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 groningen**

campus fryslân

centre for sustainable entrepreneurship

Department

Sustainable Entrepreneurship in a Circular Economy

Overview of Output

May 2022 – January 2023

Prof Gjalt de Jong

Summary and Overview

The Department of Sustainable Entrepreneurship in a Circular Economy (SECE) is very happy to share their next overview of output in the period May 2022 – January 2023. The SECE Department continued to develop a wide range of innovative activities in line with the Department's mission, vision and strategy (www.rug.nl/cf/cse). This overview reports its main output and deliverables for the May 2022 – January 2023 period (following the Department's performance reported earlier in the Department's latest [brochure](#)).

The SECE Department consists of seven (senior) staff members (prof. Gjalt de Jong, dr. Emma Folmer, dr. Josephine Geiger, dr. Berfu Ünal, dr. Niels Faber, dr. Tom Long and Hillie van der Bij), 10 PhDs (Valerija Golubic-Woudstra, Femke Vrenegoor, Hellen Dawo, Can Saral, Jens Kaus, Eric Fath-Kolmes, Geesje Duursma, Rymvide Muzikeviciute-Oud, Stefano Bertorini and Alex Bonnema) and a network of alumni including former staff members (including dr. Maaïke de Jong, dr. Alexander Grit, Hans van Polen, dr. Elsbeth Bembom and Giacomo Buzzao), former PhDs (including dr. Manon Eikelenboom, dr. Hendrik Thelken, dr. Angela Greco, dr. Margo Enthoven and dr. Monique de Ritter) and approximately 125 former master sustainable entrepreneurship students.

The SECE Department 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 SECE Department 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 impact programs for regional, national and international communities.

In the past year, the SECE Department has developed 23 journal articles/chapters/working papers, 4 community reports, 25 public engagement events, 14 (planned) grant applications, 5 PhD committees and 34 master student sustainable entrepreneurship research projects. Each of these achievements is valuable. No matter how abysmal its contribution, each achievement was developed from the intrinsic motivation to make sustainable entrepreneurship and the circular economy successful. Among all achievements, three innovations are worthwhile highlighting.

First, the senior team of the SECE Department successfully completed the DeGruyter Handbook of Sustainable Entrepreneurship Research. In doing so, the team involved many international scholars to present state-of-the-art academic research. The DeGruyter Handbook presents a wide variety of perspectives concerning research questions and aims, research methodologies, theoretical foundations and development and societal impact. The DeGruyter Handbook is an achievement given that the SECE Department now is considered a research team meeting international standards of academic research in research universities. The DeGruyter Handbook is the final token of appreciation for the legitimacy of sustainable entrepreneurship as an independent field of research.

Second, the unique proposition of the SECE Department not only enabled to deliver unique publications and PhD theses but also new very large grant applications that otherwise would not have been possible. The SECE represents the University of the Sustainable Future showing how our interdisciplinary, transdisciplinary and multi-method research with to date a very successful and proven track record can constructively solve societal challenges; a feature that is not available for traditional desk-top scholars that favour publications over anything else.

This resulted in two new research lines, at least. A first new and promissory research line concerns the SECE Department's lead for nature-inclusive farming transitions reflected in the network of [nature inclusive farmers](#) at the University of the North, the [Sicco Mansholt](#) Transition Program, the LNV grant [regenerative farming](#) (of 550K) enabling to hire new staff members for new business model research, new SECE PhD students working from radically new perspectives such as Art & Culture, the FryslânDOK/NPO television documentary "[de bodem bereikt](#)" on regenerative farming, the FryslânDOK/NPO podcast on [leadership of sustainable transitions](#), the seminar joint with AgroAgenda Noord-Nederland on [regenerative farming in the North of the Netherlands](#) – with reports in local press ([De landbouw heeft wroters nodig om door regels en systemen heen te breken](#)) and farming press ([Rijksuniversiteit Groningen en boer gaan samenwerken in transitie](#)) –, and the National Consortium application for regenerative farming (of 245M total with 15M for SECE). A second new and very promissory research line concerns the "Shocking Mobility" research program with the Dutch Zwaartekracht grant application (of 20M total) in which SECE participates. Sustainable mobility can only be achieved with a large-scale, disruptive transformation that results in drastic changes in transport and spatial behaviour. The Shocking Mobility program will investigate the decisional and behavioural dynamics of multiple stakeholders (such as citizens, policy-makers, entrepreneurs) and using these insights to come up with state-of-the art models and decision-

