



Global challenges – local responses:  
Scaling up local sustainability  
innovations and business models to  
address the SDGs



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10TH INTERNATIONAL CONFERENCE ON NEW BUSINESS  
MODELS NBM2025

# 10th International Conference on New Business Models NBM2025

[BOOK OF ABSTRACT]

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## Partners



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## WORDS OF WELCOME

In today's academic world, the International Conference on New Business Models (NBM) is a leading platform for discussing sustainable business models. As we embark on its 10th edition, the NBM conference is more than just a milestone; it is a committed effort to advance knowledge and solutions in sustainable business practices. This conference brings together academics, researchers, and practitioners to tackle urgent issues and encourage innovative research in the evolving field of sustainable business models. NBM2025 is set against a backdrop of new socio-economic complexities and uncertainties, making sustainable business models increasingly challenging to design and adopt. Global trends like climate change, resource scarcity, demographic shifts, and the technological revolution are driving significant transitions that demand radical and transformative changes, supported by various forms of innovation. Sustainable business models are crucial for achieving digital, green, and inclusive transitions.

The technological and digital revolution is transforming all industrial sectors, altering goods, services, and processes in both public and private organizations. New business models are emerging, driven by digitalization, automation, and the adoption of flexible technologies like artificial intelligence, connectivity, big data, robotics, and additive manufacturing. These technology-driven innovations are not only disrupting industries but also changing our way of life. It is essential to integrate values such as human dignity, equality, security, and basic rights into business model designs. The climate crisis has heightened the need for rapid and extensive systemic change to achieve carbon neutrality by 2050. This goal requires moving away from traditional business practices to sustainable business models. The green transition necessitates business models that support the circular economy, eco-innovation, and the creation of green jobs.

The digital and green transitions must be inclusive and fair, prioritizing people and ensuring no one is left behind. Organizations need to develop business models that address intergenerational challenges, promote diversity in all its forms (gender, race, class, etc.), encourage cooperation, create shared social value, and foster a culture that empowers individuals to contribute to social transformations. Over the years, this conference has built a robust and expanding academic community focused on sustainable business models. We are dedicated to making NBM2025 a platform for those aiming to develop sustainable business models that integrate technological, energy, climate, and social transitions with a holistic approach to sustainability. Our goal is to unite science, technology, innovation, and society to create more resilient, green, and inclusive business models for a fairer, more prosperous, and sustainable future.

We look forward to seeing you at the School of Business Administration of University of Iceland for another unforgettable New Business Models Conference!

Dr. Lára Jóhannsdóttir

Conference chair

Environment and Natural Resources

School of Business Administration



## CONFERENCE THEMES AND TRACKS

The NBM2025 aims to be a forum for reflection and academic debate in the field of sustainable business models for the digital, green, and inclusive transition through different levels of analysis: system level, sectorial and organisational level, organisational impact level and theoretical and methodological foundations.

Along with the parallel tracks of academic papers, the program will include plenary talks and debates on how we can better enable impactful business models for sustainability in practice.

### **Themes and topics**

The 10<sup>th</sup> International Conference on New Business Models will continue to explore relevant themes and topics building on the insights from previous conferences:

At the system level, we invite scholars working on topics such as collaborative business models for inclusive transitions, ecosystem thinking in support of sustainability; empirical observations and theoretical foundations of business models for transitions; and collaborative and circular business models emerging in the global south.

At the sectoral and organisational level, we will address topics on data-driven business models for sustainable transformation, business model experimentation for circular economy; and rural community led business models.

At the organisational impact level, topics will deal with the design, functioning and impacts of sharing economy business models; management and accountability for sustainable business models; new business models in times of crisis; and assessing and managing sustainability performance of business models (which includes a special subsection on Business Models & Life Cycle Assessment).

We will also explore the theoretical and methodological foundations of business model research, including new theoretical views business models for sustainability, and the role of design thinking practices during sustainable business model innovation. Additionally, the session, Bring Your Own Tool, provides the opportunity to present practice-based experiences using tools to develop sustainable, circular, and inclusive business models.

Topics in each one of the four themes are presented below





# 1 EXPLORING THE SYSTEM LEVEL

## 1.1 *Innovative business models and ecosystems for sustainability transition: perspectives from global north and global south*

**Track chairs:** Annukka Näyhä & Irene Kuhmonen, Jyväskylä University School of Business and Economics, Finland; Timber Haaker Saxion, University of Applied Sciences, The Netherlands; Nguyen Hong Quan, Institute for Circular Economy Development, Vietnam National University - Ho Chi Minh City, Vietnam; Nguyen Cong Thanh, National Economics University, Hanoi, Vietnam; Milou Derks, Orange Corners and Eindhoven University of Technology, Netherlands

It is widely agreed that diverse organizations, instead of seeking purely economic profits attained through innovations, should increasingly pursue sustainability-oriented innovations which promote environmental and/or social sustainability (e.g. Boons and Lüdeke-Freund, 2013; Adams et al., 2016; Bocken et al. 2019). Further, aligned collaborative efforts by a diverse range of value network actors and stakeholders are needed for sustainable value creation and successful innovation diffusion. For example, circular business models and innovations with networked nature are key levers for implementation of circular economy principles (Antinkainen and Valkokari, 2016). All in all, sustainability transition requires innovative business models and collaboration between diverse organizations as well as between organizations and their stakeholders in diverse business ecosystems, value networks and platforms (Köhler, 2019; Aagaard et al. 2021; Planko and Kramer, 2021; Derks et al., 2022; Näyhä and Wallius, 2024; Nguyen, Haaker, and Le, 2023).

However, in-depth information on the impacts of innovative business models and ecosystems on system-level change is often lacking. Similarly, effects of system structures and the drivers and barriers they pose on sustainable business models requires more knowledge. Transition studies explore large-scale societal transformation towards sustainability, thus offering more systemic and interdisciplinary approaches to management and organizational studies (Markard et al., 2012). Management studies, in turn, when combined with transition perspectives, can illuminate the role of business actors and their agency in transition processes (Köhler et al., 2019). Further, the form that the business models and ecosystems take depends on the societal and business context in which they are to be embedded, such as Global North and Global South. For example, the Global South has informal low-income contexts which are rich in necessity-driven value retaining practices for materials and goods (Korsunova et al., 2022; Muchangos, 2021). While the transition contexts in these regions vary greatly, businesses in both regions are connected to each other through global telecouplings which affect the distribution of both environmental and social sustainability impacts and economic returns, highlighting also the justice aspects related to transition processes (Ramcilovic-Suominen, 2022).

Thus, attuning towards the specific challenges that arise from these contextual settings enhances the opportunities for promoting the role that innovative business models and collaborations can play in sustainability transitions.

This session welcomes studies that combine research on sustainable business models and large-scale, systemic sustainability transitions. The session explores the role of innovative business models and ecosystems in the sustainability transition both in Global South and North. Bringing together these diverse theoretical and geographical perspectives is a necessity for studying, understanding, and facilitating the sustainability transition in our society. The session is divided into two parts, one of them concentrating on presentations related to Global South, and the other one to Global North.

## 1.2 Ecosystems in support of sustainability

**Track chairs:** Abel Diaz Gonzalez, Maastricht University (The Netherlands); Nikolay Dentchev, University of National and World Economy (Bulgaria) and Vrije Universiteit Brussel (Belgium); Bart Leyen, Vrije Universiteit Brussel (Belgium); Valery Chistov, Deusto Business School, University of Deusto (Spain)

The ecosystem concept has gained significant attention over the past decade (Audretsch et al., 2018). Ecosystem thinking offers valuable insights into how various stakeholders can align, interact, and collaborate to gain competitive advantage, foster innovation, and enhance business productivity (Adner, 2017; Jacobides et al., 2018). Ecosystems support business growth by leveraging the diversity and complementarity of actors, their interactions, and coordinated efforts to mobilize resources (Neumeyer & Corbett, 2017; Roundy et al., 2017; Spigel & Harrison, 2018). Although there is still a lack of conceptual and theoretical clarity around ecosystems (Wurth et al., 2021), they serve as an ideal unit of analysis for addressing sustainability issues due to their holistic and systemic characteristics (Henriques et al., 2022).

In recent years, world leaders have increasingly advocated for more coordinated efforts to address various global challenges. Organizations like the World Economic Forum (World Economic Forum, 2020) have established supportive structures and programs to help entrepreneurs develop their businesses and increase their impact, offering both financial and non-financial assistance. Despite these initiatives, more cross-sectoral partnerships and support are urgently needed to address complex global challenges effectively.

As we strive to tackle sustainability problems, building well-functioning ecosystems becomes critical (Theodoraki et al., 2017). These ecosystems must prove their capacity to adapt, mobilize flexible and complementary resources (funding, infrastructure, knowledge), and evolve governance structures (Acs et al., 2017), policies (Stam, 2015), boundaries (Audretsch et al., 2019), and interrelationships (Stam & van de Ven, 2021). Ecosystem culture and resilience capacity are equally important (Roundy et al., 2017).

The ecosystem approach is crucial for both large, established businesses aiming to reduce their environmental impact and small, new sustainable ventures. For large businesses, ecosystems offer a platform to collaborate with diverse stakeholders, share knowledge, and access innovative solutions that help them transition to more sustainable practices and reduce their environmental footprint. These ecosystems provide the necessary support for integrating sustainable technologies, adjusting supply chains, and aligning with evolving environmental regulations. On the other hand, for small, new sustainable ventures, ecosystems are equally vital as they provide access to essential resources such as funding, mentorship, and networks, which are often limited for startups. By leveraging these ecosystems, small ventures can collaborate with key actors, foster innovation, and accelerate their growth while maintaining a sustainability focus. Ecosystems help these startups overcome barriers to entry and scale their impact more effectively by tapping into shared knowledge and resources.

This session aims to bring together scholars to discuss their current research on how ecosystems can be developed to support sustainability. Our focus will be on building ecosystems that foster new business models and address emerging global challenges. We welcome papers that explore the importance of ecosystems both for large, established businesses working to decrease their environmental impact, and for small, new sustainable ventures looking to scale their innovations. Papers from various methodological backgrounds, including literature reviews, theoretical, conceptual, and empirical work, are encouraged.

### **1.3 Business Models for Transition. Empirical observations and theoretical foundations of existing or emerging business models fostering societal transformation and transition**

**Track chairs:** Niels Faber, Hanze University of Applied Sciences, Groningen and University of Groningen (The Netherlands) & Jan Jonker Radboud University Nijmegen, em (The Netherlands).

Recently, it has become clear that we need to develop innovative and radical solutions to tackle wicked and pressing problems associated with our current, linear economy and the sticky societal arrangements that are formed around it. Limitations of current society to tackle complex challenges become more and more visible. Efforts to address these issues thus far have only resulted in the creation of waste, pollution, depletion, and extreme forms of social exclusion.

A new generation of business models is needed that fosters a transition towards sustainable societies (Derks, et al., 2023; Faber and Jonker, 2023). Since many, if not all, of these problems, stem from how value creation is organised, it calls for a reconceptualization of how the amalgamation of sustainable, circular, inclusive, and restorative business models can bring about radical (system) change.

This track invites contributions exploring how sustainable business models can shape transformation and transitions towards a more sustainable and inclusive society (e.g., Jonker and Faber, 2021; Faber and Witjes, 2024). Problems to be addressed include a mixed and diverse perspective on circularity, sustainability, social well-being, and biodiversity (Rockström et al., 2009; Raworth, 2017). These problems are linked and should be addressed at various levels of aggregation.

#### **Leading questions**

For NBM2025@Reykjavík, we want to continue to explore the debate started at NBM2024@San Sebastian on how sustainable business models contribute to shaping transitions towards a more just, more inclusive, and sustainable society. We welcome both empirical as well as theoretical and conceptual contributions. Regarding practice, we are interested in contributions that address the question of where we may find examples of this in practices and/or policies, in which business models are deliberately applied to realize such transition. We are interested to learn what the real and if possible measurable impact of these business models is.

Concerning theoretical/conceptual contributions we are looking for ways in which the foundations and concepts of business models foster transition. How are the connections between the concepts of transition and value creation operationalized and to what effect?

Our concept of business models is not limited by thinking only in concepts based on organizations' pur-sang. On the contrary, we are convinced that value creation can be shaped through a rich and emerging variety of collective or collaborative business models based on collaboration between diverse stakeholders such as citizens, businesses, and government.

Our ambition is to chair two sessions. The first is on empirical observations and experiences of how business models shape societal transition. The second session will focus on exploring the theoretical and conceptual foundations of business models for transition. All those who submit to this track are cordially invited to join both sessions, present their work, and join the discussions.



## 2 EXPLORING THE SECTORAL AND ORGANISATIONAL LEVEL

### 2.1 *Innovation through artificial intelligence and data-driven business models for sustainable transformation*

**Track chairs:** Maya Hoveskog, Halmstad University (Sweden), Laura Michelini, LUMSA University of Rome (Italy), Magnus Holmén, Halmstad University (Sweden), Lauri Paavola, University of Eastern Finland (Finland); Luís Irgang Dos Santos, Halmstad University (Sweden)

This track theoretically and empirically analyzes and conceptualizes the emergence and structure of both firms' and ecosystems' value propositions for sustainability. The track focuses on, but is not limited to, the interplay between products and services vs data-driven business models and ecosystems; digitization, digitalization, and digital transformation of business models; the development and use of big data and machine learning, the use of generative AI for innovation and decision-making, data acquisition strategies and new business models; the role of digital platforms for business model innovation; methods for developing data-driven business models and ecosystems. A particular focus is placed on AI for data-driven business models for sustainable transformation.

Below listed are questions that illustrate relevant topics that the contributions can tackle. Those are neither exhaustive nor comprehensive. Other relevant lines of investigation are welcome tackling innovation through artificial intelligence and data-driven business models for sustainable transformation.

- How to leverage AI and data-driven business models to address environmental and societal challenges? What are the associated drivers, barriers and enablers?
- What are the opportunities and challenges related to AI and data-driven business models for sustainability? More specifically, what are the factors that condition value creation and value capture from the use of AI and data-driven/digital technologies?
- What are the organizational and technological tensions and involved in AI and data driven business model innovation for sustainability? Additionally, how do organizations manage paradoxical tensions between data exploitation and privacy protection while pursuing sustainable business models?
- How do digital platforms, their corresponding ecosystems as well as overall ecosystem value propositions for sustainability emerge and evolve to leverage on critical complementarities?
- How can/should companies govern their engagement in digital platforms, and what are the implications for business models for sustainability?
- How can/should firms develop, acquire, attract, and evaluate AI/digital capabilities to diversify their product portfolio? Additionally, how does the interplay of various technical and non-technical capabilities contribute to realizing sustainability values through AI and data-driven business models?
- How can firms overcome the fears and mistrust towards the AI to create a culture that supports AI and driven business models addressing environmental and societal challenges?
- What are the tensions between algorithmic efficiency and social responsibility in data-driven business models for sustainability?
- How can organizations develop paradoxical mindsets to navigate competing demands in AI-driven sustainable transformation?

## **2.2 Community-led and community-based business models for sustainable development**

**Track chairs:** Sonia Marcos, Universidad de Burgos (Spain); Jaime González-Masip, Universidad Politécnica de Madrid (Spain); Moniek Kamm, Saxion UAS

This track explores and explains community-based and community-led business models as a new approach to better understanding the necessity of bottom-up initiatives for sustainable development. Already, community-led and based actions and strategies result in successful new business models to address challenges in different communities, where the community's interests are closely linked to the preservation of the social capital and environment, such as rural communities. Collective and community-led business models can provide new solutions to local needs of communities such as ageing populations, elderly care, lack of essential services, access to affordable housing or integration of vulnerable groups, and spark the development of opportunities of circular economy in high potential sectors such as food and agriculture, new bio-based value chains and ecosystem services, among others. "The community is an intermediate, mediating and moderating environment" (Hindle, 2010, p. 601). The community context profoundly influences the types of entrepreneurship initiatives and how they are carried out (Peredo & Chrisman, 2006), demonstrating the importance of the community context in entrepreneurship (Mezias & Kuperman, 2001). The collective context and value proposition profoundly influence the types of entrepreneurship initiatives and businesses and how they are organised, demonstrating the importance of the community context in sustainable entrepreneurship.

Community-based business models (Jonker & Faber, 2021) are a distinct form of collective business models (Jonker, Hobé and Kamm, 2024) in which constituents collectively contribute to organizing themselves in an entrepreneurial manner (Kamm, 2022) around a collective value proposition.

In community-led approaches, initiatives are not led by an organisation or other outsiders but by a communal process (Wessells, 2018, p. 19). A community-led approach uses the practices of empowerment, mutual learning and consensus building to create bottom-up, citizen-driven change (Kolosy, 2020). The community holds the power and makes the critical decisions. Community-based business models addressing wicked problems related to sustainable development demonstrate parallels to institutes for collective action (Ostrom, 2010) and Social-Ecological Systems (McGuinness and Ostrom, 2014). Community-based initiatives addressing sustainable development bring a new element in that their constituents often represent different realms of society (Kamm, 2022), resulting in a broad and diverse number of community stakeholders that are involved in governing, supporting, acting and making decisions for the work done by the community, involving strategy and core activities next to self-determination and autonomy (Wessells, 2018).

Therefore, community-based organising forms are in demand of customised business models that support the community and its goals. Social innovation is essential in designing new solutions focused on communities' local and specific needs because it adds new economic and social value to the community (Vercher et al., 2020; Ubels, Haartsen & Bock, 2019), where community-led and community-based business models can act as support structures for community development and dynamics (Olmedo et al., 2023).

This session aims to attract academics to discuss their current research on community-led and community-based business models. We welcome articles from different methodological backgrounds, including literature reviews and theoretical, conceptual, empirical, existing projects, and case studies.

### **2.3 Business model experimentation for circular economy: close, slow, narrow, regenerate**

**Track chairs:** Laura Niessen, Maastricht University (The Netherlands); Matthew Coffay, NHH Norwegian School of Economics (Norway); Sveinung Jørgensen, NHH Norwegian School of Economics (Norway); Lars Pedersen, NHH Norwegian School of Economics (Norway); Nancy Bocken, Maastricht University (The Netherlands)

The circular economy is an inspiration to many companies. Yet, established businesses and new ventures alike need significant experimentation to create desirable, feasible, viable, and sustainable business models (Bocken et al., 2021). Experimenting with diverse circular business models can support the acceleration of circular disruption with a “systemic, widespread and fast change” (Blomsma et al., 2022, p.1011) towards circularity. Research on business experimentation for circularity shows that experimentation requires considerable capability and planning but can create valuable learning and guide the transition towards sustainability (Weissbrod & Bocken, 2017). This reiterative approach can help overcome consumer barriers through finding interventions that address them (Bashhir et al., 2020).

While companies have been quite successful at creating business models focused on ‘narrowing the loop’ through resource efficiencies and closing the loop through recycling, the more challenging business models focused on regeneration, as well as slowing the loop through strategies such as sufficiency, are less commonplace (Bocken et al., 2022). Regeneration requires businesses to consider both societal and environmental well-being in their operations and to attempt to do “more good” rather than “less bad” (Konietzko et al., 2023). Sufficiency-oriented businesses seek to address the overconsumption of resources and provide alternative products and services to ensure that needs are met within the planetary boundaries (Niessen & Bocken, 2021). Both of these more strongly sustainable business transformations require piloting and experimentation to assess their desirability, feasibility and viability, as well as their real and measurable impact in terms of sustainability.

Finally, circular business models need to be designed and reviewed carefully to ensure that they do not accidentally create unintended rebound effects (Das et al., 2023). Circular business models often entail or require behavioural changes but might inadvertently lead to higher impacts due to convenience or new forms of consumption (Baczyk et al., 2024). Therefore, experimentation and experimentation tools can help to assess possible rebound effects (Das et al., 2023).

This track focuses on the cases, practices and tools of experimentation with new circular business model strategies.





### 3 EXPLORING THE ORGANISATIONAL IMPACT

#### **3.1 *Management, governance and accountability for sustainable business models***

**Track chairs:** Burcin Hatipoglu, School of Business IRRG & PSRG, Canberra, University of New South Wales (UNSW), Australia; Silvia Cantele, Department of Management, University of Verona, Italy; Assunta Di Vaio, Department of Law, University of Naples "Parthenope", Italy; Vincenzo Riso, Department of Management, University of Verona, Italy

This track explores the future directions for developing managerial capabilities and accountability when innovating business models for digital, green, and inclusive transition. Engagement with sustainability and circularity involves integrating ecological and social aspects into products, processes, and organizational structures. Some avenues to explore in this track are governance and the role of boards, leadership, and managerial responsibilities; employee participation in eco-innovation processes; circular and sustainability KPIs and incentives; formal and informal organizational learning; knowledge management; sustainability practices and sustainability or integrated reporting; and creating co-creation opportunities with employees and other stakeholders.

Theories that lend themselves to exploring the managerial side of business model innovations include the resource-based view of the firm, dynamic capabilities, capability view of the firm, stakeholder theory, organizational learning, and sustainability transition frameworks. We invite research that applies some of these theories or proposes unexplored theories to examine how the managerial side of an organization can be developed when organizations innovate their business models.

#### **3.2 *New business models in times of crisis: scaling resilient and sustainable local solutions for global challenges***

**Track chairs:** Dorleta Ibarra, Mondragon Unibertsitatea (Spain); Juan Ignacio Igartua Mondragon Unibertsitatea (Spain)

We are facing a paradigm shift marked by a convergence of multiple crises, such as climate change and environmental degradation, energy crises, water scarcity, global health crises, geopolitical conflicts, economic downturns, supply chain disruptions, social inequalities, and migration and displacement. The urgency to address these interconnected crises is driving the global triple transition—digital, green, and inclusive.

Crises stress societies, disrupt economies, strain public services, and can significantly challenge conventional business models. They increase uncertainty, challenge governance structures and regulations, aggravate inequalities, and damage social cohesion, leaving businesses and communities struggling to maintain stability and resilience while adapting to new contexts and market dynamics.

New business models emerging from crises and adapting to the triple transition often focus on agility, resilience and sustainability, accelerating technology diffusion and digital transformation to remain competitive in a changing world. In this context, emerging technologies such as artificial intelligence can play a crucial role in addressing crises by providing rapid data analysis, supporting decision-making, and predicting trends. Likewise, organisations are increasingly pivoting toward circular business models to address climate change, resource constraints and regulatory pressures. These business model innovations

must be inclusive and just, placing people at the centre and ensuring that no one is left behind. We must move towards organisations that integrate intergenerational challenges, promote diversity in all its forms (gender, race, class, etc.), foster (inter-)cooperation, create shared social value, and cultivate a culture that empowers individuals to play a more active role in social transformations.

This track explores research aimed at understanding the dynamics that help businesses and communities not only weather crises but also seize them as opportunities for innovation and sustainable growth. It focuses on building and assessing more resilient business models, considering dynamic capabilities, financial resilience, upskilling and reskilling needs and supporting tools for risk management and informed decisions-making.

We are particularly interested in cases involving startups, SMEs, and cooperatives, as they often address global challenges through local responses, promoting community-driven and solidarity-based solutions. Their unique characteristics make them naturally adaptive and resilient. Additionally, these models often focus on mutual aid, support for local economies, and the provision of essential services during times of distress.

The track encourages both conceptual and empirical contributions—quantitative, qualitative, and mixed-method studies—that offer insights into creating business models capable of navigating the complexities of a multi-crisis environment.

### **3.3 Measuring and managing the sustainability effects of business models**

**Track chairs:** Florian Lüdeke-Freund, ESCP Business School Berlin (Germany); Romana Rauter, University of Graz (Austria); Henrikke Baumann, Chalmers University of Technology (Sweden); Ana Carolina Bertassini Chalmers University of Technology (Sweden); Joan Manuel F. Mendoza, Mondragon University (Spain)

Business models for sustainability (BMfS) aim at contributions to sustainable development and are therefore based on the principles of triple-bottom-line and stakeholder-centric value creation. They aim not just to improve the performance of organizations but also to have net positive ecological and social impacts beyond organizational boundaries (Freudenreich et al., 2020; Lüdeke-Freund et al., 2020). The aim of this track is to better understand whether and how business models can have such effects and how these effects – including outputs, outcomes, impacts, and value – can be managed and measured (Rauter et al., 2019). Assessing and managing the sustainability effects of business models requires exploring and integrating various topics and concepts (e.g., business model, system-level perspectives, types of effect) as well as tools and metrics (e.g., from sustainability reporting and accounting, life cycle assessment). Digitalisation and artificial intelligence as well as regulatory frameworks such as CSRD/ESRS, EU taxonomy, CSDDD etc. play an increasingly important role, too. This track is open to conceptual and empirical papers that integrate the notions of business models and measuring and managing the sustainability effects of organizations in novel and robust ways. Approaches based on life cycle assessment frameworks and methods are particularly welcome as these have proven to be promising and thought-provoking in past editions of this track (e.g., Böckin et al., 2022; Goffeti et al., 2022).

What does measuring and managing the sustainability effects of business models mean? Measuring and managing the sustainability effects of business models involves defining the units of analysis for the business model and its performance, which includes, for example, the created and destroyed value, its contribution to an organization's environmental performance, and the social impacts resulting from organizational activities. It also refers to the necessity to develop frameworks, methods, and tools that allow specifying, measuring, and managing such effects. Here critical questions emerge, such as: What sustainability effects do business models create? How can these be measured and managed effectively?

How do we know that these effects are related to business models and their properties? This also requires navigating challenges in defining terms like “performance,” “value,” and “impact” in relation to business models (e.g., Dembek et al., 2023), as these concepts are currently not well-connected to business models in standardized or meaningful ways.

Why is it an important topic? Business models are central to organizational value creation and, by extension, to societal value creation. Thus, integrating sustainability into their core operations is crucial for sustainable development. BMfS can help bridge the gap between businesses’ relationships with society and the natural environment by promoting sustainability in their operations and outputs. Understanding and managing the sustainability effects of business models is hence essential to guide responsibility, accountability, and governance within and beyond organizational boundaries.

What are current challenges in dealing with this topic? As BMfS are defined using diverse theoretical perspectives (e.g., stakeholder, activity, or value flow perspectives) a high degree ambiguity exists, leading to challenges in developing meaningful approaches for sustainability assessment and management from a business model perspective. The broad and inclusive nature of BMfS concepts makes it difficult to focus on distinct sustainability impacts and qualities, which leads to significant boundary setting and scoping issues, such as assigning specific environmental or social impacts to certain business models, or parts thereof, as well as determining the scope of a BMfS in terms of responsibility and governance of both direct and indirect effects. Furthermore, value-creating activities and their sustainability impacts occur at various levels (e.g., individual, organizational, global), yet there is limited understanding of how these impacts unfold across levels as well as across different stakeholders (e.g., consumers, companies, regulators) with their varying needs and expectations. Overall, there is a lack of unified concepts and terminologies to address sustainability performance, outcomes, and impacts of business models.

These challenges highlight the need for robust, interdisciplinary research to address gaps in sustainability assessment and management for business models.



## 4 EXPLORING THEORETICAL AND METHODOLOGICAL FOUNDATIONS

### 4.1 *New theoretical foundations of business models for sustainability*

**Track chairs:** Florian Lüdeke-Freund, ESCP Business School Berlin (Germany); Tobias Froese, Borderstep Institute for Innovation and Sustainability (Germany)

This track explores the status quo and future directions of theories underpinning research on business models for sustainability (BMfS). Building on, and going beyond, established approaches – such as activity-based (e.g., Zott & Amit, 2010), component-based (e.g., Osterwalder et al., 2005), design-based (e.g., Lüdeke-Freund, Massa et al., 2024; Zott & Amit, 2010), value-logics-based (e.g., Laasch, 2018; Lüdeke-Freund, Froese et al., 2024), or values-based (Breuer & Lüdeke-Freund, 2017) theoretical views on BMfS – we are looking for novel and theoretically robust contributions that further develop our understanding of the antecedents of BMfS, conditions of their emergence, their inner workings, and their sustainability implications. New theoretical views that lend themselves to this endeavor include, for example, theories of social practice (e.g., Gherardi, 2012), Alexandrian pattern theory (e.g., Alexander et al., 1977), or social mechanism theory (e.g., Hedström & Swedberg, 1998).

We invite contributions that make use of such theoretical lenses as current research faces significant shortcomings in addressing the complexities and special features of BMfS. Most current theoretical approaches are mono-disciplinary, leading to siloed perspectives that restrict integration across disciplines and fail to capture the systemic nature of both business models and sustainability. Additionally, there is a lack of comprehensive frameworks that link firm-level to system-level phenomena, such as societal value creation or sustainability transitions and transformations. Conceptual clarity is another issue as existing theoretical frameworks struggle to explain how BMfS create and diffuse value, and how they resolve tensions between traditional and sustainability-oriented modes of value creation (e.g., Laasch, 2018). These and further gaps highlight the need for more holistic and integrative theoretical foundations that can address the multidimensional nature of BMfS.

Several theories have the potential to provide promising foundations for the study of BMfS by offering interdisciplinary and systemic perspectives (for an exemplary overview see Lüdeke-Freund et al., 2021). Beyond those mentioned above, interesting candidates are sustainability transition and innovation system theories that shed light on how BMfS drive systemic change across multiple levels and networks (e.g., Bidmon & Knab, 2018). Imprinting theory to emphasize the importance of initial design choices in shaping long-term sustainable outcomes (e.g., Snihur & Zott, 2020), or paradox theory that addresses the tensions and conflicts that arise when organizations attempt to balance traditional business models with sustainability objectives (e.g., Hahn et al., 2018). Overall, promising avenues for future research lie in fostering multi-, inter-, and transdisciplinary theoretical frameworks that merge firm-level and system-level perspectives, while also considering the growing importance of emerging artificial intelligence (AI) technologies that will undoubtedly influence how future BMfS research will be conducted.

