

Sharing Information on Progress Report 2017–2019:

PRINCIPLES FOR RESPONSIBLE MANAGEMENT EDUCATION

LUT University | School of Business and Management

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Principles for Responsible
Management Education PRME
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A WORD FROM THE DEAN



We have taken important strategic steps in integrating sustainability and responsibility since our last Sharing Information on Progress (SIP) report. Our School of Business and Management (LBM) has reorganised in 2018 and made an even clearer commitment to the Principles for Responsible Management Education—we renewed our mission and declared our goal to educate research-based and responsible professionals for the future. Thus, responsible management education is even more firmly embedded in our school's strategy. In the future, each of our programmes will have a responsibility-related learning goal. In other words, responsible management education will soon touch upon each and every student in our school.

LUT University has long traditions in addressing sustainability from various perspectives in teaching and research. For LBM, sustainable value creation is one of our three strategic focus areas, along with SMEs and international entrepreneurship, and digitalisation and business analytics. Our staff and students work on a campus where sustainable solutions are visible every day as part of our Green Campus programme. Via our partnerships, collaboration, professional networks and initiatives such as the LUT Junior University, the impact of our expertise extends near and far.

We take our role in educating responsible future professionals seriously. For us, responsible business professionals understand that sustainability and responsibility have touch points to each discipline and each profession, and we aim to equip our graduates to address the challenges relating to sustainability and responsibility as part of the work that they do on a daily basis. Depending on the programme, these challenges can be manifold—ranging from sustainable supply management to sustainable business models, from digital privacy to employees and their wellbeing.

We are happy to report positive progress in this SIP report, and step into the future with continuous commitment to the Principles for Responsible Management Education. With enough courageous steps, business schools that follow the PRME principles can make a lasting impact on our future.

Professor Sami Saarenketo
Dean of LUT School of Business and Management

OVERVIEW OF LUT UNIVERSITY

LUT University (Lappeenranta-Lahti University of Technology LUT) is a pioneering science university in Finland, bringing together the fields of science and business since 1969. Our community is composed of approximately 6,000 students and experts engaged in scientific research and academic education, consisting of approximately 70 different nationalities. The main campuses are located in Lappeenranta and Lahti.

Clean energy and water, circular economy and sustainable business are the key questions of humankind to which LUT University seeks solutions through technology and business. The university is organised into three schools: the LUT School of Energy Systems, the LUT School of Engineering Science and the LUT School of Business and Management.

We are characteristically a challenger university. We desire to conduct research that is of a high quality and relevant to society and industries. As a compact, agile and highly focused university, LUT contributes to an economically, ecologically and socially sustainable society in our focus areas together with our partners in cooperation. We have traditionally strong

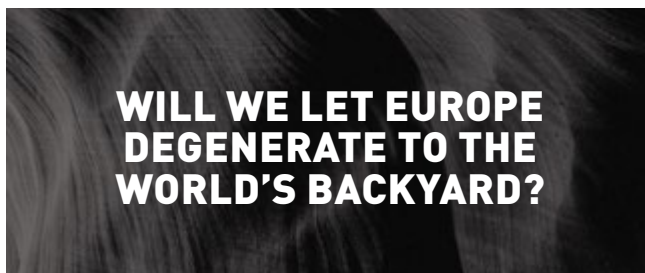
links with the business community. In everything we do, we observe our values: the courage to succeed, passion for innovation through science and a will to build wellbeing.



We are interested in tasks that others may consider impossible. Because of our trailblazer spirit, we are often in the vanguard and address issues based on our ability for renewal and our visionary outlook.”

Juha-Matti Saksa,
Rector of LUT University.

Employing our core expertise, we focus on selected global themes which are also important nationally and locally. Since 2015, our ‘Trailblazer’ strategy has directed us to seek answers to the following four core questions:



**The answer is: No.
We are the difference-makers.**

We are committed to providing an alternative path to these global challenges, focusing on solutions that favour renewable energy, a waste-free world, clean water, sustainable and smart business models and new green-collar entrepreneurship to boost growth in Europe. We educate future problem-solvers to change the world and work as we know it.

Strategic focus areas

- » Clean energy
- » Circular economy, emphasising clean water and waste streams
- » Sustainable business and entrepreneurship

LUT Goals

Educational revolution

- » We train the next generation of entrepreneurial problem-solvers who have a sense of responsible curiosity and who are willing and able to transform challenges into opportunities, seizing and shaping the business environment of tomorrow.
- » We use state-of-the-art teaching methods.
- » Our graduates' employment rate tops that of other universities.

Research in high gear

- » We are committed to excellence. This translates into high-quality research with a significant impact and visibility and into successful competition for funding.
- » We work together with the best possible international partners.
- » We recruit the top candidates internationally.

Impact

- » We contribute to providing answers to today's important societal challenges.
- » We are the first Finnish entrepreneurial university which meets the OECD's and the European Commission's criteria.
- » We are consolidating our position among the world's best universities.

LUT Values

- » Courage to succeed
- » Passion for innovation through science
- » Will to build wellbeing

Scientific solutions

Clean energy

- » Energy markets and solar economy
- » Energy conversion and storage technologies
- » Sustainability science

Circular economy

- » Water purification and reuse
- » Processing of secondary and renewable raw materials
- » Products and life cycle assessment

Sustainable business and entrepreneurship

- » Sustainable value creation
- » Small and medium-sized enterprises (SMEs) and international entrepreneurship
- » Business analytics and decision-making
- » Digitalisation of businesses

Cross-cutting themes

- » Digitalisation and data science
- » Focus area research in the Russian context and with the best Russian partners



GREEN CAMPUS

LUT Green Campus is a unique research and educational environment, where the university's expertise in energy as well as its own innovations are put to practical use. The purpose of our Green Campus actions is to decrease our environmental load and to increase our positive environmental impact. The Green Campus encompasses LUT University's environmental policy and environmental management system, including on-campus production of solar and wind power. LUT University is committed to recognising its environmental responsibility in all of its operations.

Green Campus is our way of thinking and operating, allowing us to utilise interdisciplinary research and teaching activities innovatively to reduce environmental load. With the Green Campus environment, we set

an example for how science and technology can be used to solve environmental problems. On the Green Campus, we can build a world the way we think it should be.

As part of the Green Campus programme, LUT has maintained the World Wildlife Fund (WWF) Green Office certificate since 2012. According to the Green Office principles, we reduce the environmental impact of our campus by saving energy, reducing waste, recycling and sorting, and sustainable procurement, and are regularly monitored for our efforts by WWF.

Further information:
lut.fi/web/en/green-campus

LUT SCHOOL OF BUSINESS AND MANAGEMENT

The LUT School of Business and Management (LBM) is a compact, agile business school in a university of technology. We are a public, medium-sized business school operating in three locations—the main campus in Lappeenranta, the Lahti campus, and the LUT Mikkeli regional unit. The academic and administrative staff consists of approximately 100 persons, and the number of students enrolled in degree programmes is approximately 1360.

An entrepreneurial, sustainable and global mindset and analytical thinking characterise LBM. We belong to the community of European business schools committed to developing their activities according to the international higher education quality standards.

Students in our research-based degree programmes graduate as Bachelors, Masters and Doctors of Science in Economics and Business Administration. Our graduates are experts with excellent problem-solving and professional skills. Our Master's Degree Programme graduates fare exceptionally well in the job market: the employment percentage for our graduates of 2018 was 79%.

LBM's focus of both education and research is on sustainable business renewal. The LBM strategy is aligned with the current LUT strategy, extending to 2020. LBM combines social, technological and business expertise for promoting entrepreneurship, the growth and internationalisation of businesses and the sustainable development of society. This combination is a focal strength of the university and gives great potential for education and research with the aim of creating new knowledge and solutions that promote sustainable business renewal and, thus, wellbeing on Earth.

Vision

The LBM Vision is to be internationally recognised for our impact on sustainable business renewal—enabled by new technologies and an entrepreneurial spirit.

Mission

The LBM Mission is to educate research-based and responsible professionals in the fields of business and management.

We do this by creating and sharing quality research and business-relevant knowledge for the benefit of students, businesses, the academic community and society at large.

