

Content

05	Foreword by Danske Bank
07	Introduction
08	Summary
10	Key Findings: The state of Nordic Impact Start-ups
21	In the spotlight: The gender gap, energy, responsible consumption and production, developing markets
25	Closing remarks
26	Appendix; About this report - definitions, methodology and data quality



FOREWORD BY DANSKE BANK

Building businesses for a new world

The world faces major challenges: climate change, pollution, inequality, poverty ... just to mention a few. These are challenges that we cannot overcome with traditional business solutions. They require new ways of doing things – new ideas, new habits and innovative solutions. The 17 UN Sustainable Development Goals (SDG) set the direction and ambitions for the changes we need to make.

Impact-driven entrepreneurs are an important part in driving this change as they build strong businesses, not for the sake of earning money in itself, but rather for the accomplishment of creating viable companies with a vision and solutions that can make the world a better place to be.

As a leading financial institution, we at Danske Bank wish to leverage our knowledge, competencies, resources and comprehensive network to help Nordic Impact Start-ups create solid businesses and scale them to a point where they make a substantial positive impact on society.

In 2018, we set out to understand which challenges the Impact Start-ups face. Our surveys revealed that 87% of these companies find the ecosystem in the Nordics fragmented, lacking awareness from stakeholders and the general public.

Therefore, we published the first impact insights report last year, presenting an overview of the ecosystem. In addition, we educated specialised growth advisors to support the Impact Start-ups, established the +impact platform where they can post challenges and experts give advice, and an accelerator for impact to provide them with more execution power on their business model.

The idea of the report is to help the ecosystem have important dialogues and discussions based on facts, not just assumptions. This year's report is based on double the number of Impact Start-ups as last year (647), and is built around deep dives into specific topics that the Impact Start-ups have asked for on the basis of last year's report: business models, markets, customers (b2c or b2b) and gender diversity.

Three basic questions are examined: Who are these start-ups, what is their focus and not least, how do they perform from an economic point of view?

Thus, with this report, we aim to address an important need in the ecosystem: overview, facts and insights into a scene that is growing and with many innovative companies already making a difference. Our hope is that the Nordics can become an epicentre for Impact Start-ups, and that we together with partners can help facilitate that development.

Jeanette Fangel Løgstrup
Head of Group Societal Impact and
Sustainability at Danske Bank

Klavs Hjort
Head of Growth and Impact at
Danske Bank



Introduction

This is the second time we map Nordic start-up companies that address the United Nations' Sustainable Development Goals - the SDGs. Here they are called "Impact Start-ups" because they show potential for positive social and environmental impact, alongside their potential for financial returns.

This is still new territory, which means that discussions about definitions and methodologies for measurement are still in their infancy. Please read more about our definitions, methodology and data quality at the end of this report.

We have analysed start-up companies that have either registered on the Hub (<https://thehub.dk>), on +Impact (<https://plusimpact.io>) or are known by Danske Bank in the Nordic countries. The Hub and +Impact are free-of-charge, online community platforms for Nordic, scalable start-ups. These platforms currently host more than 5,000 new ventures. The Hub and +Impact allow start-ups to classify their business area according to a number of pre-defined categories such as Impact Tech, Healthcare, Education, IT & Software, Service, etc. The research for this report is not limited to the Impact Tech category but takes in every category on the platforms.

Out of the 5,125 companies surveyed on the Hub, we found 525 to be Impact Start-ups. By surveying the +Impact platform and Danske Bank's start-up community we identified an additional 122 Impact Start-ups, thereby bringing the total sample in this study up to 647.

We are looking at a sample with an uneven geographical distribution of Impact Start-ups

The Hub was launched first in Denmark and later in Sweden, Norway and Finland. Consequently, there is an uneven geographical representation of start-ups on the Hub. Most of the Impact Start-ups are from Denmark (37%) followed by Swe-

den (26%), Norway (19%) and Finland (18%). The sample of Impact Start-ups featured in this report must therefore not be confused with an exhaustive mapping of the entire Impact Start-up market. Many great start-ups in the Nordic countries have not been part of the analysis, simply because they are not part of the Hub, +Impact or are in general not known to us.

Figure 1
Nordic Impact Start-ups split by country

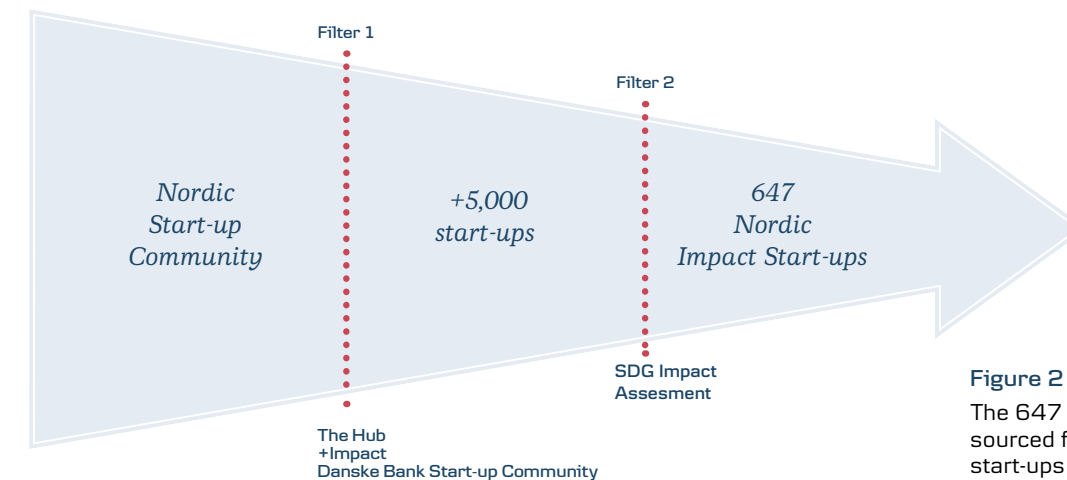
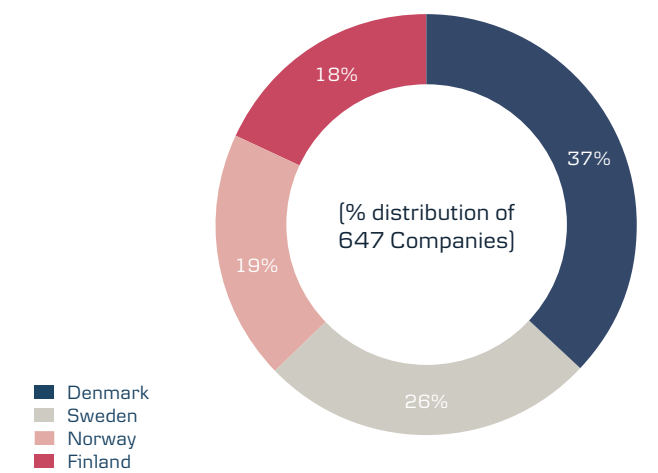


Figure 2
The 647 Nordic Impact Start-ups were sourced from The Hub, +impact and start-ups known by Danske Bank.

Summary

The Sustainable Development Goals (SDGs) are set by the United Nations and adopted by 193 nations - including the Nordic countries. They represent a wide range of market needs, from energy solutions to food production and medical services. We have identified 647 Impact Start-ups from The Hub and +impact - two online community platforms - and from the start-up community known to Danske Bank. Impact Start-ups show potential for social, environmental and economic impact in line with the SDGs.

Our findings indicate that Impact Start-ups are following similar patterns as other start-ups. They focus on top-line growth but struggle to make a profit. Financial performance seems to improve as Impact Start-ups mature in age. In addition, we see that the Energy market represent 63% of the profit pool. 21% are exploring business opportunities in developing markets. In average only 14% of Nordic Impact Start-ups are led by women. 82% of Impact Start-ups seem to be aware of their impact as indicated by their use of impact statements on their website. Read on and find more details inside the report.

647

IMPACT START-UPS



4,594

EMPLOYEES



Top 4 SDG



10 %

ARE IMPACT START-UPS



8 %

APPLY A CIRCULAR BUSINESS MODEL



46% of the SDG12 Impact Start-ups are from Denmark

21 %

ARE IN DEVELOPING MARKETS



74% of the total profit is made by Impact Startups that are present in Developing markets

14 %

HAVE A FEMALE CEO



26 % of CEOs in Norway are women

65 %

OF THE PROFIT POOL IS IN THE ENERGY MARKET



44% of Impact Start-ups working in the energy market are from Sweden

82 %

MAKE IMPACT CLAIMS ON THEIR WEB-SITE



Organisation

Figure 3
Age distribution across Nordic countries

The Nordic Impact Start-ups are typically 3-4 years old. The Danish and Norwegian companies are slightly younger (typically 3-4 years old) compared to the Finnish and Swedish companies, being typically 5-9 years old.