## **4.2 Transitioning business models towards sustainability through finances**

**Track Chairs:** Adam Gordon (Columbia Climate School); Þröstur Olaf Sigurjónsson (University of Iceland), Björg Jónsdóttir (Bifröst University), Lára Jóhannsdóttir (University of Iceland)

Business models for sustainability (BMfS) are relevant for transitioning towards more socially, equitable, and ecofriendly world. However, this transition requires sustainable finance (La Torre et al., 2019) and investments fostering global development that is sustainable (Cunha et al., 2021) by taking into account environmental, social and governance issues (ESG) (European Commission, n.d.; Zairis et al., 2024). Sustainable finance, traced back to 1986 (Ferris & Rykaczewski, 1986), combines the elements of finance and sustainable development goals (SDGs) (Kumar et al., 2022), but sustainable finance and investment (Cunha et al., 2021) is of key importance in addressing the 2030 sustainable development agenda and the relevant SDGs, the Paris Agreement (Sisodia & Maheshwari, 2023) and in delivering the European Green Deal policy objectives (European Commission, n.d.). If not, risk can be embedded in investment portfolios, including transition risk (Alessi & Battiston, 2022).

Responsible business practices can furthermore be incentivized through finance- and reporting-related regulatory frameworks, standards and criteria, including the EU Taxonomy, the Corporate Social Responsibility Directive (CSRD), European Sustainability Reporting Standards (ESRS), Environmental, Social, and Governance (ESG) criteria, Sustainable Finance Disclosure Regulation (SFDR), and more relevant for finance and investment decisions (European Commission, 2020; Greenomy, 2023), where finance is used to encourage companies to adopt more sustainable and ethical practices. The research has, for instance, been categorized in terms of value creation, ESG ratings and performance, green bonds, and banking, financial risks, banking and sustainable finance (Zairis et al., 2024). Material or subject topics related to sustainable finance include sustainable development and the SDGs, climate change, green bonds, financial performance and social finance (Zairis et al., 2024), but also commonly associated with impact investing (Agrawal & Hockerts, 2021; Lehner et al., 2019; Rathee & Aggarwal, 2022; Roundy, 2020) and corporate social responsibility (CSR) and corporate social performance (Dam & Scholtens, 2015).

The European Commissions definition of sustainable finance “understood as finance to support economic growth while reducing pressures on the environment to help reach the climate- and environmental objectives of the European Green Deal, taking into account social and governance aspects (European Commission, n.d.)” is seen as too narrow, whereas a broader definition states that “sustainable finance should encompass all activities and factors that would make finance sustainable and contribute to sustainability” (Kumar et al., 2022, p. 2). However, it should be noted that the literature on sustainable finance is still very fragmented thus offering rooms for exploring the topic further on different levels of the society (Cunha et al., 2021), including institutional and organizational levels.

The sustainable finance, or finance for sustainability, landscape is complicated as it includes operational and labelling standards, industry-originated frameworks, and wider policy context where the main components include environmental, social and economic goals, as a part of the SDGs, in addition other sustainability-related policy objectives, therefore much wider than climate finance, green finance, SDG finance (Migliorelli, 2021), ethical investing, conscious capitalism (Kumar et al., 2022) or similar finance aspects. The subject is, consequently, relevant to all economic sectors and activities such as energy production, transmission, storage, or efficiency, transport, buildings, agriculture, social infrastructures, reduction of inequalities, food security and food systems just to name some examples (Migliorelli, 2021).

The purpose of this session is to explore the theoretical, methodological and practical foundation of transitioning of business models towards sustainability through finance.



### ***4.3 Actor engagement in sustainable (circular) business model innovation through design thinking and other practices***

**Track Chairs:** Katrien Verleye, Ghent University (Belgium); Alexander Henkel, Open University (Netherlands)

This track aims to provide insight into ways to engage a multitude of actors – such as businesses, customers, and governmental bodies – in the development, launch, and adoption of circular and sustainable business models so that value is co-created. Specific attention is dedicated to the role of design thinking for circular and sustainable business model innovation. Yet, we also embrace research on practices for motivating actors (e.g., storytelling) and supporting actors (e.g., offering sharing platforms, smart lockers, and other technologies) to engage in the creation of circular or sustainable value.



## 5 CONFERENCE WORKSHOPS

### ***Incorporating paradoxes into my research on business models for sustainability: insights from the case of the fashion industry***

#### **Organizers**

Jaime Gonzalez-Masip. Universidad Politécnica de Madrid

Sonia Marcos. Universidad de Burgos

Esben R.G. Pedersen. Copenhagen Business School

Grace Achieng. Gracelandic

Thorey S Thorisdottir. University of Iceland

Research on the tensions generated by paradoxes in sustainability-oriented business is topical. This workshop will explore those paradoxes inherent in business models for sustainability and how stakeholder behaviour influences them. Through a case study of the fashion industry, we will discuss various theoretical and practical perspectives on these complex dynamics. A panel of practitioners and academic experts and an interactive session will enable participants to delve deeper into this topic, share experiences, and co-construct new ideas.

The workshop seeks to facilitate integrating and advancing participants' research agendas within the topic. By fostering collaborative discussions and exploring academic and practical experience, it aims to identify new avenues to expand the field's boundaries and practical and theoretical frameworks of ongoing and future research. Additionally, group activities will help participants connect with potential collaborators for future research projects.

### ***Building Climate Solutions: En-ROADS workshop for Global Action***

#### **Organizers**

Agusta Thora Jonsdottir, University of Iceland

Rósbjörg Jónsdóttir, Icelandic Energy Cluster

The En-Roads Climate Workshop is an interactive session where participants, guided by a trained facilitator, propose climate solutions. These solutions are tested in real-time using the En-Roads Climate Solutions Simulator to evaluate their impact on global temperature. The workshop aims to develop scenarios that align with the Paris Agreement's goals of limiting global warming to well below 2C, ideally 1.5, above pre-industrial levels.

The workshop is ideal for those seeking to understand the implications of climate mitigation strategies and their impact. Participants gain a deeper understanding of the interconnectedness of various climate solutions, such as renewable energy, carbon pricing, deforestation reduction, and their impact on global warming. They experience a hands-on, real-time simulation using the En-Roads Climate Solutions simulator, which visualizes the outcomes of proposed climate policies and actions.

The workshop emphasizes global goals and offers insights into policies that support international climate objectives. It also helps participants evaluate the effectiveness of different strategies for mitigating climate change while understanding the trade-offs and synergies among other actions.

By the end of the workshop, a panel discussion on individual and collective actions and how we, as individuals, the research community, and businesses, can make a meaningful difference in addressing climate change.

## ***Interdisciplinary dialogues on new business models: recognizing the value of nature and people***

### **Organizers**

Dominika Alexa Teigiserova, Manchester Metropolitan University

Tulin Dzhengiz, Manchester Metropolitan University

Paul Dewick, Manchester Metropolitan University

Susana Toboso Chavero, Universitat Autònoma de Barcelona, Universitat Autònoma de Barcelona Erasmus University Rotterdam

Achieving meaningful sustainability in business demands a nuanced understanding of diverse approaches, including regenerative models, circular economy, strong and weak sustainability, sufficiency strategies, and community-based practices. These models intersect with a growing interest in inter- and transdisciplinary approaches, which transcend traditional disciplinary boundaries to address complex, real-world challenges. This workshop provides a platform for researchers and practitioners to collaboratively explore the synergies, tensions, and opportunities offered by inter- and transdisciplinary approaches, particularly in the context of sustainable, circular, social innovation, and other purpose-led business models and ecosystems. A variety of emerging 'new business models' and 'ecosystems' introduce inherent tensions, which we will explore by engaging with a spectrum of perspectives—ranging from weak sustainability, which seeks to balance environmental, social, and economic priorities, to strong sustainability, which emphasizes ecological value and empowers individuals as active contributors. This exploration will provide a deeper understanding of the interconnectedness of these models and uncover pathways to advance research practices.

Whether it is to learn more about these models or share your expertise, this workshop will offer you a platform. Interactive group activities and visual mapping exercises will culminate in a synthesis of insights, which will be shared with participants to inspire further research and collaboration. Through interactive activities and discussions, participants will:

- Learn from each other, co-create solutions to challenges of inter and transdisciplinary approaches to sustainability
- Gain a deeper understanding of how weak and strong sustainability interact with other models, emphasizing both ecological integrity and the role of social capital, as well as systemic interconnectedness.
- New insights to enhance your research or professional practice.
- Meaningful connections with potential collaborators for future projects.

The workshop is ideal for those eager to contribute to the evolution of sustainable business practices and particularly early career researchers interested in inter- and multi-disciplinarity.

## ***Co-Creating a New Research Agenda: A Cross-Cultural Dialogue on Business Model Innovation to Solve Global Challenges***

### **Organizers**

Online Hogeboom (Director, Flourishing Startups, Fellow, Georgian College Canada)

Dr Maya Hoveskog (Halmstad University)

Levinia Jones (Specialist in cultural intelligence and cultural exchange - Southern Africa)

This workshop convenes entrepreneurial leaders from both the Global Majority and the North to engage in a reciprocity-centered exploratory dialogue about groundbreaking business models and their impact on sustainability, equity, healthcare, and climate resilience in order to surface current research gaps and opportunities for further research. Focused on addressing the world's largest challenges, we will explore two distinct business models tackling the same issue—one from the Global Majority and one from the North—while leveraging different resources and drawing from diverse cultural wisdom and knowledge.

Through dynamic presentations and an exploratory dialogue between entrepreneurs from South America, Africa, and the North, we will uncover the intersections of their innovations and the unique differences in their approaches. This session will challenge traditional perceptions of innovation by learning how these different approaches are advancing next-generation business models.

Building on the outcomes of these discussions, a facilitated workshop will engage participants in exploring further research opportunities. Together, we will identify key themes and opportunities to highlight new directions for future research.

### **Key Themes**

- Unique Business Models: Examine the design, resources, implementation strategies, and impact of innovative business models.
  - Entrepreneurial Skills and Mindsets: Discover how diverse cultures, creativity, and wisdom empower entrepreneurs to envision innovative solutions and drive impact and change.
  - Reciprocity and Global Systems Change: Explore how collaborations between the Global Majority and the North can inspire and sustain transformative global impact.
  - New Research Agenda: Identify key opportunities and emerging themes to inform new research directions, aligned with the normative values, interests and expertise of workshop participants.

Workshop participants will gain valuable insights into innovative business model designs, uncovering new pathways for democratized transformative business practices. This session fosters cross-contextual learning, encouraging reciprocal collaboration, exploring new research themes and opportunities for future exploration.



# CONFERENCE PROGRAMME



NBM 2025



[www.newbusinessmodels.org](http://www.newbusinessmodels.org)

Conference venue:

Faculty of Business Administration – University of Iceland Sæmundargata 2, 102 Reykjavík  
University Cinema (Háskólabíó), House of Vigdis (Veröld hús Vigdísar) Institute of Foreign Languages,  
Oddi – University of Iceland

Tuesday  
24 June – Pre-conference day

8:20 – 8:50	Doctoral Colloquium (Only for accepted doctoral students)
08:50-09:00	
09:00-09:10	
09:10-10:10	
10:10-10:20	
10:20-12:00	Lunch for Doctoral Students
12:00-12:10	
12:10-13:00	
13:00-14:00	
15:30-16:00	Registration Háskólatorg (University of Iceland)
16:00-18:00	Welcome drink for registered people Háskólatorg (University of Iceland)

Wednesday 25 June

8:30 - 9:00	Registration	Registration
9:00 - 10:30	Opening Plenary	Parallel Sessions (Tracks)
10:30 - 11:00	Break	Break
11:00 - 12:30	Parallel Sessions (Tracks)	Parallel Sessions (Tracks)
12:30 - 14:00	Lunch	Lunch
14:00 - 15:30	Parallel Sessions (Tracks)	Closing Plenary
15:30 - 16:00	Break	
16:00 – 17:30	Parallel Sessions (Tracks)	

Conference dinner  
Gamlabíó  
Ingólfsstræti 2a, 101 Reykjavík  
(An additional ticket is needed for this dinner, 18:30 – 21:00)

A detailed version of the conference program (session tracks and distribution of presentation of authors) will be available in ConTool to all conference participants.





# CONFERENCE TRACKS AND ABSTRACTS

## Theme 1. Exploring the system level

1.1 Innovative business models and ecosystems for sustainability transition: perspectives from global north and global south

**Track chairs:** Annukka Näyhä & Irene Kuhmonen, Jyväskylä University School of Business and Economics, Finland; Timber Haaker Saxion, University of Applied Sciences, The Netherlands; Nguyen Hong Quan, Institute for Circular Economy Development, Vietnam National University - Ho Chi Minh City, Vietnam; Nguyen Cong Thanh, National Economics University, Hanoi, Vietnam; Milou Derks, Orange Corners and Eindhoven University of Technology, Netherlands

1.2 Ecosystems in support of sustainability

**Track chairs:** Abel Diaz Gonzalez, Maastricht University (The Netherlands); Nikolay Dentchev, University of National and World Economy (Bulgaria) and Vrije Universiteit Brussel (Belgium); Bart Leyen, Vrije Universiteit Brussel (Belgium); Valery Chistov, Deusto Business School, University of Deusto (Spain)

1.3 Business Models for Transition. Empirical observations and theoretical foundations of existing or emerging business models fostering societal transformation and transition

**Track chairs:** Niels Faber, Hanze University of Applied Sciences, Groningen and University of Groningen (The Netherlands) & Jan Jonker Radboud University Nijmegen, em (The Netherlands).

## Theme 2. Exploring the sectoral and organisational level

2.1 Innovation through artificial intelligence and data-driven business models for sustainable transformation

**Track chairs:** Maya Hoveskog, Halmstad University (Sweden), Laura Michelini, LUMSA University of Rome (Italy), Magnus Holmén, Halmstad University (Sweden), Lauri Paavola, University of Eastern Finland (Finland); Luís Irgang Dos Santos, Halmstad University (Sweden)

2.2 Community-led and community-based business models for sustainable development

**Track chairs:** Sonia Marcos, Universidad de Burgos (Spain); Jaime González-Masip, Universidad Politécnica de Madrid (Spain); Moniek Kamm, Saxion UAS

2.3 Business model experimentation for circular economy: close, slow, narrow, regenerate

**Track chairs:** Laura Niessen, Maastricht University (The Netherlands); Matthew Coffay, NHH Norwegian School of Economics (Norway); Sveinung Jørgensen, NHH Norwegian School of Economics (Norway); Lars Pedersen, NHH Norwegian School of Economics (Norway); Nancy Bocken, Maastricht University (The Netherlands)

## Theme 3. Exploring the organisational impact

### 3.1 Management, governance and accountability for sustainable business models

**Track chairs:** Burcin Hatipoglu, School of Business IRRG & PSRG, Canberra, University of New South Wales (UNSW), Australia; Silvia Cantele, Department of Management, University of Verona, Italy; Assunta Di Vaio, Department of Law, University of Naples "Parthenope", Italy; Vincenzo Riso, Department of Management, University of Verona, Italy

### 3.2 New business models in times of crisis: scaling resilient and sustainable local solutions for global challenges

**Track chairs:** Dorleta Ibarra, Mondragon Unibertsitatea (Spain); Juan Ignacio Igartua Mondragon Unibertsitatea (Spain)

### 3.3 Measuring and managing the sustainability effects of business models

**Track chairs:** Florian Lüdeke-Freund, ESCP Business School Berlin (Germany); Romana Rauter, University of Graz (Austria); Henrikke Baumann, Chalmers University of Technology (Sweden); Ana Carolina Bertassini Chalmers University of Technology (Sweden); Joan Manuel F. Mendoza, Mondragon University (Spain)

## Theme 4. Exploring theoretical and methodological foundations

### 4.1 New theoretical foundations of business models for sustainability

**Track chairs:** Florian Lüdeke-Freund, ESCP Business School Berlin (Germany); Tobias Froese, Borderstep Institute for Innovation and Sustainability (Germany)

### 4.2 Transitioning business models towards sustainability through finances

**Track Chairs:** Adam Gordon (Columbia Climate School); Þröstur Olaf Sigurjónsson (University of Iceland), Björg Jónsdóttir (Bifröst University), Lára Jóhannsdóttir (University of Iceland)

### 4.3 Actor engagement in sustainable (circular) business model innovation through design thinking and other practices

**Track Chairs:** Katrien Verleye, Ghent University (Belgium); Alexander Henkel, Open University (Netherlands)



*Global Challenges – local response:  
Scaling up local sustainability innovations  
and business models to address the SDGs*



THEME 1  
EXPLORING THE SYSTEM LEVEL



## EXPLORING THE SYSTEM LEVEL

### ***Track 1.1 Innovative business models and ecosystems for sustainability transition: perspectives from global north and global south***

#### **Smart and Sustainable: The Determinants of Young Indians' Purchase Intentions for Refurbished Electronics**

Sajeev, Aparna<sup>1</sup>, Arangodan, Ayyoob<sup>1</sup>; Haaker, Timber<sup>2</sup>; Ho, Henry<sup>3</sup>

1. University of Calicut, India.
2. Saxion, The Netherlands.
3. Ferris State University, United States

Electronic waste (e-waste) is one of the fastest-growing waste streams in the world. Refurbishing electronic devices like laptops, tablets, mobile phones, game consoles etc. can help to extend product lifespans, conserve resources and reduce e-waste in both the Global South and Global North. This study explores the factors influencing young consumers' purchase intentions for refurbished electronics in India, with a focus on key factors such as environmental awareness, social acceptance, brand reputation and availability, and affordability. For each factor statements were developed and used as independent variables in a questionnaire. The study, conducted among 374 students at the University of Calicut, Kerala, India, reveals a strong awareness of environmental benefits of refurbishing among respondents (Mean = 3.96). Social acceptance scored the lowest (Mean = 3.36), reflecting moderate influence from family, community, and government policies. Brand reputation and availability emerged as significant factors (Mean = 3.80), with respondents emphasizing the importance of reputable manufacturers and sellers. Affordability also influenced decisions (Mean = 3.57), with price considerations being prominent but not overwhelmingly dominant. Environmental awareness and social acceptance show the highest correlation with purchase intention, highlighting the need to prioritize environmental awareness and social acceptance in promoting new business models for refurbished electronic devices while addressing affordability and brand reputation. Findings suggest that sellers should balance the content of their actual offering, i.e. the quality of REDs vis-à-vis the reputation of manufacturer and seller, and complementary services like warranty, against acceptable price levels.

***Track 1.1 Innovative business models and ecosystems for sustainability transition: perspectives from global north and global south*****Exploring the Role of Resourcefulness in the Growth of African Digital Enterprises**

Ciulli, Francesca <sup>1</sup>; Derks, Milou <sup>2</sup> Van Hoolwerff, Richard<sup>2</sup>; Adeyemi, Adenike<sup>3</sup>

1. Tilburg University, Netherlands
2. Netherlands Enterprise Agency (RVO) - Orange Corners
3. Fate Foundation

In the Global South, new enterprises are emerging that leverage a variety of digital technologies to create innovative and sustainable business models. For these digital enterprises to thrive and enhance their positive impact, growth is essential. To gain a deeper understanding of the growth of digital enterprises that are contributing positively to social or environmental issues in the Global South, it is crucial to examine their resourcefulness. Indeed, previous studies have shown that resourcefulness is particularly deployed in environments where entrepreneurs face resource constraints. However, existing research presents mixed findings regarding the implications of resourcefulness for growth, indicating both enabling and hindering impacts. Yet, notably, the focus has been on traditional enterprises, overlooking the unique characteristics of digital enterprises in the Global South. This study aims to answer two research questions: What resourceful behaviors do digital enterprises in Africa adopt, as they aim to grow their innovative, sustainable business model, and why? What are the implications of these behaviors for the growth trajectories of these digital enterprises? We adopt an inductive research design, focusing on 15 digital enterprises that operate at different stages of the agri-food value chain in West Africa. The sample was selected in collaboration with Orange Corners, an initiative of the Netherlands Ministry of Foreign Affairs to empower young entrepreneurs in emerging markets. The study contributes to research on innovative business models for the twin transition in the Global South, to the resourcefulness literature, and to the study of digital enterprises.

### ***Track 1.1 Innovative business models and ecosystems for sustainability transition: perspectives from global north and global south***

#### **Collaborative Business Models for Reshaping Global North-South Partnerships in Textiles - Advocating for Engagement and Empowerment of Marginalised Communities**

Janssen, Karen

Avans University of Applied Sciences, The Netherlands

In global textile supply chains, in which business models structure often mainly favours players in the global North -focusing on economic growth and financial gains- perspectives from the global South are often obscured and not being considered in shaping these models. This paper advocates pathways for Collaborative Business Models to reshape Global North-South partnerships, ensuring equitable, inclusive partnerships that empower marginalised groups as active decision-makers and co-creators in the transformation process. Looking at three case-studies in India, Uganda, and Ghana, from the perspective of the Global-South, this paper addresses the importance of dialogue throughout the supply chain. Restructuring disconnected supply chains starts with dialogue with all partners involved through which both learn about their role and values. For collaboration, a shared understanding is a must. The findings suggest that fostering symmetrical interactions, using a holistic approach towards global value systems and recognising the importance of relational understanding between people and the environment are crucial. By embracing diverse worldviews and fostering open dialogue, partners can adopt new perspectives, positioning themselves and acknowledging the interdependencies that exist between diverse partners in the system. The paper concludes that reshaping Global North-South partnerships in textiles necessitates the active engagement and empowerment of marginalised communities. Pathways to Collaborative Business Models need to ensure real connections and partnerships, not mere 'suppliers' or 'buyers' but relationships between value-contributors and co-creators. These models are grounded in principles of resilience and accountability.

***Track 1.1 Innovative business models and ecosystems for sustainability transition: perspectives from global north and global south***

**Awakening Beauty: Understanding the Emergence of Regenerative Entrepreneurship Networks in Colombian Bioregions**

Vidal, Alejandra

Universidad EAFIT, Colombia

In an era of converging socio-ecological crises, biodiversity hotspots in the Global South face intensifying pressures from extractive development models that threaten both ecological and social systems. While global frameworks like the SDGs provide targets, effective responses must emerge from local contexts through innovative approaches that address interconnected challenges (Rockström et al., 2009). This study examines how regenerative entrepreneurship networks in Colombia manifest as locally-rooted responses to these global challenges, offering insights into alternative development pathways that enhance rather than extract from socio-ecological systems. Through a comparative case study of two bioregions in Antioquia - the Arenal and Cartama River watersheds - this research investigates how local innovations in regenerative business models emerge, evolve, and potentially scale. Using Living Systems Theory as a theoretical lens, the study employs participatory methodologies including social cartography and network analysis to map the complex web of relationships between entrepreneurs, communities, and natural systems that enable regenerative practices.



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***Track 1.1 Innovative business models and ecosystems for sustainability transition: perspectives from global north and global south*****Navigating Institutional Complexity: How Brokers Facilitate Cross-Sector Partnerships in Authoritarian Context**

Bui, Chau; Kang, Xu; Fifka, Matthias

Friedrich-Alexander-Universität, Erlangen-Nürnberg, Germany

Cross-Sector Partnerships (CSPs) between businesses and civil society organisations (CSOs) are essential for addressing societal challenges such as poverty alleviation, environmental sustainability, and inclusive education. However, CSPs often face significant challenges arising from divergent institutional logics—market, civil society, and state. These challenges are heightened in authoritarian contexts, where centralised power structures, restrictive regulations, and constrained civic spaces exacerbate institutional complexity. Brokers, as intermediaries, play a critical role in navigating these complexities by fostering collaboration, reconciling tensions, and aligning stakeholder goals. While prior research focuses on CSPs in democratic settings, this study aims to examine brokers' roles in authoritarian contexts, using Vietnam as an empirical focus. Drawing on five CSP case studies, the research illustrates brokers' dual roles: addressing internal complexities by connecting stakeholders and leveraging legitimacy, while providing technical and financial support, mediating discrepancies, and fostering learning; and managing external complexities by navigating bureaucratic systems, adapting projects to regulatory requirements, and framing partnerships to align with government priorities. This study advances the literature by incorporating authoritarian state logics into CSP frameworks and introducing an operational model of CSP brokers in the authoritarian context. The findings offer practical insights for fostering effective CSPs in politically constrained environments, indicating the importance of brokers' adaptability, strategic framing, and the need for supportive institutional policies.

***Track 1.1 Innovative business models and ecosystems for sustainability transition: perspectives from global north and global south*****The Institutional Fitness Of Nature-based Business Models With The Agro-industrial Food Regime**

Kuhmonen, Irene; Kortelainen, Sirpa; Näyhä, Annukka

University of Jyväskylä, Finland

The contemporary agro-industrial food regime operates on an institutional logic based on abundant supply of cheap food, intensive production practices, fossil metabolism, economies of scale and economic growth. As such, it is a major driver of biodiversity loss. The institutional logics give stability to food systems, but they also act as a source of structural constraints, confining path-dependencies and systemic lock-ins, which make it difficult to introduce alternative, biodiversity-respectful modes of food production in the system. Such modes of food production that offer a solution of integrating biodiversity conservation into food production can be described as nature-based solutions, and the agricultural business models based on those as nature-based business models. They include production styles such as organic or regenerative farming and specific management practices such as management of semi-natural agroecosystems. In this study, we evaluated the fitness of these nature-based business models in agriculture with the institutional logics of the contemporary agro-industrial food regime. The data consisted of interviews with 18 farmers and 6 food system experts in Finland. In general, nature-based business models have a poor fit with the institutional logics of the contemporary agrifood regime. Farmers adopting these models are driven by intrinsic motivations rather than profit, often relying on additional income sources. While agricultural subsidies support some nature-based practices, developments in supply chain relations and policies limit their viability. Despite societal values increasingly favouring nature-based models, structural forces within the regime continue to challenge their adoption and scalability.

***Track 1.1 Innovative business models and ecosystems for sustainability transition: perspectives from global north and global south*****Coordination Mechanisms for Early-Stage Entrepreneurial Ecosystems: A Relational Coordination Theory Approach**

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Although research regarding entrepreneurial ecosystems (EE) has significantly increased over the past two decades, studies focusing on the coordination of activities among institutions remain scarce. Perhaps this occurred because the emphasis is on leadership and governance, often overlooking the specific details that facilitate or limit the coordination of activities between institutions. This paper addresses this gap by analyzing the main coordination mechanisms among institutions. This research employs relational coordination theory as its theoretical framework. It is based on data collected through exploratory qualitative research, which includes 70 semi-structured interviews and three focus groups conducted in two emerging economies in South America: Bolivia and Colombia. The findings highlight that the mechanisms proposed by relational coordination theory can enhance the coordination of activities in an EE; fundamentally through effective grouping and combining strategies. In other words, when implementing a new coordination mechanism, it is essential to avoid displacing existing ones. This research clarifies the main coordination mechanisms that should be applied in the early stages of entrepreneurial ecosystems, especially in emerging economies.

***Track 1.1 Innovative business models and ecosystems for sustainability transition: perspectives from global north and global south*****Rural Entrepreneurship. Resilience and Social Sustainability for Rural Value Creation**Marcos, Sonia <sup>1</sup>; González-Masip, Jaime J. <sup>2</sup>

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Rural entrepreneurship is beginning to have the role it deserves on the research and political agendas, as it concerns not only its contribution to regional development but also how it can shape more resilient and sustainable rural communities through rural value creation. This paper aims to advance the theory of rural entrepreneurship by bridging the gap between rural entrepreneurship and value creation in rural areas. Rural entrepreneurship is part of a collaborative and resilient process of rural value creation to stimulate regional development. Likewise, rural entrepreneurship is embedded in and based on the characteristics of the place where it occurs and has a clear orientation towards social sustainability. The research question of this paper is to identify how rural entrepreneurship contributes to rural value creation. This question raises a further question: What is rural value, or what is considered value creation in rural areas? Through a bibliometric analysis, we identify research constructs in rural entrepreneurship that allow us to create a novel research taxonomy and a theoretical framework that focuses on a broad concept of rural value creation. Our findings and discussion highlight the collaborative nature of rural entrepreneurship in creating value for the rural community, contributing to local resilience and social sustainability through specific business models that go beyond the exclusive generation of economic benefits. We also propose a definition of rural value that will contribute to future research on rural entrepreneurship and all research focusing on rural issues from any perspective.

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***Track 1.1 Innovative business models and ecosystems for sustainability transition: perspectives from global north and global south*****Innovative Approaches Towards More Inclusive Business Models. Improving the Labour Market Participation of Refugees**

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The main objective of this paper is to validate innovative approaches that can help enterprises to sustainably integrate people with a refugee background into their organizations and become more inclusive. After analyzing numerous work-study programs—both successful and less successful—across different economic sectors, the authors developed a generic model that highlights the key components to address in order to create a sustainable and potentially scalable work-study program for refugees. After determining the specific sector, profession, and desired level of the work-study program, all relevant stakeholders (e.g., businesses, local governments, language schools, and educational institutions) need to identify the roles they will play in each component, as well as their commitment in terms of time and other resources. This study analyzes a two-year co-creation process involving multiple stakeholders to develop two sustainable and scalable work-study programs for refugees: one at IKEA, a multinational conglomerate that designs and sells ready-to-assemble furniture and home accessories, and another at Transdev, an international private-sector company that operates public transportation. The contribution of this study is twofold. Firstly, the results aim to provide a validated and transferable approach for achieving more inclusive business models by successfully integrating individuals with specific support needs into existing organizations. Secondly, the outcomes will enhance our understanding of how innovative collaborations among multiple stakeholders can be structured to create greater value for individuals, organizations, and society as a whole.

