Report on sustainability research at BI Norwegian Business School
Introduction

“At BI, students, academics and business professionals co-create a more sustainable future”

- The BI mission for 2025

Responsibility is one of our core values. It means that we contribute to sustainability and corporate responsibility by working in alignment with the UN Sustainable Development Goals (SDGs) and UN Principles for Responsible Management Education (PRME) by integrating them into our research, teaching, operations and collaboration with stakeholders.¹

BI is a research based business school. This makes us well-positioned for contributing to the sustainability agenda through relevant research. Research plays a pivotal role in providing us with the knowledge we need to change practices and find better ways to organize and do things. Be it business models that allow for greater value creation and reduced waste, better health care management and collaborations, reduction of white collar crime and corruption or macroeconomic modelling and forecasting to predict and prevent crisis.

About this report

This report gives a summary of publications at BI classified as being relevant for UN Sustainability Development Goals (SDG). The SDGs were adopted by all UN Member States in 2015 as a universal call to action to end poverty, protect the planet and ensure all people enjoy peace and prosperity by 2030.²

Each SDG has a number of sub-goals. For example, goal 12 – Responsible consumption and production includes sub-goal 12.5 “By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse”. Thus we define SDG-relevant research as research that is relevant to reaching at least one SDG sub-goal.

We use the Current Research Information System in Norway (CRISTIN) to gain an overview over all research published by BI-affiliated researchers for 2017-2018, and subsequently

¹ See the BI Strategy 2025: https://www.bi.edu/globalassets/om-bi/strategi/strategy-2025_v2.pdf
² See the UN SDGs: https://sustainabledevelopment.un.org/sdgs
assessed each publication as stated above on the basis of SDG sub-targets. We plan to repeat this process for 2019 publications when available.

The following report gives an overview of BI's research related to the sustainability goals as a whole, and breaks it down by departments and research centres. We also provide examples and discuss academic impact. To illustrate how our research contributes to the sustainability goals, in addition to give an overview over all sustainability relevant publications, we show case articles from each of the departments. The case examples are selected based on the quality of the publications (ABS ranking\(^3\) and JIF score\(^4\)) and their social impact (coverage in social media and policy documents). In addition, the examples should represent the SDGs that are most commonly addressed in each of the departments. A reference list, attached to the report, gives an overview over publications published in channels that are classified as Level 2\(^5\), articles published by BI faculty in journal with ABS ranking 3, 4 and 4* and with top 10% JIF score, as well as articles with impact presented in this report.

We find that research at BI has a clear contribution to SDGs, at the same time as the number of sustainability publications has been growing. In particular, during the period of 2017-2018

- More than 25% of all publications at BI have contributed to at least one SDG.
- 35% of BI faculty have published on topics related to sustainability
- All eight departments at BI have contributed with publications relevant for SDGs.
- 75% of the publications relevant for the SDGs are journal articles, where 30% of these are on ABS rank 3 or higher
- BI’s researcher have publications that are relevant for 15 of 17 SDGs.

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\(^3\) Academic Journal Guide prepared by the Association of Business Schools (ABS) is a guide to the range and quality of journals in which business and management academics publish their research. The list of journals grouped by sub-fields and ranked from 4* (highest) to 1 (lowest). The AJG is based upon peer review, editorial and expert judgements following from the evaluation of publications.

\(^4\) Journal Impact Factor (JIF) of an academic journal is a scientometric index that reflects the yearly average number of citations that articles published in the last two years in a given journal received. The journals are categorized according to their percentile ranking within their relevant subject categories. The ranking is divided into the top decile (D1), the top quartile (Q1) that falls outside the top decile and 75th percentile (Q2+Q3+Q4).

\(^5\) The Norwegian Scientific Index divides journals and publishers considered to meet scientific quality criteria into “Level 1” and “Level 2,” where “Level 2” is superior than “Level 1” and it is reserved for the internationally most prestigious journals and publishers.
The top three Goals BI’s academic work contributes to are:

- **SDG 3 – Good health and well-being**
  - Research topics include: Healthcare management & collaboration, Health technology & innovation, Psychology.

- **SDG 16 – Peace, justice and strong institutions**
  - Research topics include: White-collar crime, Fraud, Leadership of law enforcement, Counterterrorism, Electoral politics, How bureaucracies work, Corruption, and EU.

- **SDG 17 – Partnership for the goals.**
  - Research topics include: Macroeconomic modelling and forecasting (crisis-prediction and prevention), FDI, Tax, and Public procurement practices

We are proud of the breadth of our sustainability relevant research, while recognizing the monumental challenges posed by the 2030 agenda. We will continue to develop our research to provide a relevant knowledge base so as to respond to global challenges.

