

A Landscape Review

We need to shift from the Age of Extraction to the Age of Regeneration, through principles and practices based on Living Nature.

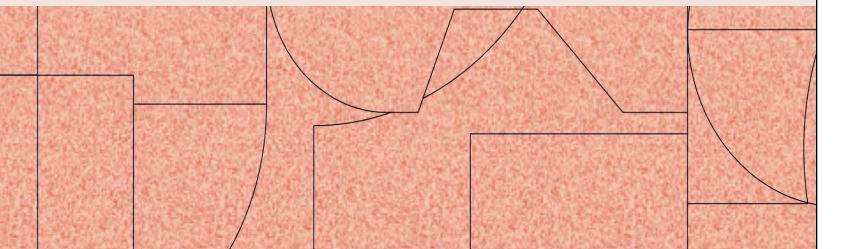
"We are eroding the very foundations of our economies, livelihoods, food security, health and quality of life worldwide."

Introduction

Fashion Values is an educational programme ideated and developed by Centre for Sustainable Fashion, UAL, in partnership with Kering, IBM and Condé Nast. It aims to enable the next generation of fashion designers, strategists and communicators to create sustainably; to empower imagination, innovation and consciousness through sustainability leadership & a powerful media narrative; and to make education and learning globally informed, interdisciplinary and accessible through cross-cultural relevance and location-specific application.

Fashion Values Nature is the focus for the first year of the programme, with subsequent years exploring Fashion Values Culture and Fashion Values Society.

Research has been conducted by Centre for Sustainable Fashion to review a range of perspectives and activities relating to fashion and nature, in the context of fashion products, services and systems. Desk research and semi-structured interviews with experts in the field have been conducted with the aim of gathering working knowledge and practice. The qualitative data collected through the interviews has been thematically analysed in order to identify regenerating fashion-led actions, and to understand related challenges and possibilities. We seek to contribute to the realizing of a fundamental shift from fashion as an extractive sector, to one that is regenerative. The headline findings from the research are summarized in the following sections – a reference point for the development of briefs to students and fashion sector professionals, to act as exemplars of regeneration in action.



Research Background

Nature is the life force that provides us with the air, water, soil and other life forms that make up the elements that come together in the garments in which each one of us is clad. Moreover, fashion designers have traditionally taken inspiration as well as materials, colours and textures from nature. The relationship between fashion and nature is dependent on how these elements are valued in emotional, cultural, political, social and economic as well as aesthetic and technical terms.

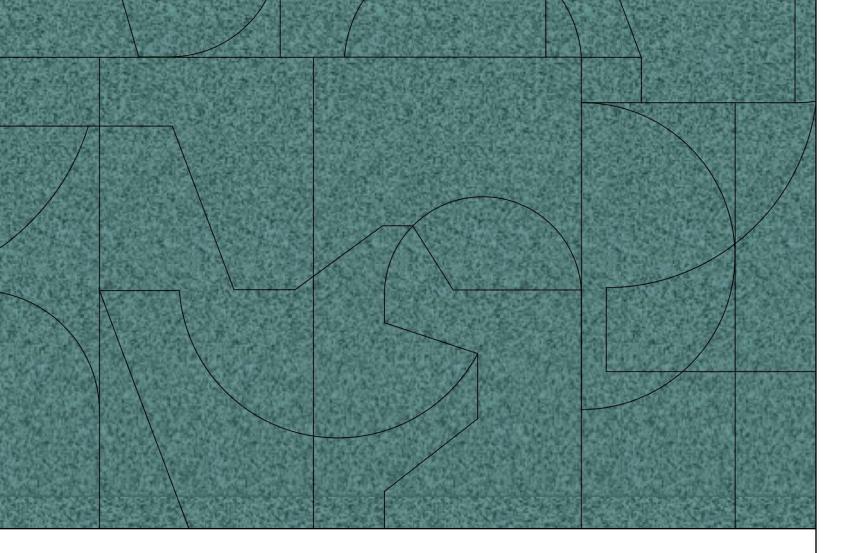
Whilst the symptoms of an undervaluing of nature by fashion are well known and widely discussed, the underlying principles of living nature are not well articulated in the studios, workrooms, boardrooms, tutorial spaces and sample rooms of fashion. This research engages a range of people working in and around fashion, in a discussion about fashion and biological diversity. This is understood as the "variability among living organisms from all sources, including inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems", as defined by the UN.1



We invite you to join us in re-imagining the impact of the fashion industry on people and the planet.

