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centre for sustainable entrepreneurship

Centre for Sustainable Entrepreneurship in a Circular Economy

Mission, vision and strategy
Education, research and societal impact



Preface

Planet Earth is a very small but unique particle in our galaxy. Evolution has developed a wide variety of ecological, social, and economic systems. In recent years, due to human behaviour the balance between these systems has been lost resulting in unprecedented social and environmental crises and disruptive events.

The Centre for Sustainable Entrepreneurship in a Circular Economy believes we can restore the balance of our valuable systems. Sustainable entrepreneurs generate new products and services with new business models that offer solutions for the grand challenges of the modern world economy. Sustainable entrepreneurs transform the linear, fossil-fuel based liberal market economies into circular, green and sustainable societies with well-being for all. Sustainable entrepreneurs save the only planet earth that we have.

The Centre wants to make sustainable entrepreneurship and the transition to a circular economy successful. This mission translates in new teaching programs for students, new research programs for scholars and new solutions for regional, national and international communities. The Centre provides students, business leaders, scholars, policy-makers and citizens with all knowledge and competencies they need to make sustainable entrepreneurship and the transition to a circular economy successful.

March, 2022

Professor Gjal de Jong

Chair and Founder-Director

Centre for Sustainable Entrepreneurship in a Circular Economy



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The what and why of the Centre

What is the challenge?

As the world's population continues to increase, per capita GDP is projected to result in a doubling of global material consumption. Many countries and regions already face unprecedented social and environmental crises and disruptive events. The United Nations Sustainable Development Goals identifies 17 critical grand challenges for the 21st century that urgently need to be solved, including amongst others climate change, access to clean water and sanitation, democratization, access to healthcare, clean energy, and the elimination of poverty.

The impact of these crises and disruptive events can no longer be ignored and require fundamental changes to our environmental, economic and social systems. The current unsustainable 'take-make-waste' market economies need to be replaced by circular and sustainable societies that seek to balance social, environmental and economic systems. In a circular economy, the intertwined relationships between economic, ecological, and social systems are balanced and preserved. We need to change from economic growth and maximizing profits at all costs to sustainable well-being and balancing the interests of people, planet and profits.

The transition from a linear, fossil-fuel based and market economy into a circular, green and sustainable society with well-being for all is the main challenge of the modern world economy.

Why sustainable entrepreneurship in a circular economy?

Sustainable entrepreneurs address the grand challenges and are therefore key in the transition towards a circular economy. Sustainable entrepreneurs are different from mainstream entrepreneurs. Mainstream entrepreneurs focus on profit-maximization for a few shareholders at all costs.

Sustainable entrepreneurs are sustainable opportunity-oriented individuals that generate new sustainable products, services, and production processes. They create new business models that simultaneously balance and preserve ecological, social and economic goals, resulting in sustainable well-being for current and future generations. Sustainable entrepreneurs offer the creative potential needed to save planet earth and to develop a circular economy.

Sustainable entrepreneurship heralds a radically new and innovative paradigm. Sustainable entrepreneurs take social impact instead of profit maximization as the point of departure. Sustainable entrepreneurship fosters sustainable opportunity recognition processes and the start of sustainable enterprises with sustainability-specific values, traits, knowledge, motivation, competencies, and passion. Sustainable entrepreneurship highlights the importance of radical innovations as the game changers that create systemic changes in societies. Sustainable entrepreneurs design and implement new business models with the triple bottom line as the benchmark for how they add value, approach strategy and organization, utilize networking, build alliances and position themselves in the market. Sustainable entrepreneurship replaces the imperative of economic growth by dimensions of well-being beyond profit maximization such as psychological well-being, health, time use, education, cultural diversity, resilience, good governance, and community vitality.

Why a Centre for Sustainable Entrepreneurship in a Circular Economy?

The Centre for Sustainable Entrepreneurship in a Circular Economy fosters the successful design, implementation, and management of sustainable entrepreneurship and the transition to a circular economy because:

1. It educates new generations of sustainable entrepreneurs by means of a new academic master of sciences degree program for students;
2. It generates new and state-of-the art academic knowledge by means of transdisciplinary, interdisciplinary and multidisciplinary research lines directly relevant for social communities;
3. It offers new and ongoing inspiration for regional, national and international communities and stakeholders that want to change their organizations and regions into successful sustainable enterprises and circular economies.

The Centre for Sustainable Entrepreneurship in a Circular Economy is all about sustainable collaboration across all societal realms. The joint efforts of students, scholars, business leaders, policy-makers and citizens result in new solutions that will make sustainable entrepreneurship and the transition to a circular economy successful.

About the Centre

Mission statement of the Centre

Our mission is to preserve our planet for future generations through successful sustainable entrepreneurship and the transition to a circular economy with well-being for all. We provide community with (inter)national and regional students, scholars, business leaders, policy-makers and citizens with all knowledge and competencies needed to make sustainable entrepreneurship and the transition to a circular economy successful.

Values of the Centre

Four values guide the Centre's education, research and society programs. These values are the measure for our thinking and for our actions. They are the essence of what ties the members of the Centre together today and tomorrow.

Relevance. All our activities start with business experience and societal challenges in our community with respect to sustainability and circularity. We are inspired to constructively fostering sustainable entrepreneurship and the transition to a circular economy with well-being for all. For our stakeholders, we are focused on providing useful knowledge and insights on sustainability that matter to business, policy-makers and citizens, and to the transition to a circular economy.

Inclusion. We are committed to building enduring relationships with all of our community members. We connect business leaders with students, scholars, policy-makers and citizens in an open environment that appreciates and values differences. We believe that inclusive and trans- and multidisciplinary relationships are best for fostering sustainable entrepreneurship and the transition to a circular economy by teaming up to successfully create and implement new sustainable and circular products and services across sectors, firms, disciplines, and institutes.

Innovation. We take pride in discovering radical new ways to make sustainable entrepreneurship and the transition to a circular economy for our members and stakeholders successful. We are open to disentangling new and unknown challenges driven by intellectual curiosity and societal relevance. We actively promote a culture of invention by encouraging continuous learning among all of our Centre's members and stakeholders reflected in ongoing radically new ideas, competencies, concepts, products and services about sustainable entrepreneurship and the circular economy.

Authenticity. We are open, trustworthy, and down-to-earth with all of our Centre's members and stakeholders. We are transparent in our way of working, methods, and services. We are convinced of the need for, and added value of, sustainable entrepreneurship and the circular economy and are rigorous and authentic in advocating our mission without compromises.

Vision statement of the Centre

Our vision is that successful sustainable entrepreneurship will result in a circular, green and sustainable economy with well-being for all that preserves our planet earth for future generations. We aspire to be a world-wide acknowledged source of expertise for the successful development, implementation, and management of sustainable entrepreneurship and the transition to a circular economy.

Strategies of the Centre

Our strategy is tailor-made for three key groups of communities: students, academic scholars and our sustainable stakeholders including business leaders, policy-makers and citizens.

First, we serve the new generations of students. The new generations of students desire meaningful employment that contributes to saving planet earth. As the new generation of future leaders, students value sustainability and the circular economy as important topics in and of itself. Therefore, the first strategy of the Centre is to continue to develop our top-level and fulltime academic master degree program in sustainable entrepreneurship. Based on research-driven and meaningful sustainable education, our master program fosters vision and competencies relevant for future sustainability careers in start-ups, business, policy-making and international research and consultancy organizations. In so doing, we respond to the call for more academic degree programs for sustainability leadership and the circular economy.

Second, we serve the new generations of academic scholars. The new generations of academic scholars are increasingly pushed and pulled towards in-depth studies of sustainability and the circular economy outside mainstream paradigms and existing faculties. The new generations of academic scholars want to develop and answer new research questions, method and theories jointly with stakeholders in order to have social impact with successful sustainable entrepreneurship and the circular economy. The second strategy of the Centre therefore is to develop and implement meaningful sustainability and circular economy research paradigms. Our research explores and exploits all elements of new business models for sustainable entrepreneurship and the transition to a circular economy in co-creation with our stakeholders.

Third, we serve the new generations of entrepreneurs, business leaders, policy-makers and citizens that want to design and implement evidence-based sustainability toolkits in order to make sustainable entrepreneurship and the transition to a circular economy successful. The third strategy of the Centre therefore is to develop and implement practice-oriented programs that are meaningful and research-driven. These programs offer state-of-the-art knowledge, competencies, and hands-on solutions regarding sustainable entrepreneurship and the circular economy. They are tailored to our stakeholders to change existing business models or to create new ones and show the implication for policies, behaviour and communities.



Added value of the Centre

The Centre provides students, academic scholars and stakeholders with all the knowledge and competencies needed to make sustainable entrepreneurship and the transition to a circular economy successful. We will do so by means of novel in-depth research and best practices, and (international) platforms for new thought leadership.

The added value of the Centre for students is a meaningful, academic Master degree in sustainable entrepreneurship. We already successfully served many different editions. The academic master degree program is unique of its kind. Given the acknowledged importance of sustainability and the circular economy in society, the academic master degree program of the Centre qualifies students for future careers in sustainable and circular start-ups, in all business sectors and (semi-) public organizations, and in national and international policy institutes and public organizations. The added value of the Centre for academic scholars is the design, implementation and management of meaningful and inspiring sustainability and circular economy research lines and paradigms. The Centre offers academic scholars unique opportunities to develop and test radically new sustainability and circular economy research questions, concepts, theories, models and data in co-creation with our stakeholders. Academic scholars benefit from our proven and meaningful interdisciplinary, transdisciplinary and multi-method sustainability and circular economy research paradigms reflected in a large number of publications, stakeholder products, PhD theses and Master student projects.

The added value of the Centre to our stakeholders includes learning how to successfully develop, implement and manage all elements of new business models for sustainable entrepreneurship and the transition to a circular economy. The Centre offers evidence-based toolkits to start, transform or to accelerate sustainable business, policies, behaviour and regional alliances in communities based on state-of-the art research and theories developed in co-creation with stakeholders. The Centre offers the thought leadership needed to solve the wicked challenges that align with the transition to a circular economy with well-being for all.

The added value of the Centre for the regional economy is fostering new sustainable start-ups, new sustainable employment, new sustainable eco-systems, and new sustainable resilience needed to make sustainable entrepreneurship and the transition to the circular economy successful. The Centre offers thought leadership and solutions for regional challenges including an ageing population and declining incumbent businesses and innovation. The Centre's change ambition, knowledge and experience are centre stage of the regional success of sustainable entrepreneurship and circular ecosystems.