LBM follows LUT values, which are the courage to succeed, passion for innovation through science and a will to build wellbeing. The main objective of LBM's research is to form a better understanding of sustainable value creation and business renewal, especially in the defined strategic focus areas.

Strategic focus areas

Sustainable value creation
SMEs and international entrepreneurship
Digitalisation and business analytics

Degree programmes

Bachelor's Degree in Economics and Business Administration, with two specialisation areas:

- » International Business
- » Financial Management

Master's Degree in Economics and Business Administration

- » Master's Programme in Accounting (LAMO)
- » Master's Programme in Knowledge Management and Leadership (TIJO)
- » Master's Programme in International Marketing Management (MIMM)
- » Master's Programme in Strategic Finance and Business Analytics (MSF)
- » Master's Programme in Strategy, Innovation and Sustainability (MSIS)
- » Master's Programme in Supply Management (MSM)
- » Master's Programme in Business Analytics (MBAN)*
- » Master's Programme in International Business and Entrepreneurship (MIBE) (new program starting autumn 2019)

Doctoral Degree in Economics and Business Administration

- » Doctoral Programme in Business and Management

**Currently organised as a joint effort of LBM and the LUT School of Engineering Science (Industrial Engineering and Management) and leading to a degree in technology. Starting from autumn 2019, MBAN will run as one of LBM's programmes.*

PURPOSE

Principle 1:

‘We will develop the capabilities of students to be future generators of sustainable value for business and society at large and to work for an inclusive and sustainable global economy.’

LBM is guided by the LUT ‘Trailblazer’ strategy 2017–2020, which emphasises clean energy, circular economy and sustainable business and entrepreneurship as strategic areas of expertise for LUT. In 2018, LBM updated its own school-level strategy in alignment with the institution-level strategy. Our new vision is to be internationally recognised for our impact on sustainable business renewal—enabled by new technologies and an entrepreneurial spirit. Our strategic focus areas are sustainable value creation, SMEs and international entrepreneurship, and digitalisation and business analytics. As such, sustainability is firmly a core element of the strategic work in our school as well as at the university level, which we are currently putting into effect across our actions.

As a token of our university-level integration of sustainability-thinking, our Green Campus programme has been an active and visible part of our campus life since 2011. Within LUT, taking environmental issues into account and managing them are part of the organisation’s management activities which are supported by the university’s environmental management system. Our environmental policy commits the organisation to maintaining and developing its management of environmental issues and the knowledge of its employees on environmental issues. We monitor, measure and regularly review the development of our environmental protection and reserve sufficient resources to ensure continuous improvement.

LBM has been a PRME Signatory since 2015. In 2017, our school also joined the Nordic Chapter of PRME to get in touch with other Nordic business schools working on PRME. The identification, development and follow-up of actions regarding the principles of PRME are managed by our school’s PRME Coordinator, in close collaboration with the Dean of School of Business and Management. The PRME Coordinator also acts as the main contact person for the PRME Office and the Nordic Chapter. The university-level actions for sustainability at LUT University are led by the Rector and coordinated by our Quality Manager and a designated Manager of the Green Campus programme. Sustainability experts with academic or industrial backgrounds sit on the highest decision-making

body of the university, the University Board, as well as on the Advisory Board, which consists of esteemed industry experts. Our students are represented in the administrative bodies of the university, such as the University Board, the Quality and Environmental Management committee and the Learning Experience development group.

LBM is committed to integrating sustainability as a cross-cutting theme across its programme portfolio and academic research, the aim being to educate responsible professionals in the field of business and management. To support this aim, a decision was made in spring 2019 to make sustainability and responsible business skills a measurable learning goal in all programmes of LBM. More precisely, it has been outlined that upon completion of their studies, LBM bachelors demonstrate their understanding of sustainable business by being able to explain key concepts and frameworks related to sustainability and responsibility and assessing sustainable business practices. Graduates on the master’s level will have responsible business skills, including a profound understanding on the discipline-specific responsibility issues as well as an ability to critically evaluate the consequences of business decisions from a responsibility perspective. The head of the degree programme is responsible for the development of education and, together with the program directors, ensures that the education is developed from the sustainability and responsibility perspectives.

Responsible management education at LBM is further supported by the efforts that the school is taking to develop its processes in alignment with the standards set by the Association to Advance the Collegiate Schools of Business (AACSB). The development of the systematic assurance of learning processes means, for example, that programme-level learning goals will be measured, results analysed and corrective actions taken when needed. As such, LBM will be better equipped in the future to evaluate the level of sustainability-related capabilities of its graduates and thereby the realisation of Principle 1 among each graduating cohort.

PROGRESS OF GREEN CAMPUS TARGETS

PURCHASING 100% OF RENEWABLE ENERGY SINCE 2014

2.2% OF ELECTRICITY SELF-PRODUCED IN 2017, GOAL TO REACH 5% BY THE END OF 2020

CONSUMPTION OF ELECTRICITY PER STUDENT DECREASED BY 5%

ON TRACK IN REDUCING THE TOTAL CONSUMPTION OF WATER BY 20% BY THE END OF 2020

LOW CARBON FOOTPRINT IS PART OF INVESTMENT STRATEGY SINCE 2018



VALUES

Principle 2:

‘We will incorporate into our academic activities, curricula, and organisational practices the values of global social responsibility as portrayed in international initiatives, such as the United Nations Global Compact.’

The mission of LBM is to educate research-based and responsible professionals in the fields of business and management. We aim to achieve our goal by creating and sharing quality research and business-relevant knowledge for the benefit of students, businesses, the academic

community and society at large. Entrepreneurial, sustainable and global mindsets are seen as cross-cutting themes in our programme portfolio, and the mindsets are embedded in the teaching methods employed throughout the course portfolio.

LUT VALUES

Courage to succeed

- » We focus on and develop our specialised expertise.
- » We are committed to strong performance, collaboration and shared results.
- » We capitalise on new ideas and courses of action open-mindedly.

Passion for innovation through science

- » We base our activities and actions on a high level of academic rigor and ethics.
- » We promote the visibility and application of scientific results.
- » We actively participate in public discourse.

Will to build wellbeing

- » We desire to make the world a better place.
- » We operate in a manner which inspires trust and confidence in stakeholders within and beyond the university.
- » We are accountable to ourselves and to the society around us.

The university-level values—courage to succeed, passion for innovation through science and will to build wellbeing—have guided us since 2011. Especially the ‘will to build wellbeing’ reflects our organisation-level commitment to sustainability and responsibility. The values were determined in 2011 in a wide and engaging process within the university, where both employees and students shared their views on what they see as important for their work. This process served as a basis for the ‘Trailblazer’ strategy (launched in 2015, updated in 2017). Furthermore, LUT’s environmental management system, environmental policy and the Green Campus programme are examples of the integration of sustainability and responsibility in our university, visible in various ways to our staff and students on a daily basis as part of our campus environment and routines.

Since 2011, LUT has followed a Code of Conduct that describes the policies and actions to ensure ethical and responsible behaviour across all decision-making processes in the university. The LUT Code of Conduct guarantees an equal and transparent basis for each member in the university’s community to act in line with the ethical expectations when faced with situations requiring ethical reasoning. Responsibility requires engagement in societal, environmental, managerial, social and economic issues with respect to the university’s stakeholders and the surrounding society. The LUT Code of Conduct stems from both national and international regulations and agreements, human rights agreements and the fundamental principles of the world of work. Furthermore, academic and business ethics and the university’s internal rules are reflected in the LUT Code of Conduct, which is enforced, updated and monitored by the university’s board of directors.

LUT has adhered to the guidelines for the responsible conduct of research that are set by the Finnish Advisory Board of Research (TENK). TENK is appointed by the Ministry of Education and Culture, and its guidelines are formed in cooperation with the Finnish research community. The guidelines promote responsible conduct of research—concerning, for example, data gathering, the role of financiers and the publication of results—and provides guidance on how to handle alleged violations. The guidelines of TENK serve as guidance both for the faculty and students at LUT, and they are integrated into LUT’s guidelines on Good Scientific Practice and Ethical Guidelines for Academic Studies.