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Oslo, May 23, 2020
1. BI’s strategy, Sustainability and Research

BI’s mission states that BI should “engage students, academics and business professionals in co-creating a more sustainable future”. As a part of our sustainability effort, BI has committed in 2015 to help realizing UB 17 Sustainable Development Goals (SDG) of the 2030 Agenda for Sustainable Development.

Working in alignment with these commitments, implies that BI has to implement and create impact in four areas of operation: on research, on programs and students learning, on own campus operations, and on student’s engagement and social interaction.

The focus of this report is how the research at BI contributes to UN Sustainable Development Goals.

Research is a cornerstone at BI and over the last decade, BI has been through a transformation into a research focused business school. BI has encouraged research by initiating an international publishing strategy, by systematically recruiting international top faculty, focusing on attracting external funding, by increasing investments in the PhD program and by focusing on a few dedicated research centers.

By delivering high-quality research in these fields BI can help shape policy making and the public debate and be an important player in the international academic knowledge development. Most importantly, BI can ensure that our students will have the necessary knowledge to contribute to a more sustainable world.
2. Overview over sustainable research at BI

The sustainability related research at BI is comprehensive and growing, and covers many different fields. Due to the breadth of its research activities, BI is equipped to study sustainability issues from multiple, integrated perspectives within interdisciplinary research teams and in collaboration with a diverse range of social and commercial partners.

More than 25% of all publications at BI in 2017 and 2018 have been related to the SDGs, and more than 35% of the BI faculty members that have published in this period, have published in topics related to sustainability. After SDGs officially came into force, 1.january 2016, the number of publications related to these goals have been growing, and increased from 87 in 2017 to 99 in 2018, see Figure 1.

While these numbers include all type of scientific publications, such as journal articles, book chapters, books and monographs, more than 75% of the publications are journal articles. 30% of the journal publications are classified as highly regarded (ABS rank 3 or higher), and ¼ are published in journals that are ranked in the top quantile (D1 + Q1) according to Journal Impact Factor (JIF).

As illustrated by Figure 2, in the two years period, BI has had publications relevant for 15 of 17 SDGs.
The largest share of publications has been related to the goal SDG 16 - *Peace, justice and strong institutions*, followed by SDG 3 - *Good health and well being* and SDG 17 - *Partnerships for the goals*, on the second and third place respectively. SDGs 16 & 17 are also the most addressed SDGs if one takes into account only articles published in top journals.

All eight departments at BI have contributed with publications relevant for SDGs. Departments often overlap in terms of the SDG their publications are addressing. The departments bring their various knowledge and frameworks and are able to contribute to the research from different angels.

1/3 of all publications within sustainability are classified to relevant for SDG 16- *Peace, justice and strong institutions* and have been studies by 5 different departments. Publications related to this goal include a broad range of topics such as White-collar crime, Fraud, Leadership of law enforcement, Counterterrorism, Electoral politics, How bureaucracies work, Corruption, and EU.

Five of the departments have delivered research relevant for SDG 3- *Good health and well being*. Example of research topics associated with this goal are Healthcare management, Healthcare collaboration, Health technology and innovation, and Psychology.

Finally, macro-economic modelling and forecasting (crisis-prediction and prevention), FDI, Tax, and Public procurement practices are example of subjects addressed by five different departments in various publications related to SDG 17- *Partnership for the goals*. 
According to BI’s strategy 2025, BI should have a special focus on SDG 4- *Quality education*, SDG 5- *Gender equality* and SDG 13- *Climate action goals*. During the two years period there have been undertaken 31 different studies contributing to at least one of these goals. These have addressed issues related to Innovation in teaching, Digitalization and technology in teaching, Women in management, Gender in education, Emissions trading, Climate leadership, and Climate integrated into business models.

Four of eight BI Research Centers are relevant to reaching the SGDs. These are as follows:

- BI Research Centre for Construction Industry works with sustainability and climate questions pertaining to the construction industry, and is therefore relevant to reaching SDG 9 *Industry, innovation and infrastructure*, and SDG 13 *Climate action*.
- BI Research Centre for Health Care Management is relevant to reaching SDG 3 – *Good health and well-being*.
- BI Research Centre for applied macroeconomics and commodity prices works with macroeconomic stability, forecasting and crisis prevention and is therefore relevant to reaching SDG 17 – *Partnership for the goals*.
- BI Research Centre for Internet and Society works with questions related to digital inequality and social and labour characteristics of the sharing economy, and is therefore relevant to reaching SDG 10 – *Reduce inequalities*. 
3. Overview over sustainable research at BI’s Departments

3.1 Department of Accounting, Auditing and Business Analytics (AA), Department of Economics (EC) and Department of Finance (FI)

Department of Accounting, Auditing and Business Analytics (AA), Department of Economics (EC) and Department of Finance (FI) are quantitative oriented and a substantial part of research is conducted by using advanced mathematical/statistical methods. In addition, all three departments contribute to the discipline of business economics.