***Track 1.1 Innovative business models and ecosystems for sustainability transition: perspectives from global north and global south*****Navigating a Warming Climate: Paradox Opportunities In The Emergence Of Norwegian Wine Production**

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Climate change, while often associated with risk and loss, also creates opportunities in unexpected contexts. In Norway, a traditionally cold climate with harsh winters, rising temperatures now enable the cultivation of wine grapes. This study examines the emergence of Norwegian wine production as a paradoxical opportunity created by climate change. Early adopters in Norway have begun cultivating cold-hardy grape varieties, such as Solaris and Rondo, leveraging the longer growing seasons and less severe winters. However, this nascent industry's success depends on continued warming, creating a tension between benefiting from climate change and adhering to sustainability imperatives. Using Paradox Theory as a framework, this research explores how Norwegian wine producers perceive and manage the contradictory demands of climate-driven opportunities and the ethical responsibilities of sustainable practices. Semi-structured interviews with wine growers, industry experts, and retailers provide insights into these tensions at both system and individual levels. The study reveals how producers navigate competing demands through dynamic strategies, balancing innovation with ethical and environmental challenges. The findings contribute to broader discussions on the complexities faced by industries emerging in response to climate change. Norwegian wine production exemplifies how new markets can integrate sustainability principles from their inception while grappling with the paradox of relying on a phenomenon they must also address. This research sheds light on the tensions and strategies shaping the intersection of climate change, industry innovation, and sustainability in cool-climate wine regions.

## ***Track 1.1 Innovative business models and ecosystems for sustainability transition: perspectives from global north and global south***

### **Designing Fair Business Models For Climate-Smart Agriculture**

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Achieving fairness remains a critical challenge in sustainable agri-food systems transition particularly in implementing climate-smart agriculture (CSA). Ensuring fairness is essential in fostering stakeholder's trust and long-term commitment to CSA. Business models (BMs) can play a crucial role as solutions to enable fairness in agri-food systems. BMs that ensure fairness are needed to capture value of CSA implementation. Still, the literature lacks a clear conceptualization of the design and content of fair BMs. The study addresses this knowledge gap through two objectives: to conceptualize fair BMs and to design and develop fair BMs for CSA. Using insights from fairness and sustainable business model literature, the research employs a design science research methodology to develop theory around fair BMs and design and develop implementable fair BMs for CSA. The study yields three significant outcomes. First, it offers a definition of fair business models as business models that embed distributive, procedural, informational, and interpersonal fairness into all aspects of firm's value proposition, value creation and delivery and value capture. Second, it delivers a portfolio of thirteen BM prototypes that systematically address identified fairness challenges in the context of CSA. Third, these fair BM prototypes will be validated in the demonstration and evaluation phase through five co-creation workshops which are expected to reveal cross-cutting success factors and context-specific adaptation requirements. The findings advance the sustainable business model literature and offer practical implications for agri-food stakeholders, including policymakers, agribusinesses, and farmers, to ensure fairness in the transition towards climate-smart agriculture.

***Track 1.1 Innovative business models and ecosystems for sustainability transition: perspectives from global north and global south*****Purpose Under Pressure: Navigating The Risk Of Mission Drift**

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Entrepreneurs and small businesses are pivotal in addressing societal sustainability challenges in Africa. The extent to which entrepreneurs may successfully address sustainability challenges however critically hinges upon their ability to simultaneously advance social, environmental, and economic objectives. Yet, advancing dual or triple objectives frequently creates tensions, risking 'mission drift'. Organizations move away from their main purpose, and become too focused on one objective over the others. Multiple conditions informing mission drift have been identified, including scaling, funding sources, and business model particularities. There is however a need to explore the interplay among conditions and assess configurations of factors contributing to mission drift. Although mission drift has been extensively studied, focus has hardly been on African contexts. With a predominant focus on enterprises, the literature has largely overlooked entrepreneurs, despite their critical role as breeding ground for sustainable enterprises. This study addresses the question which combination of factors contributes to mission drift for entrepreneurs in Africa. It deploys a QCA (qualitative comparative analysis) based on survey and secondary data to study entrepreneurs engaged in the Orange Corners programme in Mali, Algeria and Angola. Orange Corners is an initiative by the Netherlands Ministry of Foreign Affairs to support young entrepreneurs in emerging markets building sustainable businesses. The study is expected to generate insight in the configuration of conditions that inform mission drift among nascent entrepreneurs in different contexts in Africa.



***Track 1.2 Ecosystems in support of sustainability*****Regenerative Ecosystems: Stakeholder-Centric Approaches to Value Creation and Capture**

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This paper explores how integrating stakeholder theory into sustainable business practices addresses the intertwined processes of value creation and capture in regenerative organizations, illustrated through an in-depth case study of Karün, a Chilean eyewear company. Karün's purpose-driven model prioritizes multidimensional value creation by harmonizing social, environmental, and economic goals while cultivating trust and collaboration among stakeholders. Through an abductive approach integrating theory and empirical insights, the research identifies three interconnected phases in regenerative ecosystem development: exploration, innovation, and transformation. These phases can enable firms to transition from traditional sustainability practices to holistic regenerative models by addressing systemic challenges, co-creating solutions with stakeholders, and scaling impacts for long-term resilience. The findings highlight that value creation extends beyond firm-centric approaches, encompassing co-creation and reciprocal resource exchange within an ecosystemic context. Value capture mechanisms are also explored, demonstrating how firms can balance financial viability with shared benefits for stakeholders, including local communities, employees, and investors. Karün's initiatives, such as waste material recovery and community empowerment, exemplify the operationalization of regenerative principles. This study contributes to management literature by providing a structured framework for regenerative ecosystem development and advancing the integration of stakeholder theory into sustainability discourse. It offers practical insights for firms seeking to adopt regenerative practices and positions regenerative ecosystems as a critical pathway to addressing contemporary social and environmental challenges while achieving economic sustainability.

***Track 1.2 Ecosystems in support of sustainability*****A Control Point Perspective On Environmental Business Strategies: Companies' Roles And Mechanisms In Shaping Sustainability-Oriented Markets**

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The climate crisis necessitates a shift in production and consumption patterns, requiring a reconfiguration of traditional markets to align with sustainability principles. This transformation introduces unique challenges for companies operating in sustainability-oriented markets including technological disruption, regulatory shifts, unpredictable customer behaviour, financial constraints, and strategic inertia such as waiting games. While the literature on market shaping identifies firms as pivotal agents in the formation of new markets it is less clear whether firms can truly act as catalysts for sustainability-oriented markets. The additional complexities inherent in these markets raise questions about whether and how firms can effectively navigate these challenges to drive the formation of new market models without compromising their competitive positioning. To address this gap, we use a control point perspective to analyse key positions within the value network where firms can generate systemic value while ensuring future value capture. Our case study of nine key firms in the emerging green hydrogen market in Italy reveals how market-shaping roles - Market Drivers, Market Supporters, and Market Missionaries - navigate challenges of value creation and capture amidst technological disruptions, regulatory shifts, and financial constraints by exploiting different configurations of control points. Additionally, we identify specific positioning mechanisms that provide deeper insights into the agentic role of actors driving the transition to sustainable markets. By emphasizing the coexistence of sustainable transformation and competitive dynamics, this study offers practical insights for firms seeking to navigate emerging sustainable markets.

***Track 1.2 Ecosystems in support of sustainability*****Emergence of Circular Service Ecosystems: A Multiple Case Study**

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This study explores the organizational practices that lie at the basis of the emergence of circular service ecosystems. As organizations seek long-term sustainability, they increasingly implement circular services, such as take-back programs, repair services, and rental offerings, which support resource retention and minimize waste. These services give rise to new ecosystems where multiple actors, including customers, competitors, suppliers and governments, engage in resource exchange to co-create circular value. Despite their growing importance, limited research exists on the practices underlying the emergence of these ecosystems. Drawing on service-dominant logic and practice theory, this research examines the practices that contribute to the emergence of circular service ecosystems. Through a multiple case study of six companies from diverse industries, including both established businesses and new ventures, the study identifies two key practices: (1) shaping connections for circularity and (2) sustaining connections for circularity. The former focuses on initiating and coordinating resource exchanges among actors, while the latter ensures the long-term collaboration necessary for maintaining and changing institutions. The findings emphasize the need for systemic coordination and long-term partnership building for successful circular value co-creation. Data was collected via interviews, observations, and secondary documents, and analyzed using an abductive logic. This study advances the understanding of circular service ecosystems by highlighting the importance of organizational practices in their emergence. It contributes to both theoretical and managerial discussions, offering insights into how managers can facilitate the development of circular ecosystems and, in turn, promote sustainable consumption and production patterns.

## ***Track 1.2 Ecosystems in support of sustainability***

### **The Consumer Prism in Circular Ecosystems: Navigating the Multi-Level Maze of Circular Economy Transitions**

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The global economy faces unprecedented challenges due to environmental degradation, resource scarcity, and economic instability. The traditional linear economic model has proven unsustainable, necessitating a shift towards Circular Economy (CE). However, this transition is hindered by systemic barriers and complex stakeholder interactions. This research aims to address a critical gap in understanding consumer roles within CE ecosystems, examining how consumers both influence and are influenced by various stakeholders in the transition process. The study integrates the Multi-Level Perspective (MLP) and Stakeholder Theory to provide a comprehensive framework for analysing consumer engagement in CE transitions. This integration allows for a nuanced examination of consumer interactions at the macro (landscape), meso (regime), and micro (niche) levels while highlighting their impact on systemic changes. A Systematic Literature Review (SLR) methodology is employed to synthesize existing knowledge, identify patterns, and develop conceptual frameworks that elucidate consumer roles in CE ecosystems. The research utilizes bibliometric analysis and thematic synthesis techniques to ensure a rigorous and transparent review process. Expected contributions include enhancing theoretical understanding of consumer roles within CE ecosystems, providing detailed mapping of consumer interactions with other ecosystem actors across different levels, informing strategies for engaging consumers in circular practices, and offering actionable recommendations for policymakers. By centring consumers in the CE transition and examining their interactions from an ecosystem perspective, this research aims to identify key leverage points for accelerating the shift towards a more sustainable and circular economy.

***Track 1.2 Ecosystems in support of sustainability*****The Role of Universities in Building Social Capital to Develop Entrepreneurial Ecosystems**

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This research aims to explore the role of universities in fostering social capital to enhance local entrepreneurial ecosystems. While universities are important for helping entrepreneurs, their role in building these relationships (social capital) is not well understood. Using qualitative analysis of 39 interviews and one focus group in Bolivia and Ecuador, three research questions are addressed: how universities contribute to social capital, the mechanisms they employ, and the challenges faced in transitioning to entrepreneurial models. Findings suggest that universities struggle with inter-institutional competition and budget constraints, leading to fragmented networks and symbolic collaborations among universities. The study underscores universities' need to adopt robust strategies to strengthen ecosystem actors' engagement, foster trust, and prioritize cooperative initiatives over isolated efforts. By leveraging social capital theory, this research highlights the transformative potential of universities in nurturing cohesive entrepreneurial ecosystems and advocating for systemic changes to overcome institutional and financial barriers.

***Track 1.2 Ecosystems in support of sustainability*****Overcoming Barriers to Circular Economy Adoption in SMEs: Development and Validation of a Digital Guidance Tool for the Implementation of Circular Economy**

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The linear economic model's unsustainable resource consumption necessitates a transition to a circular economy (CE). While CE's potential is widely acknowledged, operational implementation, particularly for Small and Medium-sized Enterprises (SMEs), remains challenging. Existing CE assessment tools often lack SME-specific adaptation, clear operationalization, and actionable recommendations. This research developed a digital "Circular Economy Compass" to address these limitations. Using a design science approach, the Compass was designed as a user-friendly self-assessment tool, providing circularity scores, recommendations, and practical examples. The tool's development involved systematic literature review, stakeholder workshops, iterative design, rigorous testing, and validation phases. The Compass focuses on five key internal fields of action for SMEs: circular product development, recyclable material sourcing, resource-efficient production, extended product utilization, and product-service systems. It directly links CE to climate protection by highlighting its role in greenhouse gas emission reduction. The tool promotes collaboration and networking, strengthening resource-efficient supply chains and boosting SME competitiveness. By addressing the specific needs and challenges of SMEs, the Compass helps facilitate CE adoption, fostering sustainable economic growth. Further research will explore the tool's long-term impact on resource consumption, emissions, and SME performance, contributing to Austria's CE and climate neutrality objectives.

***Track 1.2 Ecosystems in support of sustainability*****Balancing Tensions: Ecosystems for Safe-and-Sustainable-by-Design (SSbD) in the Dutch Chemical Industry**

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The chemical industry plays a dual role in modern society, supplying essential materials while also negatively impacting the environment. As innovation in chemical products and processes surges, so too does the number of novel (potentially dangerous) entities that society is exposed to. In response, the concept of Safe and Sustainable by Design (SSbD) has emerged as a proactive approach to mitigating these impacts by integrating safety and sustainability into the design of chemicals, materials, and products. However, the successful implementation of SSbD requires alignment across complex innovation ecosystems. These consist of diverse actors—including industry players, policymakers, researchers, and societal organizations—who may have conflicting incentives and priorities. This study examines SSbD as a value proposition within innovation ecosystems, investigating the tensions, uncertainties, and trade-offs that arise during its implementation. Using a qualitative case study approach, we analyze four cases spanning the chemicals-materials-products continuum, focusing on the Dutch and broader EU context. Data collection involves semi-structured interviews, policy and industry document analysis, and focus group discussions with key ecosystem actors. This is an ongoing project; however, we already observe tensions, e.g. in (1) differing definitions of safety, sustainability, and circularity, (2) diverging perceptions of how to deal with these differences, and (3) conflicting priorities and interests of actors, among others. By exploring how ecosystems can be structured and managed to foster SSbD, this research will provide practical insights for businesses and policymakers navigating sustainability transitions. Ultimately, it contributes to a broader understanding of how ecosystems drive sustainable innovation in the chemical industry.

***Track 1.2 Ecosystems in support of sustainability*****Paths to Sustainability: Comparing Stakeholder and Literature Perspectives on Plastics Sustainability**

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Society widely recognizes the need for a transition to a sustainable system to address climate crises. Due to the wickedness of the problem, shifting to a sustainable system requires a combination of several strategies. This is also of importance for the plastics ecosystem, where improving sustainability is largely related to quality and quantity of plastics throughout the system. Currently a holistic approach including all actors in the ecosystem is lacking in this regard. Existing studies emphasize different approaches and strategies, however, they often focus on specific parts of the value chain and leave out a broader group of actors such as NGOs, start-ups, and investors. To have a successful adoption of strategies and thereby transition to a more sustainable ecosystem for plastics, it is important to understand the level of alignment between this literature and actors' perception in the ecosystem, which is currently not explored. This study addresses this gap by researching actor perceptions of necessary improvements on quality of plastics for a more sustainable ecosystem. Semi-structured interviews and a literature study are used to compare different perceptions of actors on improvements that are necessary. The outcome of this study provides an overview of all actors perceptions and their alignments and misalignments on improvements for a future sustainable plastic ecosystem.



## ***Track 1.2 Ecosystems in support of sustainability***

### **Podcasting Our Way into Circular Economy: Circularity Framings of Ellen MacArthur Foundation**

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This study explores how non-profits strategically frame the circular economy, focusing on the Ellen MacArthur Foundation's (EMF) The Circular Economy Show Podcast. Drawing on 159 episodes spanning over eight years, we employ a multi-method approach, combining qualitative and quantitative content analysis and sentiment analysis to examine the framing dimensions and strategies utilized in advancing circularity narratives. Our findings reveal five key framing dimensions: Materiality, emphasizing the tangible elements of circularity; Relationality, highlighting stakeholder collaboration and shared responsibility; Spatiality, addressing geographic and contextual adaptation; Temporality, underscoring urgency and long-term vision; and Formalization, focusing on institutional mechanisms such as regulations and certifications. These framings interact dynamically, with strong co-occurrences between material and relational framings, underscoring the sociomaterial nature of circularity. Action-oriented strategies such as reuse, repair, and repurpose dominate discussions, while recycling appears less emphasized. Podcasts emerge as a novel medium for framing complex grand challenges, fostering engagement, building trust, and reaching diverse audiences. EMF's podcast exemplifies how non-profits leverage this medium to diagnose issues, propose solutions, and inspire collective action, blending emotional and informational framing to promote circularity. This study advances framing literature by demonstrating the potential of podcasts as an innovative and underexplored data source. It highlights the critical roles of spatiotemporality, sociomateriality, and formalization in framing circular economy narratives, offering deeper insights into how non-profits advocate for systemic change. Additionally, we contribute to circular economy literature by uncovering diverse framings of circularity, examining their dynamic interactions, and exploring their alignment with R-strategies for circular economy transformation.

***Track 1.2 Ecosystems in support of sustainability*****Investigating Sustainable Business Model Interactions in the EV Lithium ion battery ecosystem: A Norwegian context**

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The road transport sector is transitioning towards electrification, with Norway leading due to sustainability trends and policy incentives favoring electric vehicles (EVs). EVs typically use lithium-ion batteries (LiBs) valued for their high density and capacity. A LiB is typically retired from an EV once it reaches 70%-80% of its capacity, which consequently starts its 'second-life'. These batteries can then be repurposed for secondary applications like stationary energy storage systems (ESS) in household or industrial contexts. Repurposing can potentially prolong the battery life and allow recycling technologies to develop further. However, challenges such as variable battery designs, market barriers, and a lack of collaboration among the stakeholders can hinder the adoption of repurposed batteries. This complexity calls for a more holistic understanding of the roles of the stakeholders, their business models, and their interdependence, whereby using an ecosystem lens can be pertinent. This study explores the development of sustainable business models (SBMs) to address these challenges, emphasizing the importance of social, environmental, and intellectual considerations. By mapping the EV LiB ecosystem in Norway, the study aims to understand business model interactions, identify drivers and barriers, and clarify stakeholder roles. It addresses the following primary research question: How do SBMs interact in an emerging EV LiB ecosystem? Preliminary results indicate a dynamic market with emerging actors, creating uncertainty and collaboration challenges. The study contributes to theory development for SBM interactions and second-life EV LiBs, maps the Norwegian battery ecosystem, and provides policy guidelines to mitigate barriers in the EV LiB ecosystem.

***Track 1.2 Ecosystems in support of sustainability*****Theorizing The Emergent Field Of Young Impact-driven Innovators: Sustainability Entrepreneurial Ecosystem**

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This submission is a short paper describing the imminent proposal of a framework for theorizing the sustainability entrepreneurial ecosystem, the social arena of young impact-driven innovators' practices, as the field, in the Bourdieusian perspective. The overlapping broader fields of economics, policy, and society also host fields and subfields, such as the emergent field of sustainability entrepreneurial ecosystem, one of the key actors of which are young impact-driven innovators. They construe and construct their field, and it, in turn, shapes their practices. To construct the framework for theorizing the relatively new concept of the sustainability entrepreneurial ecosystem as the social field of practices executed by the young impact-driven innovators, we employed Hoon's (2013) meta-synthesis methodology, which is the basis for building theory from qualitative case studies. It starts with a research question and thorough searches to locate the papers included in the study based on specific criteria. We are currently at this stage in methodology implementation. We will then extract the data from relevant studies and code it as per constructivist grounded theory analysis. As we inductively perform the case-specific analysis, we formulate our findings. The findings will then be synthesized across studies. As a result, the theoretical model of the mechanisms underlying the field dynamics and mechanisms of the sustainability entrepreneurial ecosystem will be built. Finally, we will identify and reflect on the limitations of the meta-synthesis and discuss the implications of the new theoretical framework.

***Track 1.2 Ecosystems in support of sustainability*****Handling Waste by Connecting with the Informal Sector: Social Symbolic Work and Interstitial Spaces in the Indian E-waste Ecosystem**Bhaskar, Kalyan <sup>1</sup>; Griffin, Jennifer <sup>(2)</sup>; Ram Tripathi, Vinayak <sup>1</sup>

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This study examines India's first producer responsibility organization (PRO) and the Indian e-waste ecosystem from 2016 to 2020. In doing so, we explore a new type of organizing to address a large, complex environmental challenge (electronic e-waste) in the context of emerging economies. Our examination is anchored in the notion of 'purposive action' as espoused in social-symbolic work literature. We identify 'interstitial work' as a form of social symbolic work within our setting of India's e-waste management ecosystem. On one hand, the new social enterprise was on the frontline of e-waste collection engaging directly with 'invisible' informal sector workers and, on the other hand, undertaking 'policy-oriented advocacy work' within the broader institutional context. We argue that by undertaking two different modes of work, at different levels, across a range of stakeholders in an emerging economy to accomplish e-waste circularity, this new type of organizing expanded the ambit of an ecosystem to explicitly include informal workers while simultaneously influencing institutional evolution. Our study advances theorizing on social-symbolic work by advancing the frontier of catalysing action in complex socio-institutional settings of emerging economies with social enterprises. More specifically, the social enterprise had to engage with informal workers at the frontline addressing environmental challenges while simultaneously, shape policy-level contexts that are conducive to field-level institutional ecosystems.

***Track 1.2 Ecosystems in support of sustainability*****What do we mean by Circular Ecosystems? An analysis of Core Principles, Aims, Enablers**

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The transition towards circular economy is challenging and far from being complete. Circular economy requires to be implemented with an ecosystem perspective in order to fully leverage its potentialities. Circular practices, strategies and cycles need to be jointly designed and implemented by a wide set of actors to avoid burden shifting and mismatches. The concept of circular ecosystems has recently emerged to emphasize the need for this ecosystem perspective to undergo the transition towards circularity. However, as scholars have advanced the discourse concerning circular ecosystems, there is a need for an updated and comprehensive definition of circular ecosystems. Therefore, we perform a systematic literature review of academic and non-academic contributions collecting 123 documents. We replicate the methodology deployed by Kirchherr et al. (2017; 2023) to identify the main components of circular ecosystems and a comprehensive definition of circular ecosystems. The result of our research is an updated and comprehensive definition of circular ecosystems that clearly identifies core principles, aims and enablers. We believe that our research has relevant implications for scholars as well as practitioners, providing a compass to those trying to navigate the novel concept of circular ecosystems.

***Track 1.2 Ecosystems in support of sustainability*****Circular Ecosystem Development: A Process Framework and Practical Application**

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The transition toward a circular economy (CE) necessitates systemic change beyond incremental resource efficiency measures. In particular, the plastic packaging industry's persistent "take-make-waste" paradigm underscores the urgency for coordinated action across diverse stakeholders. While the emerging concept of circular ecosystems promises to align CE principles with the collaborative value creation mechanisms of business ecosystems, existing ecosystem design frameworks fall short in addressing the unique requirements of circular contexts. Drawing on a systematic literature review, we evaluate eight prominent business ecosystem design approaches and reveal key gaps in integration, governance, and transformation for circular applications. In response, we propose a Circular Ecosystem Development Framework comprising four iterative stages—Vision, Configuration, Formation, and Operation—supplemented by actor-level enablers and actor-level transformation considerations. Grounded in design science research, our framework guides stakeholders in defining a circular value proposition, determining a configuration, ensuring robust governance, and continuously refining ecosystem health. We demonstrate the framework's applicability through the research project COPPA, which aims to implement a digital collaboration platform for plastic packaging stakeholders. The initial application of the Vision and Configuration stages in COPPA indicates that the framework provides practical structure and clarity for orchestrating cross-sectoral collaboration while fostering trust, data sharing, and viable circular business models. By merging academic rigor with practitioner-oriented tools, the Circular Ecosystem Development Framework serves as a boundary object for academia and industry, facilitating both theoretical advancement and tangible progress toward sustainable, circular value creation.

## ***Track 1.2 Ecosystems in support of sustainability***

### **Imaginaries of Circular Economy Ecosystems: A Case Study of Textile Industry**

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Modern textile industry experiences increased pressure for transition to a circular economy (CE) across the countries due to its high environmental impact and social sustainability concerns. The transition requires, besides technological innovations, the development of social structures and the engagement of various actors to develop and legitimize a common vision of the textile CE ecosystem (CEE) supporting a desirable sustainable future. This case study adopts socio-technical imaginaries and CEE conceptual lenses, and empirically explores textile CEEs from Finland and Lithuania aiming at sustainability. The study results represent the collective imaginaries of the textile CEEs business and institutional actors and their vision of technological advancement, markets and industrial development, regulatory changes, and actors' interaction at the ecosystem level. The findings reveal three major inconsistencies in the imaginaries: expectations of technological progress are higher than technologies real capabilities to close a loop of textile circulation; while economic feasibility of CE processes depends on a scale of business operations, scaled production can rise sustainability concerns; and transition to a CE can increase as well as decrease competition in the textile markets. Our findings on the socio-technical imaginaries are captured into a conceptual framework which contributes to the management literature on circular ecosystems and aims to support textile industry executives and policy makers in transitioning to the CE.

**Track 1.2 Ecosystems in support of sustainability****Circular Transition, Disruption, Or Leapfrogging?: Innovating Circular Ecosystems For Immature Industries**

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The shift to a circular economy (CE) requires innovative business ecosystems to be designed and implemented. However, research shows that there is an ongoing design-implementation gap for circular business models and ecosystems. Therefore, it is crucial to understand what actions are required to foster circular ecosystems. Several studies to date have explored this problem for mature industries that are transitioning to circularity, though the learnings for emerging value chains remains vague. This study examines how circular ecosystems can be fostered in immature industries, using the proton exchange membrane (PEM) electrolyser industry as a case study. By applying the WaveS model as proposed by Blomsma et al. (2023), this research explores strategies for embedding circularity before linear practices become entrenched. Through a qualitative, mixed-methods approach, including stakeholder interviews and workshops with value chain representatives, the study evaluates four potential ecosystem models, each with distinct roles for private and public actors. The findings will provide insights into stakeholder collaboration, policy interventions, and business model adaptations necessary for circular transitions in the selected industry, and by implication to immature industries in general. This research advances CE theory by extending the applicability of circular transition frameworks and contextualises them within the literature on mission-driven innovation systems and offers practical guidance for designing a circular ecosystem for PEM electrolyzers from the outset.



***Track 1.2 Ecosystems in support of sustainability*****Leading The Loop: A Circular Ecosystems Leadership Model**

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Companies are increasingly implementing circular economy (CE) principles to address sustainability challenges, regulatory pressures, and resource scarcity. This transition necessitates circular business models that integrate CE principles into value creation, delivery, and capture processes. However, circular business model innovation (CBMI) often fails due to ecosystem complexity, uncertainty, and stakeholder reluctance. Recent studies emphasize that successful CBMI requires collective action within circular ecosystems. These interdependent multi-actor systems are driven by shared circular goals and require orchestration by a leading actor. Despite growing research interest, existing studies lack a comprehensive framework for understanding the development and orchestration of these ecosystems. This study aims to explore how leading actors shape and orchestrate circular ecosystems. Using grounded theory methodology, we conducted semi-structured interviews with experts from diverse business-to-business industries, applying an inductive coding approach to derive theoretical insights. Preliminary findings reveal a three-stage circular ecosystem leadership model: (1) circular ecosystem vision development, where a visionary leader establishes foundational long-term objectives and gains stakeholder support; (2) circular ecosystem initiation, which involves forming a collaborative value proposition, aligning partner incentives, identifying barriers, and validating circular solutions; and (3) circular ecosystem expansion, characterized by ecosystem scaling, knowledge exchange, and regulatory advocacy. Our study contributes to circular ecosystem research by identifying distinct leadership stages in circular ecosystem development, emphasizing the iterative nature of the process. Additionally, we highlight the fundamental role of a visionary leader as ecosystem orchestrator. As this study is research in progress, we plan to further refine and evaluate our model through additional interviews.

***Track 1.2 Ecosystems in support of sustainability*****Brewing Circular Success: How to Map, Replicate, and Scale Circular Business Ecosystems.**

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The transition to circular models demands an integrated approach that combines systemic thinking, continuous innovation, collaboration, and value optimization. Circular Business Ecosystems (CBEs), defined as multi-actor networks promoting circular value, offer a transformative framework to overcome the limitations of linear economies. However, the replicability and scalability of CBEs remain critical challenges, requiring structured methodologies to map interdependencies, design adaptation mechanisms, and guide systemic evolution. This study addresses the gap between theoretical contributions and empirical applications by proposing a four-phase methodology for mapping, replicating, and scaling CBEs. The methodology encompasses the following four stages: (1) assessment of the CBE, with a focus on ecosystem mapping and analysis of the regulatory environment; (2) analysis of connecting mechanisms, examining the evolution of relationships between actors and governance structures; (3) testing and modelling for replicability, validating circular solutions through experimentation and iterative learning; and (4) testing and modelling for scalability, standardising circular practices, disseminating them, and promoting learning from them. This research adopts a design science approach to validate the proposed methodology, highlighting its applicability in addressing sector-specific challenges such as economic inequality, social issues, and environmental waste. The preliminary results demonstrate how the methodology can guide the transition from static ecosystem analysis to dynamic, scalable, and replicable circular models. By providing a structured roadmap, this study contributes to bridging the gap between theory and practice, offering actionable insights for organizations aiming to implement and scale circular ecosystems in diverse contexts.

