

Aas, Norway 28 April 2020

<u>Sharing Information on Progress (SIP) Report by Norwegian University of Life</u> <u>Sciences, School of Economics and Business ("NMBU HH")</u>

Practical actions and assessment of outcomes:

Our commitment to developing 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 has been increasingly deepened by incorporating important elements into our academic activities, curricula, and organisational practices. The most important are listed below.

Education:

Courses:

Developing student awareness and required skills are embedded in most of our courses. We have established several *dedicated* courses, in business and economics, at undergraduate-, graduate- and PhD levels, e.g.:

www.nmbu.no post@nmbu.no



- ECN180 Global Challenges I. Economics and Sustainability; A first semester bachelor course, which is also open to students outside our faculty (first time launched in 2018);
- BUS180 Global Challenges II. Dilemmas and Business Opportunities; A third semester bachelor course, which is also open to students outside our faculty (first time launched in 2019);
- PHI301 Corporate Social Responsibility Business Ethics; A mandatory course for all master students in Business Administration (first time launched in 2011);
- BUS360 Taxes, Inequality, and Sustainability I; Since Autumn 2019 this course is mandatory for all master students in Business Administration and Economics across all specializations (first time launched in the Spring of 2020);
- BUS361 Taxes, Inequality, and Sustainability II (first time launched in 2020);
- BUS362 Corporate Tax and Sustainability (first time launched in 2020);
- ECN275 Natural Resource and Environmental Economics Theory (first time launched in 2017);
- ECN376 Natural Resource and Environmental Economics applications (first time launched in 2017);
- ECN306 Economics of Sustainability (first time launched in 2017);
- ECN350 Development and Global Change (first time launched in 2019);
- INN271 Sustainable entrepreneurship; Mandatory course for all bachelor students in Business Administration and open for all of NMBUs students (first time launched in 2018);
- ECN271 Cost Benefit Project Evaluation and Environmental Valuation; Mandatory course for all bachelor students in Economics (first time launched in 2010);
- BUS311 Environmental Management and Sustainability Reporting (at master level, but open to bachelor level students, first time launched in 2013)
- PHI100/101 Examen Philosophicum; The course emphasises the special responsibility of NMBU HH in making students more conscious of value questions linked to research and its application.



To an increasing degree, we are collaborating with outside businesses in different courses. Such collaborative activities are being guided by selection of partners with CSR core to their strategies.

Study programs:

One of the goals in our strategy for 2018-2022 is that "All programs should link sustainability into practice to the core subjects in the programs". The last few years we have incorporated several mandatory courses addressing sustainability issues in all our study programs. In addition to dedicated courses, we have also incorporated for example sustainability cases in the more general courses.

Here follow some examples on mandatory courses addressing sustainability in the different study programs:

<u>Bachelor's in Business Administration</u>: ECN180 Global Challenges I. Economics and Sustainability, BUS180 Global Challenges II. Dilemmas and Business Opportunities and INN271 Sustainable Entrepreneurship.

<u>Bachelor's in Economics</u>: ECN180 Global Challenges I. Economics and Sustainability, BUS180 Global Challenges II. Dilemmas and Business Opportunities OR INN271 Sustainable Entrepreneurship) and ECN271 Cost Benefit Project Evaluation and Environmental Valuation. <u>Master's in Business Administration</u>: BUS360 Taxes, Inequality, and Sustainability I and PHI301 Corporate Social Responsibility - Business Ethics. In addition, sustainability is being addressed in the two core courses AOS300 My Leadership and BUS335 Corporate Strategy -Alliances, Mergers and Acquisitions.

<u>Master's in Economics</u>: ECN306 Economics of Sustainability and BUS360 Taxes, Inequality, and Sustainability I. In addition, we offer specializations in Environment, Climate and Energy Economics, Development and Global Change and Agribusiness and Food Economics.