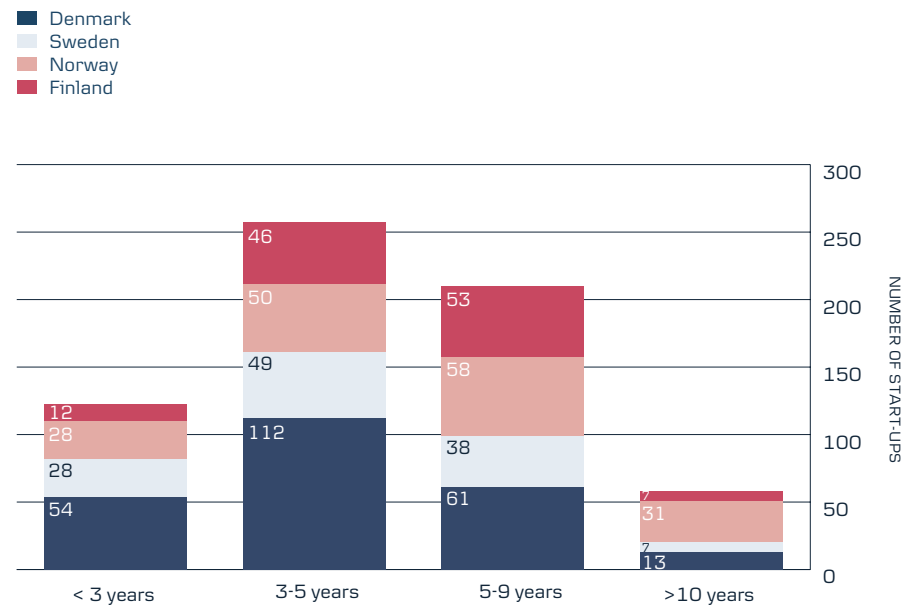


Figure 5
Female CEO

Only 14% (90) of the Nordic Impact Start-ups have a female CEO, indicating that there is still some way to go before the Nordic start-up community is making use of the entire talent pool for both genders.

■ Impact Startups (647 Companies)
■ All Nordic companies (Number not available. Value from <http://nordicparadox.se/>)

The ratio found in this report is higher than the European average for Tech Start-ups where 6% of CEOs are women (source: The State of European Tech 2018 on <https://2018.stateofeuropeantech.com>), but at the same level as the Nordic average at 13% for women in executive and director positions (source: Sanandaji (2014) on www.nordicparadox.se). The size of the gender gap varies across countries with Norwegian Impact Start-ups being ahead of both the other Nordic Impact Start-ups and the average for all companies.

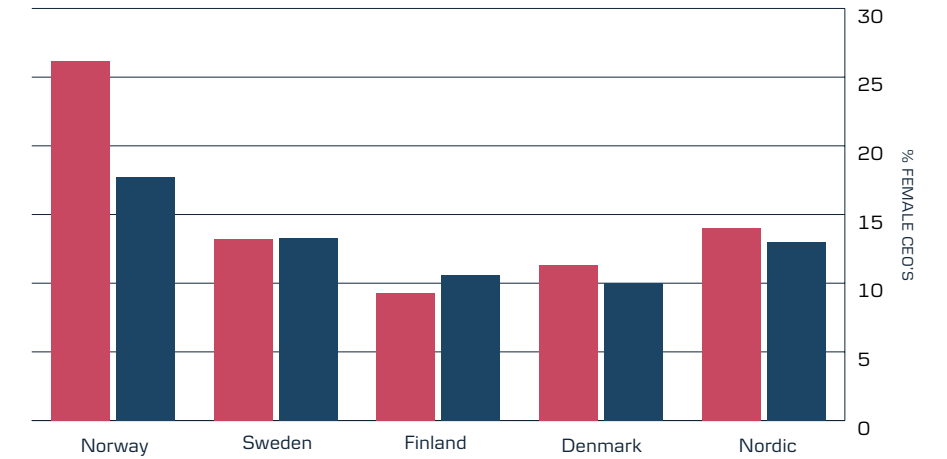
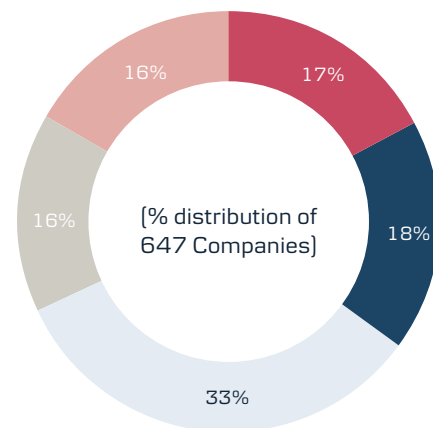


Figure 4
Business size - number of employees

The total number of employees in these 647 Impact Start-ups is 4,594, with an average of seven employees per company. The typical Nordic Impact Start-up employs 3-5 persons (33%).

■ 1
■ 2
■ 3-5
■ 6-10
■ > 10



Impact

Figure 6
UN Sustainable Development Goals

We define “impact” as business solutions that help society achieve the 17 SDGs, which outline the most pressing environmental, social and economic challenges to society. To find out where Impact Start-ups focus their entrepreneurial energy, we have paired their product offering with the most relevant SDGs. Furthermore, we have collected data on Impact Start-ups’ business approach and their financial performance.

The Sustainable Development Goals (SDGs) are set by the United Nations and were adopted by 193 nations - including the Nordic countries - in 2015. There are 17 interconnected goals and 169 associated targets covering every dimension of economic, environmental and social sustainability, such as poverty, hunger, health, education, climate change, gender equality, water, sanitation, energy, urbanisation, environment and social justice.



Figure 7
SDG distribution across Nordic countries

One out of ten companies on the Hub qualifies to be an Impact Start-up. Out of the 5,125 companies on the Hub surveyed, we found 525 to be Impact Start-ups. It means that approx. 10% of the start-ups on the Hub can be classified as Impact Start-ups. This is slightly higher than the ratio found in last year’s survey, which indicated that 8% of the start-ups on the Hub were Impact Start-ups. The Hub has grown in numbers since last year and as we are only looking at a sample of self-registered start-ups, one should be careful not to over-interpret this development. In addition to the 525 Impact Start-ups on the Hub, we have identified 122 Impact Start-ups from +Impact and from Danske Banks network in the start-up community. It brings the number of Impact Start-ups in this year’s report up to 647.

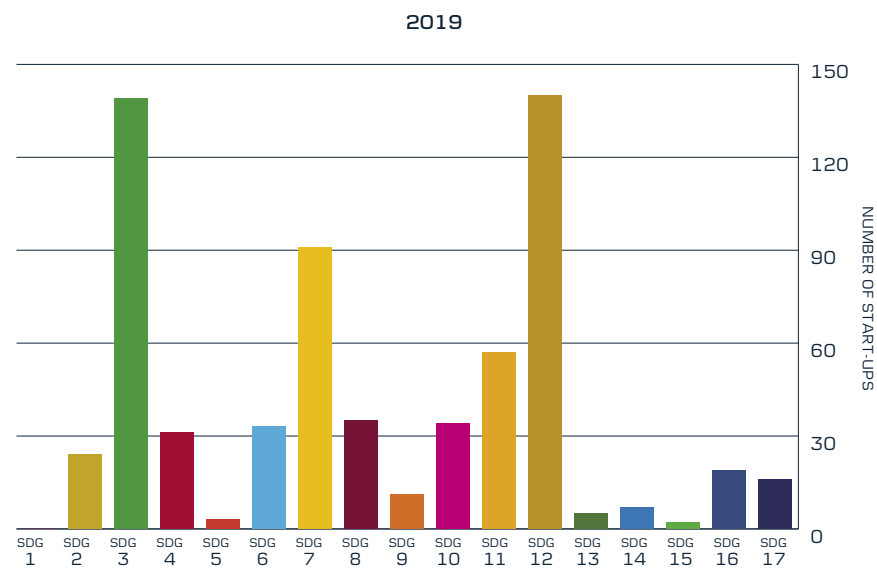


Figure 8
Top 4 SDG's / Ratio of Impact Startups



The top-4 SDGs are: SDG3 (Health & Well-being), SDG7 (Clean & Affordable Energy), SDG11 (Sustainable Cities) and SDG12 (Responsible Consumption & Production)

For all Nordic Impact Start-ups, the top four most frequently addressed SDGs are numbers 3, 7, 11 and 12. However there are differences from country to country in terms of the distribution of Impact Start-ups between these four SDGs. In Denmark the most frequently addressed is SDG12 (Responsible Consumption and Production). In Finland and Norway it is SDG 3 (Health & Well-being). The most frequent SDG among start-ups in Sweden is number 7 (Energy)

Responsible Consumption and Production (SDG12) is the SDG most frequently addressed, with 22% of the Impact Start-ups focusing on this area

SDG12 is about decoupling financial growth and societal development from our ecological footprint by changing the way we consume goods and resources. To give some examples, TraceGrow (Finland) turns problematic and costly alkaline battery waste to premium level micronutrients. The company offers fertilizers for use in farming as well as turnkey production plants. In a different industry, the Norwegian company TotalCtrl has developed a technology platform that helps grocery stores, hotels, restaurants and other companies to gain control over their food inventory using the power of expiration dates. Their approach reduces food waste and costs, while improving profitability.

Good Health and Well-being (SDG3) is explored by 21% of the Impact Start-ups

SDG3, Good Health and Well-being, is about fighting health risks and disease while promoting health with appropriate funding and systems. This area is explored by 21% of the Nordic Im-

pact Start-ups. For example, Octlight (Denmark) has invented a swept light source technology that makes it possible to take full 3D images of the eye, which allows for early and affordable diagnosis of eye diseases. Likewise, Nightingale (Finland) has created a blood analysis platform for early and affordable diagnoses of cardiovascular diseases and diabetes.