***Track 1.2 Ecosystems in support of sustainability*****From Linear to Circular: An Ecosystem Approach in Chemical Manufacturing**

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The chemical manufacturing industry faces significant challenges in transitioning from linear to circular value chains, where resources are reused and recycled across sectors. This shift is necessary to meet global sustainability goals but is hindered by complexity, uncertainty, and disagreement among stakeholders. Traditional industrial structures struggle to address these barriers, emphasizing the need for a robust ecosystem approach. Ecosystems encourage cross-sector collaboration, resource mobilization, and innovation, offering a promising framework for aligning efforts and addressing systemic sustainability challenges. However, practical applications of the ecosystem concept in chemical manufacturing are limited, and there is a need for further theoretical and practical development. This research explores how an ecosystem-driven approach can accelerate the formation of circular value chains in the chemical manufacturing industry. Using an action research methodology within the BioBased Circular initiative in the Netherlands, the study engages stakeholders in iterative cycles of planning, acting, observing, and reflecting. The research aims to co-create scalable blueprints for circular value chains, offering solutions to the complexity of sustainability transitions. The study's findings will provide both theoretical contributions to ecosystem literature and practical insights for industries seeking to scale innovations and manage transitions toward renewable resources.

## ***Track 1.2 Ecosystems in support of sustainability***

### **What Is The Role Of Support Organizations In Entrepreneurial Ecosystem Vs. Clusters**

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2. University of Iceland

In this paper the subject studied is support organizations, primarily entrepreneurial support organizations but also a cluster organization. The focus is on the role such organizations play in the environment it operates in, that is in the entrepreneurial ecosystem which it is a part of. this study also addresses the impact that an entrepreneurial support organization can have on the competitiveness of the location in question when it comes to entrepreneurial activities, business development and innovation in a social and environmentally responsible manner. The theoretical section of this research addresses the recent knowledge on entrepreneurial support organizations and entrepreneurial ecosystems and links this field to theories on competitiveness of locations. The aim of the literature review is to bring forward a frame of reference to discuss the findings from the empirical examples that are studied in this paper. The main case studied in the paper is an organization serving entrepreneurs in Iceland with the name Klak – Icelandic Startups. the main service provided is running 3-4 different accelerators together with mentor service and related support to entrepreneurs. The accelerator services have been successful, and the organization holds a very central position and role in entrepreneurial field in Iceland.

***Track 1.3 Business Models for Transition.***

**Empirical observations and theoretical foundations of existing or emerging business models fostering societal transformation and transition**

**Circular Business Models: A critical rethink beyond the buzzword**

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Circular Business Models (CBMs) have gained significant attention in recent years; however, the topic has been only marginally analyzed from a critical perspective in management literature. This paper aims to address this gap by providing a critical analysis of CBMs, particularly tracing their roots to contested concepts in business models and the circular economy. The theoretical approach adopted for analyzing the CBM concept is Critical Theory, which not only deconstructs the concept but also offers an alternative perspective for researchers and managers. The study focuses on three key issues: the weak theoretical foundation of CBMs, the uncritical adoption of practitioner narratives in academic research driven by an overly optimistic view of CBMs as essential for the transition, and the academic race to define archetypes, which risks leading to premature standardization. The paper seeks to identify pathways for future research to address the current limitations in this field.

***Track 1.3 Business Models for Transition. Empirical observations and theoretical foundations of existing or emerging business models fostering societal transformation and transition***

**Integrating Social Value in Circular Economy: A Dynamic Capabilities Perspective from the Automotive Manufacturing Sector**

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Manufacturing organizations face mounting pressure to implement circular economy principles while creating social value, yet research has predominantly focused on environmental and technical aspects of these transitions. This study investigates how organizations develop dynamic capabilities to integrate social dimensions during circular economy transitions, through an in-depth case study of a UK-based automotive components manufacturer. Our research extends dynamic capabilities theory by identifying 'reacting' as a distinct fourth capability alongside sensing, seizing, and transforming. This addition helps explain how organizations manage the tension between responding to immediate stakeholder demands and developing longer-term transformative capabilities. Drawing on twelve months of data collection, including interviews with key stakeholders and analysis of organizational documentation, we develop a framework for social value integration that identifies three levels: operational, strategic, and ecosystem. The framework demonstrates how organizations can systematically create and measure social value across different stakeholder groups while pursuing circular economy objectives. Our findings reveal that successful sustainability transitions require careful attention to both immediate pressures and long-term capability development, supported by appropriate organizational structures and resources. The study contributes to both theoretical understanding and practical guidance by showing how organizations can effectively balance competing demands during sustainability transitions. This research is particularly relevant for manufacturing contexts where established operational paradigms may conflict with circular economy principles, offering insights into how organizations can develop capabilities that enable both responsive action and systematic transformation toward sustainability objectives.

***Track 1.3 Business Models for Transition. Empirical observations and theoretical foundations of existing or emerging business models fostering societal transformation and transition***

**Collaborative Business Models For A Sustainability Transition: Insights From Two Cases In Europe**

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Collaborative actions have been identified as key for the sustainability transition, hence a need for understanding inclusive, robust and dynamic Collaborative Business Models (CBMs). The objective of this study has been to get insights into different CBMs involved in the sustainability transition in the blue economy and in food systems. Our core question is ‘what are joint, sustainability visions, inclusive types of governance structures, and value co-creation processes that contribute to this transition and how?’. Semi-structured interviews have been carried out for two cases, one in Finland and one in France. First, results reveal the importance of a commonly-defined sustainability vision to increase the actors’ feeling of ‘belonging to’ the CBM. Secondly, governance models should take into account multiple stakeholders’ interests, formal processes within a well-defined framework and be flexible to allow informal exchanging in a dynamic environment. Third, co-creation processes should be designed such that all involved partners benefit (e.g. creation of knowledge), but indirectly also a snowball effect is generated that enriches others. The main insights from this study further suggest a key role for an intermediary organisation that guides all actors in the CBM to contribute to the sustainability transition of blue economy and food systems.

***Track 1.3 Business Models for Transition. Empirical observations and theoretical foundations of existing or emerging business models fostering societal transformation and transition***

**The Dynamics of Stricter Environmental Regulations Supporting the Implementation of Circular Economy Business Models: A Building Industry Case Study**

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The circular economy is high on the political agenda as a solution to minimize raw material use and carbon footprints across socio-economic systems. Each country must follow its path to achieving circularity, and businesses must seek new types of sustainable and circular business models. This study aims to analyze the Icelandic building industry as a case study from a systems perspective to identify the systemic forces influencing the adoption of circular strategies and business models. Based on insights from industry stakeholders, the study aims to formulate dynamic hypotheses regarding implementing circular strategies, represented as causal loop diagrams (CLDs). Qualitative methods including semi-structured interviews and group model building are utilized. The dynamic hypotheses proposed, illustrated by CLDs, explain the system's internal behavior that drives its dynamic. The dynamic hypothesis suggests that the building industry's environmental impact pressures the government to adopt policies. Stricter regulations can motivate project owners to adopt circular approaches, increasing their use and reducing environmental harm. The study's theoretical contribution is advancing the knowledge of implementing circular strategies and their impact on business models by providing a systemic perspective. A practical contribution is providing business leaders and policymakers with an analysis of how endogenous factors influence the implementation of circular strategies in one industry, supporting the transition toward a circular economy.



***Track 1.3 Business Models for Transition. Empirical observations and theoretical foundations of existing or emerging business models fostering societal transformation and transition***

**Steering the Energy Transition: the Influence of Social Norms on Citizens' Willingness to Steer Energy Communities**

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To decarbonize the energy sector, there is a widespread consensus that the role of end-users in the energy system should change from passive consumption to active prosumption and engagement. This is of particular importance as an increasing number of technologies and business models are focusing on the end-users. These developments provide new opportunities for further technical and social innovation to smarter, flexible and integrated systems such as Energy communities (ESs). Despite the high relevance, one of the critical challenges remains ensuring engagement and active citizen participation. The citizens' willingness to steer ECs is rather low compared to their willingness to participate, and there is limited knowledge on the citizens' willingness to steer as well as the associated factors determining such willingness. Through a randomized survey-based experiment composed of three scenarios among citizens in Italy, this research investigates whether mimetic social norms (i.e., neighbourhood and authority figures) play a role in shaping individuals' willingness to steer ECs. The study is currently in the methodology development phase.

***Track 1.3 Business Models for Transition. Empirical observations and theoretical foundations of existing or emerging business models fostering societal transformation and transition*****Circular Business Models For A Sustainable Blue Bioeconomy: The Case Of Two Seafood Nations: Norway and Iceland**

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Advancing circularity in the blue bioeconomy entails new approaches for seafood value chains. Circular business models are a way for companies to create, deliver and capture value in ways that both advance circular economy objectives but also improve the sustainability performance of organizations. Norway and Iceland are traditional seafood nations and in both countries seafood industries are an important pillar of the economy. There is increased recognition among industry and government actors that value added activities to achieve full utilisation of seafood is an important objective for sustainability. Yet, the implementation of circular business models has in general been slow partly because of the dependence of businesses on linear models and partly because of resistance to change. This study seeks to understand how companies can adopt circular business models to enhance value creation, sustainability performance, and competitive advantage. The study will build on previous research analyzing barriers to circularity in the seafood industries of Iceland and Norway and will: (a) analyse current business models, including exemplary circular business models, and (b) review and critically evaluate strategies and policies that encourage the transition to circular business models. The analysis will be based on interviews, focus groups, and the application of a qualitative system dynamics approach. Results are expected to elucidate crucial leverage points, important governance actors and enabling policies and strategies to underpin the transition to a more circular and sustainable blue bioeconomy.

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***Track 1.3 Business Models for Transition. Empirical observations and theoretical foundations of existing or emerging business models fostering societal transformation and transition*****From Waste to Value: Circular Business Models for Extending, Sharing, and Looping EV Batteries**

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The transition to net-zero emission vehicles depends on effective circular strategies for managing electric vehicle (EV) batteries, particularly through second-life applications and recycling. This study identifies and conceptualizes viable archetypes of circular business models (CBMs) that support battery circularity within the EV ecosystem. Despite increasing urgency, many firms struggle to transition from linear to circular models due to limited practical insights into how circularity can be operationalized. Based on data from 24 semi-structured interviews and 22 workshops with 15 companies across the EV battery ecosystem, the study identifies three overarching CBM archetypes—extending, sharing, and looping—comprising eight sub-archetypes: product life extension, refurbishing, battery as a service, charging infrastructure as a service, gap-exploiter model, remanufacturing, total energy management solutions, and recycling. These archetypes are mapped across three key criteria—circular resource strategies, collaboration architecture, and ownership structure—offering a structured framework for understanding how circular value is created, delivered, and captured. By presenting these distinct archetypes, the study provides actionable insights for businesses, policymakers, and stakeholders aiming to accelerate sustainable energy transitions. It also contributes to the broader theory of circular business models, with specific relevance to the evolving EV battery ecosystem.

***Track 1.3 Business Models for Transition. Empirical observations and theoretical foundations of existing or emerging business models fostering societal transformation and transition*****Sustainable Business Models in Agriculture - a Scaling Tale**Kamm, Moniek <sup>1</sup>; Bruun, Charlotte <sup>2</sup>

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The Green Deal requires sustainability-oriented agricultural policies in EU member states but national agricultural policies as well as environmental policy regarding agriculture differ. This indicates that the various agricultural sustainability business model archetypes identified in the literature, as well as pilots in various countries, have different chances of implementation among member states. Most of the archetypes identified in the literature have not yet been scaled – they are merely examples of how to improve agricultural business models, primarily by making use of waste products. Due to the large role played by agriculture in The Netherlands and Denmark, environmental policies inviting an upscaling of elements in the sustainable business model archetypes, are currently being implemented in these countries. Here some agricultural businesses have already started to adapt to the new legislation. This provides us researchers with a playground for testing new business models. We are interested in agricultural businesses that have already started to introduce sustainable innovations that comply with Green Deal demands. We are eager to investigate questions such as: if and when upscaled, do these business models work as intended; how is sustainable impact embedded in supply chains; and what impact do they have on a local, EU, and global scale?

***Track 1.3 Business Models for Transition. Empirical observations and theoretical foundations of existing or emerging business models fostering societal transformation and transition***

**The Role of Collaborative Networks in Driving Transition to Regenerative Agriculture: Insights from The Netherlands**

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The demand for regenerative agriculture is increasing due to the harmful effects of conventional farming on ecosystems, soil, and biodiversity (El Bilali, 2019; Konietzko et al., 2023). Mainstream approaches focus on strategic and operational changes on farms (Bocken and Geradts, 2020; Hoffman, 2017), but they often frame sustainability as an instrumental rather than a paradigmatic shift (Carmin and De Marchi, 2023). To transition successfully, farmers require financially viable business models but also mindset shifts to navigate early challenges, including higher costs, increased labor, lower short-term yields, and knowledge gaps (Sher et al., 2024; Verburg et al., 2022; Vermunt et al., 2022). The institutional level, shaped by norms and beliefs (Hoffman, 2017), influences business models and determines farmers' acceptance of early transition challenges. This study examines how collaborative networks influence institutional levels during the transition. We ask: How do collaborative networks facilitate farmers in the transition to regenerative agriculture? What institutional-level influences underlie network effects on farmers' transition? Our qualitative research, grounded in an interpretive approach, follows three distinct steps: a Doughnut Economics Action Lab Workshop (Sahan et al., 2022), a feedback session, and semi-structured interviews with seven representatives of various network types in the Netherlands. Findings suggest that collaborative network activities and requirements act as engines of institutional change, driving adaptations within farms. These insights support network leaders in fostering institutional change and promoting sustainable farming transformation.





*Global Challenges – local response:  
Scaling up local sustainability innovations  
and business models to address the SDGs*



THEME 2  
EXPLORING THE SECTORAL AND  
ORGANIZATIONAL LEVEL



## EXPLORING THE SECTORAL AND ORGANIZATIONAL LEVEL

### ***Track 2.1 Innovation through artificial intelligence and data-driven business models for sustainable transformation***

#### **Artificial Intelligence-driven Sustainable Business Model Innovation: A systematic literature review**

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The innovation of business models aims to address the digital and green transition that contemporary society and industry are experiencing. To promote a sustainable future, environmentally, economically and socially, digital technologies can play a fundamental role. Among these technologies, artificial intelligence (AI) is emerging as a key driver of business model innovation (BMI). In this context, this paper aims to explore the role of AI in driving Sustainable Business Model Innovation (SBMI) and how this technology will facilitate the transition towards a more competitive industry. For this purpose, a systematic literature review (SLR) following the PRISMA guidelines is being conducted, with searches in Scopus and Web of Science databases. The search query includes terms related to sustainable business models and AI, resulting in an initial pool of 285 articles. After the primary screening, 88 articles are being considered for further analysis using qualitative research tools. The research aims to understand how AI supports SBMI processes, including the steps, activities, and tools involved. It seeks to provide insights into AI-driven BMI and its potential to make a sustainable impact, as well as to identify AI-driven SBM typologies. The expected results include a descriptive analysis of the selected articles and an exploration of AI-driven decision-making tools for SBM innovation. This SLR aims to significantly advance research in sustainable business models, offering valuable insights into their development and the role of AI in driving BMI towards sustainability. It provides actionable knowledge to guide companies in adopting sustainable practices and transforming their business models.



***Track 2.1 Innovation through artificial intelligence and data-driven business models for sustainable transformation***

**Data-driven Circular Business Models - Overcoming barriers to sustainable innovation**

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This paper uses Design Science Research to explore the challenges of implementing data-driven circular business models in specific industries. It develops a prototype digital management system to enhance data sharing between stakeholders for successful Circular Economy adoption.

***Track 2.1 Innovation through artificial intelligence and data-driven business models for sustainable transformation*****Complementing or Constraining? Artificial Intelligence and the Dynamics of Business Model Innovation**

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This study examines how Artificial Intelligence (AI) adoption influences Business Model Innovation (BMI) capabilities. While research has explored AI's organizational impact and BMI's strategic importance separately, the relationship between AI and BMI capabilities remains understudied. Drawing on various perspectives, we develop propositions linking AI adoption to five critical BMI capabilities. We propose several key relationships: an inverted U-shaped relationship between AI adoption and experimentation orientation; a positive relationship between AI adoption and environmental anticipation capability, moderated by environmental complexity; a temporal duality in AI's impact on performance sustainability; a positive relationship with resource utilization effectiveness; and a negative relationship with collective commitment. Our work seeks to provide a nuanced understanding of AI's role in BMI capabilities, moving beyond technological determinism to consider contextual factors and adoption stages, while establishing a foundation for future empirical research.

***Track 2.1 Innovation through artificial intelligence and data-driven business models for sustainable transformation*****Managing The Sustainability Impacts Of Corporate Digitalisation: A Qualitative Exploration Of Manager Perceptions On Drivers, Barriers And Actions**

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The interlinkage between sustainability and digitalisation is an ambiguous one, as digitalisation has the potential to enable sustainability, for instance through process efficiency increases, as well as being the cause of a growing set of negative social and environmental impacts, as shown by its skyrocketing global energy use. This is also the case within businesses, which experience a 'digital imperative' and increasingly engage in a digital transformation. Within such corporations, managers play a critical role in integrating the sustainability impacts of digitalisation within sustainability management. This study explores how managers take up this role and what factors are of influence. Through semi-structured interviews, 21 sustainability and IT managers in Belgium were interviewed, which resulted in insights into managerial perceptions of sustainable digitalisation. The findings reveal drivers to sustainable digitalisation such as legal requirements and financial incentives and a set of internal and external barriers, such as challenges in data collection and cost-efficiency trade-offs. Importantly, this study shows that systemic and indirect impacts such as rebound and induction effects remain unaddressed, and trade-off management often disadvantages environmental and social considerations. Moreover, it was found that a lack of standardized guidance and legislation impedes a comprehensive assessment and reporting of digital sustainability impacts. As such, this study underscores the need for integrated decision-making tools and legislation targeting sustainable digitalisation. Overall, this study provides insights into managerial perceptions of sustainable digitalization and highlights the critical roles of sustainability and IT managers within sustainable digitalisation.

***Track 2.1 Innovation through artificial intelligence and data-driven business models for sustainable transformation*****From Physical To Digital: Developing Energy Hub Platforms For Sustainable Energy Systems**

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The Tilburg University, Netherlands

Energy Hub Platforms (EHPs) are a promising collective solution to facilitate the energy transition. These are digital platforms, established within specific local contexts, eminently in business parks, where, by leveraging data and AI, they facilitate the coordination of renewable energy production, consumption, and storage among participating organizations. Participation in EHPs is limited to organizations operating within a specific, limited local area. However, developing EHPs remains challenging, as organizations often struggle to recognize their economic and environmental value and have differing concerns and interests. Consequently, the early-stage practices involved in developing EHPs, when organizations explore their value, align diverse interests, and build trust, are critical for implementing EHPs successfully. During this stage, interactions among potential EHP participants influence the design of the EHP's core dimensions: the material (its digital infrastructure) and social dimension (its governance structures). Hence, interactions in the physical domain, related to pre-existing relationships, trust, and the existing physical infrastructure, are likely to profoundly shape the development of EHPs' digital domain and, specifically, its architecture-governance "configuration". Our study draws on a sociomateriality perspective, which highlights the inseparability and mutual constitution of social and material aspects in organizing, to investigate how inter-organizational interactions in the physical domain shape the development of the architecture-governance configuration of EHPs. We employ a longitudinal multiple-case study design, focusing on three EHP cases in the Netherlands. The study contributes to the sociomateriality perspective and digital platform research by focusing on the development of innovative, locally-embedded platforms, that leverage data and AI to tackle grand challenges.

***Track 2.1 Innovation through artificial intelligence and data-driven business models for sustainable transformation*****AI-Powered Business Models: Creating a Sustainable Future for Automotive Companies**

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This study investigated the sustainable impact of Artificial Intelligence (AI) on business models within the automotive industry, using the Business Model Canvas (BMC) as a theoretical framework. The integration of AI into the automotive industry is changing traditional business paradigms, forcing companies to move from vehicle-centric to technology-based mobility solutions. Despite significant progress, uncertainties and challenges remain, in particular in aligning AI with existing business structures. To address these challenges, semi-structured interviews were conducted with 22 industry experts, focusing on the application and impact of AI across the nine dimensions of the BMC. The findings show that AI can improve operational efficiency, predictive maintenance, and customer interaction while facilitating the emergence of collaborative partnerships between automotive companies and technology companies. However, its implementation requires overcoming barriers such as skills shortages, integration complexities, and financial constraints. The findings underline the transformative potential of AI, particularly in optimizing value propositions, customer relationships, and cost structures. Nevertheless, the study highlights the need for a structured, adaptive approach to AI integration, emphasizing workforce development and strategic alignment. This research contributes to the academic discourse by bridging the gap between AI technology and sustainable business model innovation in the automotive industry. Practical implications include a roadmap for leveraging AI to achieve sustainable advantages, while future research is recommended to explore cross-industry applications and long-term strategic implications.

***Track 2.1 Innovation through artificial intelligence and data-driven business models for sustainable transformation*****The Disruptor's Dilemma: Ecosystem Dynamics On The Road Towards Sustainable Transport**

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New actors entering an industry often face the so-called disruptor's dilemma: the tension between being dependent on support of incumbents, while at the same time aiming to stand up against them through their business model. Given the growing importance of ecosystems in business model innovation, it is relevant to explore the disruptor's dilemma from an ecosystem perspective. In our study we examine in more detail how new entrants with sustainability ambitions aim to transform the transport sector through the introduction of electric autonomous trucking. We aim to unravel what strategies can be used to overcome the disruptors dilemma (by the new entrants), how ecosystem actors respond and how ecosystem dynamics evolve. In the freight transport sector sustainability goals are not reached yet. Therefore, there is a high urgency to understand how new actors – next to established ones – can play a role in achieving these objectives. With this extended abstract we aim to contribute to discussions at the New Business Models Conference regarding new technologies, ecosystem dynamics and sustainable business models.

## ***Track 2.1 Innovation through artificial intelligence and data-driven business models for sustainable transformation***

### **Moving the Horizon Forward: How Vertical Farming Merges Technological Capabilities and Ancient Agronomical Knowledge to Change the World**

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The increasing global population and growing environmental challenges raise critical concerns about the sustainability of food production. In this context, vertical farming emerges as an innovative solution, combining advanced technologies and agronomic practices to optimize production while reducing the use of natural resources. However, transitioning to sustainable business models requires deep integration of agronomic, engineering, and digital expertise. This study examines the role of digital technologies—such as Artificial Intelligence, Big Data, and automation—in supporting the development of sustainable business models in the agri-food sector. Through a case study on an Europe’s leading vertical farming company, we explore how the combination of technological innovation and traditional knowledge can generate an efficient, scalable, and low-impact production model. The findings highlight the crucial role of interdisciplinary synergy and the value of an integrated approach in creating sustainable agricultural solutions. This study provides insights for researchers, businesses, and policymakers, emphasizing the importance of collaborative strategies in addressing the future challenges of the agri-food sector.

***Track 2.1 Innovation through artificial intelligence and data-driven business models for sustainable transformation*****How Can Digital Technology Use And Innovation Contribute To Sustainable Transformation Of Business Models In The Agri-food Sector?**

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The expectations of digital technologies in sustainable agricultural development are considerable. However, applying these technologies in agri-food value chains can have downsides, which are still barely studied. The main objectives of this systematic literature review were to discover the state of the art of the research in the use of digital technologies in business models contributing to sustainability in the agri-food sector, and to make recommendations for future research and management practice. In order to bring concepts together, develop a theoretical framework and advance knowledge, performing a literature review is conducive. This review worked with the commonly-used PRISMA-method to develop a systematic literature review. From this review, an overview of factors of digitalisation in business models of agri-food value chains were distinguished. Key themes that were found in the literature were the effects of COVID-19 on digitalisation and business resilience, the sustainability of business models in economic sense, and the importance of communication technologies in agri-food value chains. This paper argues that even though digital technologies can enhance social interaction, the human element can be lost in the process. Even if one business makes successful use of digital technologies, other actors in local and international value chains might not profit. The paper recommends for future research and management practice to use a framework that looks through a value co-creation and open innovation perspective to both the business model level and the interaction between (sustainable) business models in local and global food systems.



***Track 2.1 Innovation through artificial intelligence and data-driven business models for sustainable transformation*****Context-Aware Machine Learning and Language Creation for Business Model Innovation for Sustainability**

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The Saxion UoaS, Netherlands

Organizations utilize data science (DS) and language construction for sustainable business model innovation. It combines quantitative methods, such as natural language processing (NLP) and surveys, with qualitative methods such as semi-structured interviews and focus groups. The principal objective is to examine how data science methodologies facilitate the development of a shared language for business model innovation in the context of sustainability by utilizing business model tools, thereby enhancing communication, collaboration, and decision-making. A key challenge in sustainable business model innovation is a standardized language that aligns sustainability principles with stakeholders' perspectives. NLP and AI tools can help bridge this gap by offering contextual insights and creating a shared sustainability lexicon. These technologies enhance decision-making and help organizations manage sustainability transitions more effectively. The study is in its early phases, with focus groups refining problem articulation and the role of language creation in defining a shared project domain. Preliminary findings indicate that structured language creation is vital for integrating sustainability into business models. The survey was distributed on January 14, 2025, and the results will be available shortly. Our next steps will expand and validate the dataset, revolving around our research objective and exploring business modeling tools to contextualize sustainability terminology to improve business model innovation and support organizational transformation.

***Track 2.1 Innovation through artificial intelligence and data-driven business models for sustainable transformation*****Data-Driven Simulation for Evaluating Profitability During the Growth Phase of PaaS Businesses**Tsurusaki, Yudai <sup>1</sup>; Hwangbo, Yongsil <sup>2</sup>; Matsushima, Shinichiro <sup>2</sup>; Kimita, Koji <sup>1</sup>

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Circular Economy (CE) aims to expand economic activities while reducing environmental impact. Among various CE approaches, Product-as-a-Service (PaaS) models—where firms retain product ownership and offer functionalities as services—are rapidly growing, yet face profitability challenges during the growth phase. Because PaaS businesses must invest heavily in product procurement, it takes time for revenue to surpass these costs, jeopardizing cash flow. This research develops a simulation tool to evaluate strategies that balance profitability with resource efficiency in a PaaS growth context. Our approach focuses on a used PC rental business, incorporating two core components: a user decision-making model, based on discrete choice analysis and actual operational data, and a resource circulation model that divides the supply chain into maintenance, demand, procurement, transport, and failure confirmation. Together, these models replicate daily operations in an event-driven manner. Comparisons of actual and simulated sales data show strong predictive accuracy, validating the simulation's ability to capture real-world demand. Pre-evaluation of supply strategies suggests that maintaining more recent products in inventory at comparable prices can mitigate long-term inventory risk while enhancing profit margins and utilization rates. Additionally, periodically introducing new products can further strengthen both profitability and resource efficiency. This study underscores the importance of data-driven modeling to represent user behavior accurately and offers a practical method for examining how strategic decisions affect performance. Future work will incorporate competitor dynamics and environmental indicators, such as greenhouse gas emissions, to enable more comprehensive evaluations of PaaS-based business models.

## ***Track 2.1 Innovation through artificial intelligence and data-driven business models for sustainable transformation***

### **Data-Driven Farming: Implementing Smart Product Service Systems for Sustainability**

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Fontys Venlo University of Applied Sciences, Research Group Business Innovation, Netherlands

Our study explores the integration of servitization and digital technologies in agriculture, focusing on a remote monitoring business model involving sustainable Smart Product Service Systems (SPSS). Conducted as a year-long case study with AgriWater, a leading provider of agricultural solutions in the Netherlands, the research demonstrates how sustainable SPSS can enhance resource efficiency and ensure product quality. Integration of IoT sensors and AI-driven analytics enable real-time water quality monitoring and management and reduce environmental impact. Our methodology is a single case study with a mixed-method approach, leading to a viable business model. Our research illustrates how servitization and digital technologies can transform agriculture, enhancing sustainability and providing a model for increased customer loyalty.

***Track 2.1 Innovation through artificial intelligence and data-driven business models for sustainable transformation*****Towards Sustainable Agricultural Ecosystems with Data and AI Ecosystems**

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Data and artificial intelligence (AI) are considered the main means to achieve sustainable agriculture. Based on a systematic literature review in progress, this paper analysis main obstacles, solutions, and gains from data-driven and AI based sustainable solutions for agricultural ecosystems. The literature review considers published case studies on application of data and AI in agriculture that are published in journal articles, conferences as well as books and book chapters. Preliminary results based on thirty case studies show that application of data and AI in agriculture requires specific knowledge, data, and technical infrastructure. In many cases the application of data and AI focuses on a specific part of the of the data value chain as collection of soil data. However, for an end-to-end to end solution additional solutions for data storage and management as well as analysis are needed. Furthermore, internal, and external data (i.e., weather data) with sufficient quality are required as basis for training of and development of specific agricultural models and solutions. Thus, a first preliminary conclusion of the study is that data and AI ecosystems providing specific services for agricultural firms can boost a comprehensive and effective use of data and agriculture. Data and AI ecosystems would also provide compatible solutions and infrastructure, which is one of the obstacles for a broader application of data and AI in agriculture.

***Track 2.2 Community-led and community-based business models for sustainable development*****Community-Driven Sustainable Business Models: Integrating Local Needs with Innovative Co-Creation Approaches**

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The Sustainability Knowledge Co-Creation Model, developed under the Horizon Europe's Sustainable Horizons (SHEs) project, exemplifies a community-based approach to fostering sustainable regional development. This model emphasizes co-creation between higher education institutions (HEIs), municipalities, regional authorities, companies and associations, directly addressing sustainability challenges. By leveraging the co-creation framework, communities serve as dynamic intermediaries between local knowledge and innovative entrepreneurship. The model's six-phase structure—ranging from defining joint visions to implementing evaluation systems—ensures inclusivity, regional alignment, and adherence to global sustainability goals like the UN SDGs. Central to its design is an inclusive partnership framework, integrating local expertise with academic research to co-create solutions for challenges such as climate resilience, resource management, and biodiversity conservation.