In LBM’s research fields, carrying out research rarely requires advanced reviews when the researcher commits to the TENK guidelines. However, LUT advises paying special attention to good scientific practices and research ethics when the research involves experimental settings or when the research may cause harm to the environment, animals, plants or humans. For those cases, LUT has established

guidelines and an internal process for applying for a preliminary ethical review of research and for obtaining a statement from an ethics committee, chaired by LUT’s Vice Rector of Research .

LUT has procedures in place for handling misconduct in research and student work. Issues related to cheating and plagiarism are discussed in courses and seminars throughout the studies and communicated in course materials on course websites. The electronic enrolment system obligates new students to read the guidelines before they can finish their enrolment for the first semester. Each new doctoral student at LUT will also receive a copy of the guidelines for the responsible conduct of research. Furthermore, the LUT Doctoral School offers a course on research ethics that is open to all of LUT’s postgraduate and undergraduate students and faculty. The course deals with questions such as ethical theory, preparing an ethically sustainable research plan and the researcher’s ethical responsibilities.

LUT has made a public commitment to sustainable development to the Finnish Ministry of the Environment concerning wellbeing at work. Our sustainable academic activities are governed by the university’s quality policy, which lists the following principles:

- The university’s activities and management are based on continuous assessment and development.
- The university fulfils its mission in ways that promote the wellbeing of the staff and students.
- The university maintains a quality management system, which ensures that the university is able to operate in a reliable, ethical, efficient and quality-oriented way, taking the needs of clients and other stakeholders into consideration.

At LBM, we currently have faculty members from 12 different countries. With regard to gender diversity, 54.5% of LBM faculty members are female and 45.5% male. In 2017, the share of international degree students in international Master’s programmes (in English) at LBM was approximately 21.5%. As for gender diversity in 2017, around 60% of Bachelor’s and 45% of Master’s students at LBM were male. In the LUT equality plan for university personnel and students, a formal document approved by the Rector, the main policies are outlined for supporting equal opportunities and treatment regardless of age, gender, language, ethnic origin, nationality, sexual orientation or disability. Furthermore, the guidelines for fostering accessible education are available to students via the Uni portal and to teachers via the LUT intranet. Accessibility is taken into account when new facilities are designed and old ones renovated.

METHOD

Principle 3:

'We will create educational frameworks, materials, processes and environments that enable effective learning experiences for responsible leadership.'

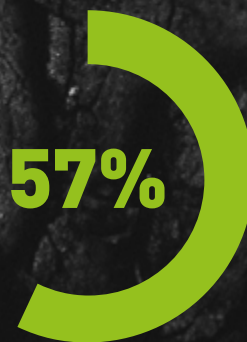
LBM has integrated sustainability and responsibility in curricula in several ways. All our incoming students are introduced to our Green Campus thinking early on when they undergo their study orientation. During academic year 2017–2018, 43% of our school's degree programmes had learning goals related to sustainable development, and in academic year 2018–2019 the share had increased to 57%. According to a national survey by the Finnish Business School Graduates published in 2018, our graduates estimate that they are better skilled at evaluating business problems from an ethical and sustainable point of view compared to other business school graduates in Finland.

Since the previous report, LBM has made a strategic decision to develop the curricula of our programmes towards a

cross-cutting approach to sustainability and responsibility. On the bachelor level, one of the most important changes has been the launch of a new course titled 'Introduction to Corporate Social Responsibility and Sustainability', running for the first time in spring semester 2019 as a mandatory course for students specialising in international business. As of academic year 2019–2020, the course will be compulsory for all bachelor-level students regardless of specialisation. Bachelor students can also add sustainability-related courses to their elective studies, such as 'Basics of Environmental Economics' and 'Social Sustainability'. The course offerings for bachelor students on sustainability and responsibility are continuously developed further as part of our curriculum work.



of our new students participating in orientation week learn about our Green Campus thinking.



of our degree programmes have learning goals related to sustainable development.

On the Master level, we are currently in the process of strengthening each programme's unique perspective on sustainability and responsibility to expose every student to their discipline-specific sustainability and responsibility issues. This means that besides the dedicated Master's programme 'Strategy, Innovation and Sustainability (MSIS)', we are adding and emphasising sustainability and responsibility within each programme's core studies and learning goals.

EXAMPLES OF RELEVANT SUSTAINABILITY AND RESPONSIBILITY ISSUES FOR OUR MASTER'S PROGRAMMES

Master's programme	Examples of sustainability and responsibility areas relevant for the programme	Examples of courses where relevant sustainability and responsibility areas are addressed
Accounting (LAMO)	Sustainability reporting Sustainable value creation	Elective courses: Sustainability Reporting and Communication Sustainable Strategy and Business Ethics
Knowledge Management and Leadership (TIJO)	Sustainable human resource management Employee trust Employee wellbeing	Mandatory courses: Strategic Human Resource Management Social Capital and Trust
International Marketing Management (MIMM)	Sustainable marketing Sustainable value propositions Sustainable branding	Mandatory courses: Strategic Global Marketing Management International Business Strategy Elective courses: Responsible International Business Sustainable Strategy and Business Ethics
Strategic Finance and Analytics (MSF)	Sustainable and ethical investment Privacy in digital business models	Mandatory courses: Information Systems in Business and Decision-Making International Financial Management Elective course: Sustainable Strategy and Business Ethics
Strategy, Innovation and Sustainability (MSIS)	Sustainable strategy Sustainable innovation Sustainable value-creation Sustainable business models	Mandatory courses: Sustainable Strategy and Business Ethics Project Course on Sustainable Business Elective course: Sustainability Reporting and Communication
Supply Management (MSM)	Sustainable supply chain management	Mandatory courses: Sustainable Global Sourcing
Business Analytics (MBAN)	Ethics of digital analytics AI and machine learning Data privacy	Mandatory courses: Information Systems in Business and Decision-Making
International Business and Entrepreneurship (MIBE) (starting autumn 2019)	Sustainable and social entrepreneurship Sustainable international business	Mandatory courses: International Business Strategies Global Business Environment Dimensions of Entrepreneurship Elective course: Responsible International Business

On the doctoral level, LBM organises a doctoral-level sustainability course as part of the Finnish Doctoral Program in Business Studies (Kataja) curriculum in spring 2019. Altogether 22 students from nine member universities of

Kataja have registered for the one-week intensive course, which aims to deepen the students' understanding of key concepts, theories and research traditions in corporate sustainability and responsibility.

MASTER'S PROGRAMME IN STRATEGY, INNOVATION AND SUSTAINABILITY (MSIS)



MSIS students develop an understanding of the modern business environment where economic value needs to be created in a way that simultaneously creates value for the entire society in a responsible manner. After completing their studies, the graduates will understand how sustainability issues create both challenges and opportunities for innovative value creation. The studies will also highlight the interconnection between sustainability and innovation.

The focus of the programme is on close cooperation between business education and the business community, integrating knowledge and best practices. Several sustainability-focused courses of the MSIS programme are offered as elective courses in other programmes. Examples of such courses include 'Sustainable Strategy and Business Ethics' and 'Sustainability Reporting and Communication' (new course launched in autumn 2018).

LUT SUSTAINABILITY MINOR (24 ECTS)



The three schools of LUT (LBM, School of Engineering Science and School of Energy Systems) offer a joint multi-disciplinary Sustainability minor (24 ECTS) that consists of courses from different schools and creates a comprehensive understanding on sustainability from different viewpoints. The courses cover

topics such as sustainable strategy and business ethics, bioenergy and cleaner technologies and markets. The Sustainability Minor provides students with a multidisciplinary view on how sustainability can be achieved in the interface of business and technology.

ADDRESSING THE SDGS IN TEACHING



The United Nations Sustainable Development Goals (SDGs) are addressed in several courses at LBM. For example, on the bachelor's level the SDGs are introduced in the 'Introduction to Corporate Social Responsibility and Sustainability' course, which will be mandatory for all LBM students starting from 2020. On the master's level, in the course 'Sustainable Strategy and Business Ethics' (mandatory for MSIS and elective for several programmes) the SDGs' relevance is discussed especially from the perspective business strategy, and the students can take the UN

Sustainability Literacy Test (Sulitest) as part of the course activities. On the course 'Sustainability Reporting and Communication', the SDGs' relevance for sustainability reporting is presented, and the students work on an assignment where they explore how companies can understand opportunities and challenges related to the SDGs. On the course 'Project Course on Sustainable Business', students work for several months with a case company to develop an advanced sustainable strategy for the company, and the SDGs is one framework that the students use in their assignments.