A significant share of Impact Start-ups address Affordable and Clean Energy (SDG7) and Sustainable Cities and Communities (SDG11)

Compared to 2018, we have found in this year’s research that relatively more Impact Start-ups are creating solutions to solve sustainability challenges regarding SDG7 (Energy), with 14% exploring solutions in this area, and SDG11 (Cities), with 9% working in this field.

SDG7 is about creating new solutions for renewable energy and smart management of energy systems. To give an example, SaltX (Sweden) tries to meet the demand for storage of renewable energy. SaltX uses nano coated salt technology to create energy storage for energy utilities, industrial and commercial customers.

In the case of SDG11, there is a need to manage the immense pressure on economic, environmental and social systems caused by the rapid growth of cities around the world. To give a few examples of Impact Start-ups in this area, Clean Motion (Sweden) has introduced an electric mini vehicle for lean, clean and safe city transportation. Envirate (Finland) has created an app that allows anyone anywhere to rate the environment and thus create awareness about air quality for citizens and authorities. Gaest (Denmark) has developed an online platform that enables efficient utilisation of city space through a sharing platform for meeting rooms and offices.

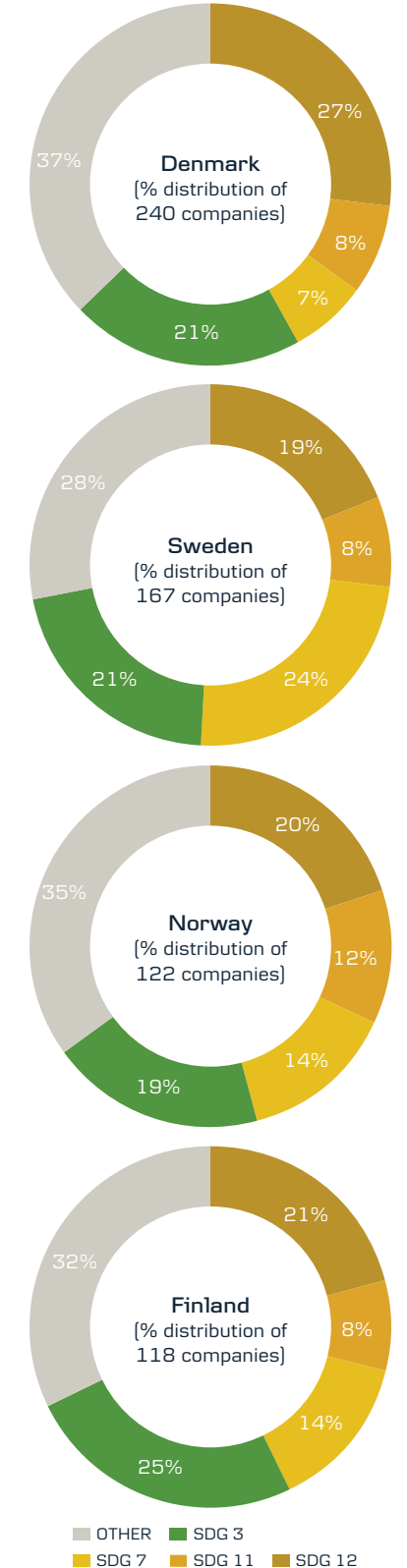




Figure 9
Are Impact Startups making impact claims on their web-site?

Most Impact Start-ups are communicating their impact – but hardly any refer to the SDGs

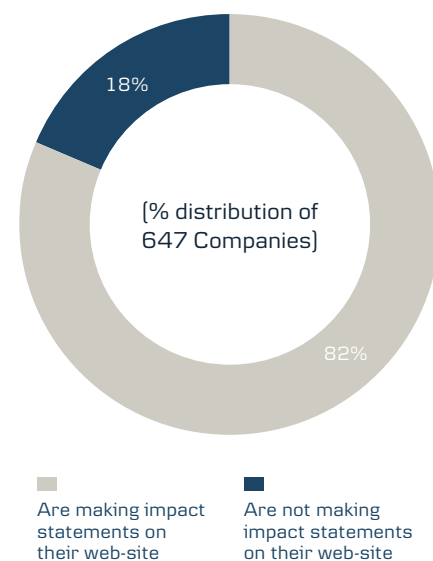
Communication of impact claims may be an indication of the maturity of the impact market, i.e. how aware are Impact Start-ups of their sustainability profile and how ready are customers and consumers to “pay for impact” or make purchase decisions based on the impact profile of products and services?

When looking at their web-sites, we found that 82% of Impact Start-ups make impact statements in their online communication. In some cases, these statements are about reducing the negative effects of consumption and production, e.g. reducing energy consumption, food waste and pollution. In other cases, the impact statements may be about creating a net positive

impact – not only reducing the negative effects – on environmental and social conditions.

For instance, Desertcontrol (Norway) has found an innovative way to convert desert to agricultural land and Solar Food (Finland) is offering a technology to make protein out of air, water and electricity.

The highest ratio of Impact Start-ups that make impact statements in their online communication is found in Sweden (93%), followed by Finland (89%), Norway (76%) and Denmark (73%). While the SDGs are widely used by larger private and public organisations as the communication framework for sustainability, hardly any Impact Start-ups relate their sustainability impact to the SDGs.



KEY FINDINGS

Markets

Figure 10
Market opportunities

The Business and Sustainable Development Commission was launched at the World Economic Forum and filed its first report, Better Business Better World, in 2017 (<http://report.businesscommission.org/>). It claims that achieving the SDGs opens up US\$12 trillion of market opportunities in four economic systems that represent approximately 60% of the real economy and are critical to deliver the SDGs. According to the Commission, the four biggest markets are: Food & Agriculture, Cities, Energy & Materials and Health & Well-being.

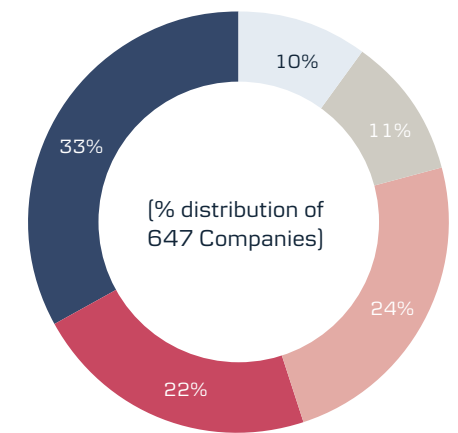
Furthermore, The Business and Sustainable Development Commission emphasises the potential in game-changing, largely digitally-enabled business models that can be adapted to capture market opportunities in line with the SDGs. According to the Commission the top 5 models are: The Sharing Economy, Lean Service, Circular Economy, Big Data & Machine Learning and New Social Enterprise Models. Please see the appendix for more details.

In this report we have paired each Impact Start-up’s market approach and business model with the most relevant market opportunities and business models as defined by the Business and Sustainable Development Commission. Please note that there is not a one-to-one relationship between the market definition and the SDGs. More details can be found in the appendix.

Most Nordic Impact Start-ups are pursuing top-4 market opportunities
The majority (67%) of the Impact Start-ups are exploring opportunities in the markets that are the most valuable according to the Better Business Better World report.

The most frequently explored market opportunity is in Energy and Materials

Food & Agriculture
Cities
Energy & Materials
Health & Well-being
Other



[24%], with many Impact Start-ups offering solutions for the expansion of renewable energy or cleaner energy. For instance, Leanheat (Finland) provide real-time optimisation for individual buildings and clusters of apartment buildings. It helps provide district heating and the solutions reduce the carbon footprint from heating.

Hexicon (Sweden) is developing projects and technology for floating multi-turbine platforms, thereby helping the expansion of renewable energy.

Likewise, Sunmapper (Denmark) offers a web application that calculates the cost of solar cells on the roof, giving homeowners an overview of their economy. In this way, Sunmapper makes it easy and manageable for private homeowners to get an overview of the financial gain by installing solar cells on their roofs.

A large part (33%) of the sample are looking at opportunities outside the top 4 markets. These companies may

still show potential to create impact business.

To give a few examples, Map Project (Sweden) has created an app that helps 4 billion people create a precise, complete and easy- to-share address. Diwala (Norway) has introduced a decentralised platform that helps marginalised people to verify and document their skills, thereby helping refugees and other vulnerable groups who wish to gain access to the job market.

From Finland, Sansox utilises new treatment technology to clean water. Coders Trust (Denmark) is a micro finance platform that funds tech education in emerging markets.

Figure 11
Business models

Half of the Nordic Impact Start-ups are applying game-changing business models

Roughly half (52%) of the Nordic Impact Start-ups apply what have been nominated as game-changing business models in the Better Business Better World report. The most frequently applied business model among these is Lean Service, which focuses on the streamlining of processes and reduction of waste and inventory. For instance, Aqubiq (Denmark) helps consumers to save about 15% of household water consumption and notifies consumers if there is a leak in their water system.