We're bringing together voices from the people driving change, and hosting an annual programme of education, events and an award that dives deep into topics related to fashion sustainability.

In 2021, our focus is on Fashion and Nature.



Living Nature

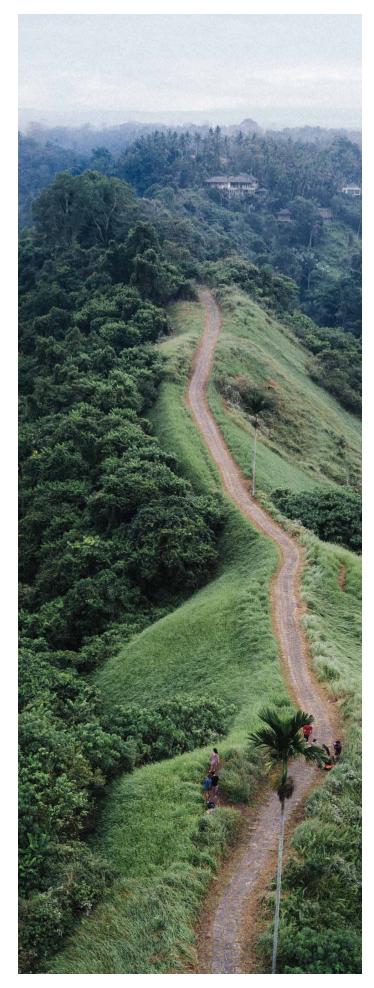
To put it in simple words, biodiversity means 'living nature'; the living skin across the whole world, including animals, plants, the habitats and ecosystems they live in, and how they interact with each other. Our skin holds us together, enables us to breathe and move, to create and to interact in the world. Its value is priceless, though in contemporary Western terms it is useful to point out that natural capital and biodiversity are valued at 125 USD trillion a year.² Whilst extinction of species is a natural process, it is estimated that the current rate of biodiversity loss is 1000 times higher than the natural rate.³ In fact, natural systems are declining globally at unprecedented rates in human history.⁴

According to the United Nations,⁵ the top five drivers of change in biodiversity are, in descending order:

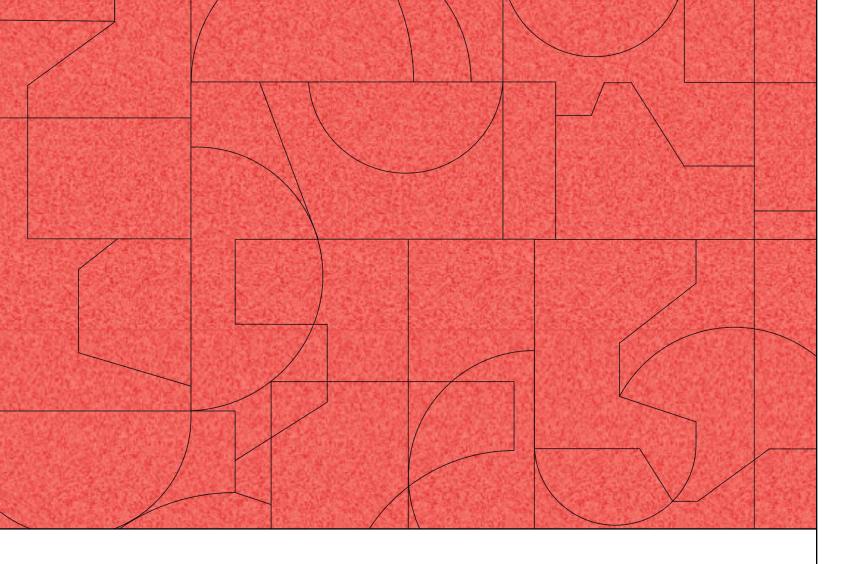
- 1. Changes in land and sea use
- 2. Direct exploitation of organisms
- 3. Climate change
- 4. Pollution
- 5. Invasive alien species

Other indirect causes of biodiversity loss are population increase and overconsumption, technological innovations (some of which have been applied in beneficial ways, whilst others in ways that are detrimental to the environment), as well as issues of governance and accountability. Biodiversity loss causes severe impacts on entire ecosystems but also on the human ability to adapt to the changing environment.