## ***Track 2.2 Community-led and community-based business models for sustainable development***

### **Maximizing Wellbeing, Transitioning to a Post-growth Business Model**

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3. EADA Business School

This study explores the transition of conventional businesses to post-growth business models, focusing on the case of Las Cañadas, a community-led Mexican agroecological cooperative. Amid the backdrop of planetary boundary transgressions and persistent social inequalities, post-growth principles challenge the prevailing growth-dependent paradigm, advocating for ecological stewardship, equity, and well-being. While previous studies have primarily offered normative guidance, this research aims to address the gap in empirical evidence by reconstructing the iterative business model transformations of Las Cañadas. Initially established as a cattle farm, Las Cañadas underwent multiple transitions over three decades, shifting towards agroecological practices, democratic governance, and interdependence within local ecosystems. Through qualitative data from interviews, archival records, and direct observations, the study identifies critical triggers and strategies that enabled this transformation. The findings reveal how the organization aligned its value functions—proposition, creation, delivery, and capture—with post-growth principles, emphasizing care for people and nature, simplicity, and frugality. For example, the cooperative prioritized self-sufficiency, redistributed decision-making power and regenerated degraded landscapes. This case hints that post-growth business models are not only theoretically viable but also practically implementable under certain conditions. By integrating ecological and social priorities, Las Cañadas provides insights into alternative pathways for businesses aiming to operate within planetary limits. The study contributes to the discourse on post-growth by offering a path for transitioning conventional business models towards sustainability-oriented frameworks that emphasize environmental and social wellbeing.

## ***Track 2.2 Community-led and community-based business models for sustainable development***

### **LocalArctic: Exploring The Feasibility Of A Community-Based Business Model For MICE Tourism In Greenland**

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The Arctic has gained a lot of interest among tourists in recent years. Greenland has become a popular travel destination for adventure and cruise tourists who want to explore the Arctic. The Greenlandic government follows an ambitious strategy to expand its tourism activities including several large infrastructure projects. Visit Greenland, a key entity for tourism owned by the government, follows an ambitious marketing structure. They are planning to transform Greenland into an attractive meetings, incentives, convention, and exhibition (MICE) -destination. This will open new opportunities for tourism activities. However, at the same time the MICE industry is one of the most unsustainable forms of tourism. In this study, we explore the feasibility of an innovative locally anchored business model for increased MICE tourism activities in Greenland. In this business model, MICE tourists would contribute to community development by paying an extra fee in addition to their conference fee that would go to local sustainable projects. We investigate the interest among MICE stakeholders in financing local sustainability projects in Greenland. We have carried out 9 semi-structured interviews with stakeholders from the Greenlandic/Danish MICE industry to study their interest. Preliminary results show that MICE stakeholders are generally positive about the concept and see a potential for this among their clients. However, they underline a set of parameters that would have to be included in the business model design, to make it successful. It also remains unclear who would be a suitable entity to run this community-based business model.

***Track 2.2 Community-led and community-based business models for sustainable development*****From Competition to Collaboration: A Community Model for Women Entrepreneurs at the Base of the Pyramid in Bolivia**

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This research explores the transition from competition to collaboration through a community-based business model focused on copaiba oil production by women entrepreneurs at the Base of the Pyramid (BoP) in Bolivia. Sustainability is crucial for community ventures, particularly for economically marginalized groups that possess significant yet underutilized natural resources. In Quitoqiña, women-led households face substantial socio-economic barriers that restrict their access to markets and financial resources, despite their potential for economic empowerment through the copaiba tree's oil. The study employs a qualitative approach, utilizing participatory research methods such as semi-structured interviews, focus groups, and direct observations to gather insights from women entrepreneurs and local stakeholders. Findings are expected to reveal how community-driven collaboration enhances financial inclusion, overcoming the limitations of individual efforts. Additionally, best practices for implementing community initiatives will be identified, emphasizing the importance of social capital in achieving sustainability. This study aims to contribute significantly to discussions surrounding community-based business models for sustainable development, illustrating how collective action can empower women entrepreneurs at the BoP and guide policymakers towards designing supportive frameworks that encourage economic growth.



***Track 2.2 Community-led and community-based business models for sustainable development*****Collective Data Stewardship: Data Cooperative as an Inclusive and Sustainable Digital Innovation**

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In recent years, the development of generative artificial intelligence (GenAI) has sparked intense debate on the use of data. Generative AI and automated decision-making systems based on algorithms and data are increasingly common, with profound implications for individuals, organizations, communities and society. Hence, data equity is a shared responsibility that requires collective action to create data governance systems that promote fair and just outcomes for all. Alternative data governance models, such as data cooperatives which have member-owned data management systems, can support responsible and collaborative use of data ensuring agency of participants, minimize extractive practices and support data sovereignty. This article analyses an array of transformative cases that underline the potential of cooperative data governance. The analysed case studies provide evidence of the patterns and reveal the contingencies involved in building systems that ensure data quality and integrity. We seek to expand our understanding of innovations in data governance by synthesizing existing knowledge and generating new insights about collective stewardship that can serve as a source of inspiration and help align with global ethical and sustainability goals. When successful and competent, data cooperatives can be a powerful secure data management tool. It promises its users a better protection and control of their data, as compared to the traditional way of their handling by the data collectors (such as governments, big data companies, and others). However, for the success of data collaborations, existing challenges with respect to data management systems need to be adequately addressed.

***Track 2.2 Community-led and community-based business models for sustainable development*****Supporting the Deployment of Rural Connectivity: Collaborative Value Creation and Capture Models as Part of Community-led Business Models**

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This study investigates the collaborative value creation and capture models used as part of community-led business models to support rural connectivity deployment. Despite advancements in digital connectivity, rural communities remain underserved as opposed to urban areas. Consequently, rural communities are often unable to participate in the digital economy. Lack of rural connectivity is generally caused by the rural penalty: low population density, greater distance to labor markets, and lack of energy infrastructure, lead to unfavorable business cases for service providers for supporting rural connectivity deployment. Community-led business models, in which local stakeholders collaborate to foster value creation and capture, can help to overcome these challenges. Understanding what options in terms of collaborative value creation and capture are employed can help such local initiatives to flourish. Through a multiple-case study approach, we investigate the collaborative value creation and capture models employed by four European Living Labs focused on rural connectivity deployment, identifying three models used. In the end-user collaboration model, end-users make shared investments for rural connectivity to achieve shared value capture. In the local government-supported model, local governments subsidize or co-invest with end-users to support connectivity access, motivated by collective impact through use. In the private-supported model, private companies co-invest with end-users, recognizing the potential benefits in value chain performance and data access. The study contributes to theory by illustrating how the ecosystem of stakeholders can support rural connectivity deployment. For practice, it offers collaborative options for value creation and capture to support rural connectivity deployment for initiatives to explore.

## ***Track 2.2 Community-led and community-based business models for sustainable development***

### **Designing Community-based Business Model For Forestry Data Ecosystems: Research In Progress For A Large Swedish Forestry Association**

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This research will design a data-driven and community-based business model for a large Swedish forestry association. Utilising stakeholder involvement and data, this study will identify the potential and applicability of these business models for member-owned forests. Ultimately, the expected business model will utilise available resources to offer maximised productivity, reduce costs and identify new business avenues for community members.

***Track 2.2 Community-led and community-based business models for sustainable development*****Circular Economies and Social Regeneration: a Case Study of a Community Bike Rescue and Repair Programme**

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The circular economy (CE) offers a transformative alternative to the linear “take-make-waste” model, emphasizing resource regeneration, waste minimization, and sustainability. While CE initiatives have gained global traction, they often prioritize environmental and economic dimensions, leaving social impacts underexplored. This study addresses this gap by introducing the concept of social regeneration, which encompasses community cohesion, quality of life, and social capital as integral aspects of CE initiatives. Through an empirical case study of Southern Youth Development’s Bike Rescue Programme in Aotearoa-New Zealand, this paper examines the intersection of CE and social regeneration, demonstrating their potential to create inclusive and sustainable communities. Operating under a waste minimization contract, the programme diverts bicycles from landfills, refurbishing them to reduce waste and carbon emissions while promoting sustainable transport. Beyond measurable environmental impacts, the programme fosters critical social regeneration outcomes, including skill development, community inclusion, and access to affordable transport. Using an action-research design, the study develops and tests a framework for assessing social regeneration within CE, employing both qualitative and quantitative methods to capture its multi-dimensional nature. The findings highlight the necessity of integrating social regeneration into “strong” CE models, aligning environmental and social goals to achieve systemic change. By advancing this framework, the research underscores the potential of CE initiatives to deliver transformative sustainability outcomes, paving the way for inclusive, community-centered approaches.

### ***Track 2.3 Business model experimentation for circular economy: close, slow, narrow, regenerate***

#### **Beyond The Trend: Experimenting With Business Models To Enhance Garment Durability And Sustainability**

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There is an urgent need for a deeper understanding of how textile and fashion brands can create garments that are durable and long-lasting, as well as what a business model focused on durability looks like. Circular business model experimentation (CBME) is an emerging field in business literature that could guide the transition towards incorporating durability into business strategies. This paper draws on data from an exploratory research project involving 14 Danish brands to examine how companies in the textile and fashion industries are addressing durability. It will also explore how participating in a collaborative research initiative can support business model innovation for sustainability. Theoretically, this paper aims to provide a more nuanced understanding of the challenges and opportunities related to garment durability. Methodologically, it will contribute to CBME literature by offering insights into the challenges and opportunities of business model experimentation across different types of textile and fashion brands. Lastly, the paper will offer practical insights by discussing real-world examples of business model experimentation for sustainability.

***Track 2.3 Business model experimentation for circular economy: close, slow, narrow, regenerate*****Barriers To Scaling Product Innovation: A Case Study of Circular Workwear in Dutch Healthcare Organizations**

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In the context of circular workwear in public sector healthcare organizations, our study investigates the adoption of circular production innovation. We followed a collaborative innovation project that designed, developed and piloted a circular isolation gown, workwear for medical professionals. Circular workwear is closely linked to circular public procurement that, due to its large volume and buying power, has the potential to accelerate circular economy transformation. Our study poses the question, what barriers do public sector organizations face in adopting circular product innovations? From 2021-2024, we conducted a longitudinal single case study with two embedded cases and collected data from field participation in project meetings with the innovation partners, semi-structured interviews and workshops with key stakeholders, e.g. procurement managers, suppliers and users. Our findings revealed several barriers at the user and organizational levels that interacted and amplified the resistance to adopting circular product innovations. Furthermore, changes to circular procurement policies, supplier relations and user behavior required holistic management approaches in order to support circular product adoption. Our paper makes important empirical contributions to the literature on circular product innovation, circular public procurement and circular workwear as well as salient recommendations to public sector managers and policy makers.

***Track 2.3 Business model experimentation for circular economy: close, slow, narrow, regenerate*****Circular Business Models: What's Missing When the Beginning Meets the End**

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A society-wide sustainable transition requires workable business models. At the upstream front, innovations in new materials, such as bio-composites and flexible batteries, have proceeded hand-in-hand with circular thinking in product designs. On the downstream front, viable business models are, however, yet to be created. Existing keystone players in the current ecosystem are not yet aligned to synchronize resource allocation and operations. New actors, such as those involved in sharing platforms and Product-as-a-Service (PaaS) offerings, have yet to be engaged and incentivized in co-creating sustainable value. Moreover, new sustainable business models are path-dependent in their creation. They do not emerge like “manna from heaven,” but rather represent a Schumpeterian recombination, where the existing architectures are maintained while linear and non-adaptive modules are replaced. This study uses a vacuum cleaner redesign student project to examine how, when “the beginning”—product (re)design—meets “the end” of the lifecycle—recycling, the “middlemen” (other stakeholders like manufacturers, retailers, repair shops, sharing platforms, and end-users) are aligned, goal-wise, resource-wise, and operation-wise. Methodologically, this study uses in-depth (firm-level) interviews, with key stakeholders across the entire lifecycle— designers, recycling companies, manufacturers, retailers, and end-users—to explore alignment challenges in realizing regeneration. With an ecosystem-centric rather than a company-centric approach, this study maps stakeholders involved in respective redesign solutions and their struggles, illustrating key elements that influence circular business model creation. It also highlights the transitional challenges inherent in regeneration, which need to be “endogenized” in any circular design.

***Track 2.3 Business model experimentation for circular economy: close, slow, narrow, regenerate*****The Regenerative Business Model as an Intermediary Between Market Actors and Local Earth Systems**

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This paper applies a marketing perspective to explore how regenerative business models act as intermediaries between market actors and earth systems, focusing on the operational practices necessary for their design, development, and ability to sustain. Regenerative business models are studied in the context of aquaculture, specifically mussel farming, to explore how businesses can support ecosystem regeneration while maintaining economic viability. As environmental degradation escalates and multiple planetary boundaries are transgressed, there is an urgent need to transition beyond net-zero impact towards practices that foster the regeneration of ecosystems. Regenerative business models offer a path towards net-positive outcomes, where businesses can enhance both social-ecological systems and their own practices. However, despite growing interest, there is limited research on the practical, operational dimensions of these models and how they can contribute meaningfully to regeneration. Unlike sustainability approaches grounded in an anthropocentric market logic, regenerative models require adaptation to local and contextual social-ecological systems. They depend on an understanding of the dynamic and contextual characteristics of ecosystems, responding to changes, and fostering long-term system well-being. Using mussel farming as a case study, based on its low environmental impact, potential for biodiversity enhancement, and benefits to coastal communities, this paper draws on insights from a transdisciplinary research project on ecosystem-based management in Sweden. It aims to identify key operational practices for implementing regenerative business practices in aquaculture. In doing so, the study contributes to advancing regenerative business practices and outlines both the opportunities and challenges for transforming market structures towards regenerative sustainability.



***Track 2.3 Business model experimentation for circular economy: close, slow, narrow, regenerate*****Embedding Sufficiency: A Case Study of Sufficiency-oriented Tools and Strategies in the Cleaning Industry**

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This study explores the case of Clinitex, a professional cleaning services provider, which has undergone a seven-year transition to a sufficiency-oriented organisational model. Through a detailed case study, we explore the experimental tools, strategies, and the overall dispositif that facilitated this shift. The ongoing research addresses the urgent need for new business models that align with strong sustainability, as current economic models overshoot the Earth's capacity to sustain them, and do not necessarily enhance quality of life. Clinitex, a B Corp-certified family-owned company founded in 1980, has over 3,500 employees and is considered a pioneer in sustainability within the French cleaning industry. Inspired by philosopher Pierre Rabhi, the CEO initiated a shift from a growth-oriented to a sufficiency-led organisational model. This transformation involved the implementation of a 'sufficiency threshold' – a management tool balancing profit, employee well-being, and customer satisfaction. Our abductive qualitative approach includes semi-structured interviews and secondary data analysis. Our findings reveal the critical role of leadership and the use of management dispositifs to drive sufficiency, as well as the challenges encountered, such as employee adaptation. This case contributes to the literature by providing a practical example of sufficiency in a larger-scale BtoB services company and highlights the potential of sufficiency-oriented management tools to complement sustainable business models.

### ***Track 2.3 Business model experimentation for circular economy: close, slow, narrow, regenerate***

#### **Paradoxical Tensions in Cascading Circular Business Models**

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While the circular economy (CE) promotes imperatives like reuse and recycling, recent literature highlights cascading as a method to sequentially utilize resources across circular business models (CBMs), thereby preserving their value. However, instigating cascading CBMs may involve conflicting goals, designs, and structures among actors, leading to paradoxical tensions (PTs). This study explores the challenges PTs pose to the implementation of cascading CBMs in the textile and clothing (T&C) industry, using content analysis of the literature supplemented by 26 semi-structured interviews with used textile collectors, fashion retail brands, charities, sorting companies, and textile recyclers. By applying cascading principles – appropriate fit, augmentation, consecutive relinking, and balancing resource metabolism – and paradox classes (organizing, performing, belonging, and learning), the results are mapped, integrating insights from the literature. Findings show that PTs mainly emerge in relation to appropriate fit, driven by safety and hygiene concerns, aligning with the performing paradox. This is akin to consecutive relinking, stemming from the design of location-specific value chains and concerns about the longevity and viability of recycling, reflecting the organizing and performing paradox classes, respectively. The research also indicates that PTs linked to appropriate fit and augmentation pose greater challenges for cascading inner-loop CBMs, such as repair and reuse. In contrast, outer-loop CBMs, like recycling operations, are more affected by PTs related to consecutive relinking and balancing resource metabolism. Most PTs stem from conflicting value chain designs and socio-environmental and economic contradictions, offering guidance to practitioners and policymakers in addressing cascading bottlenecks in the T&C sector.

***Track 2.3 Business model experimentation for circular economy: close, slow, narrow, regenerate*****Behavioral Insights into Circular Practices**

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The transition to a circular economy is critical for addressing global environmental challenges, particularly in urban settings where recycling, reuse, and waste reduction are key drivers. This study investigates the behavioral dimensions influencing circular practices in Albanian cities, a context where such behaviors are underexplored. Leveraging a mixed-methods approach, it combines structured surveys with urban residents and in-depth interviews with community leaders, and local businesses from key cities such as Tirana, Durrës, and Shkodër, representing 51% of Albania's population. Quantitative data are collected through a structured questionnaire capturing demographic trends, behavioral patterns, and preferences for interventions. The survey included both closed and open-ended questions, added to the qualitative data gathered through stakeholder interviews. Descriptive and inferential statistics, alongside thematic coding, reveal the barriers to circular practices, such as cultural resistance and limited infrastructure, as well as motivators, including economic constraints fostering conscious consumption. The findings underscore the potential of behavioral interventions tailored to the Albanian urban context. Strategies such as targeted awareness campaigns, incentive programs, and improved infrastructure for recycling and reuse are proposed. The research also highlights the importance of multi-stakeholder engagement in fostering circular behaviors, offering insights into how emerging economies can adapt circular economy principles through behavioral change. By providing a localized perspective, this study enriches the understanding of behavioral experimentation in circular practices and contributes actionable frameworks that can inspire similar adaptations in other developing contexts, aligning with global sustainability goals.

***Track 2.3 Business model experimentation for circular economy: close, slow, narrow, regenerate*****Exploring the Role of Market Orientation in Aligning Supply and Demand for Textile Recycling**

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Textile recycling is gaining global prominence due to the resource-intensive and environmentally damaging nature of the textile industry. Despite its potential to close the linear flow and reduce reliance on virgin resources, less than 1% of textile waste is recycled globally, hindered by technological and supply chain challenges. This paper examines the role of market orientation in mitigating supply-demand mismatches, a critical barrier to scaling recycling operations. Market orientation, encompassing customer focus, competitor awareness, and interfunctional coordination, enables businesses to adapt to shifting market demands, foster innovation, and align supply with demand. The study employs an exploratory abductive approach, incorporating semi-structured interviews with 20 industry leaders from diverse geographical and operational contexts. Findings reveal that customer alignment enhances product design and market adoption rates, while competitor orientation fosters innovation and competitiveness. Interfunctional coordination improves internal collaboration and supply chain integration. Additionally, external factors such as EU regulations and ethical challenges significantly influence market dynamics. The research underscores the importance of close customer communication, strategic collaborations, and responsive feedback mechanisms in achieving sustainable and scalable recycling practices. However, challenges such as high production costs, inconsistent regulations, and ethical concerns persist. This study contributes to the literature by highlighting the strategic value of market orientation in addressing industry gaps and promoting circular business models. Future research should focus on regulatory comparisons, longitudinal studies on sustainability impacts, and the role of absorptive capacity in enhancing adaptability to evolving market and regulatory landscapes.

***Track 2.3 Business model experimentation for circular economy: close, slow, narrow, regenerate*****New Circular Business Model In Waste Management Sector: A Case Study**

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The transition to the circular economy (CE) requires companies to adapt their business models (BMs) to reach sustainability and resource efficiency. Waste management plays a key role in this shift, as it involves the recovery and reuse of materials. While existing literature offers various circular business model (CBM) frameworks, the specific adaptation of waste management companies remains underexplored. This paper presents a case study of a leading Italian waste management company specializing in medical and industrial waste. The company has developed a CBM integrating innovation and waste recovery approaches, bringing together CBM elements into a unified model. Notable practices include the widespread use of reusable waste containers, the integration of waste-to-energy and plastic container production within a single plant, and a sustainable logistics strategy facilitated by a territorially distributed network. This system ensures efficient operations while reducing emissions. The study employs a qualitative methodology, incorporating interviews, secondary data, and external validation to ensure robust findings. It contributes to the literature by offering a real-world example of CE principles in practice, highlighting the company's operational synergies and innovation. The company's BM stands out for its ability to generate multiple revenue streams, improve cost-efficiency, and expand territorially, making it an exemplary model for other firms in the sector.

This exploratory study aims to enrich the existing literature by presenting a successful BM case that may serve as a valuable reference for other companies, scholars, and professionals interested in advancing the circular economy transition.

***Track 2.3 Business model experimentation for circular economy: close, slow, narrow, regenerate*****Leveraging Circular Business Models for Social Inclusion: Empowering Low-Income Families in Developing Countries**

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The shift from a linear economy to a circular economy (CE) is an increasingly acknowledged pathway towards solutions for challenges including resource exhaustion, waste, and climate change (López et al. 2023). Circular business models (CBMs) encourage reducing, reusing, and recycling rather than the classical "take-make-dispose" model (Bocken et al., 2016). Despite potential environmental benefits from these models, there is an ongoing debate about whether they are inclusive, particularly of low-income communities, women, rural populations, and marginalized groups (Cohen et al., 2021). Such groups have also been reported to struggle to access and benefit from CBMs, particularly due to a shortage of resources, restriction in technology, inability to afford and an absence of policy support (Lacy et al., 2020). This study aims to identify barriers inhibiting vulnerable populations from realizing the benefits of CBMs and to develop policy recommendations and scalable solutions to promote inclusion. Some of these groups can be excluded as they may not have adequate access to technology or infrastructure, knowledge of circular practices, or face high initial investment costs into circular economy initiatives. Moreover, they have been further marginalized by the lack of economic incentives or subsidies (Cohen et al., 2021). Used purposive sampling to gain a balanced understanding of perspectives across different government sectors (environmental policy, economic development, social equity), this study explores perspectives from government officials to see where possible gaps exist and how policies could be structured to address them.

### ***Track 2.3 Business model experimentation for circular economy: close, slow, narrow, regenerate***

#### **It's The Tensions, Stupid! Why Hybrid Business Models That Experiment With Circularity Should Be More In The Spotlight**

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Circular business models are challenging, especially if circularity is to exploit its full transformation potential and thus go beyond efficiency and consistency. Unfortunately, there is no blueprint for such a transition; it requires careful observation and experimentation. What exactly is the difficulty? It's not (only) about new products and how materials can be replaced; it's about the fact that circularity requires logics to be overlay that may contradict each other and the tensions that arise as a result are not practiced. However, there are organizations that live (well) with anchoring different logics in their business models: hybrid business models. From a circular transition perspective, these can be particularly exiting: because business models as change agents need points of contact in the mainstream logic of the regime and in alternative logics in the niches, which is what the circular economy has. But how exactly does that work? We still have to try it out, and the investigation of circular hybrid business models (e.g. those for which design is important in addition to market logic) is a hopeful combination. Three business case studies in the high-end office furniture sector will be used to examine how circular tensions are dealt with. The initial results seem to indicate that the "gateway" of simple circular strategies is also being used to discuss more advanced strategies. Whether these will actually be used and what this will look like is of course not yet clear, but it is worth taking a closer look.

***Track 2.3 Business model experimentation for circular economy: close, slow, narrow, regenerate*****Exploring the Industrial Symbiosis Behaviour: An analysis in SMEs, Italy**

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2. LUMSA, Italy

The 2023 IPCC Synthesis Report highlights the detrimental effects of climate change, particularly on industries like agriculture, fishing, and tourism, impacting overall economic growth. In response, enterprises are shifting toward strategies that create economic, social, and environmental value. One key approach is the Circular Economy (CE), which aims to address the limitations of the linear economy by promoting resource efficiency through reduction, reuse, and recycling. Industrial Symbiosis (IS), a collaborative economic approach where companies exchange resources and byproducts, is crucial for implementing CE at the meso level. Although IS has been extensively explored in the literature, to the best of our knowledge, no studies have specifically investigated the predictors of IS behavior. Based on the Theory of Reasoned Action, the study distinguishes between and categorizes the predictors into three groups: subjective norms (awareness, environmental commitment, satisfaction, trust, organizational purpose), behavioral intentions (intention to collaborate), and attitudes (social pressure). The study employs a survey that was designed and conducted among Italian SMEs between July and September 2023.







*Global Challenges – local response:  
Scaling up local sustainability innovations  
and business models to address the SDGs*



THEME 3  
EXPLORING THE ORGANISATIONAL IMPACT



## EXPLORING THE ORGANISATIONAL IMPACT

### ***Track 3.1 Management, governance and accountability for sustainable business models***

#### **How Family Imprinting Shapes Family Business Models**

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We explore how family imprinting shapes family business models, using the value logics lens. We conducted 68 interviews across 15 Chinese family businesses and analyzed them using a thematic template analysis. Our findings show how family business models' value proposition, creation, exchange, and capture are shaped by three distinct family imprinting practices, namely practicing traditions, family storytelling, and family leading by example. These practices' shaping effects, both assume the form of maintaining family business models and changing them. We firstly contribute to business model research by exploring how family business models are influenced by family imprinting. We also contribute to the family business literature by embedding the family imprinting perspective as an important driving force during family firms' development. Finally, we contribute to imprinting research by offering the value logic lens as a conceptual bridge between the family members' cognitive logic and the logics of action of a family business.

***Track 3.1 Management, governance and accountability for sustainable business models*****Green Digital Servitization: Can Opposites Attract?**

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Green digital servitization integrates servitization, digitalization, and sustainability into a unified model, addressing the growing demand for manufacturers to align profitability with environmental responsibility. Servitization transitions firms from product-based to service-oriented business models, while digitalization facilitates real-time data analytics and customized solutions. Companies reduce their ecological footprint and improve operational efficiencies by adopting circular economy principles—emphasizing resource reuse, redesign, and lifecycle extension. This framework overcomes paradoxes linked to individual digital and green servitization efforts, such as unanticipated financial underperformance despite significant investments. Combining these strategies yields synergies that enhance firm performance and competitiveness. Digital tools optimize resource use, supply chains, and service delivery while promoting sustainable practices. However, achieving profitability remains challenging without aligning strategic objectives and capabilities.

### ***Track 3.1 Management, governance and accountability for sustainable business models***

#### **The Role of Sustainability Planning in Addressing the Tensions of ESG and Corporate Strategy Integration**

Riso, Vincenzo; Valcozzena, Silvia; Cantele, Silvia; Vernizzi, Silvia; Campedelli, Bettina  
Department of Management, University of Verona, Italy

This study explores the role of sustainability planning in addressing tensions that arise during the integration of corporate sustainability into business strategies. Through semi-structured interviews with 12 Italian firms from various sectors, the research identifies key challenges, including cultural resistance, technical complexity, lack of metrics, governance issues, and the multiplicity of objectives. These tensions reflect the interplay between achieving environmental, social, and governance (ESG) goals and maintaining business competitiveness. Adopting the strategic choice theory (SCT) framework, the study highlights how decision-makers navigate these challenges, emphasizing their capacity to balance internal capabilities with external demands. Findings underscore that sustainability planning acts as a pivotal tool to alleviate tensions. It facilitates alignment between sustainability and core business strategies through strategic coordination, formalized processes, and organizational restructuring. For example, the establishment of dedicated ESG teams and integration of sustainability metrics into corporate planning enhance agility and decision-making efficacy. Furthermore, sustainability planning fosters cross-departmental collaboration, ensuring clear goal definition and prioritization. This structured approach enables firms to address ambiguities in regulatory compliance and integrate diverse stakeholder expectations effectively. The study contributes to existing literature by bridging theoretical insights with practical applications, offering insights for managers and policymaker, including the importance of fostering a culture of sustainability, institutionalizing planning processes, and adopting governance frameworks tailored to sustainability objectives.

### ***Track 3.1 Management, governance and accountability for sustainable business models***

#### **Stakeholder Management under Extreme Conditions: CEOs and the Practice of Silencing-Off Corporate Opponents**

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Stakeholder management research suggests that activists can be influential opponents of corporate interests. For this reason, managing relationships with them is of strategic relevance for CEOs. We focus on extreme cases where prominent activists (defenders) risk their lives while opposing corporate interest and examine the modalities enacted to silence them off. Using a configurational approach and a novel database of 780 attacks to defenders over the period 2015-2020, we identify four equifinal configurations of CEO-defender characteristics, operating across different institutional environments, linked to physical integrity attacks. Our findings show that, when operating in institutionally weak countries, companies are more at risk of being involved in the latter kinds of attacks when their CEO is young, non-founder and holds a post-graduate degree in business studies.

### ***Track 3.1 Management, governance and accountability for sustainable business models***

#### **Sustainable Shipping Business Models through Circular and Accountability Harmony: A Research Agenda**

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The shipping industry, a key component of global trade, plays a significant role in achieving the Sustainable Development Goals (SDGs) outlined in the United Nations 2030 Agenda. Meanwhile, it also contributes approximately 940 million tons of carbon dioxide (CO<sub>2</sub>) annually, for which it is undergoing a process of decarbonizing its supply chain to reduce Scope 3 emissions. This involves not only reducing emissions but also measuring and reporting them, striving to balance environmental concerns with profitability. However, Scope 3 emissions fall outside the direct control of shipping companies, as they are tied to the resources and raw materials consumed (e.g., paper, waste) and the emissions of suppliers. Reporting and reducing these emissions are particularly important for shipping companies adhering to frameworks like the Carbon Disclosure Project (CDP), the Global Reporting Initiative (GRI), or the Task Force on Climate-related Financial Disclosures (TCFD). Shipping activities related to fuel production, energy consumption, and waste generation, categorized as upstream Scope 3 emissions under the GHG Protocol Corporate Standard, are influenced by the shipping industry's business model. This model, when driven by circular economy principles and business accountability, can help mitigate climate change and contribute to the achievement of SDG7 (Affordable and Clean Energy) and SDG13 (Climate Action). Despite growing scholarly interest, these issues remain fragmented, particularly regarding the integration of circular economy models in the shipping industry's business practices and accountability mechanisms. This study aims to address these gaps by analyzing existing literature and proposing a research agenda to advance knowledge in this area.