The added value of the Centre to the University of Groningen is the Centre's state-of-the-art innovative expertise for sustainable entrepreneurship and the circular economy. The Centre's education, research lines and community services foster the University's international profile and leading position. The Centre actively builds new academic and stakeholder communities dedicated to successful sustainable entrepreneurship and the circular society collaborating with regional, national and international universities and research groups. The Centre is a best practice example for the University showing the social impact of sustainability and circular knowledge and expertise.

The general model of sustainable entrepreneurship in a circular economy

The mission, vision and strategies for teaching, research and societal impact in the Centre are organized with the general model of sustainable entrepreneurship in a circular economy.

Figure 1 shows the three stages for successful sustainable entrepreneurship. In the first stage, the sustainable enterprise is designed. Foundations and core knowledge together with personal leadership result in the strategic decision to start a new sustainable enterprise or to transform an existing one. In stage 2, the consequences of the sustainable strategy are translated in the internal organization, external alliances, the positioning of the sustainable enterprise in the external context and the relationships with public policies.

In stage 3 the outcomes of stages 1 and 2 are materialized in the management of triple bottom line performance of the enterprise. All three stages of sustainable entrepreneurship will co-design the regional/national/international circular economy and contribute to social well-being rather than economic growth.

The research and education of the Centre address each of the topics independently such as the role of personal values in exploration of new sustainable opportunities or in combination such as the joint effects of leadership and strategy on the triple bottom line performance of the enterprise.

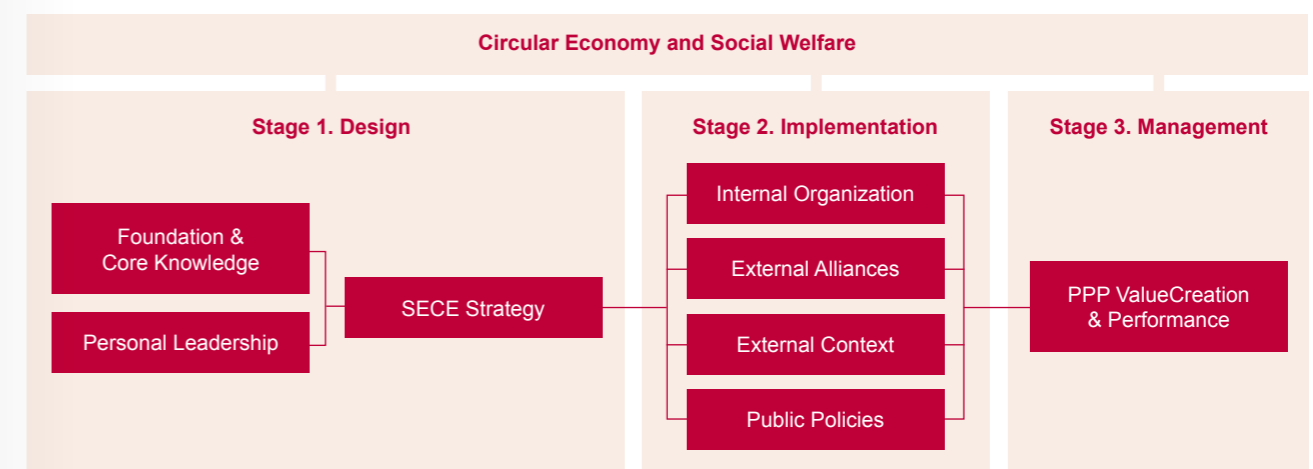


Figure 1 The general model of sustainable entrepreneurship in a circular economy. Source: de Jong (2022). The general model of sustainable entrepreneurship in a circular economy. Introduction to G. de Jong, B. Unal, N. Faber, T. Long and E. Folmer (eds), The DeGruyter Handbook of Sustainable Entrepreneurship Research.

Our services for students

Our academic master degree program

The Centre offers a 1-year fulltime Master of Science degree program in Sustainable Entrepreneurship for students. Today, the Centre served various successful editions with almost all students completing their program on time and with very high satisfaction rates and ratings in national and international evaluation surveys. As a result, the Centre developed a wide range of sustainable entrepreneurship and circular economy projects as well as new communities and alumni. The program is unique in its aim, profile, and organization.

First, the Master program enables students to simultaneously develop leadership, entrepreneurship and academic knowledge and competencies. This unique threefold combination of knowledge and competencies enables students to successfully develop a meaningful final sustainable entrepreneurship project. The program enables students to develop their tailor-made leadership profile relevant to start a new sustainable enterprise or to join (inter) national corporations, public organizations or policy institutes that require state-of-the-art expertise to solve sustainability and circular economy challenges and transitions.

Second, the content of the program is fully dedicated to all elements relevant for the design, implementation and management of successful sustainable entrepreneurship. It reflects the ambition of the Centre, that is, increasing the number of new sustainable start-ups or the transformation of for-profit firms to sustainable enterprises. Students develop their knowledge and expertise for leadership, strategy, organization, alliances, context, policy, and performance. Together with foundational state-of-the-art insights and novel academic research methods, they are best prepared to successfully complete their final sustainable entrepreneurship project.

Third, the Master program offers students inspiration about the success and failures of sustainability start-ups, transformations in existing business firms and the relevance for public organizations. We believe that learning comes from action in different settings. The program offers a wide range of case studies, stakeholder experiences, best practices and consultancy projects that learn students how sustainability drives leadership, strategy, organization, collaboration, public policy, and societal change.

Teaching philosophy, structure and admission

The master program builds on research-driven education enabling students to learn state-of-the-art theories, research methods and practice. The teaching philosophy is based on vision-based and competency-based learning. Successful sustainable entrepreneurship – in a new sustainable start-up, large multinational corporations, small or medium-sized enterprises, government institutes, network organizations or educational institutes – cannot do without the design and formulation of a personal mission, vision and strategy. We use our tailor-made leadership profile and help students to develop key competencies including leadership, communication, team working, problem solving and self-management.

The master program consists of four blocks. In block one, students learn how to design sustainable enterprises (including foundations, leadership and strategy). In block two, students learn how to implement sustainable entrepreneurship (including organization, alliances and context). In block three, students learn how to manage sustainable entrepreneurship (including policy, performance and methods). In block four, students apply their personal mission in practice within the final sustainable entrepreneurship project.

The courses of the program integrate research-driven education with hands-on business challenges and best-practices of sustainable entrepreneurship and the circular economy. Within each course, students have the opportunity to design and present projects themselves, in couples or in teams.

Students with a bachelor degree from an academic research university in the fields of business, entrepreneurship or economics (or a similar profile) are eligible for entering into the Master degree program. Students that have deficiencies in the admissions benefit from the program-specific support program. This program is tailor-made for students from, for example, Universities of Applied Sciences. It enables students to develop their academic knowledge comparable to a default bachelor program from research universities.

Sustainable start-up academy and student projects

The Centre offers a specific start-up program in the Sustainable Start-up Academy, that gives students in the Master degree program an additional opportunity to design and start their own sustainable start-up with design methods and tools.

The Sustainable Start-up Academy offers various workshops and a final competition event. The first session starts with inspiration from a successful regional sustainable entrepreneur followed by the business idea generator tool that uses ideation methods. The second session explores the lean start-up method that provides tools for developing a new product or service in uncertain circumstances. Students use the lean start-up tools to develop rapid prototypes and collect feedback for viable products or services. The third session offers a launch game in which the first two years of a sustainable start-up are simulated with consultancy from industry experts. Students learn how to find launching customers and a successful entrance into the market. The fourth session enables students to discover new customers and markets following the lean business modelling training. It enables students to learn how a new sustainable start-up can move from the first customers to having a substantial market share. The fifth session prepares students to pitch their sustainable start-up. In the sixth session, students compete with other students from other programs and institutes for the student start-up award of the year.

In the final project of the master program students offer solutions for a wide range of business challenges that derive from the communities of the Centre such as:

- How can sustainability principles shape the foundations of our company?
- How can all of our financial subsidiaries implement our new sustainable strategies?
- Which actions can our company take to become carbon-neutral?
- Which indicators can our organisation use to measure sustainability performance in all our international locations?
- How can we involve our customers to become more sustainable?
- How can we collaborate with our employees to become more sustainable?
- Which leadership styles are needed to accomplish the energy transition mission in our province?

Quality assurance and career opportunities

The Master program is an accredited degree programme and is chaired by a program director. The program implements the quality and performance evaluations of the Dutch Flemish Accreditation Organization (NVAO). A professional Faculty quality organisation ensures the academic degree and organisation of the programme and monitors the alignment with the NVAO accreditation criteria (reflected in financial, student support, marketing, education support and teaching staff professionalization services with the use of program committees and examination and admissions boards).

The alumni of the Master program have a proven track record in a wide variety of careers. Alumni start new sustainable enterprises and develop careers in multinationals, sustainability niche and consultancy companies or policy organisations and government institutes.



Our services for academic scholars

Research meets entrepreneurship and business practice

In the Centre, academic scholars directly collaborate with entrepreneurs and stakeholders to successfully develop, implement, and manage new research for sustainable entrepreneurship and the transition to a circular economy that has societal impact. The transdisciplinary nature of the Centre's research starts with the end goal in mind and aims to understand how a social, environmental, and value-creating society can be established and how sustainable entrepreneurship can be successful.

Exploring and exploiting new challenges with new answers drives the collaboration with the Centre's stakeholders and is supported by the Centre's multidisciplinary research involving entrepreneurship, business, psychology, sociology, transition, and circular economy expertise.

The academic scholars design new research methods to collect data in order to answer novel research questions including case studies, peer group discussions, interviews, observations, interventions, advanced database analyses, artificial intelligence and machine learning methods. The research projects of the academic scholars answer research questions such as:

- How can we measure and visualize the sustainability of an organization?
- What are the most important instruments to make organizations more sustainable and to obtain sustainable well-being?
- What are the key principles for changing an existing for-profit business model into a sustainable one?
- How can companies become both, sustainable and financially successful?
- How can managers use multiple and coherent leadership instruments in one business model for successful sustainable enterprises?
- How can companies successfully communicate changes in mission, vision and strategies without losing market shares?

Our senior staff members and research lines

The senior staff members of the Centre develop and supervise a large number of research lines. The research lines serve specific dimensions of sustainable entrepreneurship and the circular economy. The research lines also offer sustainability monitors and consultancy tools for firms, industries, and regions that measure the success of sustainable start-ups and that enable the exploration and exploitation of new challenges and opportunities for sustainability and the circular economy in existing enterprises. These new and relevant insights are translated in a growing number of books, journal papers, conference presentations, working papers, PhD theses, Master student projects, community services and news events.