"We are eroding the very foundations of our economies, livelihoods, food security, health and quality of life worldwide." In other words, biodiversity loss is "not only an environmental issue, but also a developmental, economic, security, social and moral issue as well."



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Fashion and Living Nature

The exploitation of nature by the mainstream system of fashion production and consumption is contributing directly to land desertification, drainage of watersheds, water pollution, degradation of coral reefs, an increase in the amount of carbon in the atmosphere, and deforestation. The evidence of fashion's destructive processes is widely shared and a plethora of initiatives focus directly on one or more of these issues.

The fashion sector is contributing to a rapid decline in biodiversity and an acceleration of species extinction, with related negative implications on indigenous communities and local knowledge, and livelihoods and cultures being decimated. This involves complex issues that the fashion sector is only just beginning to understand. There is growing evidence of ways in which the fashion sector can creatively seek to value biodiversity in its practices (such as those demonstrated by Kering and H&M Award winners). But the pervasive approach to fashion in relation to biodiversity is simplistic and rational, where a sustainable product or material is seen as a static goal, rather than engaging in the dynamic interactions that take place in Living Nature.

In 2016, the International Union for Conservation of Nature (IUCN) declared an urgent need for the fashion industry to take action towards preserving nature and biodiversity. At the G7 summit in August 2019, The Fashion Pact (signed by a range of brands) announced that Biodiversity was one of the three main pillars in its sustainability objectives.

The Global Assessment Report on Biodiversity and Ecosystem Services by IPBES (2019b) emphasized the need for 'transformative change' to be implemented now, at every level from local to global, in order to preserve and restore biodiversity, deliver the Paris Climate Agreement and reach the UN Sustainable Development Goals (SDGs) and the 2050 Vision of the UN Biodiversity Convention 'Living in harmony with nature'. Transformative change implies a "fundamental, systemwide reorganization across technological, economic and social factors, including paradigms, goals and values" as well as new business models (ibid).



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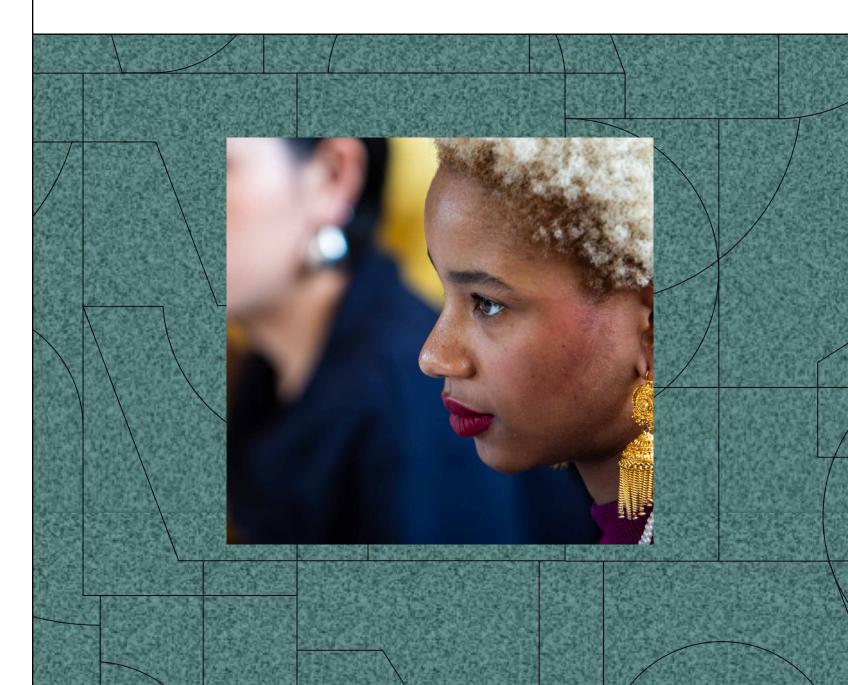
Fashion Sector Enablers to Engaging in Living Nature

