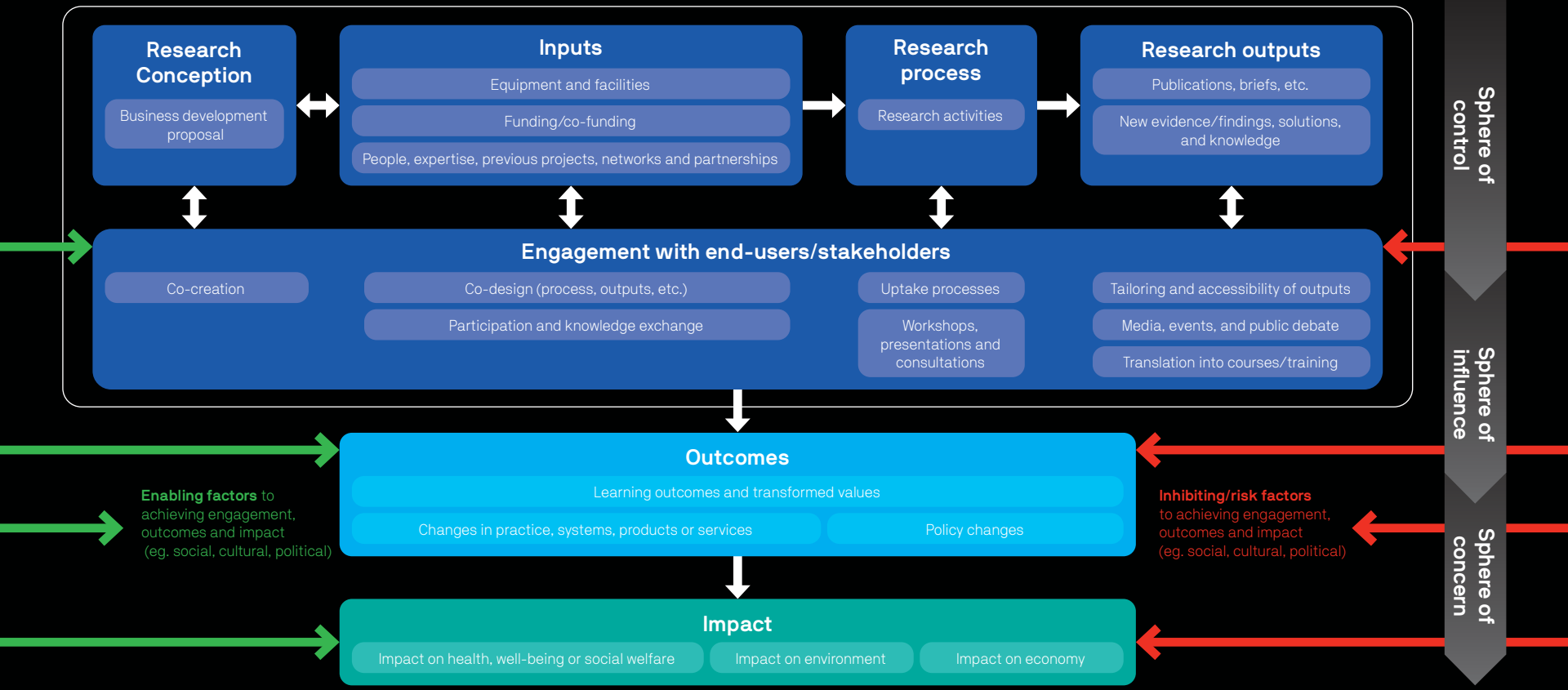
Positive societal, environmental, and economic change tend to happen over the longer term, often occurring beyond the research timeframe. Outcomes, as described above, are the foundation for such impacts.



Enablers and inhibitors

Social, cultural and political factors can support or diminish outcomes and impact. Identifying these factors early can help us maximise opportunities and reduce risks to achieving impact.

ISF pathway to impact



Guiding principles for impact

ISF's research approach is based on 25 years of delivering sustainability and change, and built on the following three principles:

Considering whole systems and narratives in sustainability transformations

After decades of incremental progress, we now know that complex, contested sustainability problems – water and food security, poverty, energy innovations or climate change – require a transformative response. These challenges cut across social, cultural, economic and technological domains, responses to sustainability challenges are not merely technical, instead, they also require political influence, the act of shifting dominant narratives and motivating behaviour change. Our impact approach includes using systems thinking to: unravel intersecting drivers and influences on the issues at hand; inform influential actors' ideas language and paradigms; and support collective action.

Working together across disciplines and across diverse perspectives

Sustainability challenges cannot be solved by a single point of view. At ISF, our researchers are from diverse backgrounds and we are leaders in transdisciplinary (TD) research[1], an approach that can address complex problems that cut across disciplinary boundaries. TD research relies on multiple stakeholder perspectives to define the issues to be addressed and the research approach. Through collaborative TD practice and co-production[2], learning and transformation can happen across a system, generating new knowledge, shared understandings and new competencies[3].

