

Accelerating Sustainability Transitions

INTERNATIONAL INSTITUTE FOR INDUSTRIAL ENVIRONMENTAL ECONOMICS
ANNUAL REPORT 2021



The IIIEE is an international and interdisciplinary centre within Lund University. We are committed to produce rigorous, impactful, and solution-oriented interdisciplinary research, focused on Business Management and Practice, Consumption Governance, Urban Transformation, and Policy Interventions to catalyze climate neutrality and resource-efficient economies.

We recruit students from all over the world with various disciplinary backgrounds. With a dual focus on management and policy, we educate future leaders and change agents with the knowledge, skills, and networks to drive sustainability transitions.

OUR VISION

A future in which the IIIEE has accelerated the transitions to climate-neutral and resource-efficient economies.

OUR MISSION

To produce and share actionable knowledge for sound decision making at all levels, from the local to the global, and to educate future leaders and change agents, to enable transitions to climate-neutral and resource-efficient economies.

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 behavioral 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 collaboration 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. We have more than 20 nationalities represented in the staff and we have had students from more than 115 different countries.

The year 2021 was characterised by COVID-19 with online meetings and hybrid education, but also by the many innovative solutions to keep a collaborate, engaging and vibrant environment for both students and staff when working from home. Looking back, we managed amazingly well with keeping a creative and joyful working environment. 2021 resulted in fantastic performance including collaborative processes leading to new insights and conclusions on how to advance a transformative change in society. Many articles were produced, new research ideas were developed, student reports were written, and examinations were successfully finalised. We can celebrate yet another year where we provided important contributions to achieve a transformative change towards climate-neutral and resource efficient economies. In this annual report, we share the experiences of some of our developments and contributions. We thank students and staff for their efforts as well as all research partners, companies, and organizations for creative and constructive collaboration in 2021.



Jenny Palm, Director 2022



Lena Neij, Acting Director 2021

RESEARCH

In 2021, the IIIEE hosted approximately 45 research projects and several research applications were developed and submitted to various research funding agencies; 15 of these applications were accepted for funding. In all, the IIIEE received more than 20 MSEK in new research contracts. The main funding agencies are EU, Formas, Energimyndigheten, Mistra and Naturvårdsverket.



DOCTORAL DISSERTATION DEFENCE – SOFIE LOMPAR SANDIN

In May Sofie Sandin Lompar defended her doctoral dissertation “Evaluating for a Transition – Advancing evaluation of research and policy for a more sustainable energy system and society”. Evaluation of policy and research is key for understanding how different initiatives work and their potential contribution. However, evaluation is often focusing on individual programmes and does not provide insights about transformative contributions. Thus, there is a need to consider how evaluation practices need to be complemented in order to capture how different policy incentives - alone and together – are supporting a transition. Sofie’s thesis proposes frameworks for how to design such transformative evaluations, by drawing on interdisciplinary foundations and combining key aspects to consider. The research builds on the case of current evaluation practices in Sweden, focusing particularly on initiatives for energy efficiency in buildings.

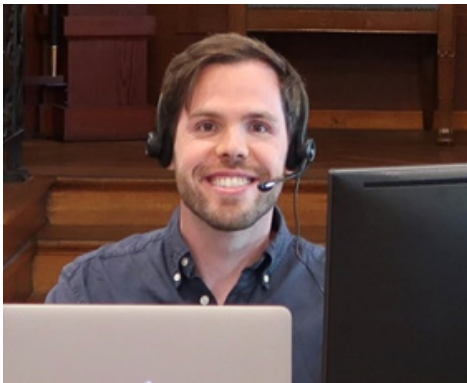
DOCTORAL DISSERTATION DEFENCE – STEVEN CURTIS

In June Steven Curtis defended his thesis entitled “Sharing Economy Business Models – Addressing the Design – Implementation Gap”. The sharing economy is said to take advantage of under-utilised goods and services in our economy, contributing to more sustainable consumption. Yet, despite widespread claims in academia and the media, the sharing economy is not sustainable by default. Accommodation sharing may gentrify neighbourhoods and contribute to over-tourism; ridesharing can lead to congestion; and bikesharing and e-scooters have led to an overcapacity of underutilised assets. In his thesis Steven Curtis concludes that with careful design of the business models that facilitate access over ownership, the sharing economy can increase intensity of use and material efficiency, contributing to sustain-