The departments provide research based teaching and knowledge development in financial management, business economics, accounting and auditing, all areas of finance, international macroeconomics, industrial economics, competition policy, monetary and financial policy, mathematics, statistics and econometrics.

Their faculty publish regularly in recognized international academic journals and serve on editorial boards.
On average 30% of all publications in this group of the departments are classified to be relevant for SDGs. Department of Economics contributes with largest amount of SDGs publications, and in fact, has the largest share of sustainable publications at department level, that is above 40%. In total, there have been 49 scientific publications between 2017-2018. 43 of these were published in scientific journals, while the rest of publications are books/book chapters/monographs. 90% of journal publications were published in journals from ABS list, where 70% of these are publications of level 3 or higher and over 30% of level 4 or higher (according to ABS ranking). Annual number of publications within sustainability at the group level have stayed more or less constant with 24 publications in 2017 and 25 in 2018. The distribution of publications between departments over time is shown in Figure 3. Publications cover a broad range of different topics and have contributed to 12 different SDGs. Some examples of issues that have been addressed are Climate Leadership, Diagnostic Technology and Reduction in Fatal...
Mortality, Humanitarian relief operations, petroleum rents and hidden wealth. Figure 4 show the distribution of publications according to SDGs. Over half of the studies have addressed Goals SDG 16 *Peace Justice and strong institutions* and SDG 17 *Partnership for the goals*. This group of departments is the only one that has had publications related to the first two SDGs: SDG 1 - *No Poverty* and SDG 2 – *No Hunger*. The group has also the highest number of publications addressing SDG 17 - *Partnership for the goals*.

**Summary**

A substantial part of research activities in Department of Accounting, Auditing and Business Analytics (AA), Department of Economics (EC) and Department of Finance (FI) is related to sustainability. Most of these publications are published in top journals with high impact factor SDG 16 *Peace Justice and strong institutions* and SDG 17 *Partnership for the goals* have been the goals that were addressed in more than a half of sustainability publications.
3.2 Department of Marketing (MA), Department of Communication and Culture (CC), Department of Leadership and Organizational Behavior (LO), and Department of Strategy and Entrepreneurship (SE)

Department of Marketing (MA), Department of Communication and Culture (CC), Department of Leadership and Organizational Behavior (LO), and Department of Strategy and Entrepreneurship (SE) are considered to be more qualitative oriented rather than the first group of departments (AA, EC and FI), although they also have some quantitative studies. All four departments are oriented towards management field and hence share some common disciplines. The departments collaborates with a number of businesses, and their research focuses on creating solutions for companies and covers a wide variety of challenges managers meet in the modern market. Their faculty publish regularly in recognized international academic journals and serve on editorial boards.

On average ¼ of all publications in the second group of departments are classified to be relevant for SDGs. At departmental level the biggest share (30%) of publications within sustainability has been in Department LO. The department group has in total 122 scientific sustainability publications in a period between 2017-2018, 92 of which are journal publications, 6 books/monographs, and 24 chapters. The distribution of publications between departments over time is shown in Figure 5. Department of LO has highest number of publications, with more than 30 articles each year. Further, the distribution of publications according to 12 SDG addressed by this group of departments, are shown in Figure 6

**Case 4: SDG 3**

*Good Health and Well-Being*

How do you feel today? Managing patient emotions during health care experiences to enhance well-being

Line Lervik-Olsen (BI) et al. (2017)

The authors address two important questions contextualized in health care: (1) How can health care organizations better understand patient and family emotions during health care experiences? and (2) How should health care organizations use this understanding to design and better manage patient experiences to enhance patient well-being? One of the outcomes from this study are guidelines to design and better manage patient experiences.

**ABS level: 3  Citations: 30  JIF: Q1  Tweeters: 5**
As the Figure 6 shows, the largest number of publications, 35%, have contributed to SDG-16 Peace Justice and strong institutions. Some examples of the topics addressed by these studies are Brexit, public corruption, and white-collar crime. SDG-3 Good health and well-being comes on the second place in terms of number of publications. In fact, more than 90% of publications at BI that have contributed to SDG 3, have been written by this group of departments. Patient emotions during health care experiences (Case 4), occupational prestige and effectiveness of apps for lifestyle improvements (see Case 5) are examples of the issues studied in this group of research. Other examples of subjects relevant for SDGs have been Women in Power, Meaningfulness in Digital Microwork, interaction between food packaging and consumer behavior, and Digital Platforms (see Case 6). The management department group is the only one who has addressed SDG 11- Sustainable cities and communities and SDG 14 Life below water.