Long-term engagement, relationships and partnerships

We believe that change towards sustainability happens through social relations[4] and that long-term research partnerships are fundamental to achieving lasting impact[5]. That's why we place relationships at the centre of ISF's research approach. We contribute to thought leadership by engaging with and leading sector networks, forums, debate and dialogue. We exchange knowledge and ideas to influence change by developing lasting, trustful relations with clients, partners and wider stakeholders. We support action by developing tools, frameworks and high-quality, credible research that responds to stakeholder questions and needs.

Further examples of our projects and their outcomes and impacts are shown overleaf. Going forward, we continue to interrogate and improve our approach to research impact.

What has impact looked like for ISF?

Your Home: an independent guide to creating sustainable homes for the future

Client: Australian Government, Department of Industry

Output: The *Your Home* website and manual. These assets demonstrate how to create a comfortable home that is sustainable, economical to run, healthy to live in and adaptable to changing needs. Guidance ranges from more sustainable building practices to household-level water and energy efficiency recommendations.

Process and engagement: ISF led the production of the original Your Home 2001 edition and subsequent edition updates, including the 2021 sixth edition. In developing *Your Home* in partnership with our client, we convened discipline experts and industry groups (e.g. building, housing, architecture, sustainable energy and engineering industry groups) to inform *Your Home's* design. Prospective end-users provided input on appropriate language and information for a range of readers.

Outcomes and impact: The award-winning *Your Home* manual is Australia's most comprehensive guide to environmentally sustainable homes. The *Your Home* website receives over 1 million visitors per year.

1 million
visitors per year

NSW Container Deposit Legislation Review

Client: NSW Department of Environment

Output: ISF's *Container Deposit Legislation (CDL) Review* assessed the feasibility and impacts of a CDL in NSW. The CDL aimed to reduce the environmental and economic impacts associated with the production, transportation and disposal of containers.

Process and engagement: ISF undertook a deep public deliberation process to gauge a diversity of views on the costs and benefits of introducing CDL in NSW. A key element of the report was placing the responsibility for managing the waste lifecycle with the industries that create the waste. The process revealed polarised views, including resistance from the beverage and packaging industry.

Outcomes and impact: In 2017, almost 15 years after ISF conducted the review, NSW Liberal Premier Mike Baird and environment minister Rob Stokes championed the enactment of the NSW CDL. CDL schemes have been described as "the single largest initiative ever undertaken to reduce litter in NSW". The initiative included the popular 'return and earn' scheme, which offers a 10-Cent refund for every returned container.

5 billion
containers returned by March 2022

"What it took to get [a container deposit scheme] over the line was... a committed environment minister having the facts in his or her back pocket and having the political will to implement a scheme. You can't have political will without the facts to back it up. You need both."

Rob Kelman, Director of ReLoop Platform CDS and circular economy campaigner

Challenging the approach to recycled water investment

Client: Sydney Water

Output: Workshops, reports and the identification of opportunities for recycled water (RW) investment and de-risking investments in Greater Sydney.

Process/engagement: RW plays a vital role in supporting the growth of new and existing developments across Greater Sydney. RW systems also reduce water pollution, reduce potable water use and support green landscapes, even in times of surface water shortage. However, RW investment in Greater Sydney has been low due to cost concerns. In response, ISF took a genuine, deep, collaborative engagement approach with Sydney Water staff from various divisions, challenging existing perceptions of RW and revealing new insights and wider-scale deliberations on the issue.

Outcomes and impact: Short-term outcomes, informed by ISF's research, have seen Sydney Water implement a range of RW solutions at different scales. For example, a new Sydney Water RW system at Sydney Science Park can produce 2.4 million litres of RW a day, enough for 20,000 people. The project has the capacity to be scaled up in the future.

2.4 million
litres recycled water produced/day

Life-cycle costs approach for piped water service delivery: a study in rural Viet Nam

Client: Viet Nam government agency, the Institute for Water Resources Economics and Management (IWEM) and international non-government organisation East Meets West (EMW)

Outputs: Policy briefs and costing tool.