Almost half (48%) of the companies make use of business models that fall outside the definition of “game-changing”. These start-ups apply traditional “make and sell” models. For instance, BluSense Diagnostics (Denmark) uses micro- and nanotechnologies for accurate and affordable point-of-care platforms to diagnose infectious diseases. In a different area, Marine Garden (Norway) introduces sustainable seabed farming of fish to meet demand for fish protein.

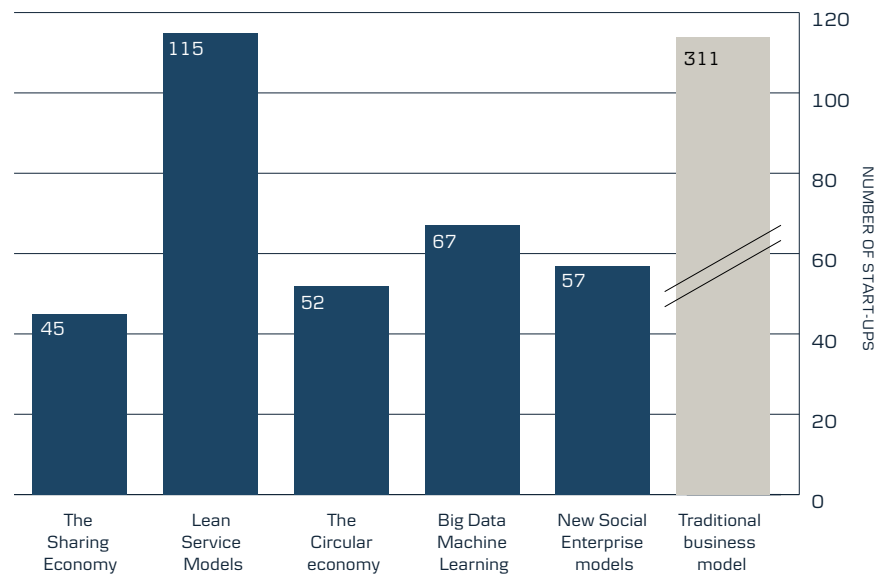
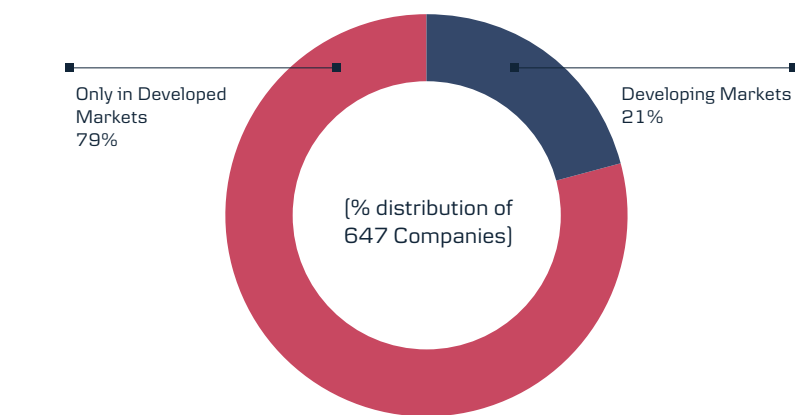


Figure 12
Developing markets

One out of five Nordic Impact Start-ups are looking at business opportunities in developing markets

21% of companies in the sample of Nordic Impact Start-ups analysed in this report are exploring developing markets. According to the Better Business Better World report more than half of the SDG market is in developing countries. If Nordic countries could seize a share of this market opportunity according to their current share of world trade, the potential would be billions of US dollars.

According to a report published by the Ministry of Foreign Affairs of Denmark, developing SDG market opportunities

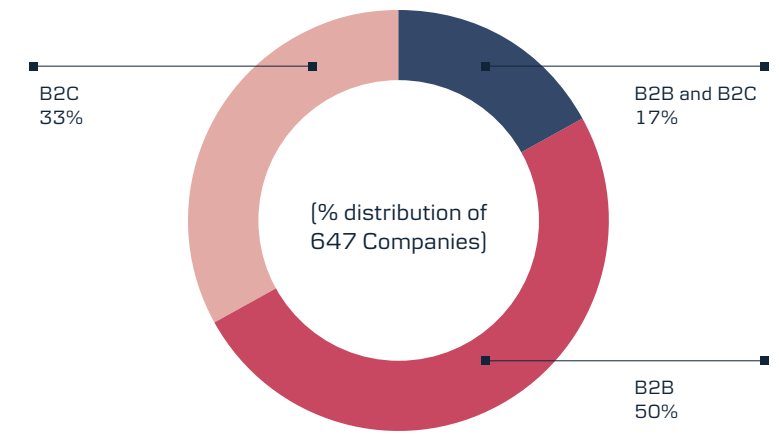


are estimated at US\$60 billion a year in 2030 for Danish businesses alone (The Sustainable Development Goals a

world of opportunities for Danish businesses, The Ministry of Foreign Affairs of Denmark, 2019).

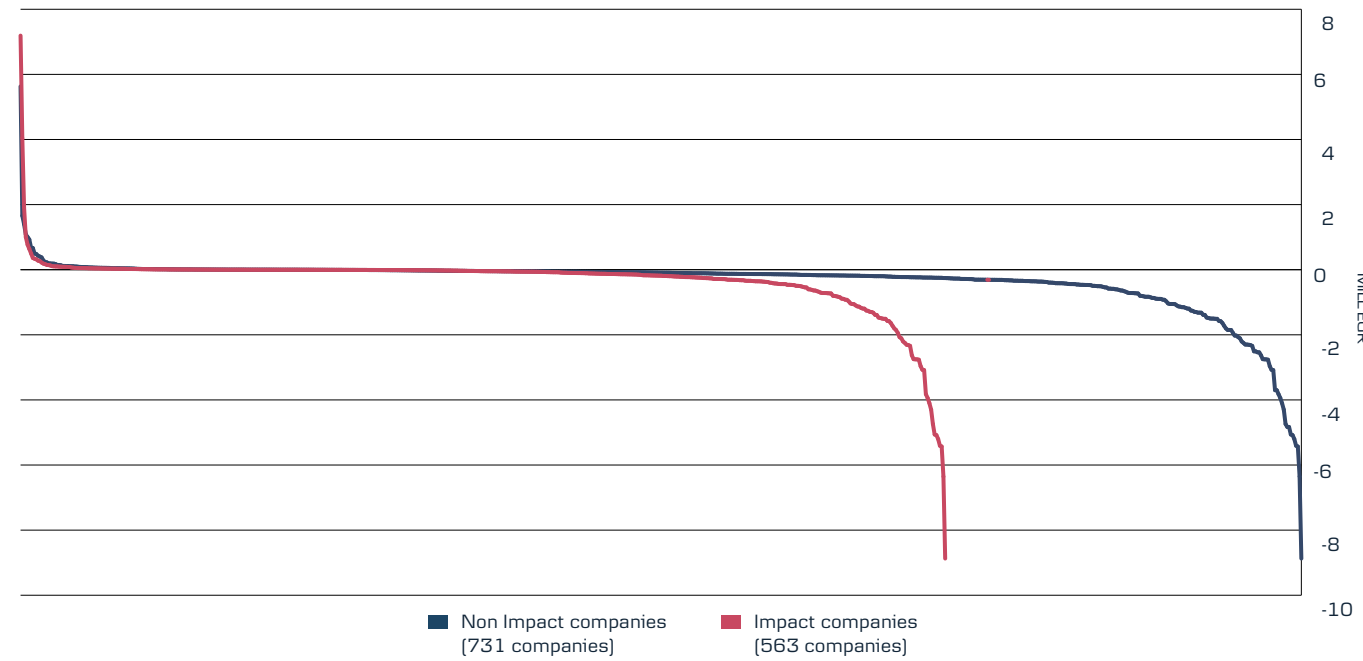
Figure 13
B2B, B2C or both?

Half of the Nordic Impact Startups are in the B2B segment



Financial performance

Figure 14
profit/loss long tails



Across the Nordic countries, rules and requirements vary as to how smaller enterprises and start-ups must issue annual reports. Consequently, comparable public data on financial performance and organisational structures is limited. However, where available we have analysed turnover, gross profit, profit/loss and equity. For Denmark

there is hardly any data on start-ups' turnover, so in this case we emphasise data for the remaining indicators.

Impact Start-ups follow the same pattern as any start-ups

When comparing the financial characteristics of Impact Start-ups to the other start-ups on the Hub, one finds

that they follow similar patterns. The success stories in terms of profit, turnover and equity are concentrated in just a few companies. In all cases the likelihood for a break-through, as measured by the ability to generate turnover and profit and grow equity, increases as companies mature and are 5-9 years' old, or even more.

Figure 15
Turnover split by age of Company

The financial performance of Impact Startups as measured by their turnover seems to improve with age. Most of the turnover is made by Impact Startups being 5-9 years old (Figure 15) compared to the average Impact Startup being 3-5 years old (Figure 3).