Findings from this research suggest a range of factors that can enable preservation and regeneration of natural ecosystems:

- Regenerative farming and wildlife friendly practices (e.g. the holistic animal grazing approach for sheep implemented by The Nature Conservancy, or the regenerative farming practices developed by the Wildlife Friendly Enterprise Network aimed at making wildlife and ecosystems thrive).
- Diversifying the fibre basket, including fibres from agricultural waste or recycled materials (e.g. ReVerso regenerated cashmere, Resilk fabrics and Second Life Fibres) and changing sourcing criteria, for example Tengri's use of yak fibre which has a lighter ecological footprint than goats; or alpaca as a sustainable alternative to cashmere).
- Animal conservation and economic incentives for low-income communities to sustainably manage and protect endangered species (see The Nature Conservancy, the Savory Institute, the International Unit of Conservation of Nature, and Conservation International).

- Eliminating harm, such as removing heavy metals from production processes and allowing cleaner waste water and reduction of negative impacts on plants and animals (see Leather Working Group audit protocols to certify leather manufacturers according to environmental criteria).
- Impact assessment on key species and ecosystems (e.g. H&M's Biodiversity Footprint Assessment tool).
- Designing with nature's qualities in mind (e.g. Icebreaker creates high-quality and long-lasting performance outdoor clothing made of merino wool and other natural materials, making the most of their natural performance).
- Traceability and transparency (e.g.
 Provenance uses blockchain technology to track the journey of raw materials through the supply chain to increase transparency of materials, processes and people behind products).

- Certifications (e.g. the Regenerative Organic Alliance is piloting a regenerative agriculture certificate aiming to restore diversity below the ground; see also the Soil Association, the UK leading organic certification body).
- Sustainable business strategies (e.g. Kering's biodiversity strategy structured in four stages: avoid, reduce, restore and regenerate, and transform; Biodiversify and University of Cambridge Institute for Sustainability Leadership have developed the 'Conservation Hierarchy',
- a flexible framework that can be applied by different fashion companies to make informed decisions about the mitigation of impacts on biodiversity at diverse scales).
- Collaboration, lobbying and policy engagement (e.g. Common Objective's Biodiversity Pledge, Tengri's agreement with the Mongolian government for not issuing mining licenses and not harvesting over tipping points, and Business for Nature's policy recommendations for business action).