Professor Gjal de Jong: sustainable entrepreneurship in a circular economy

Professor de Jong is the Founder, Chair and Head of the Department Sustainable Entrepreneurship in a Circular Economy and Director of the Centre. His societal impact mission/vision/strategy aligns with the observation that the impact of global challenges requires a redesign of production systems and societies towards inclusive circular economies. In a circular economy, the intertwined relationships between economic, ecological, and social virtues are balanced and preserved. Sustainable entrepreneurs are key in the transition towards a circular economy because they generate new products, new services and new business models that contribute to solving the grand societal and transition challenges. Together with his senior staff members, Professor de Jong designs and implements new research lines concerning the design/implementation/management of successful sustainable entrepreneurship and the transition towards a circular economy because (i) it educates a new generation of leadership in the MSc program Sustainable Entrepreneurship, (ii) it generates fundamental and applied academic knowledge by means of transdisciplinary/interdisciplinary/multi-method research and sustainability/circular economy research lines, and (iii) it inspires and supports existing/new sustainable firms and circular citizenship by means of masterclasses, policy instruments/ regional monitors and public debates. The research lines encompass studies concerning (combinations of) the design (leadership and strategy), implementation (organization, alliances, context and policy), and management (multiple value performance) of sustainable enterprises and their impact on the transition towards a circular economy.



Dr. Tom Long: regenerative entrepreneurship

Dr. Tom Long is the Centre's assistant professor in regenerative entrepreneurship. His background is in Politics and Economics and Sustainable Development. His research lines focus on the current impact and future potential of regenerative entrepreneurship and responsible innovation – and related themes of inclusivity, managing unintended outcomes and externalities, and the role of socio-ethical factors – to achieve sustainable outcomes. The research lines focus on how sustainable entrepreneurs view, incorporate and manage socio-ethical issues into their entrepreneurial and business model innovation processes. The research lines are inter-disciplinary across the fields of management, economics, sociology, psychology and political sciences, are often inductive and conducted as a team effort. The research lines offer important foundations for the regenerative opportunities of sustainable entrepreneurship in fragile nature environments such as the Waddensea region.



Dr. Emma Folmer: social entrepreneurship

Dr. Emma Folmer is the Centre's assistant professor in social entrepreneurship. Her research aims to understand how entrepreneurs and business can contribute to solving complex social problems. The answer to this question becomes more pressing in a world where existing solutions are not delivering enough impact. Traditionally, governments, charities and NGO's are held responsible to solve problems such as poverty, unemployment, climate change and inequalities in education and healthcare. More recently business approaches to solving these social problems have emerged. Her research contributes to understanding under what circumstances these social entrepreneurs can emerge, thrive and be the most successful. Because social enterprises are often embedded in local communities, they have a unique understanding of how grand challenges manifest locally. This enables social enterprises to design and implement innovative processes, products or services to create social impact. Her research is organized in three main research lines including comparative social entrepreneurship, collective and community entrepreneurship, and sustainable entrepreneurship education.



Dr. Maaïke de Jong: cultural entrepreneurship

Dr. Maaïke de Jong is the Centre's assistant professor in cultural entrepreneurship. She is the coordinator of the Network for Religious Heritage. De Jong's research contributes to sustainable development with knowledge about heritage, museums and tourism to the research and teaching activities of the Centre for Sustainable Entrepreneurship. De Jong aims at opening up discussions about heritage, museum (collections), and tourism in new ways through these projects. She also wants to contribute to the Sustainable Development Goals on issues such as 'sustainable cities and regions' and 'multi-stakeholder partnerships'. De Jong's research contributes to sustainable development within the fields of heritage, museums and tourism. She develops and participates in research projects with national and international scholars. Currently, she focuses on three research lines using applied philosophy and critical theory that analyse how communities address heritage and cultural identity challenges. The first line incorporates studies on collection ethics and responsibility collaborating with museums in the context of the restitution of sensitive collections. Dialogue with source communities (including the Museum of the Rockies, Quai Branly Museum, the Tropenmuseum and the Néprajzi Múzeum). The second considers heritage as a driver of sustainable development and communities (collaborating with the Veenhuizen and Frederiksoord museums). The third concerns museums as platforms for sustainable cities and communities (collaborating with the Humboldt Forum, the Museum of Boulder and the District Six Museum).



Dr. Berfu Ünal: sustainable entrepreneurship

Dr. Berfu Ünal is the Centre's assistant professor in sustainable entrepreneurship. She pioneers transdisciplinary research on the human-dimensions of sustainability. Her research lines study environmental sustainability by targeting a change in behaviour or mind-set, involving different stakeholders ranging from citizens to managers and employees of companies and organisations. The research has a particular focus on increasing the adoption and acceptability of responsible innovations in domains that are directly related to environmental and social sustainability. The research offers important foundations to create impact labs in which societally and socially relevant research is organized and implemented. The impact labs offer a wide range of opportunities for collaboration between academic scholars, students and regional stakeholders. An example is the Shared connectivity in Mobility and Logistics Enable Sustainability (SMILES) research program, which is a transport and mobility innovation network pilot between education and research institutes and 18 regional partners. This research program focuses on open mobility and logistics networks building on concepts of the sharing economy.



Dr. Niels Faber: circular entrepreneurship

Dr. Niels Faber is the Centre's assistant professor in Circular Entrepreneurship. His research lines focus on the organizational aspects of the circular economy in general and on the role of business models that create value in accordance with the principle of value preservation in particular. The research lines include the causes and consequences of sustainable value creation, organizing for a sustainable and circular economy, and sustainable and circular impact. A circular economy is characterized by an economic system with a low impact on natural systems while serving society in fulfilling its material needs. Realizing a circular economy is not just a matter of technological change but requires rethinking organizing our economy around value preservation. The research lines have resulted in a methodology for the design of sustainable and circular business models. Additionally, the research has resulted in a classification of circular business models that currently are applied. The research offers important foundations for the design, implementation and management of new circular ecosystems in North Netherlands, in the transition of agricultural business models and in the construction industry.



Dr. Josephine Geiger: sustainable entrepreneurship

Dr. Josephine Geiger is a social psychologist and the Centre's assistant professor in sustainable entrepreneurship. She is interested in learning about the determinants and consequences of behaviour related to sustainable entrepreneurship. She develops different research lines including a visualization of change processes and consumer requirements for sustainable packages. The first research line aims to better understand situations in which employees face (unforeseen) difficulties and challenges and how they solve it with a particular focus on the human factor in there. The visualization of these processes can help to identify challenging situations within companies and to sensitize and train employees and leaders for these. The research offers important foundations for decision-making processes with regard to sustainability. Volkswagen Emden, Bunting Emden and ID Partners Enschede are the partners in this research. The second research line aims to understand consumer's requirements for sustainable packaging. The results indicate that aesthetics and handiness are important factors for consumer to use them. House of Design is the partner in this research line and integrates these insights into the design of these reusable containers. The research offers important foundations to systematically test the effects of different designs on consumers' waste behaviours.



Dr. Pelin Gül: female entrepreneurship

Dr. Pelin Gül is the Centre's assistant professor in female entrepreneurship. She is a social and cultural psychologist, committed to research on the psychological foundations of gender relations and inequality. Drawing on perspectives from social and evolutionary psychology, the primary goals of her research are to (1) explain how motivational and cultural processes interact to shape support for traditional gender norms and beliefs, and (2) describe the implications on injustice, violence, and harassment against women at various domains of life, including domestic, health, work and education. This research offers foundations for finding new ways of combating harmful and discriminatory gender practices by offering a more nuanced understanding of the origins of traditional gender norms and why they persist in different societies.



Hans van Polen: methods and sustainable entrepreneurship projects

Hans van Polen is the Centre's expert on research methods relevant for sustainable entrepreneurship projects. The students in the master program have the opportunity to develop their own final project enabling to test their new competencies in practice. The master program offers a particular support system to make these student projects successful. In part, the final projects benefit from the course in research methods during which students learn how to develop a research question that is relevant for the business partner in question and for the academic degree competencies. Together with the embeddedness in existing literature and the justification of their research methods, this is the first part of their final project. Subsequently, students collect information and work together with our stakeholders in developing answers to their questions and the implications for sustainable entrepreneurship.

Our PhD research and icon projects



Dr. Monique de Ritter: mission-driven entrepreneurs and ecosystems

Dr. Monique de Ritter successfully defended her PhD thesis "Mission-driven entrepreneurship in ecosystems for sustainable systems change" in 2019 (supervised by professor Gjalt de Jong and professor Annemieke Roobeek).

The PhD thesis consists of a theoretical framework and a research approach that is tested with three projects of multiple in-depth comparative case studies each. The PhD research has been carried out with the assumption that the current and dominant organizing principles based on hierarchies in business and society are inadequate or even counter-effective in achieving a more sustainable economy. The PhD thesis introduces a five-layered model based on systems thinking that offers guidance to identify and analyse the organizing principles needed for sustainable systems change.

The PhD thesis shows how the theoretical model works in practice, with an emphasis on the ecosystem level and how this level connects to the micro-level mission-driven entrepreneur and to the macro-level of sustainable systems change. The PhD thesis shows that the ecosystem indeed plays an important role in leveraging the initiatives of mission-driven entrepreneurs for sustainable systems change. New skills and knowledge are needed in order to effectively apply organizational principles, from close collaboration and networking to working in ecosystems.



Dr. Angela Greco: transforming existing businesses in sustainable enterprises

Dr. Angela Greco successfully defended her PhD thesis "Changing for good: Transforming existing businesses in sustainable enterprises" at the Centre in 2020 (supervised by professor Gjalt de Jong and dr. Tom Long). Because sustainable development cannot occur without sustainable businesses, understanding how to transform organizations into sustainable ones is essential. The PhD research identified main aspects in which existing organizations can initiate and maintain the sustainable entrepreneurship process. This includes leadership, sustainable decision-making processes (in which internal organizational identities are coupled to external societal demands), responsive approaches to sustainability, and joint innovation initiatives that help organizations to reformulate the sustainability problem and discover solutions.

Building on the foundations of an in-depth literature review of the literature, the PhD research offers four empirical projects to explain how organisations can become sustainable. The first project focusses on sustainable business model innovation in the context of a non-profit hybrid organization that combines the logic of a highly regulated and hierarchical public bureaucracy with the DNA of a social enterprise. The research adopts an inductive theory building approach based on longitudinal and in-depth case analyses of a 100-year-old social housing association. The second project analyses how organizations successfully pursue a sustainability-oriented mission characterized by a dual goal (such as the need for financial viability versus the solving of social and environmental problems). The project investigates the relationship between (dual) organizational identity and individual heuristics in the process of strategy change undertaken by the management team of a Dutch housing association.

The third project analyses how social purpose organizations can successfully serve multiple sustainable development goals simultaneously. Via action research in the setting of a Dutch housing association, the study analyses the process of strategy change while also observing the societal response to this strategy change. The fourth project studies whether and how innovation contests open to the public can be successfully used by businesses as an instrument for open innovation. Using participant observations, the project analyses the design, development, and final outcomes of a sustainable innovation challenge in practice.