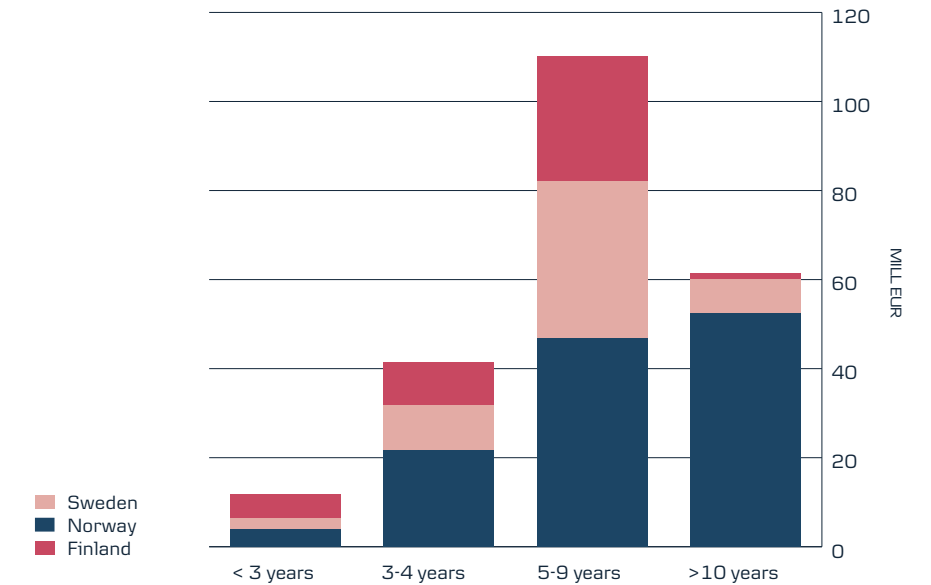


Figure 16
Top 25 Turnover in Swedish, Finnish and Norwegian Impact Start-ups: country of origin, primary SDG, year of establishment, number of employees

Most of the top 25 (turnover) Nordic Impact Start-ups are exploring SDG7
The aggregated turnover of the top 25 best performing Impact Start-ups account for 35% (EUR 102,484,000) of the total reported turnover. Since hardly any of the Danish Impact Start-ups report their turnover, all of the top 25 Impact Start-ups in terms of turnover are from Sweden (14), Norway (5) and Finland (6). Twelve out of the top 25 are exploring business opportunities related to SDG7.

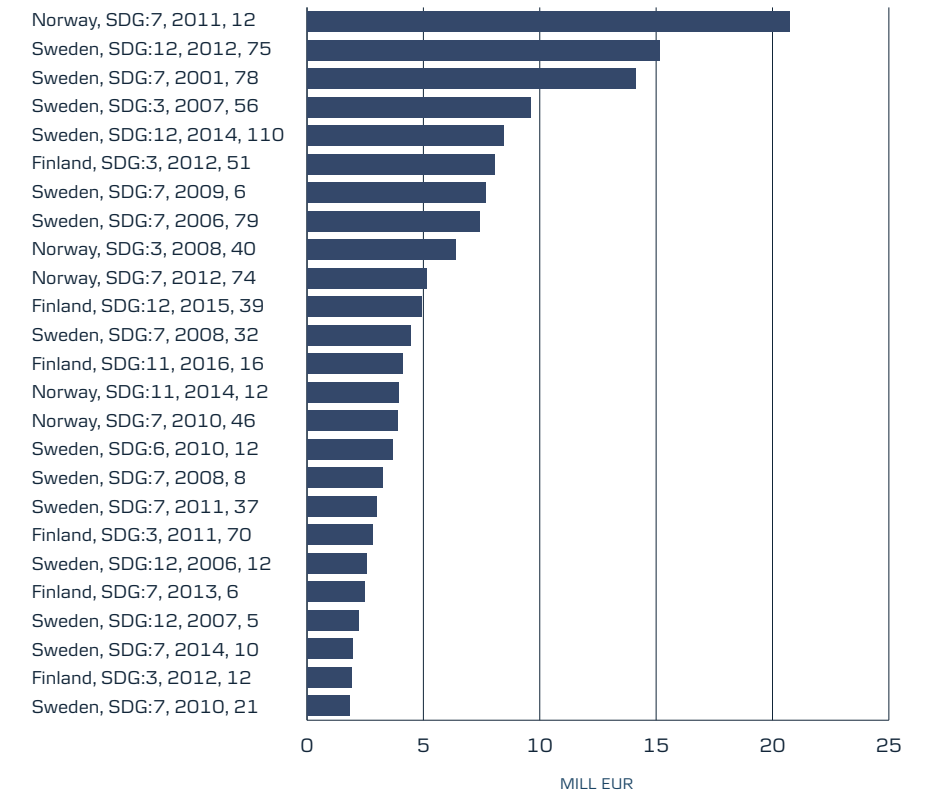


Figure 17
Top 25 Gross Profit in Danish Impact Start-ups: country of origin, primary SDG, year of establishment, number of employees

Most of the top 25 (gross profit) are exploring SDG7 and SDG12
 In the case of the Danish Impact Start-ups we have very limited data on turnover. Instead we use gross profit as an indication of their economic activity. For 18 out of the 25 top performers in terms of gross profit, their age exceeds the typical 3-5 years. Furthermore, most of them explore opportunities in SDG7 or SDG12.

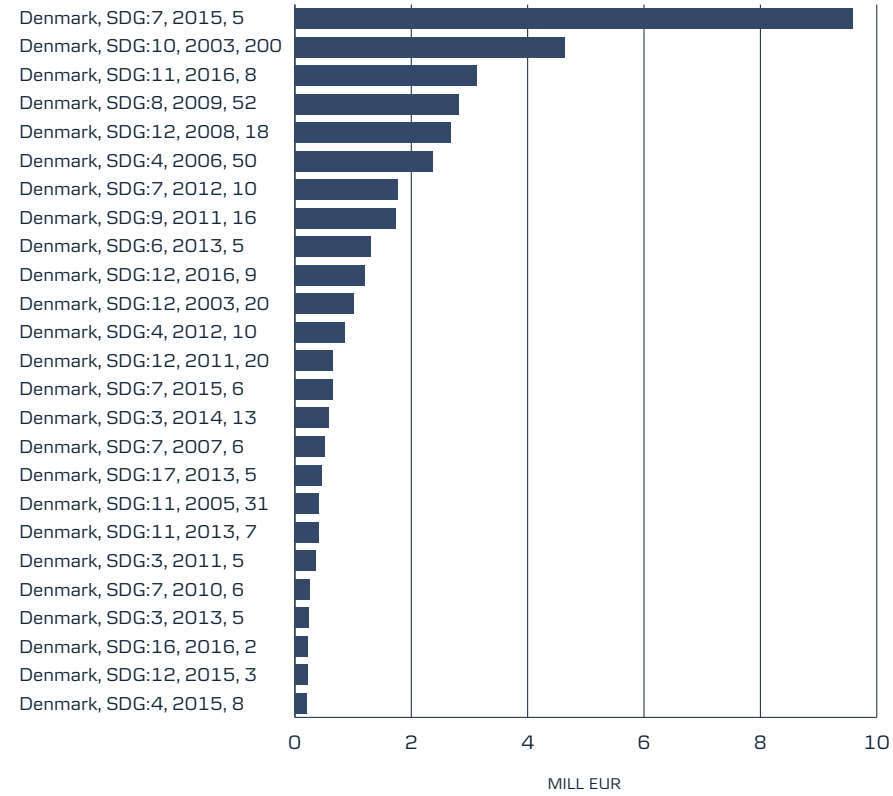


Figure 18
Top 25 Equity with: country of origin; primary SDG, year of establishment; number of employees

Most of the top 25 (equity) are exploring SDG7 and SDG12
 Similarly, in the case of top 5 equity holders, we observe that these companies seem to be more mature in terms of age and number of employees compared to the typical Impact Start-ups. Most of them explore SDG7 and SDG12.

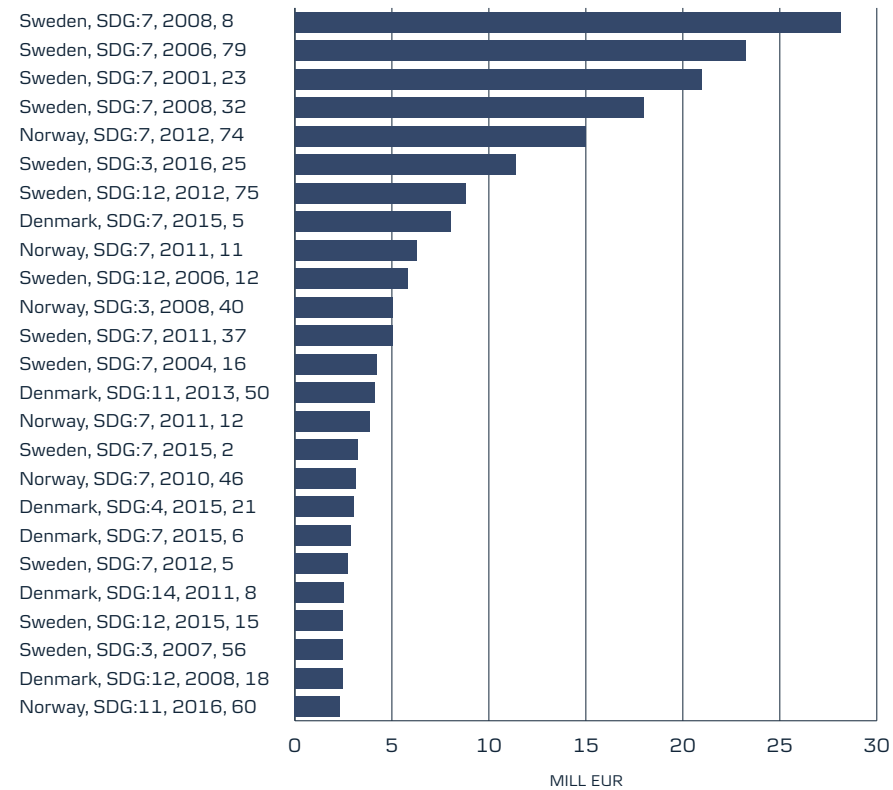


Figure 19
Profit / Loss 2017

The largest average profit per company is made in Norway - the largest average loss per company is made in Sweden.