HONORARY PRIZE FOR EXCELLENT TEACHING IN SUSTAINABILITY



In 2018, our student union Enklaavi nominated Professor Paavo Ritala for a teaching prize that is awarded by the Finnish Business School Graduates. Professor Ritala was shortlisted among the top three business school teachers and received an honorary prize for his teaching that addresses two important global trends, sustainability and digitalisation. His teaching was

also merited for combining academic knowledge with practical company examples. To celebrate the 20th anniversary of the prize, the main prize and two honorary prizes were given specifically to teachers that provide students with abilities to solve some of the most pressing challenges of our time and change the world.

HANDBOOK FOR COURSES AND THESES ON CORPORATE SOCIAL RESPONSIBILITY IN FINLAND



As a joint effort of two of our postdoctoral researchers, Laura Olkkonen and Anne Quarshie, Palgrave Macmillan is publishing a book on corporate social responsibility in Finland in spring 2019. The book covers the topic from three perspectives: the origins, institutional context and latest trends in corporate responsibility in the Finnish context. Each section of the book includes illustrative case examples and expert interviews. The book will facilitate sustainability- and responsibility-related teaching not only

at LBM but also at other universities that offer courses and programmes related to sustainability and responsibility. The book will also be of use to students working on theses related to sustainability and responsibility. For students in Finland, the book offers a comprehensive introduction to corporate social responsibility from a Finnish perspective and its Nordic traditions, while for courses and teaching outside Finland the book offers broader insights on the cultural variation of sustainability and responsibility.

Full reference: Olkkonen, L. & Quarshie, A. (2019). Corporate social responsibility in Finland: Origins, characteristics, and Trends. Cham: Palgrave Macmillan.

RESEARCH

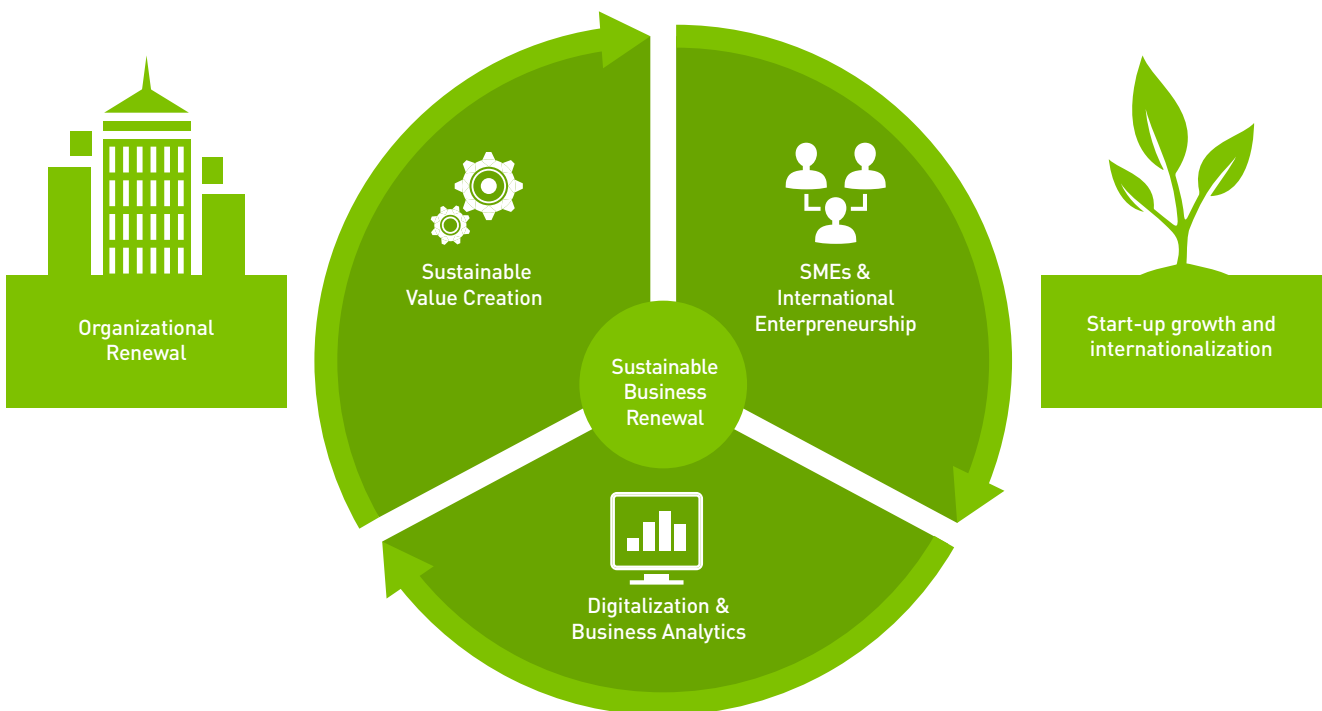
Principle 4:

'We will engage in conceptual and empirical research that advances our understanding about the role, dynamics and impact of corporations in the creation of sustainable social, environmental and economic value.'

Our focus areas in research are sustainable value creation, SMEs and international entrepreneurship, and digitalisation and business analytics. We produce research of a high standard that can be applied in practice for the use of companies and the public sector in development and societal decision-making. Our objective is to form a better understanding of the factors that lead to sustainable value creation: approaches that will ensure that companies are successful in international competition and, at the same

time, operate in a way that is economically, ecologically and socially sustainable. We seek to better understand the role of businesses and management in addressing the big problems of humankind. Especially, we focus on changes and growth opportunities that are driven by new and digital technologies and new forms of organising. Our core strength is close collaboration with the business world combined with strong theoretical, analytical and methodological expertise.

SUSTAINABLE BUSINESS RENEWAL





In 2018, 60% of LUT's scholarly publications were related to sustainable development (66% in 2017). We continue our aim to raise this share in the spirit of LUT's and LBM's strategic focusing. We are also committed to raising the impact of our research outputs by targeting top journals. Hence, we recognise that our faculty is currently working with publication processes that are rigorous, demanding and time-consuming. The most recent information on our publications is available via our Research Portal (research.lut.fi), where publications can be searched, for example, according to our focus area on 'Sustainable business and entrepreneurship' (currently approximately 800 publications listed).

In 2018, LBM launched four research groups as a result of the internal application process. The research groups are aligned with the school's mission, and their research targets the school's strategic focus areas. The research groups of

'Digitalisation and New Forms of Organising', 'Sustainable Business', 'International Entrepreneurship and International Business' and 'Value-Creative Supply Management' aim to attain a more systematic, long-term-oriented approach to research development and network building. In the long term, these and possibly other new research groups are expected to increase the quality and impact of LBM's research and represent important parts for building an even stronger research culture.

Our faculty explores sustainability and responsibility from various perspectives in different research fields. We have recently strengthened our expertise in sustainability and responsibility by appointing new tenure-track and visiting professor positions. Examples of current professor-level research profiles at LBM are presented at the end of this report.

RESEARCH PROJECTS

Externally funded projects are part of our regular research activities, with new projects launched on a yearly basis. Below are some examples of research projects exploring sustainability from different perspectives, executed during the reporting period.

NEW PACKAGING SOLUTIONS FOR PEOPLE, PLANET AND BUSINESS (PACKAGE-HEROES), 2019-2023

Package-Heroes is a five-year research project funded by the Strategic Research Council functioning under the Academy of Finland. The objective of Package-Heroes is to study and develop packaging solutions which can address simultaneously food protection and the global and constantly increasing concern of plastic packaging waste.

The project is organised as a consortium of partners and LBM's activities are led by Professor Henri Hakala. Package-Heroes is focused on the following research questions: 1. How can sustainable food packaging go mainstream? (led by the Natural Resources Institute Finland); 2. How can business ecosystems for sustainable food packaging be enabled? (led by LUT/LBM); 3. How can consumers be

encouraged to favour novel packaging solutions (led by Åbo Akademi); 4. Which new packaging solutions (e.g. those based on cellulosic materials) are both environmentally and economically sustainable? (led by the Natural Resources Institute Finland) and 5. How can political decision-making promote sustainable packaging? (led by VTT).