Dr. Margo Enthoven: opportunity recognition for sustainable entrepreneurship

Dr. Margo Enthoven successfully defended her PhD thesis "Unpacking opportunity recognition for sustainable entrepreneurship" at the Centre in 2021 (supervised by professor Gjalt de Jong joint, Dr. Emma Folmer and Dr. Berfu Ünal).

This PhD thesis addresses how and why entrepreneurs start a business with the aim to create sustainable change. Entrepreneurs cannot start a business without first recognizing an entrepreneurial opportunity, which is essentially a combination of a need in the market and resources or skills that the entrepreneur possesses, brought together by an entrepreneur to create a product or service. This results in the introduction of products or services with superior value for customers. The PhD thesis shows that those entrepreneurs who focus on the recognition, development and exploitation of opportunities in response to grand challenges are considered sustainable entrepreneurs.

Their discovery, development and exploitation is necessary to transform 'business as usual' into 'sustainable business'. Because opportunity recognition is central to the creation of new sustainable businesses, the PhD thesis focuses on where, how and why entrepreneurs recognize business opportunities for sustainable business. In four empirical chapters, the PhD thesis analyses the geographical locations of sustainable entrepreneurship, the mediating role of sustainable problem recognition in the relationship between values and sustainable opportunity recognition, the influence of identity on opportunity recognition in relation to a wicked problem, and how entrepreneurs and activists in a moral market niche attempt to change consumer culture.



Dr. Hendrik Thelken: the role of cognition in managing sustainable enterprises

Dr. Hendrik Thelken successfully defended his PhD thesis "Thinking apart and together. The role of cognition in managing multiple goals in sustainable enterprises" at the Centre in 2021 (supervised by professor Gjalt de Jong and Dr. Berfu Ünal). The PhD research analyses how social, environmental and economic values are balanced. Sustainable entrepreneurs operate in highly complex and therefore cognitively challenging environments, where the opposing demands of different stakeholders, opposing time frames and institutional logics require high cognitive processing competencies. This research explains precisely how sustainable entrepreneurs cognitively manage these complexities and opposite demands and how they cognitively evaluate the possibility of becoming a sustainable entrepreneur. In five empirical chapters, this research focuses on individual-level factors such as values and future orientation and how they benefit individuals in developing sustainable entrepreneurship cognition. This helps to understand how individuals make sense of, and assess and judge specific situations within the overall sustainable entrepreneurship process.

The first empirical project in this PhD research shows whether and how the Big Five personality traits influence consideration of future consequences, which is an important conceptualization of future orientation needed to make sustainable decisions. The second project also the relative importance of values and future orientation on intention formation within sustainable entrepreneurship. Intentions are the most important drivers of sustainable entrepreneurship opportunity recognition. The research highlights the importance of self-transcending values and future orientation on attitudes towards sustainable entrepreneurship. Finally, the PhD research analyses the role of cognitive strategies to solve paradoxical tensions in sustainable enterprises and how mission confidence influences an individual's paradoxical mind-set.



Dr. Manon Eikelenboom: stakeholder collaboration for corporate sustainability

Dr. Manon Eikelenboom successfully defended her PhD thesis “Achieving sustainability together. Stakeholder collaboration for corporate sustainability and the circular economy” at the Centre in 2022 (supervised by professor Gjalt de Jong and dr. Tom Long).

The PhD research investigates how incumbent enterprises can assist in achieving societal sustainability. Societal sustainability addresses how society can reach social, environmental and economic goals such as ending poverty and combating climate change. Enterprises are central actors for achieving societal sustainability and can fulfil this role by engaging in corporate sustainability. Enterprises need new capabilities in order to successfully integrate the principles of corporate sustainability and the circular economy at a strategic level. In four empirical chapters, the PhD research develops and applies diverse levels of analyses, thematic focus points, contexts, theoretical foundations and methodologies. Stakeholder collaborations are often complex and involve multiple dimensions, such as internal and external collaborations and individual and collective strategies. The adoption of multiple theoretical and methodological lenses is therefore crucial for understanding stakeholder collaborations.

The first two projects investigate to what extent stakeholder interactions and collaborations can assist enterprises in integrating the principles of corporate sustainability and the circular economy in their strategies and achieving economic, social and environmental objectives. In the setting of small and medium-sized enterprises, these projects investigate how stakeholder interactions and collaborations can assist the individual enterprise in integrating the principles of corporate sustainability and the circular economy. The second two projects investigate how enterprises can successfully interact and collaborate with local communities in circular strategies and approaches. These projects include a meso-level of analysis to investigate how diverse stakeholders can successfully collaborate to achieve collective actions and goals. While there is overlap in the concepts of corporate sustainability and the circular economy, both concepts have distinctive features which are taken into account in this PhD thesis.



Femke Vrengoor: sustainable entrepreneurship in the hospitality industry

Femke Vrengoor develops her PhD research concerning “sustainable entrepreneurship in the hotel industry” at the Centre (supervised by professor Gjalt de Jong and professor Elena Cavagnaro). The PhD research develops in three different empirical projects.

The first project develops an in-depth understanding of the motives of micro and small-sized hotel accommodation owners and managers to enter into this business and their sustainability measures. The first project highlights the roles of self-enhancement and self-transcendent motives for both of these strategic decisions. The first project indicates an important moderating role for personal values. Values are used to explain whether or not patterns in behaviour can be identified. In doing so, the project enters into the hotel and tourism industry, which is a relatively unknown area of sustainability research. The research context is important because it is confronted with an increasing sustainability demands. The project disentangles whether or not values are important for individuals to start a career in this industry, for the motives to behave sustainably and for the implementation of sustainability measures. It uses explorative and semi-structured interviews with owner-managers of micro and small-sized hotel accommodations to explore the multi-faceted roles of these concepts.

The first project offers the foundations for two large-scale empirical projects. In the second empirical project, the relation between pro-environmental values and the motivation to act sustainably is analysed. The second project identifies significant relationships between altruistic and biospheric values on the one hand and lifestyle, legitimization and competitive motives to act sustainably on the other hand. The third empirical project studies the relationships between values and the implementation of sustainability measures by managers in the hotel and tourism industry.



Hellen Dawo: sustainable entrepreneurs in protected nature areas

Hellen Dawo develops her PhD research concerning “Sustainable entrepreneurs in protected areas” at the Centre (supervised by professor Gjalt de Jong and Dr. Tom Long). This PhD study examines the process of sustainable entrepreneurship in the context of protected nature areas.

The PhD research is developed in two phases. In the first phase, a systems perspective is taken into consideration. This approach acknowledges that the sustainable entrepreneurship process is embedded in socio-ecological contexts with multiple stakeholders. The PhD research in this first phase answers the questions how entrepreneurs create new sustainable enterprises in protected areas, how sustainable entrepreneurs overcome distinctive barriers they face in the context of protected nature areas, and how embeddedness influences individuals in their pursuit of sustainable entrepreneurship in sensitive socio-ecological contexts. In the context of protected nature areas, the stakeholders include local and regional governments, non-governmental nature organizations, local communities, customers and incumbent enterprises. The first phase examines how interactions with multiple stakeholders influence the propensity of sustainable entrepreneurship in this socio-ecological context.

The second phase of this PhD research employs organisational perspectives to understand sustainable entrepreneurship processes. The second phase answers the question how nature and cultural heritage assets are incorporated into business models for sustainability in protected nature areas. The research in this phase examines the mediating role of business models for sustainability. These business models are used to convert nature and cultural assets that are available in protected areas, into sustainable entrepreneurship business cases. This research results in the development of context-specific tools and strategies for sustainable entrepreneurship.



Valerija Woudstra: social entrepreneurship

Valerija Woudstra develops her PhD research concerning “Social entrepreneurship” at the Centre (supervised by professor Gjalt de Jong and Dr. Emma Folmer).

Social enterprises are organisations that employ business logic and commercial activities in order to address societal problems, such as poverty, homelessness, and social exclusion. They play an important role in building a sustainable society as they are capable of developing innovative solutions to issues faced by individuals and communities.

Social enterprises employ a dual logic in their operations namely a business and social welfare logic. They need to create both, social and financial value in order to fulfil their mission. The dominant opinion in the literature is that social and financial value creation cannot go hand in hand, and that enterprises need to sacrifice one for the sake of the other. The main question addressed in this PhD research is how social enterprises can create social value. Social value is their *raison d'être*, but is challenging taking into account that social enterprises are faced with various tensions resulting from their inherent dual logic features.

This PhD research develops various research projects. In a first project, the complex and challenging relationships between social and financial performance of social enterprises are tested using international and large scale datasets from European countries. This study enables to identify whether social and financial value are substitutes or complements, and whether or not the relationships differs across different business models that are employed in social enterprises. A second project analyses the processes of business model changes in social enterprises, and the influence of those changes on social value creation. A third project will explain why and how social enterprises can measure their social value creation and societal impact.



Can Saral: transformational leadership and employee green behaviour

Can Saral develops his PhD research concerning “Environmental transformational leadership, group dynamics and employee green behaviour” at the Centre (supervised by professor Gjalt de Jong and Dr. Berfu Ünal). This PhD research develops in four different research projects.

In the first project, the relationships between transformational leadership with environmental concerns on the one hand and environmental green behaviour of employees on the other hand are examined. For this first research project, Turkish high-tech organizations are examined. In the second and third projects, the mechanisms that explain the influence of environmental transformational leadership on environmental behaviour of employees in Dutch organization is analysed taking into account group norms and individual values of employees. In the fourth project, machine-learning methods are used to understand whether and how contextual factors can change relationships between environmental values of employees, leadership behaviour and group norms or group dynamics.



Jens Kaus: sustainable entrepreneurship ecosystems

Jens Kaus develops his PhD research concerning “The evolution of sustainable entrepreneurship ecosystems” at the Centre (supervised by professor Gjalt de Jong and Dr. Niels Faber). The successful transition towards a more sustainable society will require disruptive innovations that aim to balance social, environmental, and economic objectives. Sustainable entrepreneurs are a type of actor that can succeed at developing radically new ways of organizing value to address today’s most pressing challenges and contribute towards sustainable development. However, entrepreneurship cannot be viewed isolated from the context – or entrepreneurial ecosystem – in which it operates. While knowledge is rapidly growing on entrepreneurial ecosystems, its focus is on high-growth start-ups. This PhD research investigates the dynamics of sustainable entrepreneurial ecosystems. The sustainable entrepreneur is at the core of these ecosystems and their main purpose is to foster the emergence and development of sustainable ventures. This PhD research identifies the emergence and development processes of such ecosystems and their governing dynamics.