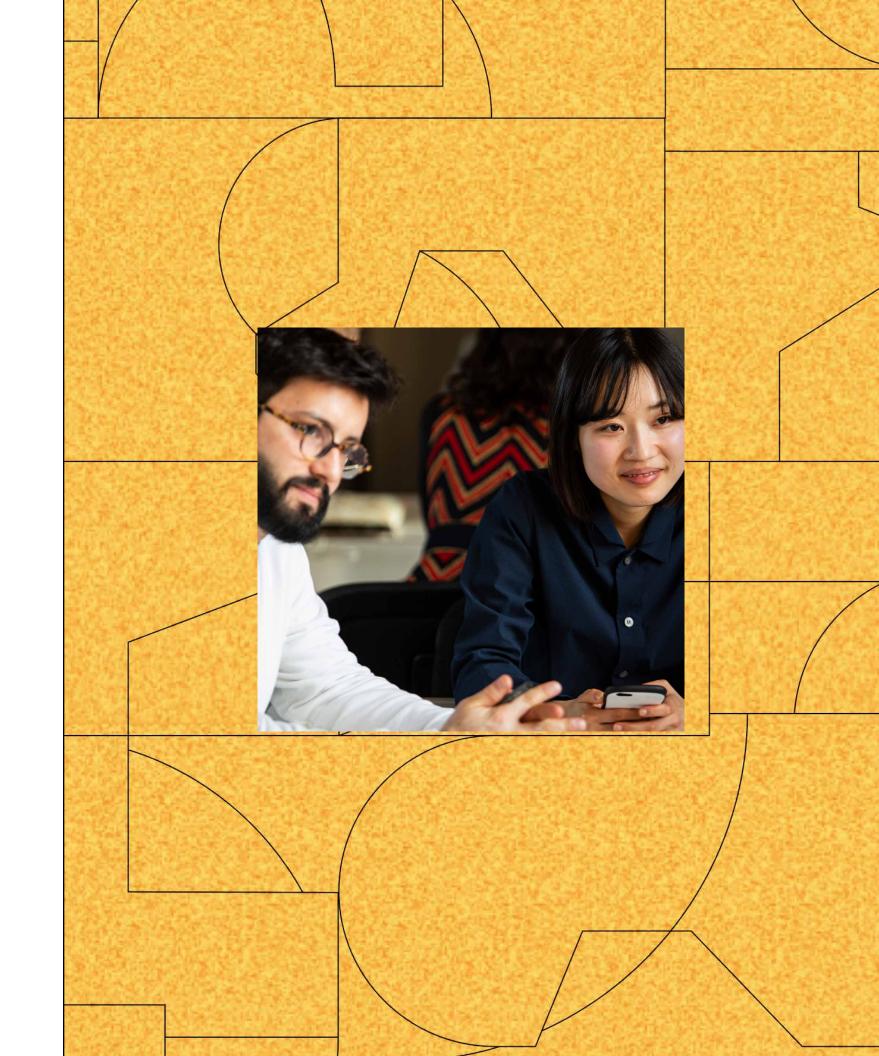


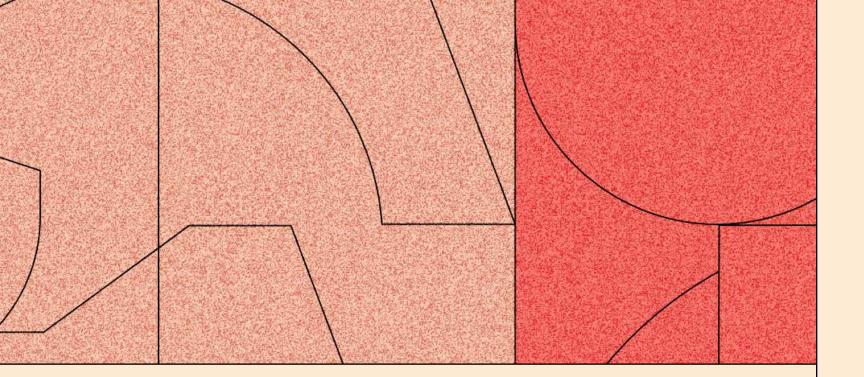
Fashion Sector Challenges to Engaging in Living Nature

Findings from this research suggest that challenges for the fashion sector in engaging in Living Nature include:

- The dominance of consumerist cultures and a model of market stimulation, builtin obsolescence and success based on increasing production and sales.
- Pervasive business practices of overproduction, excess stock and markdowns, based on social acceptability of fashion as constant newness.
- Lack of suitable infrastructure and regulations relating to fashion practices that recognize the dynamic interactions in Living Nature.
- Lack of resourcing for businesses to undertake R&D on regenerative practices of designing products, services and systems, and shortage of investment and support for their wider application.
- Greenwashing and lack of access to information – complete and verified – for fashion designers and businesses to fully understand biodiversity issues and make informed decisions.

- Generic tools and methods that lack depth and understanding of systemic interdependencies in fashion.
- Conflicting agendas (e.g. animal rights, welfare and responsible trade and biodiversity conservation).
- High costs and limited availability of novel fibres and new material innovations.
- Continued negative perception of some products, where aesthetic considerations do not conform to accepted style, texture, fit and colour aspirations of designers, buyers and customers.
- Time-lag between actions aimed at preserving and regenerating natural ecosystems (seen as incompatible with most fashion business models focused on short-term reporting).