The project will produce detailed scientific knowledge about the environmental effects of different packaging materials and solutions and about the ways in which new packaging innovations can be commercialised and meet consumer preferences. The overall goal is to construct a joint vision and pathways to a sustainable food packaging future for Finland and the world.

ORCHESTRATING A SUSTAINABLE USER-DRIVEN BIO-ECONOMY: POLICY, TRANSFORMATION AND BENEFITS (ORBIT), 2017–2020

A competitive bio-economy needs to encompass both tangible components associated with bio-resources but also intangible components in terms of the ability to produce and process knowledge to ensure adaptation in the changing global economic context and sustainability challenges. From this perspective, there is a need to identify sustainable business strategies and practices of the bio-economy networks in Finland and globally, and throughout this, enhance the renewal of smart, sustainable business to create sustainability leadership and to secure competitiveness as well as consumer acceptance in international markets. These issues have been the key focus of the ORBIT project, led by Professors Satu Pätäri and Ari Jantunen and funded by the Academy of Finland.

The purpose of this project is to orchestrate research into end-user driven systemic development and promote the growth of a sustainable and diversified forest-based bio-economy. With the share of the forest sector as high as 50% in national bio-economy output in Finland, our core focus is on the forest-based bio-economy. However, with sectoral boundaries blurring in the bio-economy via policy drivers and substitution effects in the markets, new forms of competition

and cooperation emerge between established and new business actors from, for example, the forest, chemical, food, biotechnical and construction sectors. Thus, our research is highly relevant to the interlinkages across a range of renewable and non-renewable resource-based activities in society, contributing to making Finland a world leader in the sustainable bio-economy. The result is a game-changing bio-economy strategy, which outlines how the traditional bulk-producing forest sector will increasingly expand into consumer markets with high value-added biomaterial-based products.

During autumn 2017, the project organised three thematic future-oriented workshops to explore these issues as well as to collect data. In these workshops, where the participants represented the focus industry actors and different shareholder groups (including, e.g., ministries, NGOs, lobbying organisations), we facilitated discussions on different themes covering various aspects of sustainable transition—for example, the barriers to and enablers of transition from business and policy perspectives. To complete the data collection, a survey questionnaire followed the workshops during summer 2018, and currently the data analysis is under way.



URBAN INFRA REVOLUTION (UIR), 2017–2020

The EU-funded Urban Infra Revolution aims to develop sustainable solutions for material and manufacturing technology in the construction sector. The project consortium is led by the City of Lappeenranta. LBM is responsible for the work package 'Circular Economy and Sustainable Business', led by Professors Janne Huiskonen and Veli Matti Virolainen. The work package focuses on designing the implementation of the proposed innovation, additive manufacturing construction elements from geocomposites utilising industrial side streams, conjointly from business and environmental perspectives. As a result, a viable sustainable business ecosystem is designed and environmental impacts are assessed. The environmental performance assessment is used in identifying a sustainable way of utilising the proposed innovation in the disruptive development of current industry and reducing the environmental impact of construction elements. The environmental performances of both proposed

innovation and current application are quantified. Furthermore the acceptance procedure of the estimated materials and products is ensured by complying with the requirements of the regulations and standards.

The design of the business ecosystem follows a multi-level structure. On the most general level, the market potential of proposed innovation is assessed, and views and feedback are collected from both the construction industry and urban citizens. On a more detailed level, possible business models are designed and described, and on the most detailed level, resource-efficient business processes are designed and described. This is done in close cooperation with the local actors, forming an industrial symbiosis. The output of these activities will facilitate the commercial implementation of the innovation as well as applying similar industrial symbiosis models in other locations.

BOOSTING THE INTERNATIONALISATION OF CLEANTECH SMES (BICS), 2015–2018

The research team headed by Professor Sami Saarenketo analysed the international growth of Finnish SMEs in the cleantech sector. The project sought to accelerate the internationalisation and growth of cleantech SMEs by developing new value propositions, business models and strategies that help enhance the achievement of growth targets. In addition to the six official partner companies, the research conducted in the project also took into account a national-level perspective more broadly by listening to the views and experiences of cleantech SMEs in general, including the member companies of Finpro and Cleantech Finland. The project was funded by the Finnish Funding Agency for Technology (Tekes).

According to the project results, high-growth entrepreneurship can be found in cleantech SMEs in particular, but they are facing major challenges in the achievement of their ambitious growth objectives because they are lacking the prerequisites needed to expand to the international markets. To successfully grow globally, Finnish cleantech companies need to develop the innovation capability of their business models and create sustainable value propositions. The ability to quickly react

to regulatory changes is the key, and this requires from the management the ability to see the global markets and from the company the ability to manage its network and handle its environmental and social responsibility. Furthermore, the results reveal that Finnish cleantech SMEs do not possess these capabilities by default, which is why they need to actively develop them to proactively make their internationalisation decisions and start their journey on the path to fast growth and internationalisation.

One of the final deliverables of this project was a workbook that combines the best internationalisation growth practices of the Finnish cleantech SMEs and offers tools for clarifying the internationalisation process. The workbook's purpose is to facilitate the creation of business model innovations that meet the needs of the international markets and for communicating sustainable value propositions, which are critical for cleantech companies. The workbook further includes a self-assessment tool created based on the material that covers the project's more than 200 companies. The self-assessment tool aids companies to determine how ready they are to achieve sustainable international growth.



SUSTAINABLE AGRO ECOLOGICAL APPROACH FOR ANIMAL WASTE RENDERING PLANT IN VADODARA, 2016–2018

The research project, led by Professor Pasi Syrjä and Associate Professor Helena Sjögrén, focused on business model development and innovation for frugal circumstances. The project was funded by TEKES.

The aim of the project was to create and evaluate novel and sustainable business models for the full utilisation of animal waste in India and Africa. Furthermore, the project results support Finnish companies in entering these markets and creating employment opportunities through community engagement and empowerment.

A key benefit for the participating companies was to gain a deeper understanding of the societal impact of the planned business model rather than concentrating only on the waste

rendering process technology. The societal impact includes, for example, improving the living conditions of the poor who collect animal waste, fostering local entrepreneurship, improving the soil by utilising the processed waste as fertiliser, producing green energy and preventing the spread of animal diseases. As a direct consequence of the project, the companies made the decision to delay their entry into Indian markets and turn their attention to Africa instead.

As a result of the project, the project team published a manual titled 'Waste Management Opportunities: India & Kenya', which presents the current situation of waste management and possible opportunities and tips for Finnish businesses to enter the markets.

RESEARCH HIGHLIGHT:

SUSTAINABLE BUSINESS RESEARCH GROUP

The Sustainable Business Research Group shares a common focus on, and synergies in, sustainable business and corporate responsibility tackling the current systemic changes in the relationship between business and society. The main expertise areas of the research group include cross-sector interactions (between businesses, government agencies and civil society actors) and new forms of organising and organisations, systems of value creation, biodiversity preservation, circular economy, strategy, governance, entrepreneurship, sustainability-oriented innovation and finance.

As a joint effort, the research group currently focuses on the following three complementary research topics: sustaining biodiversity, collective action and polycentric

governance, and sustainable value systems and strategies.

The group tackles new problems and phenomena related to the transformation of existing (business) paradigms, which are fostered or characterised by blurring boundaries between private and societal organisations, as well as new (sustainable) business models and social businesses connected to intrapreneurial and entrepreneurial attitudes. The group collaborates actively with international scholars via research visits and joint publications.

The Sustainable Business Research Group is led by Professor Asta Salmi and Associate Professor Laura Albareda.

