


# Accelerating sustainability transitions

INTERNATIONAL INSTITUTE FOR INDUSTRIAL ENVIRONMENTAL ECONOMICS  
ANNUAL REPORT 2019



The IIIEE is an international and interdisciplinary centre within Lund University that produces and shares actionable knowledge to accelerate the transitions to climate-neutral and resource-efficient economies.

We do rigorous, impactful, and solution-oriented interdisciplinary research, focused on Business Management and Practice, Consumption Governance, Urban Transformation, and Policy Interventions. With a dual focus on management and policy, we educate future leaders and change agents.



Following an entrepreneurial start in 1994, the IIIEE has pioneered a range of activities including interdisciplinary research, high quality international Master's programmes and courses, award-winning on-line courses, including Massive Open Online Courses (MOOCs) and an innovative podcast.

**Interdisciplinary** – The IIIEE has a genuine interdisciplinary approach synthesizing insights not only from economic theory and practice but also from natural sciences, engineering, political science, organizational, legal and behavioural studies. The IIIEE academic staff has backgrounds in diverse disciplines.

**Collaborative** – The IIIEE education and research are performed in close collaboration with business, public authorities and other societal partners. We actively engage our partners in collaborative research, case study projects, site visits, lecture series, interactive seminars and workshops.

**International** – The IIIEE is a highly international, diverse and vibrant workplace with staff and students from all around the world. Our current staff are from 19 different countries and we have had students from more than 110 different countries.

“The year 2019, our 25<sup>th</sup> anniversary, was characterized by many achievements in our core activities: education and research. In 2019 we completed the reform of the Master's programme in Environmental Policy and Management. Based on the Master's thesis of the students that graduated in 2019, we clearly educate students with the knowledge and skills to work for sustainability transitions.

In 2019 IIIEE researchers published more academic publications than any year before, most as articles in outstanding academic journals. We also built the foundation for future research by getting funding for more new research projects than previously.

In 2019 we had two major future looking activities: we developed a new strategy (2020–24) and we did a self-evaluation of the research quality (2014–18). The research quality evaluation, which was part of an evaluation of the research quality at Lund University, made visible many strengths of the IIIEE. The high quality of our research was shown by the fact that 44 per cent of all publications were among the most Cited 10 per cent of all publications in the world. The evaluation also showed some weaknesses, such as the problems related to the employment of postdocs being limited to two years.

The new IIIEE strategy was developed in close collaboration between staff and the IIIEE board. It was adopted by the board in November. The new strategy gives the IIIEE a clear direction, but it also tells us how we are going to work, based on our commonly decided core values: courage, inclusion and integrity.”



*Professor Per Mickwitz,  
Director of the IIIEE*



## RESEARCH



### NANCY BOCKEN RECEIVES PRESTIGIOUS ERC STARTING GRANT

Professor Nancy Bocken was awarded the European Research Council's Starting Grant. During five years she receives 1.5 million euros for her new project CIRCULAR X, which will develop a new field of research on experimentation with circular service business models (CSBMs). The project will address how different companies, from start-ups to large multinational companies, and across high impact sectors, can experiment with circular business models towards the Circular Economy. The research will be conducted in 3 continents and 5 countries – the Netherlands, UK, Sweden, China and the USA – and involves 3 postdocs and a PhD student.

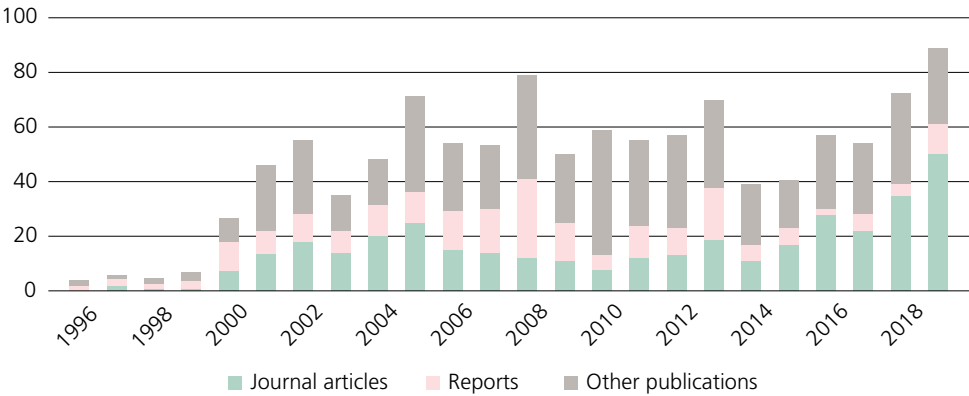
### SHOWCASING RESEARCH RESULTS OF THE MISTRA REES PROJECT

At the EcoDesign 2019 conference in Yokohama, Japan, Associate professor Carl Dalhammar co-hosted (with colleagues from Linköping University) a special session on “Advancing Circular Economy in the Manufacturing Industry: The Importance of Design, Business Models, and Policies”. Based on results from the MISTRA REES project, Carl presented his research about conflicting policies in the EU related to Ecodesign and Circular Economy, and PhD candidate Leonidas Milios presented critical inputs towards a Roadmap for a Resource Efficient and Effective Manufacturing Industry in Sweden.