***Track 3.1 Management, governance and accountability for sustainable business models*****Toward a Realistic Pathway to Circularity for SMEs**Berkers, Frank <sup>1,2</sup>; Rietdijk, Bjorn <sup>2</sup>; Kerstholt, Koos <sup>2</sup>; Dittrich, Koen <sup>3</sup>

1. TNO Vector
2. Rotterdam University of Applied Sciences
3. Rotterdam School of Management

The urgent shift to circular business is also apparent among SMEs, offering solutions for sustainability and new opportunities. However, this shift also requires significant—and not always clear—changes to the typically linear business model of SMEs. Barriers, such as a lack of time, money and knowledge, the clear point of view, an approach to make the entire value chain work together, hinder this transformation. Companies that have successfully made a shift, have developed alternative business models alongside their current ones, a practice called business model portfolio management (BMPM). Research shows BMPM results in better business performance, competitive advantages, opportunities for synergy and complementarity, as well as spreading risk and increasing agility. Despite its promise, BMPM is not specifically focused on circularity and nor designed for application in SMEs. This research aims to develop such an approach by conducting a design science study. In this paper, we seek to answer (i) What experiences do manufacturing SMEs have with circular business model innovation? and (ii) What are meta-requirements identified in the emergent literature on BMPM for an approach that can support SMEs in their transformation to circular business models?



***Track 3.1 Management, governance and accountability for sustainable business models*****How Can We Support SMEs on Their Sustainability Journey? Addressing the Gaps in Research and Practice**

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Small and medium-sized enterprises (SMEs) play a critical role in the transition toward sustainable business practices. However, they face significant barriers, including financial constraints, limited internal expertise, and fragmented regulatory support. Despite the increasing focus on corporate sustainability, a significant gap remains in the literature regarding structured support mechanisms for SMEs in their sustainability transitions. Existing research often fails to account for the highly context-dependent challenges SMEs face. This study addresses this gap by examining the key barriers and enablers of SME sustainability and proposing a concrete methodological approach to co-develop tailored support mechanisms in collaboration with stakeholders. Through a systematic literature review, this study identifies financial and regulatory incentives, capacity-building initiatives, and multi-stakeholder collaboration as critical enablers of SME sustainability. Additionally, it highlights the shortcomings of current research, which largely relies on cross-sectional analyses and lacks iterative, practice-oriented methodologies. By integrating theoretical insights with real-world applications, this study contributes to both academic discourse and practical sustainability strategies for SMEs. By leveraging Action Research, this study advocates for an adaptive, participatory approach that enables SMEs to navigate sustainability transitions through continuous feedback loops and stakeholder engagement. The findings emphasize the need for long-term, context-specific interventions and call for further research into collaborative support mechanisms that align with SMEs' unique operational realities.

***Track 3.1 Management, governance and accountability for sustainable business models*****Justice as a Leverage Point: Advancing Sustainable HRM for Transformative Change**Podgorodnichenko, Nataliya <sup>1</sup>; Edgar, Fiona <sup>1</sup>; Yin, Jiarui <sup>2</sup>; Akmal, Adeel <sup>3</sup>

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2. Universitat Politècnica de Catalunya - BarcelonaTech, Spain
3. University of Iceland, Iceland

This paper explores justice as a critical leverage point in advancing Sustainable Human Resource Management (HRM) for transformative change. While Sustainable HRM is pivotal in addressing global sustainability challenges, its fragmented implementation and misalignment between rhetoric and reality hinder its impact. Drawing on socio-ecological systems theory and Meadows' leverage points framework, we argue that justice—encompassing distributive, procedural, recognitional, and contextual dimensions—can drive systemic change across environmental, social, and organizational sustainability. Justice-based HRM policies enhance fairness, equity, and inclusion, fostering sustainable work environments that extend benefits beyond organizations to communities and ecosystems. We demonstrate how justice-oriented HRM can mitigate socio-environmental inequalities, support sustainable workforce development, and encourage employee proactivity in addressing sustainability challenges. Furthermore, we propose that justice-centered HRM interventions have the potential to shift organizational values and paradigms, fostering long-term sustainability transformations. To facilitate this shift, interdisciplinary approaches, participatory research, and systems-thinking methodologies are essential. By embedding justice as a core principle, HRM can move beyond compliance-driven sustainability initiatives to become a transformative force in achieving the United Nations Sustainable Development Goals. Our study provides a conceptual framework and research agenda for integrating justice into Sustainable HRM, bridging the gap between theory and practice.

***Track 3.1 Management, governance and accountability for sustainable business models*****Balancing Acts: How Ecopreneurs Reimagine Sustainable Business**

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In this paper, we delve into the world of ecopreneurs (Gunawan et al., 2021), those quixotic business leaders tilting at the windmills of environmental decay with profit-making lances. Peeling back the composted layers of green marketing, we reveal the human stories of these sustainability-minded capitalists—replete with their triumphs, tribulations, and the occasional compost-scented failure. Drawing on qualitative insights from a pilot study conducted in California, the research examines how these entrepreneurs reconcile the delicate balance between profit and sustainability. Using the lens of sustainability paradox theory (Hahn T., Figge, F., Pinkse, J., & Preuss, L., 2018), we scrutinize the cultural petri dishes in which these ventures germinate, uncovering how personal values, ethical dilemmas, and adaptive strategies shape their decisions. The presented research focuses on a portrait of ecopreneurs navigating the complexities of governance, accountability, and local impact, questioning whether their contributions to global sustainability are more than a hill of organically grown beans. It's a discussion as thought-provoking as a carbon offset scheme and as essential as the stories behind the green ventures redefining business. The findings contribute to the discourse on governance and accountability in sustainable business models, aligning with Track 3.1, Management, Governance and Accountability for Sustainable Business Models, of the NBM2025 conference.

***Track 3.1 Management, governance and accountability for sustainable business models*****The Relevance of BM-LCA for Strategic Decision-Making**Bertassini, Ana Carolina <sup>1</sup>; Baumann, Henrikke <sup>1</sup>; Zobel, Thomas <sup>2</sup>

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2. Luleå University of Technology, Sweden

Companies face increasing pressure to adopt sustainable business practices, yet Life Cycle Assessment (LCA) remains primarily product-focused, limiting its strategic use. To bridge this gap, Business Model Life Cycle Assessment (BM-LCA) was developed to integrate material and financial flows at the business model level. This study examines whether companies effectively incorporate BM-LCA insights into strategic decision-making. Through a case study analysis of six circular business models, including rental services and recycling initiatives, findings reveal that BM-LCA enables operational improvements, such as mobile washing stations and strategic store relocations, reducing environmental impact. However, barriers such as cognitive biases, expertise gaps, and short-term financial priorities limit its broader adoption. We explore how BM-LCA fosters cross-functional collaboration between sustainability and financial departments, enhancing business strategy. Future research should further investigate its role in SDG-aligned business ecosystems and address behavioral factors affecting sustainability decision-making.

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***Track 3.1 Management, governance and accountability for sustainable business models*****Interdisciplinary Collaboration in the Shift Towards Sustainable Business Models**

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The transition from a linear to a sustainable, circular economy is essential for staying within planetary boundaries. Businesses play a crucial role in this transition, with a growing attention for the development and implementation of sustainable business models (SBM). Although interdisciplinary collaboration comes forward as a significant factor in this shift towards SBMs, and that requires well-functioning dynamics, methods and processes, it remains underexplored. This work focuses on the role of interdisciplinary collaboration in the shift towards SBMs, with the aim to offer insights on how partnerships can support – or hinder – the sustainability transition. Through a literature review, the study presents current knowledge and identifies research gaps. Results introduces available collaboration models, success factors and hurdles for interdisciplinary collaboration in SBMs, and provides insights on how interdisciplinary collaboration can support or hinder the shift to SBMs. A main finding is that interdisciplinary collaboration comes forward as a key success factor as well as a potential, significant hurdle in the shift towards SBMs. Avenues for future research are presented, with an overarching need for more empirical investigations in the collaborative processes. Three directions for research include the need for studies on a) approaches, mechanisms, strategies and instruments that can support interdisciplinary collaboration, b) human factors and the individual-level perspective, and c) the connection between the individual- and system-level to provide insights on the impact of interdisciplinary collaboration on SBM development and implementation within and between businesses.

### ***Track 3.1 Management, governance and accountability for sustainable business models***

#### **Sustainability: A Study of Practice, Behavior and Emotions**

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Driven by global awareness of climate and environmental crises and the need for engagement with sustainability agendas, HRM practitioners are starting to embrace sustainability agendas. However, while some support for HRM's positive impact on sustainability exists, the research in this area is underdeveloped and lacking in empirical evidence, with the limited understanding about pathways through which positive outcomes can be achieved highlighted as a major concern. Addressing this gap, and drawing on stakeholder, social exchange and warm glow theorizing, our study develops and tests a conceptual model which looks at how employees' behavior and emotion mediate the relationship between sustainable HRM and wellbeing. Using a quantitative research design, we assess the reactions of a sample of 854 employees working in Australian and New Zealand organizations to sustainability initiatives. Results from testing our model mostly supported our proposed relationships, with behavior and positive affect sequentially mediating the relationship between sustainable HRM and the wellbeing outcomes of life satisfaction and job satisfaction, but not for negative affect. The implications of these findings for theory and practice are discussed.

### ***Track 3.1 Management, governance and accountability for sustainable business models***

#### **Motivational Archetypes For Circular Offers In Business-To-Business Markets**

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Circular business models (CBMs) represent a crucial pathway toward sustainable business practices, yet understanding the motivations driving business-to-business (B2B) firms to adopt them remains underexplored. This study addresses this research gap by developing a taxonomy of motivational archetypes for implementing circular offerings in B2B markets. Using a design science research approach, qualitative data from 23 interviews were analyzed resulting in six distinct motivational archetypes: Rule Follower, Market Listener, Opportunist, Guardian, Strategist, and Changemaker. These archetypes differ in their strategic ambition and motivation source, ranging from purely compliance-driven to transformative approaches. Our preliminary findings suggest that companies' motivations may evolve over time, shifting from external drivers to internal sustainability commitments. The taxonomy is currently being refined through additional empirical research, a demonstration and evaluation phase will follow. The final taxonomy offers both theoretical insights into circular economy engagement and a practical framework for developing targeted strategies in B2B markets.

### ***Track 3.2 New business models in times of crisis: scaling resilient and sustainable local solutions for global challenges***

#### **Business Model Innovation for Decoupling: application of Market Shaping Strategies and Analysis with Business Model Life Cycle Assessment**

Bertassini, Ana Carolina <sup>1</sup>; Baumann, Henrikke <sup>1</sup>; Nenonen, Suvi <sup>2</sup>

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2. Stockholm Business School, Sweden

This paper explores the integration of Business Model Life Cycle Assessment (BM-LCA) with the application of market-shaping strategies for business model innovation to measure and manage sustainability effects at the business model level and at the market level. By quantifying the decoupling achieved through business model innovation for sustainability – the dissociation of economic growth from environmental degradation – businesses can achieve and scale sustainable practices with by strategically reshaping market dynamics. Case studies are used to illustrate how these combined approaches can drive significant environmental and economic improvements, enabling actionable pathways for sustainable transitions.



### ***Track 3.2 New business models in times of crisis: scaling resilient and sustainable local solutions for global challenges***

#### **Frugal Design Workshop for SMEs: Innovation Insights from Ethiopia and the Netherlands**

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2. Alliance College Arba Minch, Ethiopia

Small and Medium Enterprises (SMEs) face significant challenges in times of crisis due to resource constraints and market volatility. Frugal Innovation (FI) offers a promising approach to enable SMEs to develop cost-effective, resource-efficient, and sustainable solutions. This study explores FI as a guiding principle in business model innovation (BMI) through a Frugal Design Workshop framework designed for SMEs in the Netherlands and Ethiopia. Following a Design Science Research (DSR) methodology, the study developed and tested a training intervention that integrates FI with the Double Diamond Design Thinking framework. The resulting workshop routine, implemented across two economic contexts, facilitated SME innovation in times of crises through peer learning, problem-based facilitation, and resource-conscious business modelling. Findings reveal that the workshop routine works, with 83% of innovations generated had social or sustainable elements, demonstrating the relevance of FI beyond emerging markets. The study contributes to mid-range theory development by extending FI principles to SMEs in both developing and developed economies. Although, future research should examine long-term adoption and policy integration of FI to enhance SME resilience in times of crises. The study highlights the effectiveness of frugal design workshop routine in fostering innovation among SMEs, offering practical and theoretical insights into business development for SMEs dealing with (resource) crises.

***Track 3.2 New business models in times of crisis: scaling resilient and sustainable local solutions for global challenges*****Supporting User Resource Stewardship With Sufficiency-based Circular Business Models**

Tuovila, Hannamaija; Petänen, Päivi; Markkula, Annu

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To answer the sustainability challenges of the textile industry, deemed to be one of the largest industries causing significant environmental and social harm, a transition towards circular economy has been called for. Despite the efforts to implement sustainable business approaches, the industry is far from being circular. To tackle the root cause behind the negative environmental impact caused by the industry, a new paradigm shift towards sufficiency has been suggested. Sufficiency-based circular economy emphasises strategies aimed at consumption-side changes to reduce environmental burden, by implementing business models focusing on circular strategies of refuse, reduce and rethink. With this extended abstract, we will contribute to advancing the discourse around sufficiency, by exploring the interplay between sufficiency-based circular business models and user resource stewardship. As a method, a multiple case study approach is utilised. The research is done by conducting semi-structured interviews with 13 micro and small companies in four European countries. The represented sufficiency-oriented business models in Finland, Denmark, Romania and Spain include fashion rental, second hand, made-to-measure, zero waste, remake and refurbish, upcycling, local production and customization. The investigated business models embody local solutions, such as localised value chains and targeting local, geographically specific markets. The preliminary results show that the companies operating with sufficiency-oriented business models aim at a more comprehensive societal behaviour change and impact, by supporting a bottom-up collaborative approach between consumers and local businesses. Empowering individuals to play a more active role for the benefit of the environment is a central target for the business models.

### ***Track 3.2 New business models in times of crisis: scaling resilient and sustainable local solutions for global challenges***

#### **Searching for the Tenth Archetype: Creating Shared Value as Part of the Sustainable Business Model Archetypes**

Menendez-Sanchez, Jaime<sup>1,2,3</sup>; Fernandez-Gomez, Jorge<sup>1,2</sup>; Wilson, James<sup>1,2</sup>; Araujo-de-la-Mata, Andrés<sup>3,4</sup>

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2. Deusto Business School (University of Deusto)
3. University of the Basque Country (UPV/EHU)
4. Built Heritage Research Group (GPAC)

This conference paper is based on previous research, in which we addressed how oil and gas (O&G) companies are facing a pressing process of adaptation to a new context determined by complex crossroads between major global crisis and sustainability trends. We applied the sustainable business model archetypes (SBMAs) taxonomy to shed light on this transformation. Based on this, we focused on one O&G firm with large socio-economic importance in the Basque Country region (northern Spain), gathering information via semi-structured interviews. Taking into account how multi-stakeholder collaboration and a regional focus on industrial clusters appeared to be key elements of the sustainability strategy of the case study, in this conference paper we explore further this dimension of the O&G business transformation. The research suggests that the “creating shared value” (CSV) concept explains how the case study covers various SBMAs in its strategy. Based on this, we suggest integrating the CSV concept as a tenth SBMA and propose how to continue the research by focusing on the case of the Net Zero Basque Industrial Super Cluster initiative.

***Track 3.2 New business models in times of crisis: scaling resilient and sustainable local solutions for global challenges*****Empirical Analysis of Sufficiency-oriented Innovation Adoption Across Firms**

da Silva Wagner, Indra; Ebersberger, Bernd

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To mitigate present and future threats from sustainability crises, businesses must develop innovative solutions to switch to more sustainable practices. This includes taking social responsibility and reducing their ecological footprint, especially in consumer-intensive industries. The sustainability strategy of sufficiency encompasses approaches to reduce consumption and production. While innovation holds significant promise for sustainability, there is a lack of understanding of how sufficiency relates to innovation. In this study, we investigate how businesses address and diffuse sufficiency-oriented innovations. Drawing on statistical techniques, we use text-based web data on > 600 German, Austrian, and Swiss firms to test the adoption of sufficiency-oriented innovations by businesses and linkages that allow the transfer of sufficiency-oriented knowledge and practices. Our study provides practitioners with implications for realizing sufficiency through innovation. We further point to future research endeavors to explore the innovation for sufficiency nexus from an innovation management perspective to highlight the interplay between businesses and industries.

### ***Track 3.2 New business models in times of crisis: scaling resilient and sustainable local solutions for global challenges***

#### **Innovative Entrepreneurial Initiatives and Business Models for Sustainable Local Food Production and Institutional Change: Addressing Global Challenges through Localized Solutions**

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4. Humboldt-Universität zu Berlin

In the face of interconnected global crises like climate change, food security challenges, and economic instability, the need for locally responsive and sustainable business models is increasingly pressing. The agrifood industry, in particular, is a critical sector in addressing these crises. This paper explores how entrepreneurial initiatives (EIs) in Germany, Denmark, and Sweden are using innovative business models to transition towards sustainable and resilient food systems. These initiatives focus on alternative protein sources such as insect-based feed, cultivated fish, and grass-based proteins, all of which contribute to reducing environmental impacts and diversifying food sources. The paper investigates how these EIs navigate and interact with existing institutional settings, which include formal regulations, market structures, and consumer perceptions. Through the lens of institutional entrepreneurship, we examine how these ventures exercise agency to drive transformation within the agrifood sector. The research reveals how these EIs employ both fit-and-conform strategies, adapting to existing institutional frameworks, and stretch-and-transform approaches, where they actively challenge and reshape these frameworks to better support sustainable innovations. Findings underscore the importance of entrepreneurial agency in overcoming institutional barriers and reshaping norms. Ultimately, the paper contributes to our understanding of how new business models can drive systemic change, helping address the pressing challenges of sustainability, social inclusion, and resilience in food systems.

***Track 3.2 New business models in times of crisis: scaling resilient and sustainable local solutions for global challenges*****Driving Circular Economy Through Digitalisation: Addressing the Theory-Practice Gap**

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Odisee University of Applied Sciences, Belgium

This study examines the role of digitisation in promoting the implementation of circular economy business models inside social economy enterprises. The investigation addresses the disparity between established academic knowledge and its practical use. The objective was to identify digitalisation accelerators, barriers, and requirements for circular economy business models, formulate strategies to tackle the challenges of digitalisation and offer practical solutions for social economy enterprises adopting circular economy business models. We employ qualitative methodology to perform evaluation and action research. Our investigation comprised 30 semi-structured interviews with senior management of social economy enterprises and small and medium enterprises adopting or implementing circular economy business models in Belgium, particularly in the Brussels Capital Region (15) and Flanders (15). Our findings indicate considerable obstacles in adopting or implementing circular economy business models, encompassing capital, organisational capacities, technological constraints, and insufficient supportive policies. Notwithstanding these problems, social economy organisations and small and medium enterprises continue to perceive digitalisation as a facilitator and a rational progression towards a more circular economic business model. This research addresses the theory-practice gap, providing answers for enterprises and fostering more sustainable operations.

***Track 3.2 New business models in times of crisis: scaling resilient and sustainable local solutions for global challenges*****Scaling Resilient and Sustainable Local Solutions for Global Challenges Through Public Policy**

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This paper explores how local governments can foster civic wealth and long-term societal well-being by implementing strategic planning while addressing global challenges at the local level. It examines sustainable urban development policies in Bursa, Türkiye, focusing on the tourism industry and using a participatory action research approach. The research emphasizes the importance of sustainable development in urban areas, particularly in light of increasing urbanization, which causes challenges such as environmental degradation and social inequality. The study utilizes a development-first approach, which prioritizes the host community's needs, a well-being approach in public policy development, and civic wealth creation (CWC), which focuses on generating wealth that benefits local communities through multi-stakeholder collaboration. The longitudinal study conducted between 2022 and 2025 employs a mixed-methods approach, including field visits, surveys, workshops, and interviews. The study highlights the obstacles to implementing strategies for CWC, including the short-term focus of municipal governance, and emphasizes the importance of stakeholder engagement, integrative public policies, and multi-stakeholder coalitions in achieving long-term change in sustainable urban development. Developing processes of policy making and tools of strategic planning to overcome obstacles from the short-termism of the municipal governance systems is offered as a key ingredient of the new business models for addressing global challenges at the local level.

***Track 3.2 New business models in times of crisis: scaling resilient and sustainable local solutions for global challenges*****Scaling up Local Sustainable Innovations In The Energy Transition: A Business Model Perspective on Positive Energy Districts**

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In the transition towards a more sustainable modes of energy production and consumption in cities and urban environments, experimentation with Positive Energy Districts (PEDs) has increasingly become widespread across European cities, as part of the European Union's strategy for the energy transition, climate change mitigation, and carbon footprint reduction. In order to move from experimentation projects on PEDs across heterogeneous urban context in European cities, scaling up PEDs beyond these pilot settings towards mainstream application in the wider energy system is crucial for impact on the energy transition. The creation of viable business models for PEDs is crucial in their wider dissemination in the energy system, given that all current PED projects have been funded under the Horizon2020 program (EU, 2018). Taking the four pillars of PEDs into account (energy efficiency, renewable energy production, energy system flexibility, and electric mobility), this paper explores how firms strategically engage with urban stakeholders in experimentation projects for PEDs, and what type of commercially viable business models are emerging from participation in these projects to scale up PEDs in the wider European energy system. Hence, we take a firm-centric perspective on the upscaling of sustainable innovation from a business model perspective, and address how business models are emerging from local responses (local experimentation projects) to global issues (climate change, energy transition), taking PEDs and the European energy system as a research context.



### ***Track 3.2 New business models in times of crisis: scaling resilient and sustainable local solutions for global challenges***

#### **Developing Behaviour Change Techniques on Local Online Retailers to Encourage Sustainable Cargo Bike Delivery**

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The growth of e-commerce has instigated significant logistics challenges, with projections suggesting a notable rise in delivery vehicles by 2030. This development is accompanied by negative environmental externalities, including air and noise pollution, traffic congestion and greenhouse gas emissions. Particularly, the last-mile delivery segment accounts for a substantial portion of delivery CO<sub>2</sub> emissions. To date, supply-side solutions have primarily focused on adopting cleaner vehicles such as e-cargo bikes, whose commercial use has been steadily increasing – as they are virtually noiseless, zero-emission, and highly maneuverable. However, there is growing recognition of the need for aligned demand-side approaches that motivate consumers to choose sustainable delivery options (i.e., cargo bike delivery) when offered to them. Furthermore, enterprises that emphasize eco-attributes can potentially increase their competitive advantage. Thus, this research aims to develop novel behavior change techniques (BCTs) to encourage sustainable consumer delivery choices. Through an experimental webshop prototype simulator, this study will test consumer-facing BCTs easily adoptable by small businesses. Contributions include delving into the systematic process of developing novel BCTs according to intervention design methodologies that are accepted by all facets of the smart urban bicycle logistics ecosystem and consider the needs of citizens, logistics providers and online retailers. Additionally, insights are given concerning the development of a research-based webshop simulator for effective field testing in an online retail environment. Ultimately, the research seeks to promote local cargo bike courier services, nurture sustainable consumerism, and develop resilient business models that address contemporary social and market contexts while spurring local economic development.

***Track 3.2 New business models in times of crisis: scaling resilient and sustainable local solutions for global challenges*****Dynamic Capabilities For Sustainability: A 20-Year Systematic Literature Review**

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Researchers recognize the concept of dynamic capabilities for sustainability can help businesses respond to demands for improved sustainability performance. However, there is a lack of high-quality reviews of the research field as a whole. This research addresses this problem by performing a systematic literature review spanning 1997-2023. This article provides a bibliometric overview then gives insights into research gaps and themes by reviewing and coding the articles. These results demonstrate a variety of research contexts covering various industries, regions, and other areas. There is also ongoing conceptual confusion, with researchers using different definitions of dynamic capabilities and their microfoundations. This review contributes by: 1) identifying future research areas, 2) providing more clarity to ongoing research on dynamic capabilities for sustainability, and 3) methodologically, by outlining specific and improved steps on the literature review process to enhance replicability and to increase clarity about review limitations.

***Track 3.2 New business models in times of crisis: scaling resilient and sustainable local solutions for global challenges*****Business Models in Transition: Securing Rents or Embracing Eurointegration's Changes?**

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This study examines how Georgian wineries respond to eurointegration pressures through strategic responses and business model adaptations. Eurointegration presents both opportunities and risks, with compliance-driven strategies focusing on regulatory alignment to access EU markets, supported by investments in sustainability, certification, and quality improvements aimed at achieving long-term growth. In contrast, rent-protection strategies emphasize the preservation of autonomy and traditional practices to maintain short-term stability in established markets, particularly the Russian market, which accounts for 65 percent of Georgia's wine exports. Institutional theory is used to analyze how institutional pressures influence these responses. Transformation, however, is not linear or uniform, with many wineries adopting hybrid strategies that balance adaptation with the preservation of autonomy. Survey data identifies two distinct strategic clusters (strategic groups) - compliance-driven and rent-protection business models - showing that transformation progresses incrementally and is limited by institutional mistrust and weak engagement with eurointegration policies. The study concludes that targeted support mechanisms such as financial incentives and collaborative frameworks are necessary to promote sector-wide competitiveness and help wineries address eurointegration challenges more effectively.

***Track 3.2 New business models in times of crisis: scaling resilient and sustainable local solutions for global challenges*****New Wines Into New Skins: Learnings From Fifteen Years' Systemic Entrepreneurship**

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Much as modern civilisation has benefitted from the modern economy, it has root causes of the barriers now limiting otherwise excellent new business models for net zero, circularity, bioregionalism, etc. These lie deep in flawed assumptions in economics and business theory. These flawed assumptions have shaped how we incorporate, operate, and invest in firms. We will show that these structures and structured interactions are biased to deliver the outcomes we have today, regardless of the business model they contain. We discuss the complex, non-ergodic, path-dependent, multiplicative dynamics of all capitals, leading to typical outcomes differing from expectation values. We propose that creating an ecosystem of companies which goes beyond the traditional firm is necessary to transit to at least net zero, better net positive and will describe over a decade of learnings incorporating companies as a FairShares Commons, which transcends and includes the functionality of limited companies, multi-stakeholder cooperatives, and foundations. Such FairShares Commons companies have the necessary functionality to be regenerative ergodic business ecosystem ready, most importantly the collective ecosystem-wide profit pooling necessary to shift the growth dynamics towards ergodicity in order to reduce the losses caused by the non-ergodic growth of individual companies. Pooling also happens across other capitals, made robust by governance including future generations, nature, and society, and with processes to create, grow, and close companies. We describe how to address a key human barrier to change: lack of adaptive capacity to recognise and change hidden beliefs such as those pervading economics and business theory.

***Track 3.2 New business models in times of crisis: scaling resilient and sustainable local solutions for global challenges*****Corporate Volunteerism In Iceland's Disaster Risk Management As A Model For Shared Value Creation**

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Iceland's frequent exposure to natural hazards has shaped its Disaster Risk Management structure through principles of local-level risk management strategies. Much of this decentralised risk management is possible due to widespread volunteer participation in public safety non-governmental organisations. This paper explores the role of Icelandic companies that support their employees as search and rescue team volunteers without compromising their salaries when they are on rescue missions. This may provide a strong example of corporate volunteerism, where stakeholder and societal values shape the initiative, rather than pressures on corporate reputation influencing volunteerism programmes. This norm in Iceland is viewed in the context of Porter and Kramer's (2011) Shared Value Creation framework. It is suggested that companies that invest in their employees' volunteerism with search and rescue teams contribute to Shared Value Creation by creating value for the company, internal stakeholders, search and rescue teams, local communities, and the Icelandic government's efficacy in public safety. However, it may be challenged in the context of climate change and its potential impacts on natural hazards. Therefore, companies that take part in this corporate volunteerism model may have an opportunity to embed this strategy more formally into their core business alongside climate change mitigation strategies in order to contribute to improved Disaster Risk Management, public safety, and profit security. This may contribute to sustainable business models by strengthening a system that anticipates the needs of future stakeholders.

***Track 3.3 Measuring and managing the sustainability effects of business models*****Sustainable Business Model Innovation: Scale Development and Validation**

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Sustainable business model innovation (SBMI) has attracted considerable interest from scholars and business practitioners for its potential to advance sustainable development. Following numerous conceptual and qualitative case-based research on SBMI, scholars increasingly call for large-sample empirical quantitative studies to produce generalizable results. However, the lack of a comprehensively conceptualized, rigorously developed, and validated measurement scale of SBMI has impeded empirical quantitative studies in this domain. To address this gap, we conceptualize, develop, and validate a new SBMI scale through research conducted across five sub-studies. Drawing on two samples of 180 and 237 firms from the United States, we specified and assessed the scale, ultimately providing a hierarchical, three-level reflective-formative-formative model for measuring SBMI. We use thirty-four reflective indicators to measure nine first-order subdimensions of SBMI. These nine subdimensions combine into three second-order dimensions, which collectively form the overall SBMI construct. This study provides a foundation for advancing theory development and empirical research on SBMI by clarifying the SBMI construct clarity and establishing a psychometrically reliable and valid instrument for measuring SBMI.

