

Accelerating Sustainability Transitions

INTERNATIONAL INSTITUTE FOR INDUSTRIAL ENVIRONMENTAL ECONOMICS
ANNUAL REPORT 2020



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 2020 was a year unlike any other – and due to COVID-19 the IIIEE had to adjust the way we teach, research and interact. We prioritized health and safety of staff and students and made every effort to reduce the spread of the coronavirus. Despite working from home, students and staff have performed extraordinary, advancing insights and contributions for a transformative change in society. In 2020, students performed exceptionally, teachers worked hard providing a hybrid of both on-site and on-line education, and researchers found new paths in designing and accomplishing research. In all, we have all provided contributions essential for the urgent need of 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 2020.



Lena Neij, Acting Director 2021



Per Mickwitz, Director 2020

RESEARCH

RQ20

RQ20, the new major research quality evaluation at Lund University, is based on self-evaluations. These self-initiated self-evaluations are conducted at many major higher education institutions worldwide and have a great influence on funding applications and internally for the development potential of research environments. The report shows that external funding has increased substantially at the IIIIEE and larger projects have been obtained. IIIIEE stood out for its productivity and international reach. The world-class performance and the clear, and frequently-refreshed research strategy, were also mentioned in the report.



DOCTORAL DISSERTATION DEFENCE – JULIA NUSSHOLZ

In February Julia Nussholz defended her doctoral dissertation on “Circular Business Model Design: Business Opportunities from Retaining Value of Products and Materials”. Many suggest that a circular economy offers new business opportunities for companies and Julia’s thesis focuses on how companies can devise ‘circular’ business models (CBM) to capitalise on such opportunities, focusing on CBMs that retain value embedded in products and materials. Based on pioneering companies that have devised CBMs for value retention, the thesis examines what value their business model creates for the environment, business, society, and customers, and how value is created. A key finding is that CBMs for value retention have significant potential to reduce environmental impact, may have a promising business case, could generate employment, and could produce additional customer value.



DOCTORAL DISSERTATION DEFENCE – KATHERINE WHALEN

Katherine Whalen also defended her dissertation in February, entitled “Circular Business Models that Extend Product Value: Going Beyond Recycling to Create New Circular Business Opportunities”. She has mapped how companies can best apply circular business models in order to maximize profitability as customer satisfaction in their business. With the help of circular business models, companies can effectively reduce their environmental and climate footprint. The overall purpose of her research work has been to create a deeper understanding of the factors that increase the chances of a circular business model to succeed. An overall conclusion is that many companies are reluctant to invest circularly due to fears of high labor costs and limited demand for remanufactured and reused products. Another important conclusion is that support from authorities and politicians is crucial to speed up the circular shift.



FIRST ONLINE DISSERTATION – LEONIDAS MILIOS

In April Leonidas Milios defended his doctoral dissertation entitled “Policy Framework for Material Resource Efficiency – Pathway towards a circular Economy Paradigm” and at the same time he became the first PhD student at the IIIIEE to defend his dissertation online. The overarching aim of this research is to identify gaps in the current EU policy landscape relating to utilisation of material resources, and to investigate appropriate policy interventions. Eight distinct policy measures constitute the core of the



ASSOCIATE PROFESSOR KES McCORMICK ACHIEVES 200,000 DOWNLOADS

In October 2020, Associate Professor Kes McCormick at the International Institute for Industrial Environmental Economics (IIIIEE) passed a milestone of 200,000 downloads of his publications in Lund University Publications – which is the institutional repository for scholarly publications from Lund University. He is the most downloaded author at Lund University and the only researcher at Lund University who has achieved 200,000 downloads. Lena Neij from the IIIIEE is also among the top 10 most downloaded. The IIIIEE has produced over 1000 publications since it started in 1994 and around 250 publications are available for download through LUP. The IIIIEE has over 400,000 downloads in total for its publications.



policy framework, bundled together in a resource efficiency policy package: eco-design rules for product durability, reparability and recyclability; product standards for reparability and standards for secondary raw materials; circularity criteria in public procurement; quality labelling for reused products; a national reuse target; funding measures for capacity, technology and innovation development in recycling and reuse value chains; support for resource and information exchange platforms; and a ban on the incineration of recyclable waste.