### BEST PAPER AWARD FOR IIIIEE RESEARCHERS

PhD Student Steven Curtis and Professor Oksana Mont were awarded third prize for Best Paper at the 4th International Conference on New Business Models. The conference paper “Towards a Prescriptive Framework of Sharing Platform Models” presented research to describe business model choices in the sharing economy. Steven presented their research at the Conference, which took place in Berlin, Germany on 1–3 July, 2019.



### RECORD IN NUMBER OF NEW RESEARCH PROJECTS AND PUBLICATIONS

In 2019, some 13 new research projects received funding, of which the majority received funding above SEK 500 000. Among these are Circular X (Nancy Bocken), REES II (Nancy Bocken), CLUE (Jenny Palm), and CREASE (Carl Dalhammar). In 2019, the IIEE published more peer reviewed articles than in any other year. Several of these are published in top journals, such as Nature Climate Change or Journal of Cleaner Production.

## EDUCATION



### OUR INTERNATIONAL MASTER'S PROGRAMMES

We are very pleased over the fact that we continue to attract excellent students from all over the world to our M.Sc programmes. We are also very proud to see that graduates of these programmes go on to have important and rewarding careers where they truly become agents of change influencing the sustainability agenda at different levels of society across the globe. 2019 marked the culmination of our recent work with updating the programme curriculum and course design in both the EMP and the MESPOM programme. Our aim has been to further strengthen our ability to provide graduates with the knowledge, skills, and networks they need to truly drive sustainability transitions.

### IIIEE ALUMNI CONFERENCE

The Alumni Conference, which was held in May, gathered 140 participants for three intense and rich days of experience-sharing and networking, rounded off with a traditional Network dinner and party. A new Executive Committee was elected by the alumni network with key tasks to take the use of the new alumni platform to the next level. The new IIIIEE Alumni Platform reached an amazing 87% sign-up following an active recruitment campaign.



### TWO CLIENT REPORTS PRODUCED ON SUSTAINABILITY SOLUTIONS IN CONTEXT

The Sustainability Solutions in Context course is one of the capstone courses of the Master's programme in Environmental Management and Policy. The course leads student teams to client exercise projects all over the world. The students assist organisations and governmental institutions in finding solutions to their individual sustainability challenges by applying their accumulated knowledge. In 2019, two reports were produced: Reimagining Systems (Spring 2019) and The Time is Now: Accelerating Local Solutions for Global Change (Autumn 2019).



## PHD STUDENTS AND POST-DOCTORAL FELLOWS

In 2019 the following PhD students and Post-doctoral fellows began their educational and research activities at the IIIEE: Ana Maria Arbaleaz Velez, phd student on “Quantification of the sustainability impacts of sharing economy at a city level”, Anna-Riikka Kojonsaari, phd student on “Resistance and power – on smart electricity grids for the many people”, Roberto Hernandez Chea, postdoctoral researcher on “Intellectual Property Models to accelerate Sustainability Transitions (IPACST)”, and Katharina Reindl, postdoctoral fellow on “Property owners as prosumers – support structures and barriers”, and NEWCOMERS (New Clean Energy Communities in a Changing European Energy System)”.

## DOCTORAL DISSERTATION DEFENCE

Two phd students defended their doctoral dissertations: In June, Jonas Sonnenschein defended his doctoral dissertation on “Green growth and rapid decarbonization?”, and in December Jessika Luth Richter defended her doctoral dissertation entitled “Towards a Circular Economy with Environmental Product Policy: Considering dynamics in closing and slowing material loops for lightning products”.



## EVENTS, NETWORKS AND COLLABORATIONS



### SHARING CITIES SWEDEN SUMMIT

In October, Sharing Cities Sweden organized Sharing Cities Summit in Lund and Malmö with an exhibition on the role of sharing cities in advancing the sustainable development goals. Over 175 participants attended the event. Sharing Cities Sweden is funded by Vinnova – Swedish Innovation Agency with a budget of almost 120 Million SEK. Coordinated by Associate Professor Kes McCormick, the program aims to put Sweden on the map as a country that actively and critically works with the sharing economy in cities.