support tools to optimise transport planning and operations to achieve sustainable, resilient, accessible, and inclusive mobility. The national consortium applied for has a total budget of over 20 million. If granted, the UG/SECE will receive 13 PhDs and 4 post-docs for a period of 10 years.

Third, the SECE department successfully delivered its sixth and seventh PhD project with Hellen Dawo and Femke Vrenegoor defending their PhD theses soon. Also the SECE Department successfully delivered the fourth cohort of 34 sustainable entrepreneurs of the future. All our master SE students are very satisfied with our teaching mission, vision and strategy. Our master SE students are from around the globe and continue their international careers with sustainable entrepreneurship knowledge and academic expertise and sustainable leadership necessary to save the only planet earth we have. Our master SE students represent the SECE department around the globe with intrinsic motivation and inspiration derived from our master program. Meanwhile, the SECE Department already successfully started its fifth cohort of master student and use insights and feedback for continuous innovations in the teaching program.

These achievements highlight the legitimacy, success and sustainability of our SECE Department. Recent academic evidence and events show that climate change will not stop and that sustainable entrepreneurship more than ever are the key for sustainable solutions. The SECE staff members are exploring new opportunities including potential collaboration with Nijmegen University for new PhD research on the circular economy with the Vereniging Circulair Friesland for new recycling business models in farming. The SECE Department has a job to do – and will continue to do so in the next years to come.

Leeuwarden, 22 February 2023

Prof Gjalt de Jong

Head of the Department Sustainable Entrepreneurship in a Circular Economy

Journal articles/books/chapters/working papers

1. Dawo, H. L. A., Long, T. B., & de Jong, G. (2022) Sustainable entrepreneurship and legitimacy building in protected areas: Overcoming distinctive barriers through activism. *Business Strategy and the Environment*, May. <https://doi.org/10.1002/bse.3118>
2. Dawo, H.L.A., T. Long, and G. de Jong (2022). Sustainable entrepreneurship in protected areas: exploring the influences of embeddedness in a fragile socio-ecological contexts. *Proceedings of the 2022 AOM conference* (Seattle, Washington, United States).
3. 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. *Proceedings of the 2022 IFSA Conference* (Evora, Portugal).
4. de Jong, G. (2023). A general model of sustainable entrepreneurship in a circular model. In: G. de Jong c.s. (editor). *The DeGruyter Handbook of Sustainable Entrepreneurship Research*. Berlin: De Gruyter Publishers.
5. de Jong, G. (2023). Introduction to Foundations. In: G. de Jong c.s. (editor). *The DeGruyter Handbook of Sustainable Entrepreneurship Research*. Berlin: De Gruyter Publishers.
6. de Jong, G., Ünal, B., Faber, N., Long, T. B., & Folmer, E. (2023). *De Gruyter Handbook of Sustainable Entrepreneurship Research*. Berlin: De Gruyter Publishers.
7. Eikelenboom, M., & Long, T. B. (2022). Breaking the Cycle of Marginalization: How to Involve Local Communities in Multi-stakeholder Initiatives? *Journal of Business Ethics*, 1-32.
8. Engels, H., Jonker, J., & Faber, N. (forthcoming). Unravelling transition pathways (1): Conceptually clarifying the construct of events. In A. Stefanakis & I. Nikoloau (Eds.), *Circular economy and Sustainable Development: A necessary nexus for a sustainable future*. Springer.
9. Engels, H., Jonker, J., & Faber, N. (forthcoming). Unravelling transition pathways (2): Conceptually clarifying the construct of patterns. In A. Stefanakis & I. Nikoloau (Eds.), *Circular economy and Sustainable Development: A necessary nexus for a sustainable future*. Springer.
10. Faber, N. & Witjes, S. (Eds.) (forthcoming). Framing the future of the economy. Edward Elgar: London. *Planned 2023*
11. Faber, N., and Jonker, J. (forthcoming). A long-term perspective on sustainable business modelling: changing value creation, actors, and scope in a quest to foster transformation and transition. In: G. de Jong (Ed.). *Handbook of Sustainable Entrepreneurship Research*, De Gruyter: Berlin.