Eric Fath-Kolmes: dynamic capabilities for flourishing sustainable enterprises

Eric Fath-Kolmes develops his PhD research concerning “Dynamic capabilities for flourishing sustainable enterprises in the construction industry” at the Centre (supervised by professor Gjalt de Jong and Dr. Tom Long). Many organizations are underperforming in their transformation towards sustainability, as their focus is still towards economic gains. This PhD research highlights the crucial importance of new and dynamic capabilities for sustainability to improve the triple-bottom line performance. A systematic literature review based on bibliometric research methods offers the points of departure for this PhD research. These foundations offer guidance for two empirical projects in the setting of the construction industry. The construction industry offers a relevant research context given that it is under increasing societal pressure due to its high impact on global carbon dioxide emissions. A first project uses interviews with top-management of construction companies who are involved in strategic decision making processes with respect to sustainability. These interviews enable the identification of drivers and barriers for organizations in developing their dynamic capabilities. A second project studies how a model of dynamic capabilities for sustainability through collaboration with enterprises and other stakeholders can be successfully developed and implemented.



Geesje Duursma: hospitality and volunteering in not for profit organisations

Geesje Duursma develops her PhD research concerning “Hospitality and voluntary organisations” at the Centre (supervised by professor Gjalt de Jong and Dr. Erwin Losekoot). Hospitality is often perceived by management as a way to add value and improve outcomes for an organisation. A hospitable experience creates satisfaction leading to word of mouth recommendations, loyal customers and repeated purchasing. This applies to for-profit organisations, to regions and to voluntary organisations. Hospitality is a responsibility of staff and employees in general but in particular for volunteers. A substantial number of organisations works with volunteers. The development of hospitality competencies and skills is challenging. Most organisations implement training programs knowing that few of these training programs result in more hospitality. Hospitality of volunteers is a well-known intangible asset that fosters the success of organisations. This PhD research develops different models for different types of organizations that employee volunteers and for whom hospitality is a key intangible asset. The PhD research defines the concept of hospitality and offers action-based programs enabling organisations to develop hospitality of volunteers. The PhD research answers the question whether and how organisations with volunteers can develop and sustain hospitality of volunteers. The PhD research is developed in three different types of organisations relevant for the research: a public library, a hospital and a museum.



To be determined: innovative business models in agriculture

The development of innovative business models in agriculture in the Northern part of the Netherlands is the newest PhD research project (supervised by professor Gjalt de Jong and Dr. Niels Faber). This PhD research learns how to design, implement and sustain new business models in agriculture in the Northern part of the Netherlands. Agriculture has a long history in this region. Agriculture historically used circular and nature-driven business models but has evolved into linear and industrialized business models of efficiency and maximizing profits for farmers. The financial forecasts of farmers is challenging and the social appreciation of current business models has declined. The efficiency farming business models is at the end stage of its life cycle among others because of the large-scale negative ecological effects. As a result, niche farmers in the region innovate and develop new business models based on the opportunities and limitations of nature. These new business models have systemic implications for value chain partners, government policies and consumer behaviour. The new business models directly contribute to the triple bottom-line performance of farmers and their context. The PhD research enables farmers to identify farm-specific quick wins and systemic new ecological and social added value (including water quality, nitrogen and biodiversity). The farmers will learn how to capture these new added value propositions derived from their stand-alone firms or in collaboration with regional co-stakeholders and colleague farmers. The PhD research will analyse the success factors of the design, implementation, management and regional dissemination of new farming business models.



Our societal impact

Inspiration and collaboration

Sustainable entrepreneurs are of crucial importance for the transition of the current linear fossil-based economy towards a circular and green society. Entrepreneurs and policy-makers have a growing interest in learning how to make these transitions successful. The Centre offers ongoing inspiration for our stakeholders that enable business managers to learn about best practices of sustainable entrepreneurship and to identify opportunities for new or revised business models.

The general model of our Centre offers guidelines for the design, implementation and management of sustainable entrepreneurship aimed at fostering the circular economy and social well-being. This transition or new start-up requires knowledge and competencies, and can be learned by managers and policy-makers ranging from leadership to strategy, successful teams, business model innovations and new sustainable business functions such as marketing, logistics and human resource management.

We use the content and structure of our academic master degree program adapted to our stakeholder profiles for master classes and guest lectures. Together with our ongoing state-of-the-art research, we offer inspiration and competencies for the advantages and disadvantages of sustainable strategies as well as for the process of personal leadership, the opportunities for sustainable ecosystems, the obstacles and solutions for new sustainable business models and radical innovations, the success and failure of public policies for regional transitions to a circular economy, the importance and management of new value chains and more.

Collaboration is our key way of working in the Centre. We developed a large network of stakeholders with whom we jointly address an ever-increasing number of questions and challenges such as:

- What are the current sustainability activities and impacts within the enterprise?
- Which sustainable enterprises offer best practices and what can be learned and implemented in the enterprise?
- What is the sustainability potential of firms?
- Which policy instruments are effective for sustainability and the circular economy and which not?
- What accelerators are needed to foster successful sustainable entrepreneurship in a region?
- Which transition lessons can be learned from best practice circular regions?
- How can the enterprise re-design and implement new business models of sustainable entrepreneurship while existing business models are still operating?
- What are the conditions for successful management of sustainable business models?

The societal impact of our Centre and the results of our research and education include:

- New business models: innovative and relevant product and services that have been designed based on state-of-the-art business and academic insights;
- Best practices: analysing and sharing patterns of sustainability in existing business models;
- Evidence-based tools: instruments that connect to sustainable entrepreneurship including methods for organisational readiness for sustainability and the circular economy at all levels of the enterprise;
- Inspiration and education: sharing state-of-the-art insights, knowledge and competencies of successful sustainable entrepreneurship and the circular economy;
- Collaboration and networks: ongoing opportunities for entrepreneurs and policy-makers to collaborate with our senior staff members and PhDs.

Regional partners and stakeholders

The Centre has made important and valuable contributions to the strategic goals and the regional knowledge infrastructure of Fryslân. This is the conclusion of the study on the regional impact of the Centre, conducted by Bureau Beleidsonderzoek and commissioned by the Province of Fryslân and the Municipality of Leeuwarden. The report offers an overview of regional stakeholders including the Municipalities of Leeuwarden, Ameland, Súdwest-Fryslân, Smallingerland, Waadhoeke, the Province of Fryslân, Elkien housing association, the Dutch Centre for Intangible Cultural Heritage, Strong Frisian Entrepreneurship (SFO)/Fryslân Innovation Pact, Inqubator, Board of Commitment partners, Circular Plastics (NHL Stenden University of Applied Sciences), Van Hall Larenstein University of Applied Sciences, Friesland College, Wadden Sea World Heritage Site, Wadden Academy, Global Centre on Adaptation, House of Design, Diaconal Goods Management Foundation, Sense of Place, Holwerd aan Zee, Havank Neighbourhood Association Leeuwarden, Veenhuizen Museum and the Frederiksoord Museum, De Pleats Burgum, Omrin, Elkien, Ecostyle, ING Leeuwarden, Rabobank, Caparis, Dzyzzion and Vanhulley.

The Centre is one of the founding members of the Frysian Association for the Circular Economy (Vereniging Circulair Fryslân), which is a network organisation with 100+ members. Their shared ambition is to accelerate the transition to a circular economy.

Academic outreach and impact

The Centre values all forms of impact it has on society. Through co-creation efforts with our partners, we realize a wide array of social and academic impact. We create our projects around the intention to find joint solutions for real world, sustainability-related business challenges. This has resulted in many academic works, including PhD theses, contributions to international conferences, consultancy reports, working papers, student projects, news events, journal articles, and (chapters in) books. Equally important are the intangible outcomes our efforts render, including the satisfaction, inspiration, teaching contents, networking, development of new competencies and skills that (in)directly follow from our research process and design.

New business models conferences, toolkit and online education

The Centre is involved in the wider discourse on new and sustainable business models, and how these contribute to the transition towards a circular economy and sustainable society. First, Dr. Niels Faber is member of the permanent board of the annual New Business Models Conference (NBM Conference). This series of conferences provides a platform for scholars and practitioners to discuss and share insights on business models that aim to shape a sustainable society. Over the years, the conference has attracted participants from all over the world, building a strong community of more than 700 people.

Second, the Centre is dedicated to the development of a consistent body of knowledge around sustainable business models. Doing so, we answer to the imminent need for organizations to adopt sustainability in their core business is imminent. If the latest IPCC report has not yet convinced about the dangerous effects of climate change, the heat waves and floods of past summer surely must have. The central role of citizens is irrefutably established. The time is now to make the necessary changes. The question is who and how? In the book 'Organizing for Sustainability', an organizational approach is chosen. Dr. Niels Faber and professor Jan Jonker present the Business Model Template, a comprehensive approach for modelling sustainable, social, and circular business models. The Business Model Template is the result of many years of research, and has been extensively tested in practice. The book is offered as an open access publication at the publisher's website.

Third, the centre is committed to making research insights available to the public. In the past year, it has contributed to the realization of a Massive Open Online Course (MOOC) around the book 'Organizing for Sustainability'. In 7 chapters and 54 units, MOOC participants develop or change their own business model guided by the Business Model Template. Next to instruction videos, the MOOC offers a rich variety of assignments, multiple choice questions, and additional learning material. The MOOC may be used as a standalone course, or be incorporated in or used as support to existing curricula and courses. Similar to the book, the MOOC is available as an Open Access course.

Entrepreneurship and sustainability teaching

The Centre actively engages with other universities and organisations in order to increase the number of truly sustainable entrepreneurship teaching programs. Dr. Emma Folmer and Dr. Tom Long were awarded an Erasmus+ Strategic Partnership grant for their project to move entrepreneurship and sustainability teaching forward. In light of the sustainable development goals set in Agenda 2030 of the UN, there is a high need and demand to integrate sustainability into entrepreneurship education, as entrepreneurial firms are an essential part of achieving these goals. Sustainability principles are currently often provided as an 'add-on' aspect to entrepreneurship education and teaching, not truly integrating the two concepts, as is the case in our Centre. The objective of this project is to address this gap by developing a teaching module integrating entrepreneurship and sustainability education using the Centre as a best practice example.

In a similar vein, professor Gjalt de Jong is involved in regional programs to foster the number of sustainable start-ups and to redesign general entrepreneurship in vocational and universities of applied sciences towards sustainable entrepreneurship.

University of the North: nature inclusive agriculture

Professor Gjalt de Jong is the director of the new program for nature inclusive agriculture in the context of the University of the North. The University of the North is the collaboration between the different Universities and the UMCG in the North of the Netherlands. The University of the North specializes in driving transitions of change. The University of the North considers the transition from economic growth to social well-being as the amplifier for new research, education and innovation the energy transition, circular economy, health and digitalization.