In Finland 94% of the profit is made by one single company. In order not to skew the picture to much, this company is not included in the analysis of profit/loss.

The largest average profit per company is made by Impact Start-ups from Norway followed by Denmark, Sweden and Finland. The accumulated profit at EUR 18,9 million is exceeded by an accumulated loss of EUR 187,9 million. The largest average loss per company is generated by Impact Start-ups from Sweden followed by Finland, Denmark and Norway.

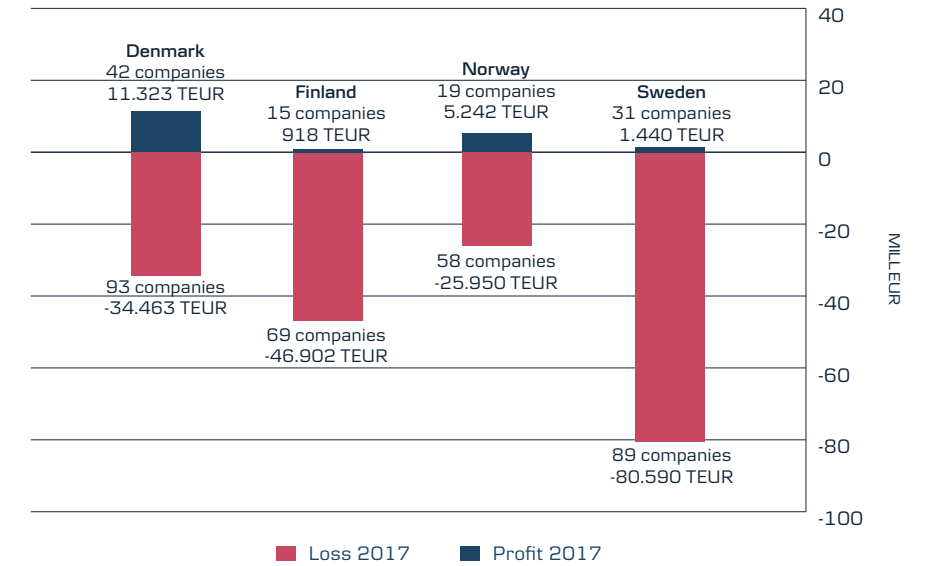
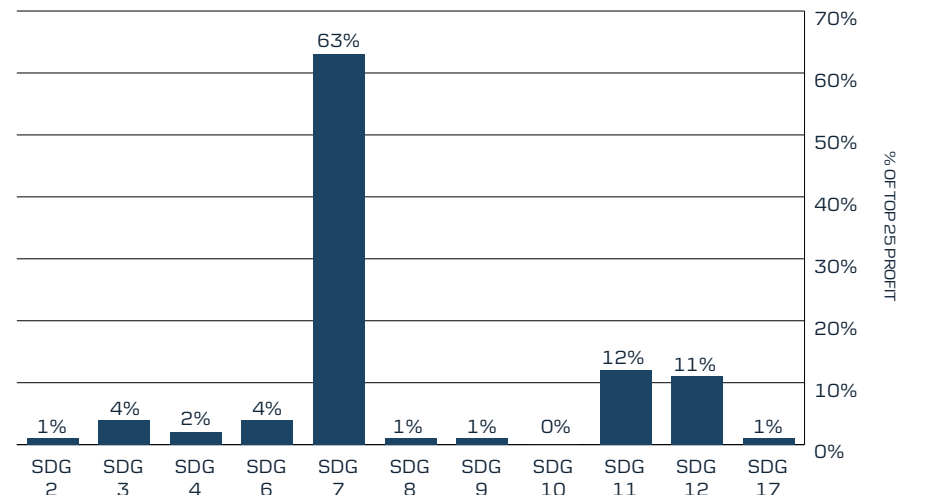


Figure 20
SDG-profile of top 25 (profit) Impact Start-ups

The largest accumulated profit pool is generated by Impact Start-ups working towards SDG7 (Energy)

Looking at the top performing Impact Start-ups in terms of profit generation, it is noticeable that most of the profit (63%) is generated by Impact Start-ups addressing SDG7 (Energy).

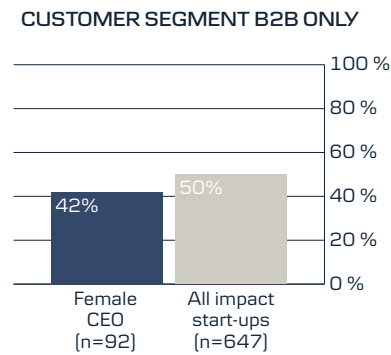
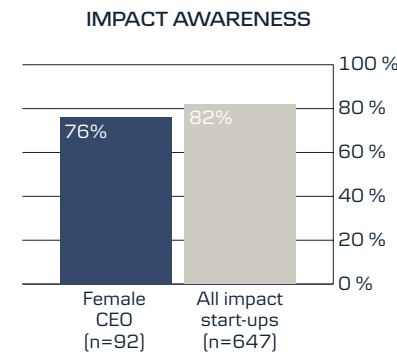
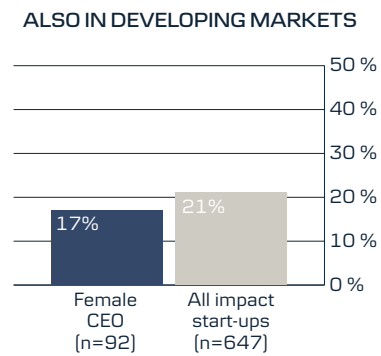
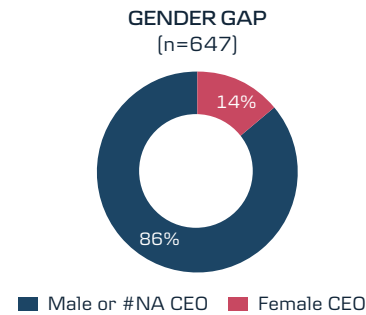


The gender gap

Females are underrepresented in leadership level among the 647 Impact Start-ups, with only 14% of the CEOs being women. This contrasts with SDG5 (Gender Equality), which aims to ensure women have equal opportunities for leadership in political, economic and public life.

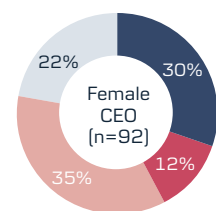
When looking at the 14% of Nordic Impact Start-ups led by female CEOs more than a third (35%) come from Norway.

In general, the Nordic Impact Start-up community is dominated by a few companies and this is also the case for women-led companies. Norway seems to be good at fostering women-led Impact Start-ups and it is no surprise that the top-performer is from Norway: Bright Products A/S delivers more than 90% of the profit and 60% of the turnover of women-led Impact Start-ups. The company develops and sells innovatively designed products (with a focus on solar lamps) to improve living situations in off grid communities. In doing so, Bright Products A/S tries to understand how affordable, convenient access to energy and light can alleviate the negative effects of living off-grid, and improve family economy, education, health and safety.



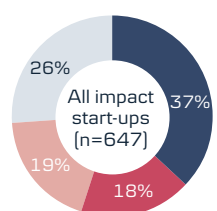
COUNTRY DISTRIBUTION

Denmark, Norway, Sweden, Finland



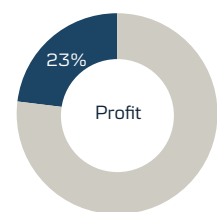
COUNTRY DISTRIBUTION

Denmark, Norway, Sweden, Finland



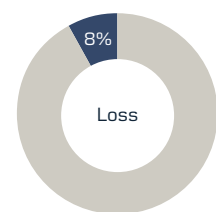
SHARE OF TOTAL PROFIT

Female CEO (n=15), All impact start-ups (n=107)



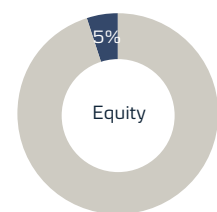
SHARE OF TOTAL LOSS

Female CEO (n=33), All impact start-ups (n=309)



SHARE OF TOTAL EQUITY

Female CEO (n=35), All impact start-ups (n=316)



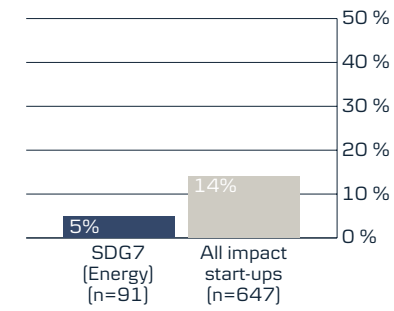
SDG 7

The power of SDG7 - Clean and affordable energy

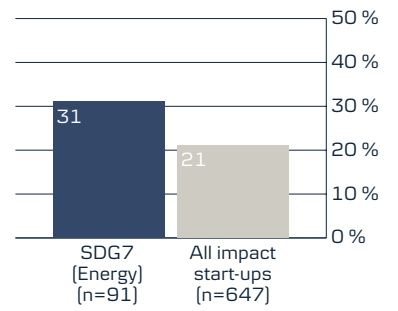
One in five people in the world still lacks access to electricity, and with growing populations the demand for clean energy and access to materials will continue to increase. The importance of SDG 7 is emphasised by its link to SDG 13 (Climate Action) as the energy sector is the dominant contributor to climate change, accounting for around 60 % of total global greenhouse gas emissions.