12. Faber, N., and Pennink, B. (*forthcoming*). From economic to sustainable value creation: the role of the region and room for entrepreneurial activities. In: G. de Jong (Ed.). *Handbook of Sustainable Entrepreneurship Research*, De Gruyter: Berlin.
13. Faber, N., Bootsma, P., & Pennink, B. (2022). Multi value creation for sustainable regional development: Defusing the complexity trap. In L. Michelini, A. Minà, & P. Alaimo Di Loro (Eds.), *Proceedings of the 7th International Conference on New Business Models: Sustainable Business Model Challenges: Economic Recovery and Digital Transformation*. LUMSA University.
14. Folmer, E., Rebmann, A. Johnson, C., & van der Waal, E. Opportunity development as a collective process: the case of community energy groups. Presented at Academy of Management Annual Meeting 2022.
15. Folmer, E., Rebmann, A., Johnson, C., van der Waal, E., & Schneiders, A. Mapping Change in local energy : Community energy groups and their Theory of Change. *Sustainable Entrepreneurship Handbook*.
16. Geiger, J. L., van der Werff, E., Ünal, A. B., & Steg, L. (2022). Context matters: The role of perceived ease and feasibility vis-à-vis biospheric values in recycling behaviour. *Resources, Conservation & Recycling Advances*, 16, 200122.
17. Golubic, V., G. de Jong, & E. Folmer (2022). When legitimacy comes crumbling down. A case study of a delegitimised publicly owned social enterprise. *Conference proceedings of the 2022 RENT Conference* (Naples, Italy).
18. Kaus, J., M. Yang, G. de Jong, & N. Faber (2022). Developing sustainable entrepreneurial ecosystems. The role of role of different ecosystems roles and types (accepted Edward Elgar Research Handbook of Entrepreneurial Systems).
19. Kaus, J., Yang, M., Gebhardt, L., & Faber, N. (2022). The emergence and development of sustainable entrepreneurial ecosystems: A comparison of three European regions. In L. Michelini, A. Minà, & P. Alaimo Di Loro (Eds.), *Proceedings of the 7th International Conference on New Business Models: Sustainable Business Model Challenges: Economic Recovery and Digital Transformation*. LUMSA University.
20. Kaus, J., Yang, M., Gebhardt, L., & Faber, N. (2022). The emergence and development of sustainable entrepreneurial ecosystems: A comparison of three European regions. *Organizing: The Beauty of Imperfection*. 38th EGOS Colloquium, Vienna.
21. Long, T.B., & Blok, V., (2023) Managing the responsibilities of doing good and avoiding harm in sustainability-orientated innovations: Example from agri-tech start-ups in the Netherlands. *New Horizons in Responsible Research and Innovation*. Springer.

22. Thelken, H., & G. de Jong (2023). Back to the sustainable future. The influence of the big five personality traits on consideration of future consequences. In: G. de Jong (Eds) *The De Gruyter Handbook of Sustainable Entrepreneurship Research*. Berlin: De Gruyter Publishers.
23. Ünal, A. B., Pals, R., Steg, L., Siero, F. W., & van der Zee, K. I. (2022). Is virtual reality a valid tool for restorative environments research? *Urban Forestry & Urban Greening*, 74, 127673.