Master's in Entrepreneurship and Innovation: Sustainability is being addressed through business cases in the two core courses INN301 Innovation and INN340 Entrepreneurship in

practice.

The goal is that the efforts regarding our study programs and courses will make motivated and highly qualified students apply for our programs, and that our graduates will be attractive on the job market. Since many of our initiatives is new, we haven't had the time to complete surveys among students and graduates, but that is something we plan to do the future.

Even though we don't have concrete numbers, we have several examples of graduates who work with sustainability and responsible management. For example the CEO of ZERO (Zero Emission Resource Organization), head of CSR in Orkla and graduates who start up new businesses with sustainability as a guiding principle.

Continuing and further education:

In June 2020 we started offering continuing and further education to people outside of the university. This Autumn we are offering 11 courses, and several of them address sustainability in various ways. For example, we offer these courses: ECN372 Climate Economics, BUS362 Corporate Tax and Sustainability, BUS180 Global Challenges II. Dilemmas and Business Opportunities and PHI201 Bioscience, Ethics and Environmental Philosophy.

In addition, we also work with Viken Technology Cluster 4.0 and other higher education institutions to offer continuing and further education to local businesses. The courses are developed based on the businesses needs for new knowledge and competencies.

In the future we can hope that our initiatives regarding continuing and further education will make us more known in the outside world, and attract more students, but also business firms we can collaborate with.



Research activities in the Field of Corporate Responsibility and Sustainability

We have many ongoing externally funded research projects where corporate responsibility and sustainability are important parts of the projects. Some of the topics and largest ongoing projects are:

Taxes and tax havens

• "How to tax capital in a globalized world?" (2016-2022)

Transition to green energy

- "Enabling the green transition in Norway" (2020-2023)
- "Stress-testing the Norwegian economy: The effects of the 1.5°C scenario on global energy markets and the Norwegian economy" (2020-2023)
- "Developing the Norwegian Energy System in the European Energy Transition (NORENS)" (2018-2021)
- "Capacity Building in Education and Research for Economic Governance in Uganda" (2016-2021)

Sustainable development

- "Youth Business Groups for Sustainable Development: Lessons from the Ethiopian Model" (2019-2022)
- "Capacity-Building for Climate Smart Natural Resource Management and Policy" (2012-2020)
- "Access to Seeds. From emergencies to sees systems development" (2019-2022).

Assessment of environment-economy trade-offs

- "Valuation of Cultural and Environmental Goods for Integrated Assessment and Decisionmaking: From Promise to Practice" (2018-2021)
- "Changing uses and values of marine ecosystem services in Arctic Norway" (2017-2020)



• "Spatial assessment of environment-economy trade-offs to reduce wind power conflicts" (2017-2020)

Forest-climate policies and actions

• "Global comparative study on REDD+" (2017-2020)

Responsible research and innovation

• "An assessment of economic and biological implications, prospects and risks by implementation of new gene tools in modern bio-production" (2019-2022)

Sustainable consumption

• "FJONG 2025 - An Endless Sustainable Wardrobe" (2020-2023)

Dissemination

Two of the goals in our strategy for 2018-2022 are to "Communicate our research both academically and to decision-makers at the organizational and community level" and to "Share our knowledge and develop interdisciplinary research projects", so dissemination is important for the school. Several of our faculty are active participants in the ongoing public debate, like discussions regarding taxation, green energy, deforestation and development. Some of our faculty are also participating in different national/international committees.

Here follow some examples on our research and dissemination:

Deforestation and forest degradation:

Since 2007 we've been heavily involved in research and advice on the global effort of Reducing Emissions from Deforestation and forest Degradation in developing countries (REDD+). Led by professor Arild Angelsen, the research has included how REDD can be included in a global climate regime (e.g. how to set reference levels), national strategies and policies needed to



achieve climate mitigation through REDD+, and analysis of the effectiveness, efficiency and equity of subnational (local) projects. Six PhD students have analyzed REDD+ initiatives in Tanzania, Ethiopia, Zambia, Brazil and Peru. They have done fieldwork, collected household data and undertaken framed field experiments to study human behavior and the impact of policy interventions for sustainable resource use. Angelsen has edited four books on REDD+, which have become standard references in the field. He has also served on expert groups for, among others, the World Bank.