Agriculture is a crucial sector in this transition. Changing from mainstream to nature inclusive agriculture will result in a healthier system of food production and positive effects on biodiversity and climate. Professor de Jong designs the mission, vision and strategy of the nature inclusive transition agenda for the University of the North.

Professor de Jong also participates in and contributes to new agricultural innovation projects such as the 'caring for soil is caring for life' and the carbon neutral farming programs.

Professor de Jong and Dr. Niels Faber participate in the Can-Do-It program and the consortium with Wageningen University and Research and agricultural partners. The consortium develops and tests innovative action perspectives for agricultural innovations that contribute to the realization of the future scenarios. The program includes regional 'small wins' perspectives, which are small-scale yet radical initiatives in the food system towards circular agriculture systems. These small wins potentially are the foundations for social transitions.

University of the North: national regenerative farming program

Professor Gjalte de Jong and Dr. Niels Faber participate in the design of the new national program for Regenerative Farming. The focus of the program is on transitioning towards next generation of farming systems in the Netherlands. This includes a systemic upscaling of existing and new regenerative agricultural solutions towards a 100% coverage, meaning the entire Dutch agricultural system is regenerative and has a positive impact on nature and climate by 2040.

With this program, the added value of land-based agriculture in 2040 has significantly increased in comparison with 2021 including new and future-proof revenue models for farmers. The program aims to contribute to substantial savings in current environmental costs incurred through unsustainable agricultural practices. It also will foster the societal support for the new regenerative agricultural sector in the Netherlands.

The program is designed by leading scholars from the University of the North, Wageningen University and Research and the University of Utrecht in collaboration with agricultural innovators and partners from the entire agriculture value chain. The program will develop new pilots for regenerative farming in Friesland and de Achterhoek with a national network and coverage of at least 1000 farmers. The program builds on four scientific research lines including the design of regenerative agricultural and natural systems at enterprise and landscape level, methods, and technology for monitoring of ecosystem services delivered, economic and business models in a regenerative agricultural system, and the development of new human capital.



Appendix A. Selection of the Centre's publications and output

CSE PhD Theses

1. Dr. Manon Eikelenboom "Achieving sustainability together. Stakeholder collaboration for corporate sustainability and the circular economy" (University of Groningen, Faculty Campus Fryslân, to be defended 3 February 2022, supervised by professor Gjalt de Jong and dr. Tom Long).
2. Dr. Hendrik Thelken "Thinking apart and together. The role of cognition in managing multiple goals in sustainable enterprises" (University of Groningen, Faculty Campus Fryslân, successfully defended 26 August 2021, supervised by professor Gjalt de Jong and dr. Berfu Ünal).
3. Dr. Margo Enthoven "Unpacking opportunity recognition for sustainable entrepreneurship" (University of Groningen, Faculty Campus Fryslân, successfully defended 18 March 2021, supervised by professor Gjalt de Jong, dr. Berfu Ünal and dr. Emma Folmer).
4. Dr. Angela Greco "Changing for good: Transforming existing businesses in sustainable enterprises" (University of Groningen, Faculty Campus Fryslân, successfully defended 16 September 2020, supervised by professor Gjalt de Jong and dr. Tom Long).
5. Dr. Monique de Ritter "Mission-driven entrepreneurs for ecosystems in sustainable systems change" (University of Groningen, Faculty Campus Fryslân, successfully defended 29 August 2019, supervised by professor Gjalt de Jong and professor Annemieke Roobeek).

CSE Monographs

1. de Jong, G. (2016a). *Successful Strategy and Individuals*. Centre for Sustainable Entrepreneurship: Monograph Series No. 1. University of Groningen, Campus Fryslân.
2. de Jong, G. (2016b). *Successful Strategy and Organization*. Centre for Sustainable Entrepreneurship: Monograph Series No. 2. University of Groningen, Campus Fryslân.
3. de Jong, G. (2016c). *Successful Strategy and Alliances*. Centre for Sustainable Entrepreneurship: Monograph Series No. 3. University of Groningen, Campus Fryslân.
4. de Jong, G. (2016d). *Successful Strategy and Context*. Centre for Sustainable Entrepreneurship: Monograph Series No. 4. University of Groningen, Campus Fryslân.
5. de Jong, G. (2016e). *Successful Strategy and Policy*. Centre for Sustainable Entrepreneurship: Monograph Series No. 5. University of Groningen, Campus Fryslân.

CSE Awards and Recognition

1. Enthoven, M.P.P. (2020). Becoming an agent for change: the role of identity in the opportunity recognition process of social entrepreneurs in the face of wicked problems. Best PhD Paper Award International Social Innovation Conference (Sheffield, UK).
2. Eikelenboom, M., T.B. Long, and G. de Jong (2019). Circular business models in social housing associations. Annual best paper Cloverleaf award at the 2019 International New Business Models conference (Berlin, Germany).
3. Enthoven, M.P.M., G. de Jong, and B. Unal (2019). Entrepreneurial opportunities as solutions of sustainable development: the relationship between problem recognition and opportunity recognition. Best paper award at the 2019 High Tech Small Firms conference (Twente, the Netherlands).
4. Eikelenboom, M. and G. de Jong (2018). The impact of dynamic capabilities on SME performance. Best paper nomination at the 2018 Academy of Management conference (Chicago, United States).

CSE Articles, Books and Book Chapters

1. Blok, V., Scholten, V., and Long, T.B. (2018). Responsible innovation in industry and the importance of customer orientation: introduction to the special issue. *International Food and Agribusiness Management Review* 21 (4), 455-462.
2. Boersma, M.F., and G. de Jong (2018). Van top-down management control naar democratische besluitvorming. *Maandblad voor Accountancy en Bedrijfsconomie*, 92 (5/6), 157-165.
3. Corradini, C., Folmer, E., and Rebmann, A. (2022). Listening to the buzz: exploring the link between firm creation and regional innovative atmosphere as reflected by social media. *Environment and Planning A*, 54(2).
4. Coster, A.B., de Jong, M., Grit, A., & Vroom, S. (2020). A Sustainable Future for Frisian Folklore: Opportunities and Challenges for the sustainable Safeguarding to Intangible Cultural Heritage and Tourism in Friesland. *Volkskunde*, 121(4), 549-577.
5. Dawo, H., A., T. Long, and G. de Jong (2020). *Barriers for sustainable entrepreneurship in protected nature areas in the North Sea region*. Prowad Link Report Workpage 5.1, University of Groningen, Campus Fryslân.
6. Dawo, H., T. Long, E. Ragni Ytredal, A. Wilde Tippett, and G. de Jong (2021). *Sustainable entrepreneurship in the North Sea region: A guide book of best practice examples*. Report Interreg North Sea Region Prowad Link.
7. de Jong, G. (2019). Educating sustainable entrepreneurship. The case of the University of Groningen, in: A. Fayolle, D. Kariv, & H. Matlay (eds.) *The role and impact of entrepreneurship education. Methods, teachers and innovative programmes*, pp. 319-331, Cheltenham: Edward Elgar.

8. de Jong, G. (2020). CSE: bedrijven als gangmakers voor duurzame samenleving. In I. Vis (ed.) *Samen kennis en innovaties ontwikkelen: Towards a circular economy* (pp 44-46). Groningen: University of Groningen, Industrial Relations Portfolio Book.
9. de Jong, M., & Grit, A. (2019). Implications for managed visitor experiences at Muktinath Temple (Chumig Gyatsa) in Nepal: A ethnography. In: M. Griffiths, & P. Wiltshier (Eds.), *Managing Religious Tourism* (pp. 135-143). (CABI Religious Tourism and Pilgrimage Series). CAB International. <https://doi.org/10.1079/9781786393197.0135>.
10. de Jong, M., & Grit, A. (2021). *Contemporary Dutch Museums in a Post-Covid Era*. (1696 ed.). *Academia | Letters*. <https://doi.org/10.20935/AL1696>.
11. de Jong, M., & Grit, A. (2022). Dit is wat de toekomst brengt voor hedendaagse musea in Nederland: een case study. *Vrijtijdstudies (forthcoming)*.
12. de Jong, M., Mendonça, C., & Overy, S. (Editors) (2021). *Accelerationism. Journal of organizational change management*, 34(6).
13. Eikelenboom, M., and G. de Jong (2019). The impact of dynamic capabilities on the sustainability performance of SMEs. *Journal of Cleaner Production* 235, 1360-1370.
14. Eikelenboom, M., and G. de Jong (2021). The impact of managers and network interactions on the integration of circularity in business strategy. *Journal of Organization and Environment*, <https://doi.org/10.1177/1086026621994635>.
15. Eikelenboom, M., T. Long, and G. de Jong (2021). Circular strategies for social housing associations: lessons of a Dutch case. Special issue *Journal of Cleaner Production*, 292, <https://doi.org/10.1016/j.jclepro.2021.126024>.
16. Faber, N., & Jonker, J. (2019). At your service: How can Blockchain be used to address societal challenges? In H. Treiblmaier & R. Beck (Eds.), *Business transformation through Blockchain: Vol. II* (pp. 209–232). Palgrave-MacMillan. <https://www.palgrave.com/gp/book/9783319990576>
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CSE Community and Consultancy Reports

1. Jonker, J., Faber, N., & Haaker, T. (2022). *Circular Business Models: A study to classify existing and emerging forms of value retention and creation*. Ministry of Economic Affairs and Climate Policy.
2. Jonker, J., Faber, N., & Haaker, T. (2021). *QuickScan circulaire businessmodellen: Inspiratie voor het organiseren van waardebehoud*. Ministerie van Economische Zaken en Klimaat.
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4. Jonker, J., Faber, N., & Haaker, T. (2022). *Classificatie circulaire businessmodellen: Een onderzoek naar bestaande en toekomstige vormen van waardecreatie- en behoud*. Ministerie van Economische Zaken en Klimaat.
5. Dawo, H., Long, T.B., Yttredal, E.R., Tippett, E.W., and De Jong, G. (2021). *Sustainable Entrepreneurship in the North Sea Region: A guidebook of best-case examples*. PROWAD LINK—Protect and Prosper, Interreg North Sea Region.
6. Dawo, H.L.A., Long, T.B., (2021) *Sustainable businesses in touristic nature areas Best case examples from 5 countries*. PROWAD LINK—Protect and Prosper, Interreg North Sea Region.
7. Dawo, H., Long, T.B., and De Jong, G., (2020). *Barriers for Sustainable Entrepreneurship in the Wadden Sea World Heritage Site: An exploratory study*. PROWAD LINK—Protect and Prosper, Interreg North Sea Region.
8. de Jong, G. and M. Eikelenboom (2017). *Monitor duurzaam ondernemerschap. De stand van zaken in Friesland 2017*. Centre for Sustainable Entrepreneurship: Community Report No. 1. University of Groningen, Campus Fryslân.