In this sample of Nordic Impact Start-ups, 14% of the companies are working in SDG7 markets, and they are well represented among the top 25 best performing companies (see key insights, financials). To give a few examples, PowerCell (Sweden) develops and produces fuel cell stacks and systems, powered by hydrogen, that produce electricity and heat with no emissions other than water. Their energy system targets needs in mobile and stationary industries, designed for use on road, off road or at sea, in such applications as vehicles, real estate or ships. EnergyNest (Norway) helps its customers to unlock value of underutilised energy: Its thermal battery stores high temperature heat, allowing the battery more flexibility when interacting with and within the power grid. By balancing energy availability with actual demand, EnergyNest helps industrial companies and power plants which rely on thermal processes.

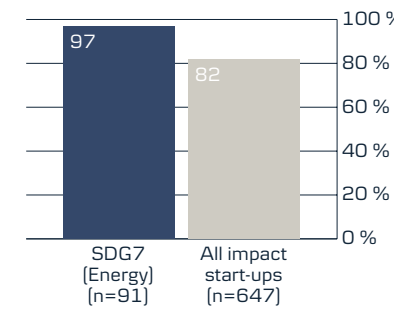
FEMALE CEO



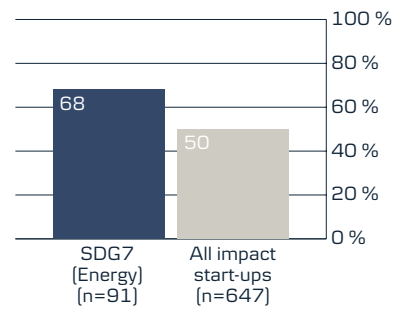
ALSO IN DEVELOPING MARKETS



IMPACT AWARENESS

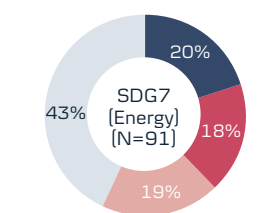


CUSTOMER SEGMENT B2B ONLY



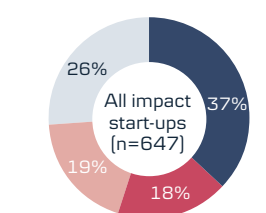
COUNTRY DISTRIBUTION

Denmark, Norway, Sweden, Finland



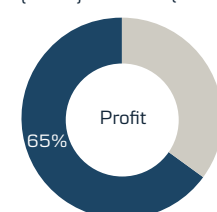
COUNTRY DISTRIBUTION

Denmark, Norway, Sweden, Finland



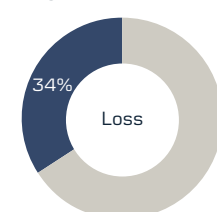
SHARE OF TOTAL PROFIT

SDG7 (Energy) (n=22), All impact start-ups (n=107)



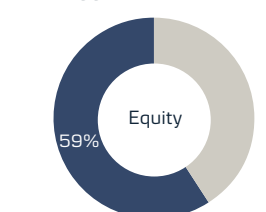
SHARE OF TOTAL LOSS

SDG7 (Energy) (n=52), All impact start-ups (n=309)



SHARE OF TOTAL EQUITY

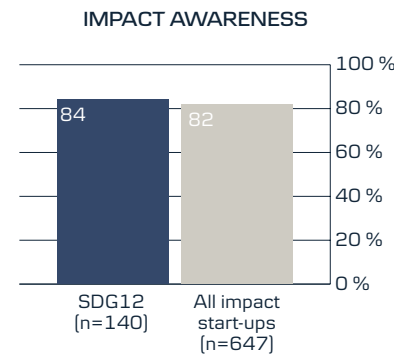
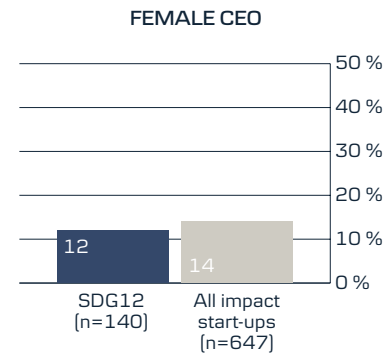
SDG7 (Energy) (n=60), All impact start-ups (n=316)



SDG 12

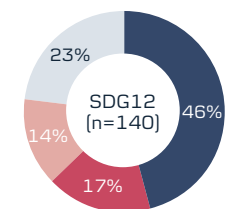
Nordic countries need new circular business solutions to improve performance on responsible consumption & production (SDG12) SDG12 (Responsible Consumption and Production) is one of the largest sustainability challenges in the Nordic countries due to a very high material consumption and waste production (source: www.sdgindex.org) We choose to highlight the Impact Start-ups who apply the circular economy business model due to their potential to reduce waste production and increase recycling, according to SDG12.

To give some examples of Nordic Impact Start-ups working in this field, Chromafora (Sweden) uses the technology SELMEXT (Selective Metal Extraction), to handle waste streams containing dissolved heavy metals. This enables recycling of metals, for example zinc and copper. Dacofi (Denmark) has developed a robust and compact filtration system, which enables the reuse of spent grains from breweries and potato pulp from starch industries. iCell (Sweden) makes insulation material with a low energy footprint from recycled materials like cellulose and newspaper. The circular principles are also used in the fight against food waste. Globally, 1.3 billion tonnes of food are wasted every year, while almost 2 billion people go hungry or undernourished. Matsmart (Sweden) tries to do something about it with an online store that sells surplus food from retailers and food producers in order to reduce food waste.



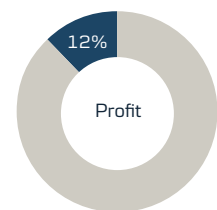
COUNTRY DISTRIBUTION

Denmark Norway
Sweden Finland



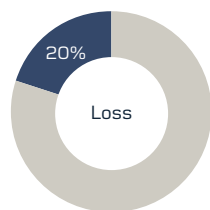
SHARE OF TOTAL PROFIT

SDG12 n=23
All impact start-ups n=107

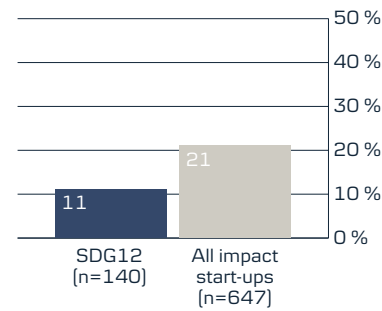


SHARE OF TOTAL LOSS

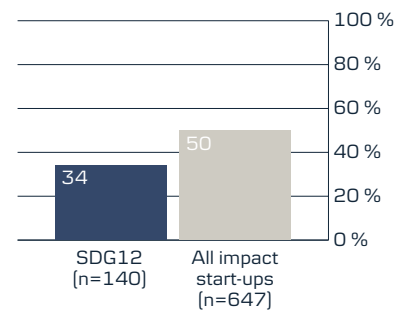
SDG12 n=64
All impact start-ups n=309



ALSO IN DEVELOPING MARKETS

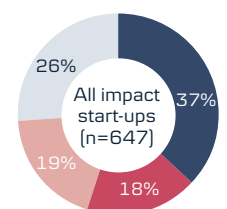


CUSTOMER SEGMENT B2B ONLY



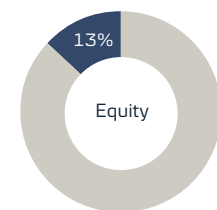
COUNTRY DISTRIBUTION

Denmark Norway
Sweden Finland



SHARE OF TOTAL EQUITY

SDG12 n=71
All impact start-ups n=316

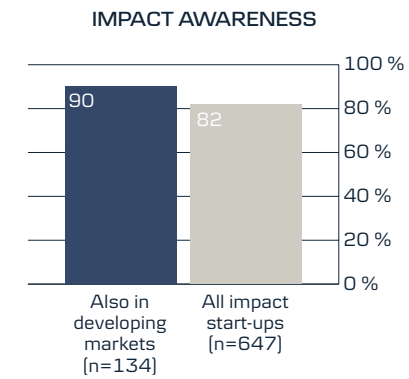
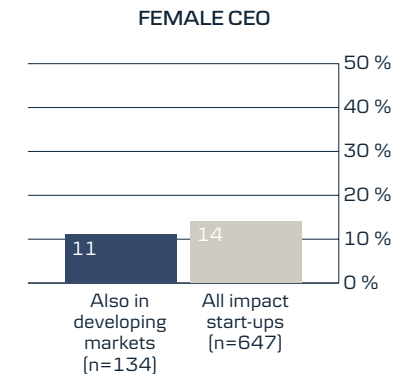


Developing markets

Developing markets represent more than half of the SDG market opportunity Even if the Nordic countries need new impact solutions to achieve all SDGs, more than half of the business potential lies in developing markets (sources: www.sdgindex.org, http://report.businesscommission.org).