### THE CLIMATE COUNCIL OF LUND MUNICIPALITY

In April, the first report by the Climate Council of Lund Municipality was handed over to the municipal executive board of Lund. Professor Lena Neij is the Chair of the newly established council, which aims to assess the climate work of Lund Municipality and guide them towards reaching the goals set. The council is to annually evaluate the municipality's work towards minimized climate impact and climate adaptation, and suggest improvements that can add to achieve the municipality's climate goals. In the 2019 report, the goals for 2020 are estimated to be within reach, but achieving the goals for 2030 and 2050 are perceived to hold a significant challenge.



### THE NATURVATION PROJECT

NATURVATION involves 14 institutions across Europe working in fields as diverse as urban development, innovation studies, geography, ecology, environmental assessment and economics. The partnership includes city governments, non-governmental organisations and business. The project assess what nature-based solutions can achieve in cities. In September 2019 the entire partnership for the NATURVATION project convened in Lund to discuss the key findings, conduct a workshop for the development of a textbook on urban nature, organize seminars to share insights and ideas across the working groups, and advance our impact pathways on urban nature.



### PODCAST – ADVANCING SUSTAINABLE SOLUTIONS

In 2019, we continued producing monthly episodes, with approx. 4,100 unique listeners from more than 50 countries. Episodes showcased research, education, and events at the IIIEE. Our most listened to episode of 2019 discussed ‘Circular Business Models for Sustainability’, which was part of our miniseries on the circular economy. In 2019, we launched a Podcast Newsletter to grow our active listeners community.



### NEW MASSIVE OPEN ONLINE COURSES (MOOCs)

A new MOOC in the Greening the Economy series, “Urban nature: Connecting Cities, Nature and Innovations”, was developed in 2019. This free, on-line course explores nature-based solutions in cities around the world, connecting key themes of nature, cities and innovation. The Urban Nature MOOC is the fourth in the Greening the Economy series. The original and first MOOC is called “Greening the Economy: Lessons from Scandinavia”. The second MOOC is entitled “Greening the Economy: Sustainable Cities” and builds on the series. The third MOOC in the series is called “Circular Economy” and focuses on sustainable materials management. A fifth MOOC on Sharing Cities is launching in May 2020.

### THREE STUDENTS GOT AWARDS FOR MSC THESIS

Annually “Stiftelsen för utveckling av energieffektivt byggande” awards prizes in collaboration with Lund University and the magazine ‘Fastighetsvärlden’ for MSc theses. In 2019 Alexandra Jonca and Paulina Lis from the IIIEE, for their distinguished MSc theses within the area of energy efficiency. Maria Jäppinen was awarded first prize in SYSAB’s thesis award for her MSc thesis written in 2019.



# The IIIEE by numbers in 2019

**Master's students:** 138

**Master's graduates:** 900+ people from 100+ countries

**Staff:** 47

**MOOCs:** More than 47.000 active course participants and more than 324.000 visitors from more than 200 countries since starting in 2015.

**Publications:** 89, of which 50 peer reviewed articles and 11 book chapters

**Downloads:** 69.800 (320.000 in total)

**Research projects:** 43

**Turnover:** 49 Million SEK

## EDUCATION ACTIVITIES

All education at the IIIEE is designed to equip students with the knowledge, skills and personal qualities needed to advance strategies for sustainable solutions.

**Master's programmes**

**PhD programme**

**Undergraduate and Master's courses**

**Massive Open Online Courses (MOOCs)**

## RESEARCH THEMES

The IIIEE is a centre of excellence conducting interdisciplinary and collaborative research focused on advancing sustainable solutions in governance and management.

**Policy Interventions**

**Urban Transformation**

**Business Management and Practice**

**Consumption Governance**

## PODCAST

The IIIEE podcast, called Advancing Sustainable Solutions, aims to make sustainability more accessible and tangible for a general audience, by showcasing ongoing research, events and activities at the IIIEE. You can find our podcast on all major podcast platforms, including Apple Podcasts, Spotify, Poddtoppen, and SoundCloud.



Follow us on Facebook,  
LinkedIn, Twitter and Youtube



## IIIIEE ALUMNI NETWORK

The IIIEE Alumni Network includes 900 environmental professionals representing 110 countries around the world. They are graduates from the since 1995-Master in Environmental Management and Policy and our since 2005-joint Master in Science, Policy and Management, holding positions in industry, consulting, government, international organisations and academia. Networking is based on a global platform allowing members to share info, see details of fellow alumni and connect. Along with the digital connection real-life meet-ups take place in Lund and regionally.



Visit [www.iiiee.lu.se](http://www.iiiee.lu.se) for all the news, events, projects and publications from the IIIEE