Experiments for Development of Sustainable Livelihoods:

Experiments for Development of Sustainable Livelihoods is a collaborative research and capacity-building program with School of Economics and Business (SEB-NMBU) at NMBU, Ås, Norway and Mekelle University (MU), Ethiopia, as the main partners and Aksum University (AKU) as an associated partner in Ethiopia. The Project builds on the long- term collaboration between SEB-NMBU and MU. MU has just started its own PhD-program in Economics and is in strong need to develop and strengthen its capacity to run this program. SEB will contribute to this within the area of Behavioral and Experimental Economics that will be applied to important development issues in Northern Ethiopia through joint research and teaching. Ethiopia has undergone dramatic changes in recent years due to strong economic growth combined with rapid population growth and rural and urban transformation. The project helps equip MU and AKU to do pro-active research on high priority policy areas such as employment creation, natural resource management, vulnerability to environmental shocks such as droughts, locust attacks and Corona virus, and adaptation to climate change and environmental shocks. The project will establish a strong database through targeted surveys combined with experiments that will serve as a basis for joint research and capacity-building focusing on these important policy issues. Insights from this research will be used at all levels in the teaching programs at MU and AKU and key policy lessons will be extracted and disseminated to the relevant authorities in Ethiopia. Furthermore, the research will result in jointly published papers in international journals and books to contribute to wider science-based



knowledge generation.

SKATTEFORSK:

SKATTEFORSK - Center for tax and behavioral research is a center at the School of Economics and Business NMBU. They research questions regarding tax and the behavior of different actors in society, like tax havens, wealth tax, energy & environment and the economic effects of Covid-19. The goal of the center is to deliver research of high international standard and contribute to a knowledge-based public debate. The center also has affiliated researchers from different institutions in Norway and other countries. The center is being led by Professor Annette Alstadsæter at The School of Economics and Business NMBU. Alstadsæter is appointed by the Swedish government as a member of the Swedish Fiscal Policy Council.

"Teknisk beregningsutvalg" for climate:

In the Paris agreement, Norway has promised to reduce its emissions of greenhouse gases substantially towards 2030. Hence, it is crucial for the government to improve its knowledge about how various climate policies (and other policies) affect emissions in coming years. For this purpose, the Norwegian government has set down a commission named "Teknisk beregningsutvalg for klima".¹ The commission is instructed to advice the government on how to improve its portfolio of simulation models and other methods that are used to calculate emissions effects of various policies. For the next three years, the commission will be headed by our Professor Knut Einar Rosendahl.

Key Specific Objectives

We have recently redefined or values reflected in our revised mission and vision statements as set out below:

¹ <u>https://www.regjeringen.no/no/dep/kld/organisasjon/styrer-rad-og-utvalg/teknisk-berekningsutval-for-klima/id2604810/</u> (only in Norwegian)

Mission

Our mission is to create knowledge across the fields of economics and business administration, and to develop professionals and leaders who combine an economic mindset with multidisciplinary knowledge, equipped to address real-world problems with sustainability as a guiding principle.

Vision

Our vision is to be a leading business school in linking research and education within our fields to a multidisciplinary perspective on sustainability. Our candidates should be known for solid knowledge, abilities for analytical and critical thinking, creativity and collaborative skills.

Our initiatives for the next years will focus on fulfilling our mission and vision and we plan to:

- Launch a new master's program in Bioeconomics, where sustainable business practices will form a natural part.
- Continue to implement sustainability as a part of our core courses
- Further develop our continuing and further education
- Continue and be more visible on sustainability, both in our academic publications and in the public debate

Enclosures:

Letter of Support signed by the rector of NMBU