EDUCATION



A DIFFERENT YEAR WITH A SWITCH TO ONLINE EDUCATION

In 2020, much focus was put on how to continue providing high-quality educational programmes under the Covid pandemic. Despite the pandemic, we managed to give all courses and we got very good feedback from the students. We switched to online education, trying out the hybrid solution where on-site and online education is combined, looking into measures to ensure students' well-being and the like. Another major change was the migration of online learning platform from LUVIT to Canvas, which also required substantial efforts. 24 students

graduated from the EMP programme and 33 from the MESPOM programme. In total more than 1000 students have graduated through the years representing more than 115 countries. Virtual celebrations for the graduating students from the two Masters programmes were held at the end of the spring semester. The quality of the master's thesis was assessed as being exceptionally high this year.

CAPSTONE CONSULTING COURSE

Our capstone consulting course challenged the final-year students in the EMP programme, this year almost entirely online with seven clients: Ikea, Axis, Oatly, Volvo Penta, Diab, Elkretsen and the Swedish Ministry of Environment. The projects covered a broad range of corporate and public sustainability matters – the clients come with real challenges to the teams to get support in their next steps. Topics included the use of SDGs to assess investments, how to move to raise ambitions in WEE recycling and framing the global perspective for the Stockholm+50 Conference. The nature of the projects brings together a

COMMISSIONED EDUCATION

In 2020, IIIEE started to investigate the possibilities to provide commissioned education. As a first step, an external commissioned education pilot - funded by the Swedish Institute – has been developed in collaboration with Lund University Commissioned Education (LUCE) and LU School of Economics and Management (LUSEM). The key theme for the pilot is Innovation in Governance.



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.

EVENTS, NETWORKS AND COLLABORATIONS



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 600,000 people have visited the courses, 140,000 have signed up and more than 73,000 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 UK.



CITY FUTURES SUMMIT

On October 8 the IIIEE organized the event "City Futures Summit", an online webinar with keynote speakers from Australia, Chile and Sweden around sustainable urban transformation and the missions approach. More than 2,000 participants signed up for the event. In conjunction to the webinar we ran interactive workshops where the global audience was divided into smaller groups and discussed topics related to the webinar. The summit resulted in an agenda that summarized the key insights and suggested actions from the event.



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. Since the start in September 2018 until December 2020, the IIIEE has produced 20 episodes. In December, the podcast crossed the threshold of 20,000 downloads, averaging more than 1,000 listens per episode! The podcast is available on all major podcast platforms, including Spotify, Apple Podcasts, Google Podcasts, SoundCloud, Stitcher and PoddToppen.



ALUMNI NETWORK

2020 saw the graduation of student 1000 from our international master programme. A historical milestone, involving graduates from more than 115 countries around the world. The other major milestone in the year was that we reached 90% sign-up rate for the engagement platform that we have set up for the IIIEE alumni network.

More numbers: more than 30 alumni supported our education by e.g. giving a lecture, hosting a student project such as an internship or a capstone project, acting as opponent to thesis project, etc. The alumni-led mentoring programme engaged 18 alumni and 43 students, and many alumni dropped by – virtually or physically – to say hi and catch up.

THE IIIEE BY NUMBERS IN 2020



Master's students: **113**
Master's graduates: **57**



Staff: **49**
(20 nationalities represented)

MOOCs: More than **600.000** unique visitors since the start in 2015. In 2020, **60 000** signed up and **30 000** started studying.



Publications: **76**



Research projects: **40**



Turnover:
45 Million SEK

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.

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

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)

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?

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