Some of the publications have been written in cooperation between the departments. One example is a study written by faculty both from LO and SE Departments, where the authors...
investigated knowledge sharing in virtual global project teams (see Case 7).

**Decent work and economic growth & Reduced Inequalities**

Unfairness by Design? The Perceived Fairness of Digital Labor on Crowdfunding Platforms.


In this study, the authors analyze how digital platforms characteristics affect the fairness perceptions in the workforce, labor conditions, and outcomes. Based on a qualitative survey conducted among US workers, the authors derive policy recommendations aimed at bolstering the conditions of digital labor.

ABS level: 3  Citations: 9  JIF: Q1
Tweeters: 3  Financial Times publication

**Case 6: SDG 8 & SDG 10**

**Responsible Consumption and Production**

Working smarter and greener: Collaborative knowledge sharing in virtual global project teams

Øivind Revang (BI) and Johan Leif Olaisen (BI) (2017)

The authors of this study have showed that we can develop social interaction building up trust and share knowledge through online technology platforms without offline social interaction. By making team members be aware of green solutions, the expected impact is less airline pollution, less stress, and more professional work.

ABS level: 2  Citations: 21  JIF: D1 Tweeters: 2

**Case 7: SDG 12**

**Summary**

Department of Marketing (MA), Department of Communication and Culture (CC), Department of Leadership and Organizational Behavior (LO), and Department of Strategy and Entrepreneurship (SE) have contributed with more than 60% of all sustainability publications at BI. While the biggest number of articles in this group of departments have been addressing SDG 16, more than 90% of publications related to the SDG 3, which comes on the third place of the most addressed SDGs at BI, are written by these four departments.
3.3 Department of Law and Governance

The Department of Law and Governance has one of Norway’s largest academic communities within business law as well as a strong team of experts in corporate social responsibility, banking and insurance, political economy and climate strategy. The department of law and governance also includes the Centre for Sustainability CRS and Energy, Centre for Economic History, and Centre for International Political Economy and Political Science. Research areas include trusts and foundations, corporate law, tax law, accounting law, intellectual property, banking and securities law, European politics, energy policy and climate strategies.

In period 2017-2018 the department has published 16 sustainability relevant publications: 7 journal publications, 2 books and 7 book chapters/anthology articles. The share of SDG publications relative to total number of publications in the departments has been just below 30%. Figure 7 shows yearly number of publications in the department.

Only one of publications is in journal from ABS list, however it is apparent that the ABS system is not well suited for the Department of Law and Governance. A lot of law problems are inherently national by nature, publishing in national journals is both necessary and relevant. Indeed, according to BIRA-report the department has a large impact in Norwegian business society.

Publications contribute to eight different SDGs, see Figure 8. A substantial part of the sustainability related research conducted at LG departments is related to energy/climate...
and address SDG 11 - *Affordable and clean energy* and SDG 13 – *Climate action*.

Some examples of the sustainability issues that have been addressed are challenge of aligning ecological and socio-economic sustainability, EU’s Regulatory, green growth, International Energy Governance, climate and digital challenge (See case 8)

**Figure 8: SDGs Publications at LG Department 2017-2018**

![Bar chart showing SDGs publications from 2017 to 2018]

**Summary**

More than a half of sustainability publications at the Department of Law and Governance are non-journal articles, and are either books/book chapters or articles published in anthologies. Despite a relative small number of faculty, LO Department has contributed to broad range of SDGs, including SDG7 - *Affordable and clean energy*, SDG12 – *Responsible consumption and production* and SDG16 - *Peace, justice and strong institutions*. 
4. **Conclusion**

Research at BI has a clear contribution to SDGs, at the same time as the number of sustainability publications have been growing. During the period of 2017-2018 more than 25% of all publications at BI have contributed to at least one SDG. The findings presented above give a strong indication of our academic strengths and the focus of each work area.

The top three goals BI’s academic work contributes to are:

- **SDG 3 – Good health and well-being**
  - Research topics include: Healthcare management & collaboration, Health technology & innovation, Psychology.

- **SDG 16 – Peace, justice and strong institutions**
  - Research topics include: White-collar crime, Fraud, Leadership of law enforcement, Counterterrorism, Electoral politics, How bureaucracies work, Corruption, and EU.

- **SDG 17 – Partnership for the goals.**
  - Research topics include: Macroeconomic modelling and forecasting (crisis-prediction and prevention), FDI, Tax, and Public procurement practices

These three goal are also where BI has the highest number of top publications.

Our research activities develop a basis that is required to be able to respond to global challenges. We are incredibly proud of the part we play in creating sustainable future at BI Business School.
References