Community Reports/White Papers

1. Buzzao, G., Long, T.B., & Bembom, E. (2022). The North Sea Sustainable Innovation. White Paper. PROWAD Link Project (www.waddensea-worldheritage.org).
2. de Jong, G. (2022). Natuurinclusieve Landbouw in het Noorden. Inspiratie, innovatie en daadkracht. Groningen: Universiteit van het Noorden.
3. 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.
4. Jonker, J., Faber, N., & Haaker, T. (2022). Quick Scan Circular Business Models: Inspiration for organising value retention in loops. Ministry of Economic Affairs and Climate Policy.

Public Engagement

1. de Jong, G. (2022). Afvalscheiding rivieren waterbubbel techniek (RTL Nieuws, 3 december 2022).
2. de Jong, G. (2022). Interview KLM en CO2 compensatie (“Rechtzaak tegen KLM om CO2 compensatie nieuwe bossen niet gegarandeerd”, NOS, 6 juli 2022).
3. de Jong, G. (2022). Key note ‘Sicco Mansholt Transitie Programma’ (landbouwconferentie Drachten, 12 November 2022).
4. de Jong, G. (2022). Key note ‘Sicco Mansholt Transitie Programma’ (Prinsjesfestival, Den Haag, 15 September 2022).
5. de Jong, G. (2022). Noord-Friesland wordt proeftuin landbouwtransitie. Leeuwarder Courant 3 november.

6. de Jong, G. (2022). Rijksuniversiteit Groningen krijgt 550 duizend euro voor onderzoek landbouwtransitie. Groninger Internet Courant (Groninger Internet Courant, 8 november 2022).
7. de Jong, G. (2022). Rijksuniversiteit Groningen krijgt 550 duizend euro voor onderzoek landbouwtransitie (nu.nl, 8 november 2022).
8. de Jong, G. (2022). RUG zet zich met subsidie voor nieuw onderzoek in voor landbouwtransitie (RUG news website, 1 november 2022, presberichten, social media en nieuwsbrieven).
9. de Jong, G. (2022). RUG zet zich met subsidie voor nieuw onderzoek in voor landbouwtransitie (duurzaam-ondernemen.nl, 8 november 2022).
10. de Jong, G. (2022). Subsidie van 850.000 euro voor onderzoek naar regeneratieve landbouw (agriholland.nl, 8 november 2022)
11. de Jong, G. (2023) Landbouw heeft ‘wrotters’ nodig om door regels en systemen te breken (Friesch Dagblad, 19 januari, 2023).
12. de Jong, G. (2023). FryslânDOK. De bodem bereikt. Aflevering 3. (Omrop Fryslân en NPO.nl, 4 & 5 februari 2023).
13. de Jong, G. (2023). FryslânDOK. Postcast professor Gjalt de Jong (Omrop Fryslân, <https://podcasts.apple.com/nl/de-boaiem-berikt-3-gjalt-de-jong/> 21 februari 2023).
14. de Jong, G. (2023). Organizer and key note ‘Regeneratieve landbouw in Noord-Nederland. Gezond voedsel van gezonde bodems met gezonde verdienmodellen.’ (18 January, Leeuwarden).
15. Faber, N. (2022). Organising for Sustainability. August 26, 2022, African Social Enterprise Workshop [online].
16. Folmer, E. (2023). Invited talk for KLM based on the work of alumna Terry Consenheim ‘organizational change for sustainability’ (18-01-2023).
17. Folmer, E. (2022). RISEBA university of applied sciences graduate school – guest lecture on ‘interdisciplinary teamwork and publishing in academia’ (08-10-2022).
18. Folmer, E. (2022). Invited talk ‘sustainable entrepreneurship’ for the Central Bureau of Statistics (CBS) during the symposium ‘the future of globalisation’ (16-06-2022).
19. Folmer, E. (2022). Invited talk ‘social entrepreneurship: business models & challenges’ for Midot, an Israeli impact investment NPO (17-05-2022).