### ***Track 3.3 Measuring and managing the sustainability effects of business models***

#### **The Use of LC-based Methodologies to Assess Circular Business Models**

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Circular business models (CBMs) represent a promising alternative to traditional linear production systems, allowing businesses to remain profitable while minimising environmental impacts. However, adopting a CBM does not automatically ensure improved environmental sustainability. While CBMs can encourage resource conservation and sustainable consumption, they may also result in rebound and backfire effects. As such, it is essential to thoroughly evaluate the environmental impacts of CBMs, with Life Cycle Assessment (LCA) being a commonly employed method for this purpose. To explore the issue, we reviewed 49 studies that utilised LCA to assess CBMs. The earliest study appeared in 2007, with consistent publications since 2014. Most studies are quantitative analyses, though some include literature reviews, meta-analyses, or qualitative approaches. LCA plays a key role, often used alone or in combination with life cycle costing (LCC) and other methodologies. Additionally, the business model LCA (BM-LCA method), which integrates LCA with economic performance as a baseline for comparison, has gained traction. These studies apply life cycle-based approaches for four purposes: evaluate the environmental impacts of individual CBMs, compare the environmental impacts of various linear business models (BMs) or CBMs, analyse transitions from BMs to CBMs, assess the environmental impacts when designing and implementing CBMs. The research spans all CBM types, with a particular emphasis on use-oriented and result-oriented product-service systems, as well as CBMs focused on extending product life, enhancing resource value, and fostering industrial symbiosis. Among the various sectors analysed, the electrical and electronic equipment and clothing industries are the most frequently studied.

### ***Track 3.3 Measuring and managing the sustainability effects of business models***

#### **Operational Framework For Integrated Sustainability Assessment Of Circular And Inclusive Initiatives: Focus On Circular Craft Centers**

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The circular economy emphasizes waste elimination, material circulation, and environmental regeneration. Urban grassroots circular economy initiatives, such as Circular Craft Centers (CCCs) in the Netherlands, play a crucial role but face resource and visibility challenges. The CCC network, established in 2019, encompasses 96 centers integrating thrift stores, recycling centers, repair services, educational activities and social employment. The objective of this research is to develop a comprehensive operational framework for the monitoring of CCCs as key enablers of the circular economy in urban areas. The specific objectives include analyzing current assessment methods, defining indicators and methodologies, developing a robust framework, and validating it through testing in two CCCs. The methodology follows a multi-step process: (1) literature and field research, (2) analysis of monitoring tools, (3) synthesis of key indicators and methodologies, and (4) framework testing. Preliminary results provide an operational framework incorporating all dimensions of sustainability, environmental (e.g., carbon footprint), and socio-economic (e.g., employment rates), as well as indicators of circularity (e.g., reuse rate), and inclusion (e.g., vulnerable group employment). Testing at two CCCs revealed key insights: one major center (CCC1) manages 2.3-2.4 million kg of waste/year, predominantly textiles (58-64%), with reuse as the main strategy (but 83-89% is exported). The smaller CCC2 specializes in wood repurposing (58%) and bike reuse and repair (30%). The operational framework ensures a comprehensive and systematic evaluation of CCCs, filling data gaps and supporting circular economy initiatives. Its adoption will enhance sustainability monitoring and serve as a model for similar urban initiatives.



### ***Track 3.3 Measuring and managing the sustainability effects of business models***

#### **Leveraging a Circularity Indicator to Ensure Sustainability in Circular Business Models - Enhancing Decision Support at the Fuzzy Frontend of Innovation**

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There is an inherent difficulty in adopting a life cycle perspective in early stage of innovation, since supply chains are undefined and information is not readily available. This is problematic, as decisions made during these early stages significantly influence the environmental impacts of products, services, and related business models. To address this challenge, we have explored the potential of the C-metric, an indicator intended to align well with the concept of circular business models. The C-metric is defined as the ratio of value retained from previous use cycles to the total employed value in a product. It is relatively quick to calculate for various scenarios and has shown strong correlations with lifecycle assessments for impact categories such as global warming potential and abiotic resource depletion. It resolves some of the suggestions in the circularity standard ISO 59020:2024 (en) (section 7.4). During the conference we expect to present our results from validating the metric for a specific industry (printed electronics) and in particular discuss the following future research topics: 1) What are the right parameters to determine the scope of validity of a circularity indicator for a specific industry? 2) Through which mechanisms do a well determined scope of validity increase the contribution to the circular transition? 3) Which industries and frontend of innovation cases would likely benefit the most from validation of indicators like the C-metric?

### ***Track 3.3 Measuring and managing the sustainability effects of business models***

#### **Assessing the Sustainability Performance and Impacts of New Business Models in the Craft Beer Sector: Lessons from Massachusetts**

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This presentation will provide empirical data about measuring the sustainability performance and impacts of new business models in the Massachusetts craft beer sector. It will share key findings from a recently launched BetterBev recognition program and related sustainability assessment tool which evaluates breweries' performance in eight categories of impact and provides quantitative scores and recommendations to participants. The research combined stakeholder perspective theory on value creation with systems theory of impact assessment to answer the following questions: How can sustainability performance and impacts of new business models be measured within a specific industry? What are the strengths and limitations of quantitative measures of sustainability performance and impact? How do companies use such performance measurement to refine their business models and achieve greater sustainability impacts? The work is based on a research project funded by the U.S. Environmental Protection Agency which involved 29 Massachusetts craft beer manufacturers. The study included site visits and assessments, interviews with founders and master brewers, online research and quantitative assessment of environmental performance, and impacts. The presentation will conclude with discussion of the need to increase industry knowledge and capacity, the role that technical assistance and recognition programs can play, and the challenges in measuring and managing the sustainability impacts of business models.

### ***Track 3.3 Measuring and managing the sustainability effects of business models***

#### **Qualitative Analysis of the Application of BM-LCA in the Evaluation of Business Models for Renewable Energy Communities**

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This study explores the application of Business Model Life Cycle Assessment (BM-LCA) to evaluate the environmental performance of Renewable Energy Communities (RECs), using the Hitzar REC located in Gipuzkoa (Basque Country, Spain), as a real case study. A novel integration of a Sustainable Business Model Canvas is proposed to enhance the methodology by incorporating a preliminary qualitative assessment of governance and sustainability aspects along with the traditional business model considerations. The analysis focuses on defining a clear value proposition, evaluating environmental and economic flows, and identifying strengths and challenges in the application of BM-LCA to the evaluation of RECs, which has also proven to be a useful tool for systematically identifying the key elements that must be understood when analyzing business models. The study demonstrates how BM-LCA links material and financial flows to sustainability outcomes, enabling informed decision-making processes and contributing to the development of sustainable energy solutions. Additionally, the study highlights the importance of tailoring BM-LCA to address the unique characteristics of RECs, such as their community-oriented governance and dependence on external technical and financial support. These aspects underscore the need for methodological adaptations to better capture the social and economic dimensions of these initiatives. Future work will expand on this framework through the quantitative application of BM-LCA to compare BM configurations and energy management scenarios of different REC models, contributing to the sustainable energy transition.

***Track 3.3 Measuring and managing the sustainability effects of business models*****A Conceptual Triple Bottom-Line Framework for Assessing Wind Turbine Blade End-of-Life Business Models and Value Chains**

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Approximately 43 million tonnes of wind turbine blade (WTB) waste will accumulate worldwide by 2050, with Europe accounting for about 11 million tonnes. Given this substantial volume, it is crucial to develop and analyse WTB End-of-Life (EoL) value chains to optimize recycling processes and identify bottlenecks that hinder material recovery, economic feasibility, and large-scale implementation. This study presents a conceptual framework for comparing WTB EoL value chains from a triple bottom-line (TBL) perspective. The framework adopts a top-down approach, ensuring that macro-level system-wide insights guide meso-level stakeholder interactions and micro-level process efficiencies. This structured approach enables a comprehensive assessment of how different recycling strategies align with long-term sustainability goals, policy constraints, and economic feasibility. The framework is applied to conduct a comparative analysis of Closed-Loop Recycling (CLR) and Open-Loop Recycling (OLR) systems for residual WTBs. CLR achieves higher material recovery rates and landfill diversion by reintegrating high-quality fibers into WTB production but requires higher capital investment and energy consumption. OLR is more accessible, with lower initial costs and energy use, but produces lower-quality materials for secondary markets, limiting long-term circularity. Using stochastic methods, the framework accounts for uncertainty in material composition, market demand, and policy shifts, offering robust comparisons of EoL strategies. The results provide actionable insights for optimizing recycling technologies, improving resource efficiency, and advancing circular economy principles in WTB waste management.



*Global Challenges – local response:  
Scaling up local sustainability innovations  
and business models to address the SDGs*



THEME 4  
EXPLORING THEORETICAL AND  
METHODOLOGICAL FOUNDATIONS



## EXPLORING THEORETICAL AND METHODOLOGICAL FOUNDATIONS

### ***Track 4.1 New theoretical foundations of business models for sustainability***

#### **Rethinking Business Models for Sustainability**

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Although all businesses make various impacts, business models for sustainability (BMfS) are distinguished to have extra goals or missions of social/environmental impact in addition to profit, unlike the conventional counterparts that focus solely on profit. While this approach is appealing given the widely practiced shareholder primacy norm around the world, it poses critical challenges to achieving the ultimate goal of BMfS—for all businesses to partake in making the world more long-lasting in regenerative conditions. This study aims to explore two challenges, utilising two theoretical lenses. The challenge about the lack of action on sustainability is explored through North's (1993) credible commitment theory to explain how businesses can genuinely commit to making profit-generating activities enable meaningful social and environmental impact. To address the challenge about the negative reputation of profit, Herzberg's (1968) two-factor theory is applied to argue that profit is a fundamental necessity to all businesses and is a separate dimension in BMfS that is different from, not contrary to, social/environmental impact. This repositioning of profit can help reconcile the perceived duality of profit versus social/environmental mission that constrains the existing theories and models. Further, it can facilitate embedding financial accountability into BMfS, enabling business accountability to become more comprehensive. By examining the overlooked challenges of BMfS through two theoretical lenses, this study seeks to contribute to the growing body of research on BMfS. This exploration can foster the development of more innovative logics, paradigms, frameworks, and theories, leading to truly novel and impactful BMfS toward a better world.

***Track 4.1 New theoretical foundations of business models for sustainability*****The Fragmentation in Sustainable Business Model Literature: Toward a Collaborative and Holistic Paradigm**

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The literature on sustainable business models (SBMs) is fragmented, with diverse frameworks like circular business models, the triple bottom line, and resource efficiency emphasizing isolated dimensions of sustainability. While these approaches provide valuable insights, they often fail to address the interconnected and systemic nature of sustainability challenges, limiting their capacity to achieve absolute sustainability. This paper explores the shortcomings of such fragmented perspectives and advocates for a collaborative and holistic SBM paradigm rooted in systemic thinking. A systematic literature review was conducted, analyzing peer-reviewed studies from the past two decades. Findings reveal that existing SBM approaches predominantly focus on relative sustainability, which prioritizes incremental improvements within existing paradigms. In contrast, holistic SBMs emphasize the integration of economic, environmental, and social dimensions, fostering systemic value creation aligned with the principles of absolute sustainability. Collaboration among stakeholders across industries and sectors is identified as a critical enabler for aligning diverse interests and addressing complex socio-ecological challenges. This paper underscores the need for integrative SBM frameworks that transcend isolated interventions. By adopting a holistic approach, SBMs can contribute to long-term resilience and systemic transformation, addressing pressing sustainability challenges and paving the way for sustainable development on a global scale.

***Track 4.1 New theoretical foundations of business models for sustainability*****Regenerative Business Models: A Conceptual Framework**

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The current economic system is degenerative, exploiting people and the environment through unsustainable practices, which has significantly weakened the planet's regenerative capacity. With six planetary boundaries now exceeded, businesses need to move beyond sustainability toward regenerative business models. Unlike sustainability, which focuses on minimizing harm and maintaining balance, regenerative business models seek to create net-positive impacts by actively improving planetary health and societal well-being. Originally rooted in biology, the concept of regeneration remains underexplored in the context of business models. The fundamental components, principles, and characteristics of regenerative business models are still undefined. Although an increasing number of companies have established regenerative strategies, it is unclear if truly regenerative business models exist. This paper aims to address this gap by integrating concepts from multiple disciplines to develop an initial conceptual framework of value exchange systems for regenerative business models. This paper argues that regenerative business models require value exchange activities that generate net-positive impacts on the firm and stakeholders (including the natural environment and society), and leave the planet, society and economy system healthier over time. The framework introduces two new components, i.e., value enhancement and value replenishment, as important activities for value regeneration. The framework suggests that a regenerative business model describes a firm's value proposition, how the firm creates and delivers value for its stakeholders in a way that continuously enhances stakeholders' well-being, and how the firm captures value from its stakeholders in a way that replenishes firm's resources and capabilities to improve planetary and social health.



***Track 4.1 New theoretical foundations of business models for sustainability*****Strong Sustainability for Circular Economy Models: Capturing and Harmonizing Transdisciplinary Approaches**

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The current economic system struggles to integrate sustainability effectively into business models. Traditional circular economy (CE) frameworks often focus on weak sustainability (WS), addressing isolated goals like recycling rather than considering the deep interconnections between ecological, social, and economic systems. Strong sustainability (SS), in contrast, recognizes the irreplaceability of natural capital and promotes a holistic, systemic approach. Many CE frameworks prioritize technical solutions, such as recycling or redesign, but fail to incorporate social and environmental dimensions. Local contexts are crucial, especially for resources like food waste, which require strong territorial relationships. Misaligned CE models risk reinforcing unsustainable global practices, such as dependence on waste generation and the misuse of edible resources for non-food purposes. SS calls for transdisciplinary collaboration, integrating engineering, economics, and social sciences to ensure sustainable value creation and systemic alignment. Moreover, it helps to better link the firm level to the systemic level and offer holistic interconnection. We aligned this via a systemic literature review of both systemic articles and case studies spanning a variety of disciplines and sectors. Our proposed framework helps transition CE models from WS to SS by addressing systemic complexities, guiding long-term outcomes, clarifying value implications, and fostering transdisciplinary cooperation. By expanding sustainability beyond environmental performance to include social equity and economic resilience, it offers practical steps for businesses to align firm-level actions with global sustainability goals. While perfect sustainability is unattainable, this approach provides a foundation for more sustainable business practices. Further research is needed to bridge theoretical insights with real-world applications.

**Track 4.1 New theoretical foundations of business models for sustainability****Enhancing Sustainable Food Business Models: Integrating Personal Values Into The Value Proposition Canvas Using The Laddering Technique.**

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Addressing global sustainability challenges, particularly in food consumption, requires transformative behaviour change. Although the ecological urgency of adopting sustainable alternatives is widely acknowledged, shifts in eating behaviour remain limited. Research identifies personal values as key drivers of food choices, yet these are often overlooked in business model design and communication strategies. This study integrates psychological insights into the Value Proposition Canvas (VPC) to align product USPs with consumers' intrinsic motivations, supporting sustainable transitions. Two methodologies were compared: focus groups and laddering interviews. Participants, recruited from Fontys campuses, were flexitarians. Two themes—meat alternatives and sports nutrition—were explored, with preliminary findings presented for meat alternatives. Transcripts were thematically analysed, coded manually using Schwartz's value scheme, and validated with ChatGPT. The findings revealed distinct value patterns: focus groups emphasised Universalism and Hedonism (sustainability and sensory enjoyment), while laddering interviews highlighted Security (health) and Tradition (cultural continuity). These differing insights led to contrasting USPs. The first USP, based on focus group input, stresses ethical alignment and taste: "Delivering ethical, delicious, and convenient meat alternatives that align with your values, elevate your dining experience, and support a sustainable future." The second USP, drawn from laddering interviews, focuses on health and tradition: "Our product offers a healthier, fresher alternative rooted in tradition, while respecting ethical values and contributing to a sustainable future—all without compromising on taste." This research highlights the value of integrating personal motivations into value proposition design, offering a scalable approach to developing value-centric strategies for sustainable business model innovation.

***Track 4.1 New theoretical foundations of business models for sustainability*****Individual-Level Paradoxes in Business Models for Sustainability. An Adapted Model of Tensions in Stakeholders Engagement**

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This study explores the role of individual-level paradoxes in creating tensions that challenge the innovation of sustainable business models. Drawing on the taxonomy of paradoxes (learning, belonging, organizing, and performing), we adapt these concepts to analyze stakeholder dynamics at the individual level. Stakeholders often display conflicting demands within groups or as individuals, where expected values and preferences clash with actual behaviors, exemplified by phenomena like the intention-behavior gap. These tensions complicate the alignment of individual stakeholder expectations with sustainability goals, affecting the design and effectiveness of sustainable business models. The proposed framework identifies two types of paradoxes: intergroup tensions, where conflicting demands arise between stakeholder individuals, and intraindividual paradoxes, where individual stakeholders themselves generate contradictory expectations. For instance, consumers may advocate for ethical products but prioritize cost-saving alternatives, while managers often face a sustainability-related intention-action gap, deviating from desired corporate goals. By examining these paradoxes, we demonstrate how they hinder the development and implementation of sustainable business practices. However, rather than resolving these tensions, sustainable business models can embrace them to create innovative solutions and build long-term organizational resilience. This research provides theoretical insights and practical implications for businesses seeking to navigate the complex landscape of stakeholder expectations while fostering sustainable development.

***Track 4.1 New theoretical foundations of business models for sustainability*****What Underpins New Business Models? A New Theory to Explain the Ascendancy of User and Open Innovation**

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While not an intrinsic requirement, new business models are often characterised by a greater reliance – sometimes at their very core – on Open Innovation and User Innovation. While Open and User Innovation was for many decades an exception to the ‘rule’ of innovation as produced by the R&D of (large) firms, its growing prevalence – to the point that it can be argued that it has in more and more cases become ‘the rule’ – calls into question the dominant ‘Schumpeterian’ paradigm of innovation. Since an innovation regime is necessarily embedded in a particular technological regime and economic system, rethinking the former requires reexamining the two latter. The aim of this paper is to demonstrate how the advent and ubiquity of digital technologies have led to a radical shift of technological regime, which has led to two fundamental trends of prosumerisation and platformisation, hereby indicating a transition for the industrial age to a new digital age, characterised by a new economic system – social capitalism. To this new era correspond a new innovation paradigm such that Open and User Innovation, no longer an exception, has become the rule, and business model innovation – and hence the need for New Business Models – has become the most critical form of innovation. This paper examines further consequences of this shift: ‘low tech’ disruption, the ascendancy of business model innovation over technological innovation, and the place of ‘traditional’ firms in this new era.

***Track 4.1 New theoretical foundations of business models for sustainability*****Scrutinizing Street Vendor Inclusion and Sustainability: A Case Study of the Inclusive Business 2SCALE-Yedent Partnership in Ghana**

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Street vending is a major source of informal livelihood for many people worldwide. International organisations, governments, and NGOs deploy inclusive business initiatives to include marginalised groups like street vendors in formal value chains. Such sustainable business models are typically implemented through cross-sector collaboration. Although there is increasing insight in the governance dynamics of collaboratively implemented sustainable business models, there is room for critical scrutiny of these dynamics vis-à-vis sustainability performance. This research explores the 2SCALE-Yedent partnership in Ghana, an inclusive business initiative to include street vendors in the soybean agribusiness value chain, implemented between 2012 and 2017. The study utilises the Terms of Inclusion Framework, developed for smallholder farmers, to study the distribution of voice, ownership, risk, and rewards among vendors and other value chain actors. Through document analysis and interviews, it analyses the terms of inclusion during project implementation and after project termination to scrutinise the temporal evolvement of their inclusion and assess the sustainability of social impact. It furthermore explores organisational logics of collaborative initiatives that informed inclusion of street vendors over time. The findings show critical gaps in ensuring sustainable and long-term inclusion. The limited involvement of street vendors in key decision-making processes, coupled with challenges with accessing sustained funding, credit, and market fluctuations, relegated them to passive actors; hence, they were unable to negotiate for better terms. Yedent prioritised its business interests above the partnership's inclusive benefits, thereby undermining the set objectives of the partnership. As such the business model failed to adapt to their realities.

***Track 4.1 New theoretical foundations of business models for sustainability*****Advancing Circular Business Models for Sustainability: Addressing Theoretical Gaps and Underexplored Dimensions**

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The Circular Economy has emerged as a transformative model for addressing sustainability challenges, shifting from linear to regenerative systems. Central to this transition are Circular Business Models (CBMs), which embed circular economy principles into business operations. While CBMs have gained traction in practice, their theoretical development remains fragmented, limiting their potential to drive sustainability transitions effectively. This study conducts a systematic review of reviews on CBM research to identify theoretical gaps, underexplored dimensions, and key opportunities for advancement. Through an analysis of 45 scholarly review articles, this study identifies theoretical shortcomings in CBM research, including fragmented frameworks, inadequate attention to dynamic and temporal aspects, and unresolved tensions between economic and environmental objectives. Additionally, it highlights unaddressed dimensions critical for CBM development, such as social equity, governance and policy alignment, multi-level integration, and sectoral/geographic diversity, underscoring the need for a more comprehensive and interdisciplinary approach to CBM theory.

***Track 4.1 New theoretical foundations of business models for sustainability*****Beyond the Business Model Canvas - A Puzzle-Based Approach to Circular Business Model Innovation**

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Achieving a circular economy (CE) requires a fundamental shift in business models, moving beyond incremental adaptations to systemic transformation. This paper addresses key gaps in Circular Business Model Innovation (CBMI) tools in an adaptation of Osterwalder's Business Model Canvas (BMC), which in its original form lacks the complexity required for sustainable and circular transitions. Through an iterative DSR methodology with practitioners we develop an enhanced CBMI framework that integrates a multi-stakeholder, value chain perspective, ensuring a more holistic approach to circularity. Our key advancements include: (1) Expanding the value proposition beyond direct customers to capture all key stakeholders in the value chain; (2) Mapping sustainability drivers to align internal and external forces shaping circular transitions; (3) Redefining business relationships by introducing an Engagement & Exchange component to clarify value distribution and power dynamics; (4) Recognizing strategic influence by identifying key actors who drive systemic change; and (5) Introducing a modular, dynamic approach, replacing the static BMC with a value chain puzzle that fosters flexibility and iterative CBMI experimentation. By shifting the focus from isolated business model components to a holistic, ecosystem-driven perspective, this framework enables companies to develop circular strategies that are both sustainable and economically viable. It ensures strategic alignment between value chain partners, reducing risks and maximizing long-term impact. Ultimately, circularity requires collective transformation rather than isolated firm-level efforts. Our proposed framework offers a practical and adaptable tool for organizations seeking to design, test, and scale CBMs that align with systemic sustainability goals.

***Track 4.1 New theoretical foundations of business models for sustainability*****Systemic Perspective in Patterns for Business Models for Circular Economy – Review and Ontology**

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Scarce resources force companies to operate more sustainably, making the transition from a linear to a Circular Economy (CE) essential. Beyond new technologies and products, Business Models for CE (BMfCE) are key to this shift, emphasizing extended product life cycles and reduced resource use. A CE results from the collaboration among multiple stakeholders and their interdependent BMfCE. However, implementing BMfCE faces barriers, notably a lack of structured support for their development. Researchers and practitioners have developed pattern-based approaches to support the design of BMs in general and BMfCE in specific through the generalization and reuse of proven solutions. The collaborative nature of CE requires decision-makers to adopt a systemic perspective when designing their BMfCE embedded within a CE. We conduct a systematic literature review analyzing to what extent pattern-based approaches consider such systemic perspective. Our findings reveal that existing approaches address different levels of analysis, offering patterns for individual value dimensions, entire BMs, or supply chain configurations. While some consider stakeholders or ecosystems, none focus on BMfCE interdependencies or their embedded nature within a CE. We propose a conceptual multi-level, multi-perspective ontology that embeds patterns for BMfCE in a systemic context considering interdependencies between them. This paper contributes theoretically and practically to the use of patterns in the design of BMfCE.



**Track 4.1 New theoretical foundations of business models for sustainability****The Role of (PaaS) Business Models in Sustainability Transitions: Insights from the PROSPERITY Project**

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This paper explores the role of Product-as-a-Service (PaaS) business models in sustainability transitions, drawing insights from the PROSPERITY project. The project draws inspiration from recent scholarly work outlining ways in which business models influence sociotechnical change, highlighting a role as a catalyst for innovation through sustainable value creation, warranting consideration for business models in governance frameworks. The first phase of the project comprised a systematic review of quantitative lifecycle assessments of PaaS models to evaluate their climatic impacts, particularly in alignment with Tukker's (2004) claim that PaaS models could reduce environmental impacts by up to 90%. Findings reveal that while some result-oriented services achieve this reduction, outcomes vary due to use-phase factors such as transportation, maintenance, and utilisation. Many studies rely on uncertain assumptions about user behaviour, underscoring the need for qualitative research. A second phase investigated consumer preferences for PaaS models via choice experiments on products such as robotic vacuum cleaners and wool coats, conducted across Sweden and the Netherlands. Results indicate national and socio-economic variations in willingness to adopt PaaS, with Swedes showing higher preference for access-based models than the Dutch. Preferences also varied regarding payment models, material quality, and refurbishment levels. Finally, the study examines how PaaS models shape consumer practices through social practice theory, suggesting that business model innovation can transform user behaviors, focusing on access-based parenting. Taken together, these findings highlight PaaS as a key enabler of circular economy strategies, but emphasise the need for further research on behavioral and user perspectives.

***Track 4.1 New theoretical foundations of business models for sustainability*****Towards Extended Circular Business models: By integrating transition, business model innovation and network perspectives**

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In order to accomplish a circular economy, the focus shifts to shaping our economies from linear supply chains to circular ecosystems of reciprocal production and consumption by a complex value web of actors, aiming at positive social, environmental and economic impacts. Current theories on new business models are strongly focused on sub-optimization of the sustainability problem and too much limited to a company and its network and customers, and very, if not at all, limited to the raw materials problem. In addition, the relationship to the transition theory is not sufficiently made (Freudenreich et al., 2020. Schaltegger et al., 2022). The research question is on which aspects or knowledge should the New Business Model theory be adapted or supplemented in order to better align with practice, possible policy requirements, including the transition theory. The methodology is based on matching the theories of business and ecosystem modeling and we match these on four levels; Circular Economics Policies, real world practice trends and questions, the transition theory and EU-green competences conceptual reference model with nowadays theories on eco-system and business models. To come to conclusions a special aspect and an example of the specific knowledge is logistical management, focussing on raw material as the product and process design. At the end we state that the current new Business model theories should position themselves first as a 'step' towards an eventual future or business model theory or in other words as a 'step' in a transition.

***Track 4.2 Transitioning business models towards sustainability through finances*****The Relationship between Sustainable Finance and Sustainable Business Models**

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**Purpose:** In this paper, we are primarily interested in looking at the relationship between firm financing and business models with a specific focus on sustainability. The research question is: What is the relationship between sustainable finance and sustainable business models in the literature? **Research Design/Methodology:** Employ the systematic literature process as outlined by Tranfield et al. (2003) of three basic stages: planning (identifying the need), conducting the review (selection of studies and synthesizing the data), and reporting (applying the findings into recommendations). We further leveraged approaches by Cooper (1988) and Basias and Pollalis (2018) to consider six significant characteristics – focus, goals, perspective, coverage, organization, and audience – throughout our research process. **Results:** The aim is to uncover how literature within sustainable finance and, separately, sustainable business models references and relates to one another. The intended result is that the two help strengthen one another—i.e., a company has a better chance attracting sustainable finance with a sustainable business model, and vice versa, a company has a more sustainable business model when it is financed using sustainable instruments.

***Track 4.2 Transitioning business models towards sustainability through finances*****The Impact of Preserving, Adjusting or Transforming The Boundaries of Sustainable Banking Business Models Through Boundary Work**

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The wave of sustainability regulations has placed significant pressure on the banking sector to integrate sustainability into its operations. This study examines how three Danish banks respond to these pressures, focusing on boundary work's role in reshaping sustainable business models. Based on 24 interviews, the findings identify regulatory frameworks as boundary conditions that compel banks to engage in boundary work to align internal processes, customer relationships, and competencies with sustainability requirements. The tensions between traditional practices and sustainability objectives leads to different Boundary work approaches where banks attempt to adjust knowledge, competencies, and organizational boundaries by preserving, adjusting, or transforming their business models. The study reveals that while shifts in sustainability regulations can ripple through internal resources and customer interactions, these impacts are insufficient to drive transformational change. Many banks remain in a state of status quo, i.e., no major innovations to their business models. This limits the sector's potential to mainstream sustainability and meet the growing demands of regulations and stakeholders.

***Track 4.2 Transitioning business models towards sustainability through finances*****Influence of Institutional Investors on Corporate Decision-Making**Wendt, Stefan<sup>1</sup>; Sigurjonsson, Throstur Olaf<sup>2</sup>

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The aim of this paper is to answer the question of whether and how institutional investors influence the decision-making of the companies they invest in. The focus is on institutional investors such as pension funds, banks, investment funds, and insurance companies. Additionally, the perception of institutional investors themselves regarding other stakeholders who may influence corporate decision-making is examined. Within corporate governance, there has been considerable academic debate about the involvement of different stakeholders in corporate operations, with stakeholder theory being a prominent perspective. However, less research has been conducted on how shareholders influence corporate decision-making and what aspects they affect. Among shareholders, institutional investors have become an increasing group of company owners, yet their activism and involvement in decision-making remain relatively unknown. An online survey was conducted among Icelandic institutional investors to explore their attitudes towards their own shareholder activism, that of other institutional investors, and the stakeholders most involved in corporate decision-making. The research is particularly interesting as institutional investors may have previously unrecognized effects on corporate decision-making. The main findings indicate that institutional investors relatively rarely interact with CEOs, CFOs, and boards of directors of the companies they invest in. They primarily contact board chairpersons when necessary. Institutional investors seek greater influence over decisions related to sustainability, executive compensation policies, and board member selection.