CSE Conference Presentations and Working Papers

1. Balogh, N., D. Faems, I. Estrada Vaquero, and G. de Jong (2017). Not all those who wander are lost. Partner instability and performance of windfarm joint ventures. Proceedings of the *2017 Strategic Management Society conference* (Houston, United States). Awarded Best Paper Runner Up Award in the Strategy Process Interest Group.
2. Balogh, N., D. Faems, I. Estrada Vaquero, and G. de Jong (2018). What to keep and what to share. The drivers of human capital value in alliances. Proceedings of the *2018 Strategic Management Society conference* (Paris, France).
3. Balogh, N., D. Faems, I. Estrada Vaquero, and G. de Jong (2018). Summer breeze or large storm? The performance implications of partner change in wind farm joint ventures. Proceedings of the *2018 Academy of Management conference* (Chicago, United States).
4. Dawo, H., T. Long, and G. de Jong (2020). Barriers and opportunities for successful sustainable entrepreneurship in fragile ecological contexts. Proceedings of the *2020 RENT conference* (online due to covid).
5. De Bruin, A., I.J.M. de Boer, N. Faber, G. de Jong, K.J.A.M. Termeer, & E.M. de Olde (2022). A just transition? Justice principles relevant to food system transitions. IFSA 2022 Conference Farming systems facing climate change and resource challenges (Evora, Portugal).
6. Eikelenboom, M., and G. de Jong (2017). The impact of dynamic capabilities on sustainable performance. Theory and evidence from Dutch SMEs. *Centre for Sustainable Entrepreneurship: Working Paper Series No. 1712*. University of Groningen, Campus Fryslân.
7. Eikelenboom, M., and G. de Jong (2017). The impact of dynamic capabilities on sustainable performance: Theory and evidence from Dutch SMEs. *Centre for Sustainable Entrepreneurship: Working Paper Series No. 12*. University of Groningen, Campus Fryslân.
8. Eikelenboom, M., and G. de Jong (2018). The impact of dynamic capabilities on SME performance. Proceedings of the *2018 Academy of Management conference* (Chicago, United States).
9. Eikelenboom, M., and G. de Jong (2019). The impact of dynamic capabilities on the sustainability performance of SMEs. *Journal of Cleaner Production* 235, 1360-1370.
10. Eikelenboom, M., T. Long, and G. de Jong (2019). Circular business models in social housing associations: bridging ecological goals and social contexts. Proceedings of the *2019 International Conference on New Business Models* (Berlin, Germany).
11. Eikelenboom, M., T. Long, and G. de Jong (2019). Circular business models in social housing associations: bridging ecological goals and social contexts. Proceedings of the *2019 EURAM conference* (Lisbon, Portugal).
12. Eikelenboom, M., T.B. Long, and G. de Jong (2018). Circular models in social enterprises: the case of the social housing corporation. *University of Exeter symposium Circular Economy Disruptions, Past, Present, Future* (Exeter, United Kingdom).
13. Enthoven, M.P.M, G. de Jong, and B. Unal (2019). Entrepreneurial opportunities as solutions for sustainable development: the relationship between problem recognition and opportunity recognition. Proceedings of the *2019 High Tech Small Firms conference* (Twente, the Netherlands).
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17. Enthoven, M.P.P., and G. de Jong (2017). Sustainable opportunity recognition: A systematic literature review on individual factors. *Centre for Sustainable Entrepreneurship: Working Paper Series No. 5*. University of Groningen, Campus Fryslân.
18. Golub, V., E. Folmer, U. Stephan, and G. de Jong (2020). Trade-off or trade up: The analysis of financial and social performance in social enterprises. Proceedings of the *2020 Babson College Entrepreneurship Research Conference* (online due to covid).
19. Greco, A., and G. de Jong (2017). Sustainable entrepreneurship: definitions, themes and research gaps. *Centre for Sustainable Entrepreneurship: Working Paper Series No. 6*. University of Groningen, Campus Fryslân.
20. Greco, A., and G. de Jong (2018). Identity reflexivity and managerial sense-making: facilitating change in sustainable enterprises. Proceedings of the *2018 RENT XXXII conference* (Toledo, Spain).
21. Greco, A., and G. de Jong (2018). Organizational inertia for positive social change. Theory and evidence from a housing association. Proceedings of the *2018 Academy of Management conference* (Chicago, United States).
22. Greco, A., and G. de Jong (2018). The paradigm of balancing the triple bottom line in hybrid organizations: evidence from a Dutch housing association. Proceedings of the *2018 EGOS conference* (Tallin, Estonia).
23. Greco, A., T.B. Long, and G. de Jong (2019). Experimentation for sustainability through design thinking: the case of the sustainable innovation challenge. Proceedings of the *2019 EGOS conference* (Edinburgh, United Kingdom).
24. Greco, A., T.B. Long, and G. de Jong (2019). Experimentation for sustainability through design thinking: the case of the sustainable innovation challenge. Proceedings of the *2019 Academy of Management conference* (Boston, United States).
25. Greco, A., T.B. Long, and G. de Jong (2019). The freezing effect of sustainability paradoxes and conflicting identities in hybrid organisations. Proceedings of the *2019 Academy of Management conference* (Boston, United States).
26. Greco, A., T.B. Long, and G. de Jong (2019). When chasing energy neutrality becomes unethical: paradoxes of climate mitigation strategies for social housing. Proceedings of the *2019 Sustainability, Ethics and Entrepreneurship conference* (Miami, United States).
27. Heucher, K., Greco, A., & Miron-Spektor, E. (2021). Paradox and Well-being: A Multilevel Perspective on Cognitive and Emotional Responses. Proceedings of the *2021 Academy of Management Annual Meeting* (United States).
28. Kaus, J., G. de Jong, and N. Faber (2021). Developing sustainable entrepreneurial ecosystems for regional development: A conceptual review. Proceedings of the *2021 RENT conference*.
29. Klein Woolthuis, R.J.A., and G. de Jong (2017). The diffusion of novelty and field change. A cross case comparison of sustainable innovation in Germany, Spain and the Netherlands. *Centre for Sustainable Entrepreneurship: Working Paper Series No. 8*. University of Groningen, Campus Fryslân.
30. Klein Woolthuis, R.J.A., and G. de Jong (2017). The dynamics of institutional pressures. *Centre for Sustainable Entrepreneurship: Working Paper Series No. 10*. University of Groningen, Campus Fryslân.
31. Klein Woolthuis, R.J.A., M.B.M. Lankhuizen, and G. de Jong (2017). The diffusion of solar panels in Germany, Spain and The Netherlands. *Centre for Sustainable Entrepreneurship: Working Paper Series No. 9*. University of Groningen, Campus Fryslân.
32. Nielsen, R. K., Bartunek, J., Smith, W., Greco, A., Pingel Hansen, M., Bjerre Lyndgaard, D., Omeife, N., Pradies, C., & Keller, J. (2021). Interacting Productively with Paradox Theory in Practice – Education, Interventions & Dissemination. Proceedings of the *2021 Academy of Management Annual Meeting* (United States).
33. Thelken, H.N., and G. de Jong (2017). A value chain perspective on sustainable entrepreneurship. Insights from marine debris recycling. *Centre for Sustainable Entrepreneurship: Working Paper Series No. 4*. University of Groningen, Campus Fryslân.
34. Thelken, H.N., and G. de Jong (2017). The influence of the big five on consideration of future consequences: theory and evidence from Dutch citizens. *Centre for Sustainable Entrepreneurship: Working Paper Series No. 7*. University of Groningen, Campus Fryslân.
35. Thelken, H.N., and G. de Jong (2018). On the intention formation process in sustainable entrepreneurship. Proceedings of the *2018 RENT XXXII conference* (Toledo, Spain).
36. Vrenegoor, F., E. Cavagnaro, and G. de Jong (2019). Investigating the motivating values of micro and small sized accommodation owner/managers to enter into (sustainable) entrepreneurship. *Centre for Sustainable Entrepreneurship: Working Paper Series No. 13*. University of Groningen, Campus Fryslân.
37. Vrenegoor, F., G. de Jong, and E. Cavagnaro (2020). Understanding the sustainability stance of micro and small-sized accommodation owner-managers to enter into (sustainable) entrepreneurship. Proceedings of the *2020 Sustainable Tourism conference* (Wessex Institute, United Kingdom).

Outreach Professor Gjalte de Jong: Guest Lectures and Representation

1. Sustainable entrepreneurship in a circular economy (RUG Faculty of Economics and Business, 20 January 2022).
2. Regenerative agriculture (RUG CF, University College Fryslân, 8 December 2021).
3. Capitalism, capitalism, scarcity and the circular economy (RUG CF, University College Fryslân, 1 December 2021).
4. Duurzame landbouw in een circulaire economie (Dag van de Wetenschap, Campus Fryslân, 2 October 2021).
5. Inspiration lecture 'circular economy success' (SIA Raak NHL Stenden, Stop plastic soup in Hospitality & Tourism, 17 June 2021).
6. Chair and convener workshop 'the future of sustainable entrepreneurship research' (New Business Model Conference, 8 June 2021).
7. Chair and convener workshop 'the future of sustainable entrepreneurship teaching and consultancy' (New Business Model Conference, 8 June 2021).
8. Van economische groei naar duurzaam geluk. Westerkwartier 3.0 in 2030" (Vooruitkijkspiegel, Gemeente Westerkwartier, 19 April 2021).
9. Startup Pitch Wetsus CF (17 March 2021).