RESEARCH HIGHLIGHT:

CROSS-SECTOR SOCIAL INTERACTIONS AND SYSTEMIC CHANGE IN DISASTER RESPONSE

Postdoctoral Researcher Anne Quarshie published her research on cross-sector interactions and systemic change with Associate Professor Rudolf Leuschner (Rutgers Business School, USA) in the June 2018



States National Preparedness System has evolved significantly over the past two decades, and these

issue of the Journal of Business Ethics (listed on FT50 Research Rank). In their article, they study how the simultaneous processes of systemic change and intensifying cross-sector interaction worked and interacted in the context of the preparedness system. The United

changes have influenced the system structures and goals. At the same time, new actors such as private firms have become increasingly involved in disaster preparedness efforts. Quarshie and Leuschner address this gap in the cross-sector social interactions literature regarding interactions that have systemic impacts. They examine these inter-linkages through a qualitative theory-building study in the context of Hurricane Sandy in New Jersey. Drawing from systems theory, they develop a grounded model that explains the system change and illustrates how cross-sector social interaction relates to the changes observed in the preparedness system.

An earlier version of the article is included in Anne Quarshie's doctoral dissertation 'Sustainability and Transformational Change', which recently won the IPSERA Doctoral Dissertation Award 2017.

Full reference: Quarshie, A. M., & Leuschner, R. [2018]. Cross-sector social interactions and systemic change in disaster response: A qualitative study. *Journal of Business Ethics*, 150(2), 357–384.

RESEARCH HIGHLIGHT:

SUSTAINABLE BUSINESS MODEL ADOPTION AMONG S&P 500 FIRMS

Our team of researchers, Professor Paavo Ritala, Postdoctoral Researcher Pontus Huotari, Associate Professor Laura Albareda and Professor Kaisu Puumalainen, together with Professor Nancy Bocken from Lund University, published a longitudinal analysis of sustainable business model adoption among S&P 500 firms in the January 2018 issue of the *Journal of Cleaner Production*. In the study, they examined the diversity of sustainable business models adopted by the largest global corporations—those listed in the S&P 500 index—over the period 2005–2014. Their analysis was based on press release communications during this period, which represent public data about business-relevant events that can reveal longitudinal

patterns in the adoption of sustainable business activities and models. Empirically, they utilised academic and practitioner expert panels to build a set of keywords across nine sustainable business model archetypes and utilised automated content analysis to examine the breadth and nature of a firm's sustainable business activities and practices. They found evidence of the increasing prominence of different types of sustainable business models over time. In particular, the results showed that large capitalised firms have mostly adopted the environmentally oriented archetypes and, to much lesser extent, the societal and organisational ones.

Full reference: Ritala, P., Huotari, P., Bocken, N., Albareda, L., & Puumalainen, K. (2018). Sustainable business model adoption among S&P 500 firms: A longitudinal content analysis study. *Journal of Cleaner Production*, 170, 216-226.

RESEARCH HIGHLIGHT:

POLYCENTRIC GOVERNANCE

Associate Professor Laura Albareda won two prizes in the Academy of Management Annual Meeting in 2018 in Chicago. The paper 'Polycentric governance of privately owned resources in circular economy systems', co-authored by Postdoctoral Researcher Samuli Patala (Aalto University) and Professor Minna Halme (Aalto University), received the Carolyn Dexter All-Academy Award and the Unorthodox Paper Award from the Organizations and the Natural Environment (ONE) division. Each of the Academy's Divisions & Interest Groups nominates one annual meeting submission for the Carolyn Dexter Award, a prestigious award given to the paper that best meets the objective of internationalising the Academy of Management.

The Unorthodox Paper Award is a division award granted to research that aims to introduce new and unconventional ways of thinking to sustainability management research. In the awarded paper, the research team presented an empirical study of three circular economy systems in Finland, the United States and Spain. They elaborated a new theory for the polycentric governance of privately owned resources and presented empirical findings suggesting that polycentric governance emerges to address challenges arising from information asymmetries and scale inefficiencies in insular systems with multiple independent governance units.

Full reference: Patala, S., Albareda, L., & Halme, M. (2018). Polycentric governance of privately owned resources in circular economy systems. *Academy of Management Proceedings*, 2018(1).

RESEARCH HIGHLIGHT:

SUSTAINABLE SUPPLY MANAGEMENT PRACTICES — MAKING A DIFFERENCE IN A FIRM'S SUSTAINABILITY PERFORMANCE

Our team of researchers, Professors Anni-Kaisa Kähkönen, Katrina Lintukangas and Jukka Hallikas, published a survey-based empirical study about sustainable supply management practices in *Supply Chain Management: An International Journal*. In the study, they examined the role of sustainable supply management practices in a firm's overall sustainability performance, and they found that sustainable supply management practices indeed represent a significant share of the firm's overall sustainability

performance. They formed a three-dimensional matrix for the categorisation of sustainable supply management practices, where they were able to divide between reactive and proactive practices based on the theoretical grounds of dynamic capabilities. They found that proactive practices have a long-term effect and are necessary for gaining higher sustainability performance.

Full reference: Kähkönen A-K., Lintukangas K., & Hallikas J. (2018). Sustainable supply management practices — Making a difference in a firm's sustainability performance. *Supply Chain Management: An International Journal*, 23(6), 518–530.

RESEARCH HIGHLIGHT:

STUDENT VALUES AND PERCEPTIONS OF CORPORATE SOCIAL RESPONSIBILITY IN THE FOREST INDUSTRY ON THE ROAD TO A BIOECONOMY

Professor Satu Pätäri, Associate Professors Heli Arminen and Laura Albareda and Professor Kaisu Puumalainen published an article on student values and perceptions of corporate social responsibility together with a colleague from the University of Helsinki, Professor Anne Toppinen. The key objective of the article was to examine the perceptions of students as future consumers and the future of the forest industry. Using survey data from three countries, they analysed how personal values, general corporate social responsibility support and four background variables (nationality, gender, age and study field) are related to student perceptions of overall sustainability and specific social and environmental

sustainability performance in the forest industry. The findings indicate that nationality and study field are strongly associated with students' corporate social responsibility perceptions. In addition, students build their perceptions on their personal values and their overall support for corporate social responsibility. Additionally, the article underlined the complex and context-dependent nature of sustainable forest use in a future bioeconomy as an issue that cannot be managed at the corporate level but instead is dependent on perceptions, values and levels of industry knowledge among stakeholders.

Full reference: Pätäri, S., Arminen, H., Albareda, L., Puumalainen, K., & Toppinen, A. (2017). Student values and perceptions of corporate social responsibility in the forest industry on the road to a bioeconomy. *Forest Policy and Economics*, 85, 201–215.

PARTNERSHIPS

Principle 5:

'We will interact with managers of business corporations to extend our knowledge of their challenges in meeting social and environmental responsibilities and to explore jointly effective approaches to meeting these challenges.'

At LBM, we regularly run collaborative research projects with company partners to ensure the practical relevance of LBM's research among corporate stakeholders. Research projects involve addressing major issues that the participating companies, broader industries and society at large are dealing with and include cooperating, data collection and workshops with project firms, their customers and network partners as well as benchmark companies from other industries. In Principle 4 'Research', different examples of project collaboration were described.

Students work directly with companies in teaching (see Principle 6 'Dialogue') and via thesis projects and internships. In Finland, the Master's thesis is an important bridge between university studies and business life. The Master's thesis, accounting for 30 ECTS, is a large-scale independent project in which students apply theoretical knowledge to analyse contemporary business issues and challenges. Most theses have an empirical part, and our students are expected to produce actionable managerial recommendations and/or relevant business implications. During the course of the thesis work, most students collect data in one or several companies. Master's theses are usually commissioned by companies, and company representatives are often closely involved in setting the research questions, guiding the

research process and sometimes also evaluating the final thesis. A Master's thesis project is a very common way to recruit talented university students before graduation. Some of our research projects also employ talented students for executing their Master's theses as part of the project. A recent example of such project is 'Boosting the Internationalisation of Cleantech SMEs', which had three Master's theses completed as part of the project, one of which was awarded with the MIB EPAS Consortium Master's Thesis Prize in 2018. Currently, 13% of our Master's theses completed during 2017–2018 were related to sustainability and responsibility. For some programmes, the percentage is significantly higher: 57% for MSIS and 22% for MSM in 2018.

LBM students have an option to include a voluntary internship (national or international) in their degree, worth a maximum of 12 ECTS, of which 2–6 ECTS are acceptable for Master's degree core studies; two weeks of internship correspond to one credit. LBM has actively emphasised the importance of internships as a key opportunity to gain real-life corporate experience.