***Track 4.2 Transitioning business models towards sustainability through finances*****Interdisciplinary Approaches to Integrating ESG Practices for Sustainable Business Innovation and Growth Evidence from Europe**

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The integration of Environmental, Social, and Governance (ESG) principles into business models has become a fundamental aspect of corporate sustainability and economic resilience. This paper explores interdisciplinary approaches to ESG adoption across Europe, emphasizing the role of ecosystems of actors, including businesses, financial institutions, policymakers, and academia, in overcoming barriers such as data inconsistencies, regulatory challenges, and financing gaps. By synthesizing empirical evidence from European case studies and peer-reviewed literature, the study identifies scalable ESG business models that align with the UN Sustainable Development Goals (SDGs). Initial findings indicate that cross-sector collaboration accelerates ESG adoption, particularly in regions with strong regulatory frameworks and financial incentives. Austria's renewable energy and green finance sector, Poland's cooperative banking and corporate sustainability initiatives and Cyprus's sustainable tourism and blue economy initiatives illustrate successful ESG implementation across diverse economic landscapes. Key recommendations include the establishment of EU-wide standardized ESG metrics, the promotion of financial instruments like green bonds and sustainability-linked loans, and the strengthening of stakeholder engagement strategies to drive ESG adoption at scale. The research highlights the need for longitudinal studies to assess the financial and operational impacts of ESG integration over time and calls for comparative analyses with global ESG models beyond Europe. By addressing these critical areas, the study contributes to the discourse on sustainable business model innovation and provides actionable frameworks for policymakers and industry leaders.

***Track 4.2 Transitioning business models towards sustainability through finances*****Accounting And Reporting Adjustments For A Circular Construction Economy**

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The Dutch government aims to transform the linear economy into a sustainable, fully circular economy by 2050. However, current accounting and reporting guidelines are based on principles in a linear economy, making it difficult for organisations to capture the value and impact of circular initiatives. The aim of this study is to explore the adjustments in accounting and reporting guidelines that can facilitate the transition towards a circular construction economy. This study analyses the findings of finance graduates who participated in the Living Lab “Circular Accounting in the Building Sector” to identify potential adjustments. Preliminary findings of this study show the need for consensus on the definition of circularity so that all parties within the construction chain can work effectively with this concept. In addition, negative and positive social and environmental effects must be included in financial calculations to show a product’s or construction project’s true impact. Lastly, it is important to systematic collect and report primary, project-specific data to support more accurate and reliable assessments of circular performance.

***Track 4.2 Transitioning business models towards sustainability through finances*****Why Circular Startups Fail: The Role Of Funding Amid Other Causes Of Death**

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Circular startups are essential for transitioning to a circular economy by disrupting traditional markets. However, like any other startup, circular startups face a high failure rate, with approximately 90% not surviving the first three years. The success or failure of a startup is rarely attributed to a single factor; instead, it results from a combination of various elements, which can stem from the actions of the entrepreneur or external challenges beyond their control. While many studies examine general startup failures, there is a limited understanding of why circular startups fail. This study aims to identify the key factors that hinder the development of circular startups and to analyse these factors based on specific types of circular business models, highlighting the critical need for funding and resource access. This paper contributes to the literature on circular business models by examining the experiences of circular entrepreneurs who have faced failure. Understanding these failures can be beneficial not only for current and aspiring entrepreneurs but also for advisors, investors, and the wider community. Each failure represents more than just a closed company; it signifies frustration and wasted resources that affect society as a whole. This study will adopt a mixed-method approach, combining semi-structured interviews with a survey of entrepreneurs. Furthermore, we will conduct a Fuzzy-Set Qualitative Comparative Analysis (FSQCA). We hypothesise that the findings may vary according to the different types of circular business models, as each model focuses on distinct phases and presents unique challenges that can lead to failure.



## ***Track 4.2 Transitioning business models towards sustainability through finances***

### **Financing in social entrepreneurship: Insights from the Global Entrepreneurship Monitor**

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This article studies the effect of different types of financing on the decision to become a social entrepreneur using multilevel models and considering data from the GEM 2015, both from the Adult Population Survey (APS) and the National Expert Survey (NES). The cross-sectional data allowed us to investigate the effect that different types of financing have on the probability of becoming a social entrepreneur. We found that obtaining financing from a boss or a coworker has a greater impact than seeking financing from a private investor. Similarly, crowdfunding is one of the forms of financing that increases the probability of becoming a social entrepreneur, although to a lesser extent than the one previously mentioned. Additionally, it was found that if the entrepreneur receives or expects to receive money to start the business, the probability of becoming a social entrepreneur increases, while a greater contribution of personal resources to start the business decreases this probability.

***Track 4.2 Transitioning business models towards sustainability through finances*****Managerial Response to Changing Investor Temporal Preferences: Evidence from US Oil and Gas' Renewable Energy Innovation**

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This paper leverages real-options signaling theory to examine how investor temporal preferences affect firms' intertemporal strategies toward renewable energy innovation. Furthermore, I explore how information asymmetry and firm heterogeneity moderate such investor-induced firm strategies. I test my predictions using the emergence of renewable energy innovation in the U.S. Oil and Gas industry during 1980-2018. I find causal evidence that firms adjust their types of investments in renewable energy to align with the changing investor temporal preferences. Notably, the intensity of this observed effect is contingent upon the information asymmetry between firms and investors and a myriad of firm heterogeneities. Finally, I find evidence that firms' alignment to investor temporal preferences and the impacts of information asymmetry enhance firms' performance outcomes of their renewable energy innovations.

***Track 4.3 Actor engagement in sustainable (circular) business model innovation through design thinking and other practices*****Living Labs As Catalysts For Circular Business Innovation: A Combined Systematic Literature And Practice Review**

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As global economies face increasing sustainability challenges, the circular economy has gained traction as an alternative to the linear “take-make-dispose” model. Circular business innovations aiming to design out waste and regenerate natural systems are pivotal for this transition. Living Labs (LLs) have emerged as experimental arenas and a new way in which circular innovations can be tested and refined. By embedding experimentation in real-world settings, LLs enable stakeholders, including businesses, researchers, and policymakers, to co-create solutions and address socio-technical challenges. This paper conducts a systematic literature review to critically examine the role of living labs in advancing circular business model innovations. Following the PRISMA protocol, we identified the list of relevant literature and practices to explore the contribution of LLs to circular transitions. Our findings aim to clarify the linkage between living labs and circular innovations, highlighting the potential for living labs to serve as co-creation and policy experimentation platforms. This review offers a foundation for future research and offers suggestions for how policymakers can employ LLs as strategic tools for facilitating circular transitions.

### ***Track 4.3 Actor engagement in sustainable (circular) business model innovation through design thinking and other practices***

#### **From Sea to Sustainability: Transitioning the Blue Bioeconomy through Responsible Design Thinking and the Sustainable Business Model Canvas**

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The transition to sustainability requires innovative approaches that address the complex interplay between ecological, social, and economic challenges. The blue bioeconomy, encompassing industries such as fisheries, aquaculture, and algae cultivation, holds significant potential for advancing sustainability transitions. However, the sector faces persistent issues, including resource depletion, habitat degradation, and socio-economic disparities in coastal communities. Circular economy principles offer a pathway to tackle these challenges by reducing waste, enhancing resource efficiency, and promoting regenerative practices. This study explores how Responsible Design Thinking (RDT) and visual tools like the Sustainable Business Model Canvas (SBMC) can facilitate the development of actionable, context-sensitive circular business models in the blue bioeconomy. Using the Horizon Europe BlueRev project as a case study, the research examines how these methodologies support stakeholder engagement and systemic sustainability transitions. The findings reveal four key mechanisms enabled by the integration of RDT and SBMC: (i) translating abstract sustainability concepts into concrete solutions, (ii) enhancing stakeholder ownership and accountability, (iii) aligning global sustainability goals with local realities, and (iv) driving systemic innovation through collaborative design processes. These insights contribute to a deeper understanding of co-creation methodologies and their role in fostering sustainability transitions within the blue bioeconomy, offering practical implications for policymakers, businesses, and researchers working toward circular and regenerative economic models.

***Track 4.3 Actor engagement in sustainable (circular) business model innovation through design thinking and other practices*****Actor Engagement in Circular Society Innovations: Leveraging Design Thinking for Sustainable and Equitable Practices**

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The societal implications of circular economy initiatives, particularly regarding social equity and justice, human well-being, and employment, remain poorly understood and often overlooked (Ashton et al., 2022; Kircherr, 2021; Mies and Gold, 2021). There is a growing need to understand societal actors' roles in driving a "profound social-ecological" transformation towards a 'circular society' (Jaeger-Erben et al., 2021 p.1). This research investigates how design thinking fosters collaboration among diverse stakeholders to co-create sustainable, equitable, and place-based practices. Using Greater Manchester as a test bed, the study examines participatory approaches rooted in design thinking—such as storytelling and co-production (Ansell and Torfing, 2021; Dell'Era et al., 2020)—that foreground social objectives like justice, inclusivity, and community well-being. Central to the project is the concept of 'Circular Society Innovations (CSI),' where social equity, ecological regeneration, and economic resilience are embedded within initiatives. Case studies such as The Boiler House, Manchester Urban Diggers, and the Renew Hub highlight how locally grounded CSI are shaped by—and shape—the cultural, historical, and social contexts of their places. Through the establishment of a Knowledge Action Network (KAN), the project translates findings into actionable strategies for policymakers, practitioners, and communities. This research underscores the role of design thinking in fostering collaboration and amplifying grassroots efforts, advancing CSI that reflect the aspirations and capacities of the communities they serve. By emphasising place-based approaches, this work provides a framework for addressing societal challenges and driving just transitions to sustainable economies.

***Track 4.3 Actor engagement in sustainable (circular) business model innovation through design thinking and other practices*****From Production to Reuse: Waste Analysis in a Street Market in Northeast Brazil**

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Street markets, one of the oldest forms of commerce, represent an invaluable cultural and economic heritage. These traditional spaces promote the sale of local products, significantly contributing to the regional and local economy by offering consumers greater variety and accessibility while generating income and employment. However, environmental degradation in urban areas has worsened due to improper waste disposal, particularly in regions such as the Submédio Vale do São Francisco and Petrolina-PE. Street markets are significant generators of organic waste, and inadequate management of these materials exacerbates urban environmental challenges, including soil and water contamination. This research aimed to analyze the generation and disposal of organic waste from the sale of fruits, vegetables, and greens in Petrolina-PE's street markets, with the goal of better understanding the dynamics of waste management and providing a basis for future sustainable business models that can transform these residues into valuable resources within the circular economy. The methodology included a bibliographic review, semi-structured interviews with market administrators, and on-site observations of storage, handling, and market infrastructure. Findings show that the Areia Branca Street Market produces 24,000 to 27,000 kg of organic waste weekly, yet lacks an effective waste management system. Solutions such as composting and biochar offer viable alternatives to reduce environmental impacts, but further exploration is needed to address existing implementation challenges. The valorization of organic waste can foster sustainable businesses, promoting recycling, reducing waste, and strengthening the circular economy to create environmentally responsible markets.

***Track 4.3 Actor engagement in sustainable (circular) business model innovation through design thinking and other practices*****Power Relations in Value Co-creation: Insights from the Finnish Forest-Based Sector**

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Firms need to collaborate with diverse societal actors to create value to both companies and their stakeholders. Collaborative business models are featured by elements of inclusivity, sustainable value co-creation and multi-actor approaches, and are therefore seen as essential ways to promote sustainability transition. However, empirical research on the mechanisms and effectiveness of value co-creation is largely lacking. Actor relations, including power dynamics between diverse actors, would deserve more focus. This study explores the power relations of diverse Finnish forest-related actors by defining the most distinct features in power relations, identifying actors with/without power, and exploring the types of power they hold. The study is based on 72 semi-structured interviews conducted among forest-based companies and related stakeholders. The data is initially analyzed thematically, whereas more nuanced analysis is conducted by critical discourse analysis. Initial results highlight the powerful role of large, traditional forest companies and their interest organizations in value creation. Also forest owners, represented by their interest organization in the discussions, are seen to hold a notable power. Many of the interviewees highlighted the significance of political power. The role of environmental organizations is constantly increasing, and they are seen to affect decision-making both in public and private sectors. In addition, media was seen as powerful channel through selecting the issues and actors to be given space in the media. As a negative manifestation of power relations, cronyism is seen to be embedded deeply in the value networks. The more advanced outcomes and reflections will be presented in the conference.

***Track 4.3 Actor engagement in sustainable (circular) business model innovation through design thinking and other practices*****From “Evolutionary Myth” to Reality? A Multiple Case Study of How Single Innovation Projects Can Catalyze Sustainable Business Model Transformation**

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This article explores how single innovation projects give rise to evolutionary business model transformation for sustainability. There is increasing doubt among scholars that single innovation projects are actually used as stepping stones for the entire organization to embark on sustainability transformation, and it is argued that some innovations might even lock systems into the status quo. But much of sustainable business model literature is built on a contrary argument. It suggests that it is exactly these single innovation projects that are the beginning of an evolutionary innovation process that ultimately leads to the transformation of the business model. This research aims to explore how single innovation projects can catalyze evolutionary business model transformation. To this end, this exploratory study, rooted in the transformation setting of the specialty chemicals industry, employs a qualitative research design with a three-stage process to examine how single sustainable innovation projects influence contextual conditions that allow for the evolution of business models toward sustainability. The first stage consists of a design-oriented literature synthesis across the fields of sustainable business models and project management. In the second stage, an empirical study, 18 semi-structured interviews and three workshops with innovation managers are conducted to explore the influence of recent innovation projects on these conditions. The third stage develops an integrative framework through thematic analysis to understand how innovation projects shape contexts for transformation. The results provide insights into the contexts, mechanisms, and interventions through which single innovations may lead to evolutionary innovation process for sustainable business model transformation.



***Track 4.3 Actor engagement in sustainable (circular) business model innovation through design thinking and other practices*****Strong Sustainable Business Models through Tools and Methods: Unpacking how Entrepreneurs Work with Value Co-Creation Process over Time**

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Strong sustainability puts the emphasis on the complementarity and non-substitution between economy and nature and recognizes the biophysical limits for economic activity within the planetary boundaries. Even if a plethora of methods and tools to support business model innovation entailing sustainability practices have emerged in the recent years, those remain underutilized and not empirically tested to determine their usefulness and fit with the needs and expectations of the intended users to support and speed up the transition towards strong sustainability. This paper adds on understanding business model innovation for novel and impactful business models beyond “weak” sustainability towards sustainability-as-flourishing. It performs a longitudinal empirical qualitative investigation on aspects of a business model innovation approach - flourishing startup method - and identifying how it has influenced the way early-stage entrepreneurs perceive and work with value co-creation process over time. In the paper, we follow up with early-stage entrepreneurs who took part in two learning events with a total of 64 participants, which took place in Canada 2017-2018. The interviews are to be performed and analyzed during the spring of 2025.

***Track 4.3 Actor engagement in sustainable (circular) business model innovation through design thinking and other practices*****Navigating The Usefulness Of Circular Business Model Innovation Tools**

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By 2050, global resource consumption is projected to exceed planetary limits, necessitating a transition to a Circular Economy (CE) that decouples economic growth from resource depletion. Companies play a critical role in this shift, requiring innovation in their business models—Circular Business Model Innovation (CBMI). However, CBMI is a complex challenge that demands specific dynamic capabilities. While numerous CBMI tools exist, their alignment with these capabilities remains unclear, creating barriers to effective adoption. This study systematically bridges the gap between the problem space (microfoundations of dynamic capabilities) and the solution space (CBMI tools). Through a structured design science research methodology, the research first identifies key dynamic capabilities required for CBMI and derives two types of usefulness criteria—overarching and end-specific. It then maps existing CBMI tools to these capabilities and evaluates their effectiveness in achieving the identified criteria. The anticipated findings will provide a comprehensive tool landscape, highlighting gaps where tools are lacking or insufficient. This study contributes in two key ways: first, by identifying research gaps and unmet needs within CBMI tool development; second, by offering businesses clear guidance on selecting tools that align with their dynamic capability needs. By enhancing firms' ability to navigate the CBMI tool landscape, this research supports the adoption of circular business models, facilitating a more structured and scalable transition to a circular economy and contributing to global sustainable development goals.

***Track 4.3 Actor engagement in sustainable (circular) business model innovation through design thinking and other practices*****Platforms for Collaborative Value Creation: Findings from the Finnish Forest Sector**

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Our society is currently facing many global sustainability-related challenges from climate change to biodiversity loss, affecting all life on planet. To combat these, a transition towards a more sustainable, circular bioeconomy based on renewable resources, participation and moderation are required. Moreover, collaborative business models that contain the elements of inclusivity, value co-creation and a multi-actor approach are seen as essential for tackling sustainability challenges. This study brings forward insights regarding collaboration platforms and dialogue from the Finnish forest-based sector. In this study, Finnish forest-based companies, and their diverse stakeholders views on the collaboration between forest-related actors, joint dialogue, and the current and future platforms for these are explored. To this end, in total 72 forest-based companies and stakeholder groups were interviewed, utilizing Thematic Analysis and Critical Discourse Analysis. The preliminary results show that currently media, especially social media channels, are seen as important for forest discussion in Finland. However, these channels can be repulsive and stir up conflicts, and therefore new types of platforms, especially physical ones, would be needed for dialogue and collaborative value creation. Our presentations will show how various forest-related actors in Finland reflect upon the current public discussion regarding forests, and how the multiple viewpoints on various platforms can be brought together to create collaboration instead of conflicts. As a final result, we aim to create proposals on what kinds of opportunities and platforms for forest discussion and cooperation between actors are needed to support an environmentally sustainable, socially accepted and just sustainability transition.

## EPILOUGE

The commitment of the New Business Model Conference to successfully meet the United Nation's 17 Sustainable Development Goals (SDGs) is a constant in our purpose of a better world, gathering in this effort researchers, business leaders and policymakers. We, as the NBM team research and practice community, have together accumulated a large and valuable knowledge base which we have further advanced through the discussion at every single conference from the International Business Model Conference Series. This knowledge can support the advancement of the speed and scale of the progress towards the urgently needed radical social, environmental and economic transformation in the context of digital, green and inclusive transitions. Therefore, we carry a great responsibility to further and widely disseminate our work during and beyond the 10<sup>th</sup> International New Business Models Conference, organized by the School of Business, University of Iceland.

During the one-day pre-conference Doctoral Colloquium and two conference days that make up the NBM@Reykjavik2025, a dialogue with Madam President of Iceland, Halla Tómasdóttir took place. A keynote speech was delivered from the founder of the NBM conference series, Professor Jan Jonker. A panel discussion with representatives from key industries in Iceland (energy and infrastructure, tourism, and fishing), facing difficult challenges due to global pandemic and/or seismic activities and volcanic eruptions, was hosted by Dr. Hafdís Hanna Ægisdóttir, Director School of Social Sciences Sustainability Institute at the University. Great contributions and innovative ideas were then organized into four themes and four workshops:

- Theme 1: Exploring the system level.
- Theme 2: Exploring the sectoral and organisational level.
- Theme 3: Exploring the organisation impact.
- Theme 4: Exploring theoretical and methodological foundations.

The ideas presented in this book of abstract of NBM @Reykjavik 2025 are valuable contributions to the field. It is visible that the collection of papers touches upon all 17 SDGs.

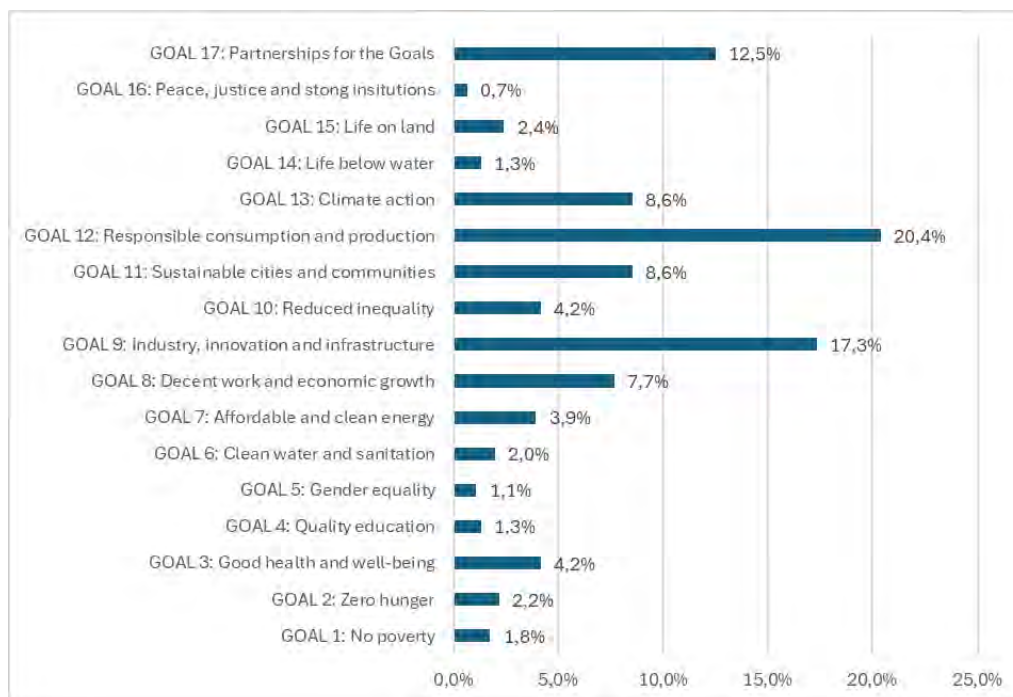


Figure 1. Distribution of papers by SDGs

Finally, during the preparation of this conference and while reviewing all submission, we understand the importance of the community, teamwork, and the need for many different skills. That is why we want to say thank to you, to the NBM community, and many people without whom this conference would not have been possible. Special thanks go to all participants and track chairs, as well as to NMB Conference board who have been supporting us on the journey of organizing this conference! We are looking forward to seeing you next year!

#### CONFERENCE FOUNDER

##### **Jan Jonker**

Professor of Sustainable Entrepreneurship  
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## ABOUT UNIVERSITY OF ICELAND

The University of Iceland was founded on 17 June 1911, on the centenary of 19th century Icelandic statesman Jón Sigurðsson, usually referred to as "president". The University was located in the Parliament House at Austurvöllur for the first 29 years. The University of Iceland was formed in a merger of the Seminary, the School of Medicine, and the School of Law, which each formed a faculty, in addition to the newly established Faculty of Philosophy.

Only 45 students, one of which was female, were enrolled during the 1911-1912 academic year; by comparison, the 2023-2024 academic year saw almost fourteen thousand students, around two thirds of which were female, studying at the University of Iceland. The University offers a variety of academic programmes on the undergraduate, graduate, and doctoral levels.

The University relocated to the Main Building (Aðalbygging) at Suðurgata in 1940. The University's facilities have grown considerably since then; the newest addition to the campus is the University Centre, which was taken into use on 1 December 2007, Veröld - House of Vigdís 2017 and Edda 2023.

A new structure and governance system for the University of Iceland entered into force on 1 July 2008. At the same time the University merged with Iceland University of Education on its centenary. The new University of Iceland has five academic schools, each comprised of a number of faculties. The academic schools are the School of Education, the School of Engineering and Natural Sciences, the School of Health Sciences, the School of Humanities, and the School of Social Sciences. In addition, the University operates a number of research and service institutions.

The University of Iceland's strategy for the years 2021-2026 (UI26) is entitled "A Better University - For a Better Society". The strategy emphasises the important role that the University has in shaping society and the creation of knowledge in the world.

The guiding principles of UI26 are:

**Quality:** We guarantee quality in all aspects of our work, ensuring international competitiveness in teaching and research.

**Trust:** We are accountable and conscious of the University's societal significance as an institution that attracts students and staff from diverse backgrounds.

**Agility:** We break down barriers to collaboration and take the initiative in responding to change and challenges, both within the University and in society at large.

Main Priorities of the University 2021-2026 are:

- Open and international
- Sustainability and diversity
- Strength based on quality
- A good place to work





## SCHOOL OF BUSINESS ADMINISTRATION

The School of Business Administration is part of the School of Social Sciences at the University of Iceland and is committed to high standards in both teaching and research. The School of Business has a distinguished tradition of excellence, established in response to the growing need for structured business education in Iceland. It has become one of the country's most respected academic institutions.

The vision is to create knowledge and skills that contribute to Iceland's prosperity while maintaining a solid connection to the national and international business community to solidify its position as a leading business education and research institution in the Nordic region, thereby ensuring Iceland remains competitive and forward-thinking in an increasingly interconnected world.

The School of Business Administration offers a comprehensive and dynamic curriculum tailored to meet the evolving needs of students and the business sector. Programs range from undergraduate to postgraduate levels, strongly emphasizing bridging theoretical knowledge with practical, real-world business skills. The School of Business continually updates its course offerings to align with developments in the business environment, ensuring students receive a relevant and current education.

Professionalism is one of the Schools of Business Administration core values, underpinned by academic independence and critical thinking. Instructors are encouraged to foster an engaging and interactive learning environment, using diverse teaching methods emphasizing active student participation. In addition, the department focuses on assessment methods that prioritize continuous evaluation over traditional final exams, further enriching the learning experience.

In response to the demands of an increasingly globalized world, the School of Business Administration has expanded its offerings in English and introduced visiting professors to bring international perspectives into the classrooms. This emphasis on global business knowledge is crucial as the School of Business prepares its students for Icelandic and international business roles.

The School of Business Administration research focuses on generating internationally recognized knowledge, emphasizing the Icelandic business landscape. The School of Business has a strong tradition of integrating research and teaching, fostering a research-driven learning environment that benefits students and the academic community.

The research strategy emphasizes innovation, practical applications of research outcomes, and collaboration, but faculty members of the School of Business are encouraged to engage in international research partnerships and actively pursue funding from competitive research grants. Additionally, there is a concerted effort to support new academic employees by providing resources and mentorship to help them establish their research careers.

Aligned with the University of Iceland's broader research goals, the School of Business focuses on advancing research that contributes to the development of Icelandic society. Research is designed to be innovative and applicable and is maintained through strong connections to the needs of Iceland's business community. This approach ensures that the School of Business Administration remains a leading force in driving economic and social progress, reinforcing its position as a leader in academic inquiry and societal impact.

The School of Business has been at the forefront of business education and research in Iceland for nearly 80 years. It is recognized for its robust academic foundation and commitment to high-quality education, significantly contributing to the Icelandic economy and society.



## ABOUT REYKJAVÍK

Reykjavík is the vibrant capital of Iceland! Nestled on the southwestern coast, Reykjavík is a city that beautifully blends rich history, unique culture, and stunning landmarks. As the world's northernmost capital, it is known for its rich history and modern significance.

Reykjavík, which means "Smoky Bay," was named by the first settler, Ingólfur Arnarson, who arrived around 874 AD. The name was inspired by the steam rising from the area's hot springs. Over the centuries, Reykjavík evolved from a small farming settlement into a bustling city. It officially became a trading town in 1786 and has since developed into the heart of Iceland's political, economic, and cultural life.

Today, with a population of 140,000 in the city and 248,000 in the Capital Region, Reykjavík stands as a model of sustainability, celebrated for being one of the cleanest, greenest, and safest cities globally. This blend of history, progress, and environmental consciousness makes Reykjavík a key destination and a vibrant urban hub.

Reykjavík is furthermore known for its vibrant cultural scene. The city hosts numerous festivals throughout the year, including the Reykjavík Arts Festival and Iceland Airwaves, a popular music festival. The local cuisine is a delightful mix of traditional Icelandic dishes and modern culinary innovations. Don't miss trying the famous Icelandic hot dogs and fresh seafood. Swimming is a significant part of Icelandic culture, and Reykjavík is no exception. The city boasts numerous geothermal swimming pools that are popular among locals and visitors alike. These pools are more than just places to swim; they are integral to the social fabric of the community.

Reykjavík is home to several iconic landmarks that reflect its rich heritage and modern spirit:

**Hallgrímskirkja:** This towering church is one of Reykjavík's most recognizable landmarks. Designed to resemble the basalt columns of Iceland's landscape, it offers panoramic views of the city from its observation tower.

**Harpa Concert Hall and Conference Centre:** A marvel of contemporary architecture, Harpa hosts concerts, conferences, and cultural events. Its glass facade, Icelandic-Danish artist Olafur Eliasson in collaboration with Henning Larsen Architects, inspired by Iceland's basalt landscape, is a sight to behold.

**Sun Voyager:** This striking steel sculpture by Jón Gunnar Árnason resembles a Viking ship and symbolizes the promise of undiscovered territory, a fitting tribute to Iceland's adventurous spirit.

**Perlan:** Perched on Öskjuhlíð hill, Perlan features a rotating glass dome and offers exhibitions on Iceland's natural wonders. The observation deck provides stunning views of the city and surrounding landscapes 2.

Reykjavík is a city that invites exploration and discovery. Whether you're wandering through its charming streets, enjoying its vibrant arts scene, or marvelling at its natural beauty, there's something for everyone to enjoy. Welcome, and enjoy your stay!



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