10. Teaching sustainable entrepreneurship, United in Diversitiy. A Europe of Sustainability – Challenges and Perspectives, Georg August University, Göttingen (19-20 November, 2020).
11. VVD Oost-Groningen 'duurzaam ondernemen in een circulaire economie' (8 October 2020).
12. TerpenTheater 'de transitie naar de circulaire economie' (24 January 2020).
13. Honours College 'sustainable entrepreneurship' (27 November 2019).
14. Representative Campus Fryslân site visit Delft University 'De stad als campus, de regio als proeftuin' (6 November 2019).
15. Science café 'circulaire economie' (November 2019).
16. Member of the alliance conference University of Groningen and Wageningen University & Research 'circular economy' (October 2019).
17. Economic Board Noord Nederland 'visie circulaire economie Noord Nederland' (October 2019).
18. Representative Campus Fryslân opening Kenniscentrum Energie (August 2019).
19. Representative University of Groningen project 'Friese burgers voor Friese boeren' (July and August 2019).
20. Opening lecture Circular Minds Conference, Campus Fryslân (June 2019).
21. Representative Campus Fryslân 'Wetenschapsprijs Friesland' (May 2019).
22. Representative Campus Fryslân site visit Gotland University (May 2019).
23. Representative Campus Fryslân 'Friese Ondernemer van het Jaar' (April 2019).
24. Lions Lecture 2019 'Duurzaam ondernemen in een circulaire economie', Lions and service clubs Sud West Fryslân (April 2019).
25. Science lecture Campus Fryslân 'Duurzaam ondernemen in een circulaire economie' (March 2019).
26. Sustainable entrepreneurship, Rethinking Economics, Erasmus University Rotterdam (January 2019).
27. Representative Campus Fryslân 'Waddenacademie: duurzame toekomst van de wadden' (November 2018).
28. Representative Campus Fryslân 'SDGs en ketensamenwerking', Friesland College (November 2018).
29. Representative Campus Fryslân 'Citydeal Leeuwarden: de stad is onze campus, de regio is onze proeftuin' (November 2018).
30. Met groene kerken naar een duurzamere wereld (Ikkerkerk Burgum, November 2018).
31. Representative Campus Fryslân visit Gotland Campus Uppsala University (November 2018).
32. Representative Campus Fryslân Friese Bestuurdersdag (October 2018).
33. Representative Campus Fryslân BGDD circulair bouwen (October 2018).
34. Representative Campus Fryslân opening academic year Northern Knowledge (September 2018).
35. Representative Campus Fryslân 'Fryske Academy: Academic Day 80th Dies Natalis' (September 2018).
36. Representative Campus Fryslân Friese Compagnie (June 2018).
37. Representative Campus Fryslân Friso Bokaal (May 2018).
38. Sustainable entrepreneurship and sustainable policy, Landelijk Congres Bestuurskunde (May 2018).
39. Representative Campus Fryslân expert groep Fryske Academy and Fries Sociaal Plan Buro (April 2018).
40. Succesvol en duurzaam ondernemen, MBA Leadership University of Groningen (April 2018).
41. Representation chair group in 'jaarplan circulaire economie provincie Friesland' (April 2018).
42. Sustainable entrepreneurship and regional development, Uppsala University Campus Gotland (April 2018).
43. Representative Campus Fryslân opening Innovatiehuis Buitenpost (June 2016 – June 2018).
44. Tresoar 'Duurzaamheid helpt Friesland vooruit' (January 2018).
45. Rabobank 'Succesvol duurzaam ondernemen' (December 2017).
46. Zakenkring Westerwolde 'Succesvol duurzaam ondernemen' (November 2017).
47. Representative Campus Fryslân opening 'Dag van de Duurzaamheid SKSG' (October 2017).
48. Representative Campus Fryslân conference 'Circular Economy', Ecommunity Park Oosterwolde (October 2017).
49. Representative Campus Fryslân for the 'intentieverklaring Franeker Academie' (October 2017).
50. Koplopersproject Groningen 'It giet oan! Strategie en nieuwe businessmodels van duurzaam ondernemen' (October 2017).
51. Commerciële Club Noordwest Friesland 'Regelvrij ondernemen in Noord-west Friesland' (April 2017).
52. Winterschool University of Groningen 'Sustainable entrepreneurship and business models' (February 2017).

Outreach Professor Gjalte de Jong: News and Opion

1. Expert opinie Energiegebruik in bedrijven en de ecologische voetafdruk (De Standaard, special katern milieutechniek, eind februari 2022).
2. Interview on-line magazine University of Groningen (Bevlogen bekeerling predict duurzaam ondernemen. Hoogleraar Gjalte de Jong zoekt en vindt verbinding met soulmates in Noord-Nederland, 20 december 2021; en online media).
3. Interview duurzaamheidsstrategie Bol.com (Bij Bol.com je koopschaamte weggliken met het vinkje 'duurzamer', Trouw, 23 november 2021).
4. Interview on-line magazine Rijksuniversiteit Groningen – duurzaam ondernemen in een circulaire economie en de regeneratieve landbouw. RUG, December 2021.
5. Interview reliving start-up (Meubels met ervaring, beter voor de CO2 uitstoot). Trouw, 9 november 2021.
6. Interview tweedehands kleding (Tweedehands wordt eerste keus. Tweedehands kleding is definitief doorgebroken maar dat heeft ook een keerzijde). Het Parool, 19 juni 2021.
7. Interview CO2 negatieve tapijttegels Interface. Trouw, 26 april 2021.
8. Westerkwartier "Als afval geld oplevert. Zicht op de kringloopsamenleving", www.westerkwartier.nl, 13 april 2021.

9. Interview circulair plastics en verdienmodellen. Afvalplastic is het berrpaaltje voorbij, Het Financieele Dagblad, 29 October 2020.
10. Interview tweedehandskieren. Milieubewuste jongeren kopen hun kleren steeds vaker tweedehands, Trouw, 15 October 2020.
11. Samen op weg naar kringlooplandbouw in Noord Nederland. Persbericht WUR/RuG, 3 september 2020.
12. Opinie Swaphone en de circulaire economie, Trouw, 11 augustus 2020.
13. Opinie tweedehands producten en de circulaire economie, Trouw, 3 juli 2020.
14. Centre for Sustainable Entrepreneurship. Green Innovation Agenda, Industrial Relations, University of Groningen, May 2020.
15. Corona crisis kan op termijn de vergroening versnellen. Friesch Dagblad, 30 March 2020.
16. Het komt economisch goed. RTV Noord website, 27 March 2020.
17. Opinie economische crisis. RTV Noord tv, 26 March 2020.
18. Opinie economische crisis. RTV Noord radio, 26 March 2020.
19. Student wil markt op met start-up. Pullplast, Amir Abu-Ghazaleh. Leeuwarder Courant, 8 February 2020.
20. In het schimmelig (bezoek Minister van Veldhoven). Leeuwarder Courant, 8 February 2020.
21. Persbericht portfolio boek "Samen nieuwe kennis en innovaties ontwikkelen: towards a circular economy", 3 February 2020.
22. Circulaire 11-Stedentocht Sneek, December 2019.
23. Opinie circulaire matrassen, Trouw, 19 November 2019.
24. College van professor in tweedehands toga bij heropening beursgebouw in Leeuwarden, Leeuwarder Courant, 2 November 2019.
25. Circulaire 11-Stedentocht Franeker, October 2019.
26. CSE: MKB bedrijven als gangmakers voor een duurzame samenleving. Industrial Relations University of Groningen, October 2019.
27. Verslag 11-stedentocht circulaire economie Ondernemend Leeuwarden LinkedIn, 22 May 2019.
28. Persbericht 11-stedentocht circulaire economie, 21 May 2019.
29. Circulaire 11-Stedentocht Leeuwarden, May 2019.
30. Fryslân worstelt met de circulaire economie. VNO NCW bulletin, 28 March 2019.
31. Netwerk essentieel voor de Friese circulaire economie. Gezamenlijk persbericht Provincie Fryslân en Campus Fryslân, 19 March 2019.
32. Werving nieuwe universitaire docent social media Campus Fryslân en University of Groningen, January 2019.
33. Eerste Friese eiland in 2022 duurzaam. Nederlands Dagblad, 17 January 2019.
34. Routekaart sirkulere ekonomy Fryslân. Interview Omrop Fryslân, 16 January 2019.
35. RUG helpt provinsje Fryslân: ien eilân moat folslein sirkuler wurde. Omrop Fryslân, 15 January 2019.
36. RUG moet Friesland binnen zes jaar circulair maken. Leeuwarder Courant, 15 January 2019.
37. Jaarplan 2019 Circulaire Economie, Provincie Friesland. 15 January 2019.
38. Persconferentie Provincie Friesland 'studenten wijzen de weg naar een circulair Friesland', 15 January 2019.
39. Groningse Eelde Airport is dood – lang leve de virtuele snelweg. RTV Noord – Noordzaken, 10 December 2018.
40. Duurzaam ondernemen kun je leren. Interview Dichterbij, ledenmagazine Rabobank, December 2018.
41. Neoliberaal geloof leidt naar ondergang. Leeuwarder Courant, 7 November 2018 (en social media).
42. Neoliberaal geloof leidt naar ondergang. Dagblad van het Noorden, 7 November 2018 (en social media).
43. De ondernemer van nu gaat voor geluk, niet voor het geld. RTV Noord – Noordzaken, 10 April 2018.
44. Webinar master sustainable entrepreneurship. RUG Campus Fryslân, 28 March 2018.
45. Webinar master sustainable entrepreneurship. RUG Campus Fryslân, 7 February 2018.
46. De week tot 1. Pannel lid RTV Noord Radio, 2 February 2018.
47. Sociaal ondernemen helpt ons op weg. Leeuwarder Courant, 31 January 2018.
48. Sociaal ondernemen helpt ons op weg. Dagblad van het Noorden Opinie, 30 January 2018.
49. Verkoop FC Groningen aan haar leden. RTV Noord – Noordzaken, 23 January 2018.
50. RUG kan los met opleiding duurzaam ondernemen. Friesch Dagblad, 20 December 2017.
51. Gezocht: wereldverbeteraars. Leeuwarder Courant, 20 December 2017.
52. Groen licht voor master duurzaam ondernemerschap. RUG Campus Fryslân, twitter, Omrop Fryslân, 19 December 2017.
53. Opinie beoordelingsgesprekken. Interview RTV Noord Radio, 28 November 2017.
54. It giet oan. Duurzaam ondernemen in de Westerwolde. Westerwolde Actueel, 21 November 2017.
55. Friese bedrijven: 7 op duurzaamheid. Friesch Dagblad, 9 October 2017.
56. Gjalt de Jong benoemd op eerste nieuwe leerstoel Campus Fryslân. Persbericht RuG, 5 October 2017 (social media, Omrin, Friesch Dagblad, Circulair Friesland).
57. Help mensen uit de bijstandsgevangenis en versoepel de regels. RTV Noord – Noordzaken, 17 July 2017.
58. De week tot 1. Pannel lid RTV Noord Radio, 7 July 2017.
59. Vergroenen levert blij medewerkers op. RTV Noord – Noordzaken, 6 June 2017.
60. Zoeken duurzame ondernemers elkaar op? TGTHR Magazine, May 2017.
61. Onderzoek duurzaam ondernemen met brief onder 1500 MKB bedrijven Noord Nederland, May 2017.
62. Opinie woningmarkt. Interview RTV Noord Radio, 18 April 2017.
63. RUG Campus Fryslân start met master sustainable entrepreneurship. Interview LEO en vermeld op homepage RUG, nu.nl, Omrop Fryslân, Leeuwarder Courant, GPTV, en Dagblad van het Noorden, 28 and 29 February 2017.
64. Ook master sustainable entrepreneurship goedgekeurd door de minister van onderwijs. RUG Campus Fryslân, 28 February 2017.