DOCTORAL DISSERTATION DEFENCE – LUCIE ENOCHSSON

In June, Lucie Enochsson, defended her thesis entitled “The Sharing Economy in Cities – Institutionalisation and Sustainability”. The environmental, social and economic benefits of the sharing economy have become a contested issue. When municipalities and sharing organisations argue how the concept should develop, they often use sustainability claims to back up their standpoints. In her thesis, Lucie Enochsson explains how sharing organisations and municipalities argue about the benefits and threats of the sharing economy. The study finds that a sharing platform needs to be aware of sustainability problems of the cities where it wants to operate. Otherwise, it may increase existing issues and face regulations that restrict its operations. Her thesis shows what sharing organisations can do to normalise the sharing economy, and how they can disrupt the old practices.



able consumption. “Past academic research and media attention tend to focus on unicorns such as Airbnb and Uber. There is greater need to explore the diverse permutations of business models within the sharing economy, especially considering sustainability”, says Steven.

EDUCATION



EDUCATION – THRIVING DESPITE THE COVID TIME

Despite the on-going covid situation that continued to affect our teaching activities in 2021, teachers and students strived to make the combination of on-site, on-line and hybrid learning activities work. 54 students – 27 from the MSc in Environmental Management and Policy (EMP) programme, and 27 from the Joint Master Degree in Environmental Sciences, Policy and Management (MESPOM) - successfully concluded their study in June. The evaluation of the EMP programme in 2021 highlighted the very high achievement of learning outcomes through various courses, while also provided food for thought for how to incorporate the worldview of the global south and the pluralistic perspectives on socio-economic systems in our education better.



ONLINE GRADUATION CEREMONY

On June 7 the 26th cohort of the EMP programme celebrated their graduation. The graduation ceremony was held in the University Aula, but this time with empty benches and family and friends around the world following the ceremony online through live streaming on YouTube. The graduation was much appreciated by the students, not least since we are the only institution within the University which managed to run the ceremony at least partly on site under the covid restrictions.

EDUCATION



COMMISSIONED EDUCATION

In 2021, IIIEE in collaboration with Lund University Commissioned Education (LUCE) and LU School of Economics and Management (LUSEM) successfully ran a capacity development pilot programme on Innovation in Governance for Urban Nature-based Solutions (2020–2021). The

EVENTS, NETWORKS AND COLLABORATIONS

IIIEE ENERGY BLOG

The Energy Blog was launched in 2021 and is a space to discuss energy, its role in our societies and how it can be transformed. The aim is to contribute with innovative ways to accomplish a transformation to a low-carbon society and a more sustainable and affordable energy system. Behind the blog you find a team of PhD students, researchers and professors. They present findings from their work with practitioners, policy-makers, civil society stakeholders and other researchers. You find the blog at www.iiieeenergyblog.wordpress.com

MASSIVE OPEN ONLINE COURSES (MOOCS)

Our MOOCs attract university students, professionals looking to learn new skills and generally interested. They are open to everyone and free of charge. Since the launch in January 2015, more than 800,000 people have visited the courses, 173,000 have signed up and more than 93,000 have started studying. The majority of participants are in the age of 25–34 (span over 18-65+), employed full time or unemployed (app 65%), and has a Bachelor’s or Master’s degree. The lion part of the participants come from India, US and the EU.



CAPSTONE CONSULTING COURSE

Our capstone consulting course challenged the final-year students in the EMP programme, this year almost entirely online with eight clients: Ingka Construction, Axis, TCO Development, UN-IDO, Opibus, Vinhos de Alentejo, Nomad Energy and the Swedish Ministry of Environment. The clients come with real challenges to the teams to get support in their sustainability work. Topics

programme targets mid- to upper-level managers in city administrations, civil society, or multilateral organisations focusing on governance, leadership, and innovation in the context of nature-based solutions in Azerbaijan, Armenia, Georgia and Ukraine. The second year of the programme with the same theme continued to receive funding



PODCAST – ADVANCING SUSTAINABLE SOLUTIONS

Advancing Sustainable Solutions is a monthly podcast produced by the IIIEE to make sustainability research more accessible and engaging for society, by connecting the podcast to research, events, and people relevant to the activities of the IIIEE and Lund University. The podcast has received 40,000 downloads across 27 episodes, placing it in the top 10% of all podcasts globally. The IIIEE Podcast remains an initiative of early career researchers, with team members having been Steven Curtis, Sofie Sandin, Frans Libertson, Katherine Shabb, and Karolina Södergren. In 2021 the podcast received more than 18,000 listens, an increase of 26% compared to the previous year.