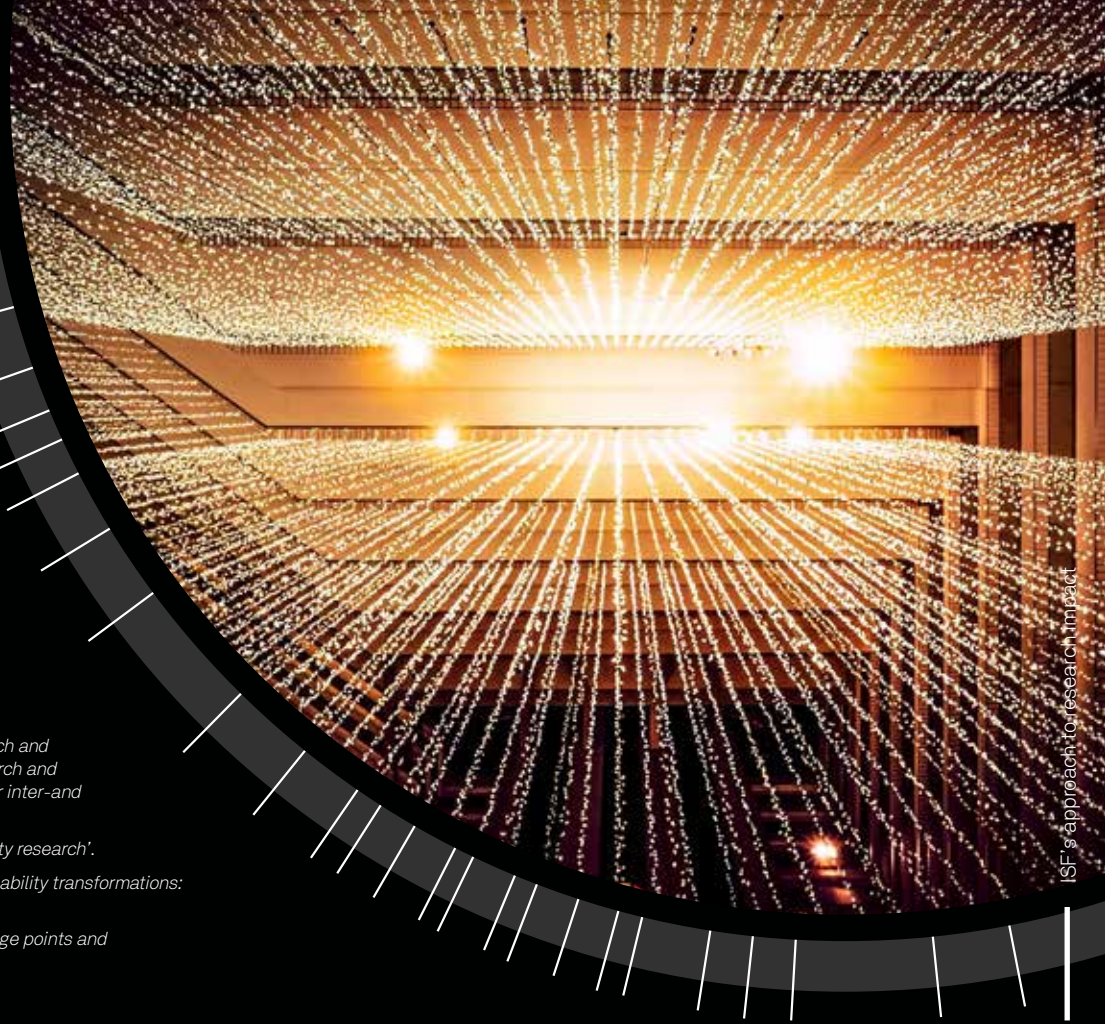
Process/engagement: In 2020, according to global monitoring, only 26% of people have access to piped water in rural Viet Nam, making local private enterprise an increasingly important supplier. However, little research has been done to document the costs of private water supply. ISF worked with IWEM and EMW to assess the life cycle costs of piped water.

Outcomes and impact: The research improved understanding of costs associated with rural piped water schemes. The findings are supporting government to deliver better policies and regulation, private enterprises to set tariffs and conduct business planning, and civil society organisations to target their support to water entrepreneurs and their enterprises.

Find out more

Explore the ISF approach to impact at **www.isf.uts.edu.au/impact**

For more information or to find out how we can help you achieve your transformational research goals, you can contact us at **isf@uts.edu.au**



References:

1 See Fam & O'Rourke, 2020, *'Interdisciplinary and Transdisciplinary Failures: Lessons Learned from Cautionary Tales'*; Fam, Neuhauser, & Gibbs, 2018, *'Transdisciplinary Theory, Practice and Education: The Art of Collaborative Research and Collective Learning'*; Fam, Palmer, Riedy, & Mitchell, 2018 *'Transdisciplinary research and practice for sustainability outcomes'*; Mitchell & Willetts, 2009, *'Quality criteria for inter-and trans-disciplinary doctoral research outcomes'*.

2 See Norström et al., 2020, *'Principles for knowledge co-production in sustainability research'*.

3 Schneider et al., 2019, *'Transdisciplinary co-production of knowledge and sustainability transformations: Three generic mechanisms of impact generation'*, 2019

4 West et al., *'A relational turn for sustainability science? Relational thinking, leverage points and transformations'*, 2020

5 RDI Network, 2017, *'From Evidence to Impact'*.