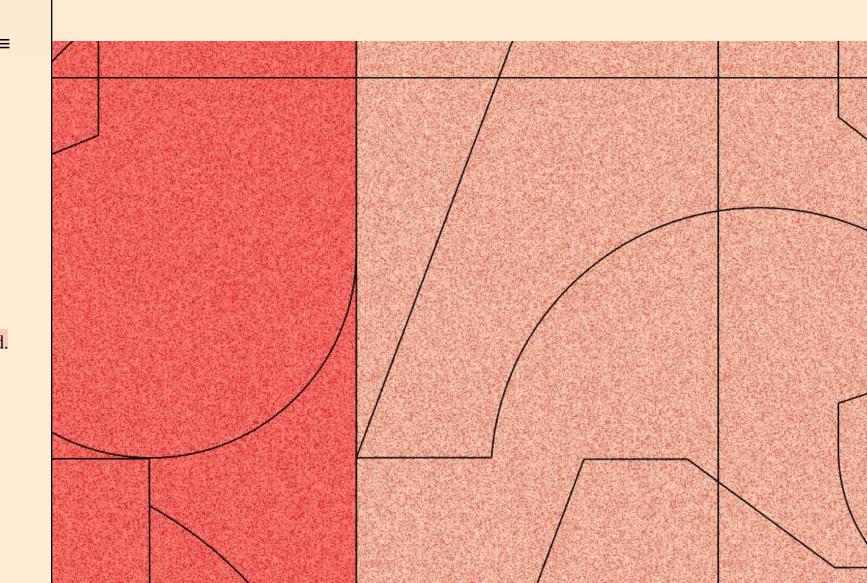


Conclusions

The degradation of nature has negative implications on societies and businesses relying on natural resources; the fashion sector is self-harming. This research highlights a range of challenges and possibilities for those involved in a range of fashion activities towards regenerative practices. From sole-trader designers through to multi-national corporations, the question of how to design with nature in mind can offer creative stimulation, concern, consternation and confusion. There is a need for those with scientific, artistic, technical, entrepreneurial, political, ecological, and sociological expertise to support those who seek to design with Living Nature in mind.

The research indicates that promising practices, commitments and understanding relating to fashion and Living Nature are being developed and implemented by fashion businesses and organisations. These include the adoption of impact

assessment tools, regenerative farming and wildlife friendly practices, regenerative sourcing strategies, a 'do no harm' to 'do good' philosophy, traceability and transparency, regenerative business strategies, cross-sector collaborations, and policy engagement. These practices offer encouraging signs of critical consideration of how to shift in the right direction, but, as yet, the harm created through fashion activities is increasing. There is a fundamental clinging on to economy over ecology, short term gain over long term viability, and it is still easier to engage in destructive rather than regenerative practices in fashion. The current lack of resourcing and support, access to verified information, conflicting agendas, costs and availability of a more diverse range of fibres, consumerist cultures and difficulty in capturing long-term impacts can be overcome if and when the imperative for change is recognized and its realization supported.



Next Steps

We are on the cusp of the most profound, consequential and significant transformation of human civilization in history. The convergence of planetary, societal, technological and information shifts means that the world is being defined by disruptions and unpredicted occurrences. As with preceding civilisations that have faced a convergence of factors of change, we have the choice to either cling on to the old system, at our peril, or to embrace new principles, practices and to apply the technologies around us to the principles of Living Nature.

We would like to invite those with expertise, knowledge and understanding of Living Nature to contribute to a new set of briefs for designers, businesses, and communicators to develop regenerative products, services, and systems. These are



aimed at transforming interactions with nature through our personal and professional lives. Through this, we seek to identify and recognise designing with nature in mind, realized as fashion that offers value and is valued; services that honour and extend that value; and models that ensure that the overall contribution of fashion to nature is greater than its debt.

By bringing together an international panel of people with diverse expertise to discuss the findings of this research, we will collate the deliberations and insights to frame an open-source call to designers, businesses, and communicators. Responses to the call will be shared to support designers, tutors, business leaders, students and policy makers to actively contribute to an Age of Regeneration.

In preparation for the discussion, we would like to ask you to consider the following questions:

- How can fashion designers and businesses give voice to and listen to Living Nature?
- Who can play a part in valuing, respecting and regenerating Living Nature, through fashion?
- How can fashion products, services, and systems be designed with Living Nature in mind?
- How might technologies be applied to create regenerative practices in fashion?
- What system of organisation can shift fashion to centring ecology over economy?
- What are the narratives around fashion as part of Living Nature?

Imprint

ua london college of fashion



This executive summary is authored by Centre for Sustainable Fashion, UAL with the aim to present a landscape review and a fact-based resource to support and educate the next generation of designers, businesses and communicators through responding to a set of challenge briefs calling for regenerative fashion products, services and systems.