As was discussed in Principle 1 'Purpose', sustainability experts with industrial backgrounds are represented on the LUT University Board and the Advisory Board. Furthermore,



we have invited influential scholars as Visiting Professors and prominent industry experts to serve as Professors of Practice, bringing their vast practical experience to benefit our LUT community. The Visiting Professors and Professors of Practice actively engage in our teaching and research projects. LUT operates as an entrepreneurial university, and our aim is for entrepreneurship to be a cross-cutting theme in all university activities by the year 2020. The university's own investment company and accelerator Green Campus Innovations Ltd. supports the commercialisation of our research results.

As an example of partnerships with the public sector, LUT has close collaborative relations with the cities of our campus areas, the City of Lappeenranta, City of Lahti and City of Mikkeli. One of the most recent activities in this area is the collaboration between LUT Junior University and the City of Lappeenranta. LUT Junior University was launched in 2017 as an initiative to collect all our collaborations with primary and secondary schools, done previously in different actions and projects since 2000. As a specific aim, LUT Junior University aims to utilise our expertise in clean energy, circular economy and sustainable business and entrepreneurship at all levels of teaching preceding higher education, starting from preschool. LUT Junior University enables phenomenon-based collaboration between young students and LUT researchers and arranges events and courses for preschool, primary and secondary school students. The close collaboration with the Education Department of the City of Lappeenranta ensures that the activities of LUT Junior University fit effortlessly into the primary and secondary education curriculum. During academic year 2018–2019, approximately 860 pre-, primary and secondary school students have been involved in activities organised by LUT Junior University, and approximately 70 teachers have participated in related trainings. See Principle 6 'Dialogue' for more specific activities of LBM in LUT Junior University.

Part of our partnerships are memberships in networks and associations that advance sustainability and responsibility. Since 2017, LBM has been a member of FIBS (Finnish Business & Society), a non-profit organisation that acts

as the leading network of corporate social responsibility and sustainability in Finland. FIBS currently has over 300 member organisations, including companies, NGOs, educational institutions and government agencies. LBM has two designated contact persons for FIBS, and LBM staff has access to trainings and events that FIBS organises on a regular basis. In 2018, LBM has also joined the Network for Business Sustainability (NBS), an international network of more than 6000 researchers and managers of sustainable business, coordinated by the Ivey Business School in Canada. NBS aims to advance business sustainability by bringing researchers, managers and stakeholders together. LBM engages in NBS especially by taking part in the NBS Sustainability Centers Community. As was described in Principle 1 'Purpose', LBM joined the Nordic Chapter of PRME in 2017 and interacts with the chapter through yearly meetings. In addition to formal institutional memberships, our faculty are actively involved in activities such as the Cross-Sector Social Interactions Community (CSSI) and the editorial board of the Annual Review of Social Partnerships, which seeks to bridge cross-sector partnerships between research and practice.

Our researchers regularly collaborate with other universities and internally with other schools within our university. Several of our projects are organised as consortiums between universities (see Principle 4 'Research') and we have master's level double degree agreements with several universities in Europe and Russia. Internally, our researchers collaborate with other schools, for example, in LUT-level research platforms, organising the Sustainability Minor and in running the Master's Programme in Business Analytics. As a specific recent example, LBM researchers are currently working in an EU-funded 'e-CirP' project with the LUT School of Energy Systems, together with several European university partners that produce teaching materials for an online course on circular economy in product design and optimisation. As part of LBM's team for the e-CirP project, our Visiting Professor Nancy Bocken from Lund University has been involved in filming material for the online course.



DIALOGUE

Principle 6:

'We will facilitate and support dialogue and debate among educators, students, business, government, consumers, media, civil society organisations and other interested groups and stakeholders on critical issues related to global social responsibility and sustainability.'

Through our actions described in the previous sections, we engage in dialogue with our internal and external partners and stakeholders through different formal and informal points of contact. Company representatives, NGOs and students serve as members of our administrative bodies, and we have long-term partnerships with local actors, such as companies and city administrations, as well as with other universities and companies operating nationally or internationally. Via our external experts in our administrative bodies, Professors of Practice and Visiting Professors, we are connected to numerous organisations that are relevant to our strategic focus areas.

As our curricula include a wide range of elements that support corporate learning experience, dialogue with companies is a part of our teaching. Some of our courses include field projects involving empirical company data, and in some courses we use company representatives in designing, outlining and evaluating student assignments. Corporate learning is also fostered through the analysis of existing real-life companies based on public information available on the Internet, academic articles and company reports, and in many of our courses we utilise case-based learning. We also have long traditions of using corporate

representatives and public sector representatives as well as NGO representatives as guest lecturers in our courses. Recently, we have hosted guests from large listed companies, SMEs, consultancy companies, as well as non-profit networks and NGOs relevant from the perspective of sustainability.

To support our students' co-curricular activities, LUT has recently established a prototyping lab, the J. Hyneman Center (JHC) in 2018. The rapid prototyping centre gives student teams space and opportunities to solve problems, create new ideas, and build and test prototypes. The centre is a well-equipped workshop that links together students, university research and expertise and business enterprises. Consequently, JHC is strongly connected to student entrepreneurship and the university's innovation activities. The centre is designed and built in cooperation with LUT's honorary doctor, Product Developer Jamie Hyneman, whose name the centre carries. In the first 'Speed Building' event in September 2018, student teams worked, for example, on innovations relating to household waste management and plastic waste in the oceans. The results of the Speed Building were presented in an opening ceremony of the JHC, to which our alumni were also invited.

LUT's honorary doctor, Product Developer Jamie Hyneman met with students and mentored their projects at the J. Hyneman Center in 2018



The LUT Junior University initiative connects us to the primary and secondary school students in our operating cities and elsewhere. LBM's experts have participated in organising events for the Junior University, such as on-campus learning days on sustainability.

Our faculty engage in teaching and research visits abroad and are involved in several scientific communities, such as the Academy of Management (AOM), the International Purchasing and Supply Education and Research Association (IPSE) and the International Society for Professional

Innovation Management (ISPIM). Most of our researchers engage in these communities as regular academic members, while some are involved in administrative tasks. For example, in 2018, our Professor Anni-Kaisa Kähkönen was selected as an executive committee member of IPSE. With special interest to PRME, our Associate Professor Laura Albareda has been involved in PRME-related activities in the AOM community as a co-organiser of the professional development workshop 'Responsible Management Education in Action: Listening to the Community, Opening Collaboration Spaces' in 2018 (scheduled to continue in 2019).



HIGHLIGHT:

Awarding the Viipuri Prize to Professor Rebecca M. Henderson

In 2017, Professor Rebecca M. Henderson was granted with the Viipuri Prize, an award given every other year to a distinguished international researcher whose work significantly influences education and research at the LBM. Professor Henderson teaches at the Harvard Business School in the General Management and Strategy units. Henderson's research focuses largely on how organisations respond to large-scale technological shifts, and she has published in top scientific journals in the fields of management and strategy research. Henderson's recent research has particularly explored how technological shifts related to ecological sustainability and energy efficiency alter


the operating environment and strategic possibilities of firms. Henderson's research offers insights into how businesses can achieve a competitive edge by committing to sustainable values and business models and by investing in progressive, energy-efficient technologies. Besides the official prize ceremony and lecture titled 'Reimagining Capitalism: Business & the Big Problems', Henderson met with LBM's faculty and students in an unofficial meet-and-greet and commented on presentations on our ongoing projects during her visit at LUT. The Viipuri Prize was established by the Society for Viipuri School of Economics.