20. Geiger, J. (2022). Lunch lecture Green Office, Campus Fryslan on 'Six Ways to Stimulate Sustainable Actions', Campus Fryslan (13 October 2022).
21. Long, T.B. (2022). European WaterCampus Business Challenge 2022 (16 May 2022). Wetsus, Leeuwarden
22. Long, T.B. (2022). North Sea Sustainable Innovation Challenge - Meeting the Winners (21 September 2022). Webinar held to introduce the PROWAD Link North Sea Sustainable Innovation Winners
23. Long, T.B. (2022). Sustainable Entrepreneurship and World Heritage (16 November 2022). Event: “Revitalizing Landscapes through Cultural and Creative Tourism - A Transdisciplinary Discussion” Heidelberg Centre for Transcultural Studies, Germany.
24. Long, T.B. (2022). Sustainable Entrepreneurship Education: Systematic Literature Review (23 April 2022). Guest lecture RISEBA University of Applied Sciences, Riga, Latvia.
25. Long, T.B., E. Folmer, U. Persson-Fischier (2022). Systematic review of sustainable entrepreneurship education research (28 March 2022). Presentation Erasmus.

Grants/Applications

1. de Jong, G. (2022). Ontwikkelen businessmodellen regeneratieve landbouw in twee gebieden. LNV subsidie €550k en subsidie Universiteit van het Noorden €300k (both accepted).
2. de Jong, G. (2022). PhD scholarship grant for Rymvide Muzekiviciuci €180K (accepted).
3. de Jong, G. (2022). PhD scholarship grant for Stefano Bertolini €180K (accepted).
4. de Jong, G. (2023). RE-GE-NL Transitie naar regeneratieve landbouw in Nederland. Total application €245M with €15,7M for UG/UvhN/CF (pending).
5. Folmer, E. (2022). SNN/ EFRO tender valorisatie Cycle-Up Circulaire Dienstverlening (submitted November 2022, pending).
6. Folmer, E. (2023). Comenius Teaching Fellow 2023 application *Teaching Sustainable Entrepreneurship in a Relational University* (pending).
7. Folmer, E. (2022). NWO KIC-call Collaboration in Mission Driven Innovation Systems: *Rural Ecosystems of Environmental and Social Entrepreneurs*. Submitted June 2022 (not accepted).
8. Geiger, J. (2023). Gratama grant on “Games to raise awareness for microplastic” with Irene Maltagliati (Faculty of Art, Sustainability Programme), Janina Wildfeuer (Faculty of Art) and Barbro Melgert (University Center for Pharmacy) (pending).

9. Long, T.B. (2022). VIDI Grant Application. Postgrowth entrepreneurship: Seeding a sustainable future (not accepted).
10. Long, T.B. (2023). 2023 Horizon Europe: Revitalizing Landscapes through Cultural and Creative Tourism, with Heidelberg University (planned).
11. Long, T.B. (2023). The 2023 Marie Skłodowska-Curie Actions, with Giacomo Buzzao (planned).
12. Long, T.B., & E. Folmer (2023). Comenius Senior Fellowship: Teaching Sustainable Entrepreneurship in a Relational University (pending).
13. Ünal, B. (2023). Application for NWO-NWA calls with the Hyperloop project with 1 PhD UG CF (pending).
14. Ünal, B. (2023). Application for Zwaartekracht total €20M with 13 PhDs and 4 post-doc for UG participation (pending).

PhD Theses, committees and prize nominations

1. Eikelenboom, M. (2023). Nomination on behalf of University of Groningen (rector magnificus) for the Social Sciences domain Praemium Erasmianum PhD Dissertatieprijs.
2. Femke Vrengoor (2023) “Sustainable tourism entrepreneurs. Values, motivations and implemented sustainability measures” (University of Groningen, Faculty Campus Fryslân, prof Gjalt de Jong & prof. dr. E. Cavagnaro).
3. Hamed Seddeghi (2022) – prof. Gjalt de Jong University of Groningen, Chair PhD. dissertation committee.
4. Hellen Dawo (2023) “Sustainable entrepreneurs in protected areas. Drivers, challenges, strategies and opportunities” (University of Groningen, Faculty Campus Fryslân, prof Gjalt de Jong & dr. T.B. Long).
5. Yarina Kowszyk (2022) – prof Gjalt de Jong, University of Groningen, PhD. dissertation examination committee.