Authors

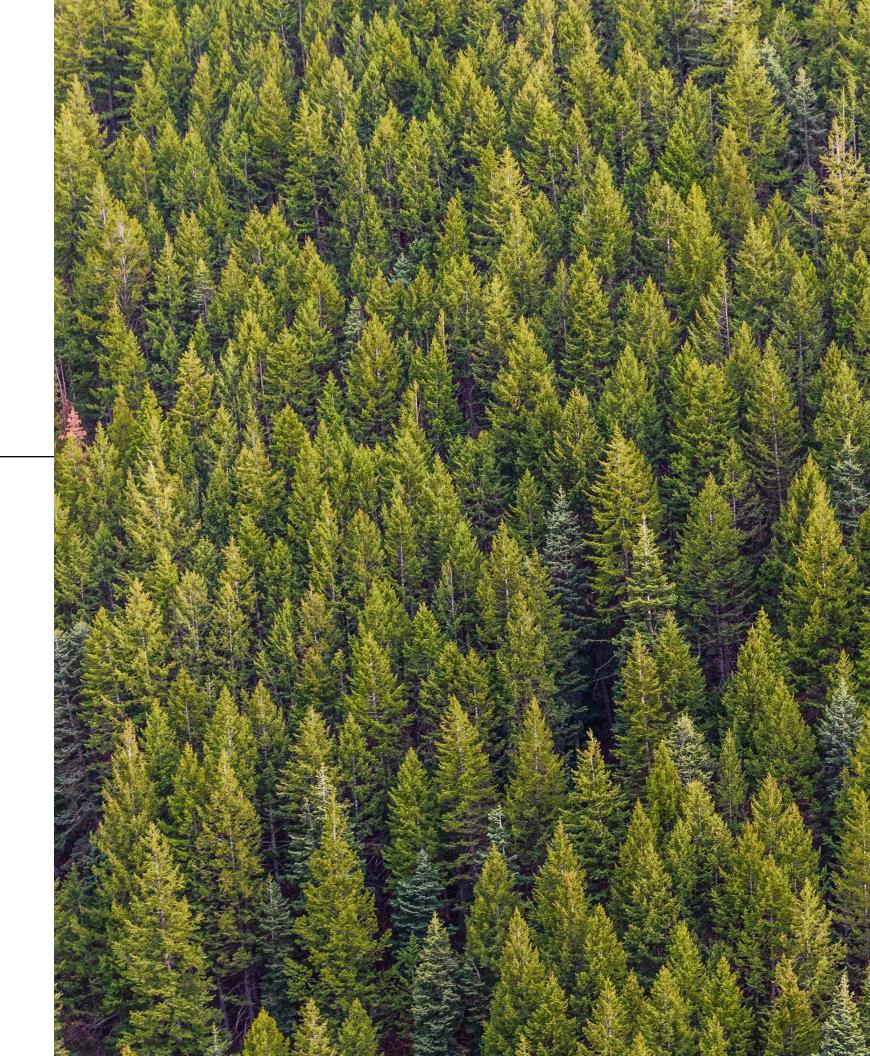
Dr Francesco Mazzarella & Professor Dilys Williams.

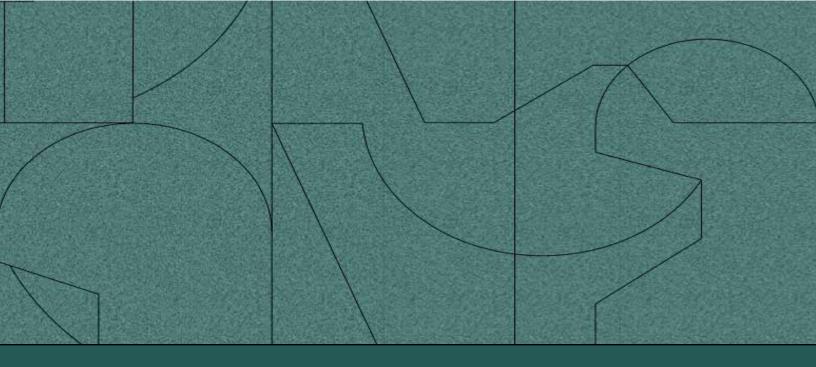
Acknowledgements

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