Summary of progress


Objectives 2015–2017	Actions and progress 2017–2019	Objectives 2019–2021
A total of 75% of the publications in the LUT research database will involve sustainable development by 2020.	Monitored as part of the LUT Green Campus programme: - 66% in 2017 - 60% in 2018 LUT Trailblazer Strategy 2020 and LBM Strategy 2018–2023 support this goal.	Ongoing
A total of 100% of LUT's new students will undergo an orientation related to environmental issues. A Green Campus briefing is included in the freshman orientation.	Orientation and Green Campus briefing were part of the freshman orientation in 2017 and 2018.	Goal achieved Green Campus briefing will continue as an established practice.
Transparent criteria for courses meeting the definition of sustainable development will be developed and adopted to support curriculum.	The criteria were developed and tested as part of the Green Campus programme, and as a result the goal was replaced with monitoring the attainment of programme-level learning goals relating to sustainable development. As part of LBM's strategy update, the goal was set to develop sustainability as a cross-cutting theme in teaching, visible in all programmes. A strategic commitment was made to set the education of responsible business professionals as a learning goal for every programme.	Monitoring the programme level learning goals continues as part of the Green Campus programme. LBM sets responsibility-related learning goals for each programme and monitors progress.
In autumn 2018, a target will be set for the relative share of courses meeting the definition of sustainable development.	As part of the Green Campus programme this goal was replaced with monitoring the programme-level learning goals relating to sustainable development. In academic year 2017–2018, 43% of LBM's programmes included learning goals related to sustainable development, and in academic year 2018–2019, the percentage was 57%. As part of LBM's strategy update, the goal was set to develop sustainability as a cross-cutting theme in teaching, visible in all programmes. A strategic commitment was made to set the education of responsible business professionals as a learning goal for every programme.	Monitoring the programme level learning goals continues as part of the Green Campus programme. LBM sets responsibility-related learning goals for each programme and monitors progress.
LUT's graduates at the bachelor's, master's and doctoral levels will assess that their sustainable development expertise has increased.	Monitored as part of the LUT Green Campus programme. In 2017, the mean answer to question assessing the abilities in sustainable development was 3.4 for LBM's bachelors, 3.6 for LBM's master's students, and 3.45 for LUT's doctoral students (scale 1=completely disagree to 5=completely agree). For 2018, the corresponding numbers were 3.5 for bachelor's and 3.8 for master's, indicating positive progress.	Monitoring will continue as part of the Green Campus programme. LBM sets responsibility-related learning goals for each programme and monitors progress.
The share of Master's theses dealing with sustainable development is monitored.	The share of Master's theses dealing with sustainability and responsibility at LBM was 13% in both 2017 and 2018. For some individual programmes the percentages are significantly higher, for example: - MSIS: 55% in 2017 and 57% in 2018 - MSM: 18% in 2017 and 22% in 2018	Ongoing
At LBM, the Master's Programme in Strategy, Innovation and Sustainability (MSIS) will be developed towards a more sustainability-focused curriculum.	The curriculum has been developed by renewing existing courses and by introducing the new course 'Sustainability Reporting and Communication' which is also open to students from other programmes.	At LBM, sustainability and responsibility will be developed as a cross-cutting theme in teaching, visible in all programmes.
We will increase the number of our research projects around the theme of sustainability.	Active application especially in Academy of Finland project calls, program calls and strategic council calls, as well as Business Finland calls. During the reporting period, we launched 2 new projects related to sustainability funded by the Academy of Finland, 1 EU-funded project and 3 projects funded by Finnish foundations.	Positive progress, goal ongoing.
We will increase the number of publications in top journals, especially related to sustainability and responsibility.	As part of LBM's strategy development, high impact and quality of research outputs was set as one of our targets. Furthermore, we aim to target most of our publications on LBM's strategic focus areas that include sustainability. The number of our publications on the AJG 3, 4 and 4* levels has doubled when articles published in 2016 are compared to articles published in 2018. We are currently developing LBM's own monitoring systems for sustainability and responsibility-related publications.	Ongoing

NEW GOALS


We will develop our degree programmes towards a cross-cutting approach to responsibility and sustainability.




We will set responsibility-related learning goals for each programme and monitor progress via systematic assurance of learning practices.



All of our bachelor's students will undergo a mandatory course on corporate social responsibility and sustainability.



We will increase our impact on sustainable business renewal with new projects, partnerships and high-quality publications.



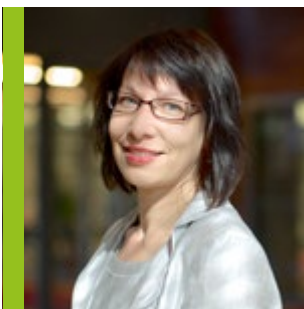
We will diminish our overall carbon footprint with our Green Campus programme.

WHO WE ARE



PROFESSOR **PAAVO RITALA**

Professor of Strategy and Innovation, whose teaching focuses on contemporary issues in strategy and innovation as well as sustainable strategy and business ethics. He has published widely on these topics, including recent contributions to business model innovations in a sustainability context as well as other aspects of sustainable value creation and strategising. He is also closely involved with business practice through company-funded research projects and executive and professional education programmes, and serves in speaker and advisory roles.



PROFESSOR **KAISU PUUMALAINEN**

Professor of Technology Research, quantitative methods. Her teaching focuses on the application of quantitative methods in strategy research. She has published extensively on the topics of innovation, sustainability, entrepreneurship and international business. Her recent research projects have focused on corporate social responsibility, social entrepreneurship and sustainable entrepreneurship opportunities.



PROFESSOR **ANNI-KAISA KÄHKÖNEN**

Professor of Supply Management. Her current areas of interest include value creation and sustainability in supply management, and sustainable supply chains. She has also studied strategic supply management from the viewpoint of supply strategies and supplier relationships. She has published several journal articles, for example, in journals such as the International Journal of Production and Operations Management, Supply Chain Management: An International Journal, and the Journal of Purchasing and Supply Management. She has also engaged in many company collaborations in different research projects on supply management.



PROFESSOR **KATRINA LINTUKANGAS**

Academic Director of Master of Supply Management Programme (MSM). She has extensive experience in educating sustainable supply management to master's and bachelor's students. Her research focuses on sustainable global sourcing and supply management, supplier relationship management and supply chains. She has published several articles in scientific journals, such as the Journal of Cleaner Production, the Journal of Purchasing and Supply Management, the International Journal of Operations and Production Management and Supply Chain Management: An International Journal. She has been project manager in three externally funded research projects examining sustainability, responsible purchasing, risks in supply chains and supply management capability in Finnish companies.



PROFESSOR **ASTA SALMI**

Professor of International Business: Strategic Management of Networks. Her research focuses on the dynamics of international business networks, cross-sectoral collaboration, biodiversity reduction and environmental issues in business networks, and sustainability in supply chains. She is Senior Associate Editor of the Journal of Purchasing and Supply Management, and she has published in academic journals such as the Academy of Management Review, the Journal of Management Studies, International Business Review and Industrial Marketing Management.



PROFESSOR SATU PÄTÄRI

Professor of Strategy Research and Sustainable Value Creation. Her main research interests include analysing and explaining the sources of sustained competitive advantage at the firm level and increasing the understanding of new business opportunities and their value-creation potential. This includes, for example, studying firms' sustainability and corporate responsibility practices and the link between corporate responsibility and corporate performance. In an ongoing Academy of Finland funded research project, the aim is to orchestrate research into end-user driven systemic development and promote the growth of a sustainable and diversified forest-based bio-economy.



ASSOCIATE PROFESSOR LAURA ALBAREDA

Associate Professor in Sustainable Business. Her primary research interests are business sustainability, collective action and polycentric governance. She has published her work in the Journal of Business Ethics, the Journal of Business Research, Business & Society, Technological Forecasting and Social Change and the Journal of Cleaner Production. She is co-author of the book 'Governments and Corporate Social Responsibility: Public Policies beyond Regulation and Voluntary Compliance' (2008). She earned her PhD at ESADE Business School (Spain) and was a postdoctoral researcher at Boston College Carroll School of Management (USA). She has been a visiting scholar at Ivey Business School, Amsterdam Business School, Boston University, Exeter Business School and Warwick University.



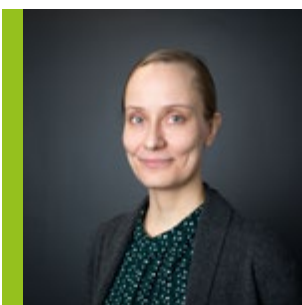
ASSOCIATE PROFESSOR HELENA SJÖGREN

Associate Professor whose primary areas of research interests are sustainable business models, social impact reporting and accounting, social value creation, social entrepreneurship and management accounting in SMEs. She has published c. 20 articles in academic journals.



ASSOCIATE PROFESSOR ANNI TUPPURÄ

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