Student Projects 2021-2022 master Sustainable Entrepreneurship cohort

1. Alejandro Giribas: [Barriers to Self-Targeting for Social Ventures Addressing the Bottom of the Pyramid](#)

2. Aleksandar Fürer: [Social Actions Fostering the Slow Fashion Movement in Europe: The Role of Social Entrepreneurs](#)
3. Alice Tarroni: [Assessing the Impact of Sustainable Start-up Support Programs: The Case of Innofest](#)
4. Anne Merkus: [The road to sustainable restaurants in the Northern Netherlands](#)
5. Anne-Laurine Ly: [Management of the environmental impact of sustainable small and medium enterprises in a B impact assessment context](#)
6. Anton Preuss: [Entrepreneurial ecosystems in the context of the Frisian energy transition](#)
7. Ayi Onikoyi: [Spillover Effects of Africa's Sustainable Goals](#)
8. Kobert Christiaan Scholten: [Young talent as the driving force towards a sustainable future](#)
9. Benjamin Recorbet: [How can we scale Sustainable Urban Agriculture?](#)
10. Brian van Es: [Micro entrepreneurs and sustainability: barriers and opportunities in Fryslân](#)
11. Dani Pattinasarany: [How can multinational cooperations create a win-win situation when creating environmental and financial sustainability?](#)
12. Eike van der Weele: [Scaling of Local Frisian Energy Initiatives](#)
13. Elena Iovenitti: [Case study: How an organization can encourage employees' pro-environmental behaviours](#)
14. Yu-Jhen Shih: [How to use sustainable branding as a unique selling point \(USP\) in a waste management companies? - A case study of Omrin](#)
15. Jonas Dijkstra: [Exploring the barriers and drivers of internal alignment: an investigation of boards of directors and ESG departments](#)
16. Jop Bijvoet: [Creating the triple bottom line in the insect rearing industry: current and future perspective](#)
17. Julia Kremer: [Customer adoption towards circular business models. An empirical case study of Circular Furniture in the city of Leeuwarden](#)
18. Julius Fischer: [Barriers to the implementation of circular food waste in farming: evidence from the insect industry](#)
19. Laura Marimon Rius: [Trust mechanisms related to perceived transparency and legitimacy of sustainable versus non-sustainable firms](#)
20. Linde van Wichen: [Who is captain? The role of leadership in sustainable small cooperatives](#)
21. Marieke Marijnissen: [Defining the barriers and drivers for startups to implement a CBM in their pre-market entry phase](#)
22. Maxime Kosterman: [Which nudges encourage Dutch consumers to consume sustainable food products?](#)

23. Namfon Jarumas: [A business model for sustainability: refurbished home appliances and its environmental, social and economic value](#)
24. Nienke Wouda: [Circular bioeconomy in Gelderland and Overijssel](#)
25. Nina Bittner: [Circular economy and the hospitality industry. An examination of the circular economy and its barriers in the hospitality sector in the Netherlands and Indonesia](#)
26. Rike Kornack: [The drivers and barriers to implementing price transparency in the case of sustainable companies](#)
27. Ruben Eduard Bos: [Identifying and overcoming barriers to electric vehicle adoption: A case for MHC mobility](#)
28. Ryoko Yatomi: [How to establish sustainable performance indicators? Barriers and motivations linked to the designing and implementation processes](#)
29. Stefano Bertorini Svec: [Accelerating the transformation of organisations towards sustainability through carbon credits](#)
30. Stijn Kromwijk: [The impact of a hydrogen guarantee of origin in the Netherlands](#)
31. Sunnivera Ferri: [Art for change. Building bridges between artists and organizations to raise awareness and educate about the climate crisis inside organizations](#)
32. Syria Reuvers: [Diversity and inclusivity in the organization](#)
33. Terry Consenheim: [Sustainable institutional entrepreneurship: the push from inside out](#)
34. Vlad Badea: [The role of franchising in sustainability and entrepreneurship](#)