ALUMNI NETWORK

2021 saw the first ever virtual alumni conference, a new addition to the biennial IIIEE alumni conference series. More than 290 alumni and students joined the event which featured sessions led by alumni on a variety of topics. Virtual fikas, tours and pub quiz allowed for great networking. In the everyday activities of the IIIEE more than 30 alumni supported our education by e.g. giving a lecture, hosting a student proj-

this year included repair policy for electronics, exploring why turning the heat off at night is bad for dissemination of district heating and sustainability for electric conversion of vehicles. The nature of the projects brings together a broad range of perspectives to the issue, creating a rich learning experience. Several of the projects have direct links to on-going research at the IIIEE and half of them had a developing country focus.

from the Swedish Institute (2021-2022). To further investigate the need for professional education in the urban realm, IIIEE in collaboration with Region Skåne, conducted a competence gap analysis, as a first step in the development of possible courses for a diversity of urban actors on the theme of smart and sustainable cities.



THOMAS LINDHQVIST RETIRED AFTER A LONG CAREER AT THE IIIEE

In December, Thomas Lindhqvist, Associate Professor, retired after many years at the IIIEE. Thomas is one of the founders and he has been researching and teaching at the IIIEE since the start in 1994. He was the key person in the initiation and development of both the EMP and MESPOM programmes. He’s also called “the father of EPR”, after having introduced the concept of extended producer responsibility in 1990.

ect such as an internship or a capstone project, acting as opponent to thesis project, etc. More numbers: 1000+ graduates with a 90+% sign-up rate to the IIIEE alumni platform. The IIIEE mentoring programme involved approx. half of the current students and ca 20 alumni. A post-COP event was held in November where half a dozen alumni shared inside experience from their participation – very inspiring for the current students.

THE IIIEE BY NUMBERS IN 2021

MASTER'S STUDENTS: 54

MASTER'S GRADUATES: 57

STAFF: 48 (20 nationalities represented)

PUBLICATIONS: 100

RESEARCH PROJECTS: 45

TURNOVER: 43 Million SEK

MOOCs: More than **800.000** unique visitors since the start in 2015.
In 2021, **35 000** signed up and **20 000** started studying.

ABOUT THE IIIEE

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.

The IIIEE Alumni Network includes 1000 environmental professionals representing more than 115 countries around the world. They are graduates holding positions in industry, consulting, government, international organisations and academia.

MOOCs (MASSIVE OPEN ONLINE COURSES)

We offer five MOOCs which are all part of the Greening the Economy series. These courses are open for everyone and free of charge.

- **"Greening the Economy: Lessons from Scandinavia"**
– How can we live a good life on one planet with over seven billion people?
- **"Greening the Economy: Sustainable Cities"**
– How can we shape our urban development towards sustainable and prosperous futures?
- **"Circular Economy: Sustainable Materials Management"** – How can we create a circular economy through sustainable materials management?
- **"Urban Nature: Connecting Cities, Nature and Innovations"** – How can we work with nature to design and build our cities?
- **"Sharing Cities: Governance and Urban Sustainability"**
– How can we govern the sharing economy in our cities?

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 accelerating sustainability transitions in governance and management.

- Policy Interventions
- Urban Transformation
- Business Management and Practice
- Consumption Governance

PODCAST – ADVANCING SUSTAINABLE SOLUTIONS

In our podcast we share ongoing research and activities through engaging conversation that is relatable and applicable to our daily lives. In essence, we wish to support listeners in their journey towards sustainability. We are launching a new episode on the third Monday of every month.

You can subscribe and listen to our podcast on any of your favourite podcast platforms including [Spotify](#), [Apple Podcasts](#), [Stitcher](#), [TuneIn](#) and [SoundCloud](#).

Visit www.iiiee.lu.se for all the news, events, projects and publications from the IIIEE and follow us on Facebook, LinkedIn, Twitter and Youtube.