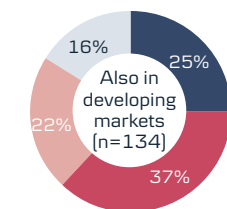
About one in five (21%) of the Nordic Impact Start-ups are not only in developed markets but are also in developing markets. Examples of these include the Swedish company Airinum, which markets an "Urban Air Mask" that filters out more than 95% of particles down to 0.3µm in size. In this way they provide one of the solutions to a significant global challenge. Air pollution is responsible for one in nine deaths and is the single largest environmental health crisis we face, according to the World Health Organization (WHO). In fact, 7 million people die annually as a result of poor air quality - especially in developing markets.

Helping people out of poverty and increasing the opportunity for decent work for all requires access to affordable education. Zabai (Norway) is exploring this business opportunity by providing e-learning in developing markets, which is especially relevant where roads are poor, unsafe to travel or if the local school is too far away. Zabai thus increases the availability of education and reduces the cost. In addition, education is made available for young women in communities with few opportunities.



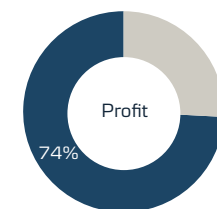
COUNTRY DISTRIBUTION

Denmark Norway
Sweden Finland



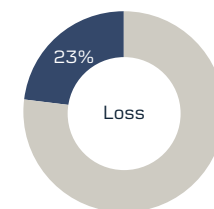
SHARE OF TOTAL PROFIT

Also in developing markets n=21
All impact start-ups n=316



SHARE OF TOTAL LOSS

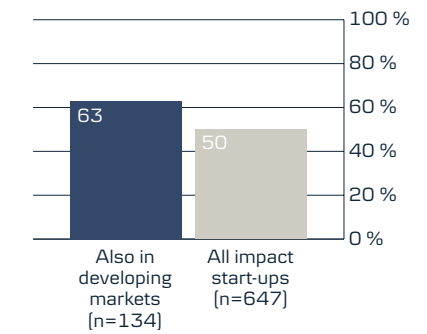
Also in developing markets n=68
All impact start-ups n=316



TOP 4 SDG FOR IMPACT START-UPS ALSO IN DEVELOPING MARKETS

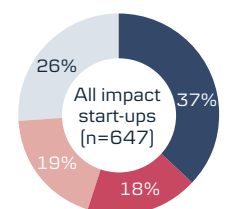


CUSTOMER SEGMENT B2B ONLY



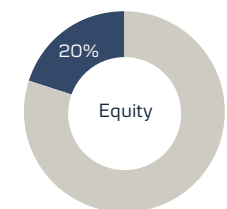
COUNTRY DISTRIBUTION

Denmark Norway
Sweden Finland



SHARE OF TOTAL EQUITY

Also in developing markets n=52
All impact start-ups n=316





We will continue to support Impact Start-ups

We believe that the Nordic countries show potential to become a global epicentre for Impact Start-ups. However, in order to make this dream a reality, we must continue to support the scaling of Impact Start-ups, help build capabilities, and connect Impact Start-ups with new business partners.

At Danske Bank we will continue to support the development and share the facts and insights that can help us build a strong community around the Impact Start-ups.

#plusimpact www.plusimpact.io

Research and writing for this report were carried out by

- IMPACT X (Jacob Trock and Richard Georg Engström)
- Lead Sustainability (Helene Regnell, Morten Nielsen and Thor Eriksen) on behalf of Danske Bank A/S.

Editor-in-Chief at Danske Bank Mikkel Skott Olsen May 2019

APPENDIX

Definitions, methodology and data quality

Term definitions; startup and impact

In general, a start-up company is defined as a company initiated by individual founders or entrepreneurs focusing on growing their topline with a repeatable and scalable business model. For the purpose of this report we have analysed companies that have registered on Danske Bank's The Hub and +Impact as start-ups or are known by Danske Bank in the Nordic countries.

An Impact Start-up is a start-up company where the potential for positive social and environmental impact is defined by the SDGs and core to the business model. If you remove the impact you also remove the business. There are many start-up companies that have a positive impact on society. If the impact is peripheral to their core business, i.e. a diversity policy on hiring, they are not included in this report.

It is essential to differentiate between actual impact and potential impact. We have not measured the actual impact of the start-ups. We have evaluated the potential impact, if the start-up succeeds and grows. We cannot know if that potential will be fulfilled, although that is our hope.

The list of impact start-ups in this report includes those that provide a better or more efficient solution to a well-known societal challenge as well as those that have the potential to transform their industry or indeed society itself. We do however not rank one start-up against another. Once included in our universe, all start-ups are treated equally regardless of differences in their potential impact.

There is a growing scepticism among those who discuss how society defines or measures impact. This is with good reason. The SDGs have in a very short time become the accepted framework that everyone wants to measure up to and make their contribution to. As a consequence, we are beginning to see examples of "SDG washing", where companies utilise the SDGs to make their offerings look more sustainable than they actually are.

Term definitions; markets and business models

Impact Start-ups' market approach and business models were mapped against the markets and business models as defined by The Business and Sustainable Development Commission. The Commission was launched at the World Economic Forum and filed its first report, Better Business Better World, in 2017 (find the full report here: <http://report.businesscommission.org>). It claims that achieving the SDGs opens up US\$12 trillion of market opportunities in four economic systems that represent approx. 60% of the real economy and are critical to deliver the SDGs. More than half of the market value is in developing countries. These four economic systems are:

- Food and agriculture - Up to 220 million additional hectares of cropland could be needed by 2030 to meet a growing demand for food, feed and fuel. This creates new market opportunities in the areas of food waste reduction, ecosystem services and the development of new food (e.g. based on insects).
- Cities - By 2030 60% of the global population will be living in cities, up from 50% today. This creates an immense pressure on the environment, social life and the economy. New market opportunities are evolving, e.g. affordable housing, energy efficiency of buildings and electric vehicles.
- Energy and materials - With growing populations, the demand for clean energy and access to materials is increasing. There is a risk of great inequality in access to these resources as costs are

growing. The market opportunities in this area include circular business models to minimise waste and the expansion of renewable energy.

- Health and well-being - Basic medical services and healthcare are missing in developing countries and across the world there are concerns about non-communicable diseases and the loss of effect from existing medications, e.g. antibiotics. Furthermore, there seems to be a lack of medical professionals and services to treat aging populations. The market opportunities include remote patient monitoring, telehealth and new funding and treatment systems.

Furthermore, The Business and Sustainable Development Commission emphasise the potential in game-changing, largely digitally-enabled business models that can be adapted to capture market opportunities in line with the SDGs. The top5 models are:

- The sharing economy - By sharing, renting, reselling and lending products, this model has the potential to reduce waste. Car sharing services are typical examples.
- Lean service - Lean and streamlined processes can help reduce waste and inventory. This is for example the case in the health sector where leaner services can increase access to healthcare.
- Circular economy - Resources and materials can be kept in play and recycled if the circular approach is integrated in design and manufacturing. One example may be the reuse of worn-out textiles to produce new clothes.
- Big data and machine learning - More and more devices are being connected to the internet. It opens new development opportunities, e.g. for reducing electricity use through smart metering.
- New social enterprise models - New businesses may be set up specifically for social or environmental impact, for example IT service companies making use of employees diagnosed as autistic.

Data in the report

This report is based solely on publicly available information. Sources are mainly company websites and public registries. Company claims about impact are not a determining factor in the inclusion or exclusion of a start-up for the purpose of this report. This means, for example, that if a start-up uses "green" or "sustainable impact" to describe its business, it may still be excluded from the list of Impact Start-ups since such claims can be made without the business and its products actually delivering against a specific SDG or its underlying targets.

By the same token, we have also included some companies on the Impact Start-up list, even if they do not communicate about sustainability but do offer a business model or product that potentially contributes towards achieving one or more of the SDGs.

Across the Nordic countries, rules and requirements vary as to how smaller enterprises and start-ups must issue annual reports. Consequently, comparable public data on financial performance and organisation is limited. As a consequence, some of the figures in this report are based on smaller samples of start-ups where data has been attainable.

This insight report includes 647 start-up companies. These Impact Start-ups were sourced from the Hub, +Impact Hub and internal Danske Bank lists during January and February 2019. Data analysis and writing of the report was carried out from February to the end of April 2019.

Danske Bank is a Nordic bank with strong local roots and bridges to the rest of the world. For more than 145 years, we have helped people and businesses in the Nordics realise their ambitions. Today, we serve personal, business and institutional customers and in addition to banking services, we offer life insurance and pension, mortgage credit, wealth management, real estate and leasing services.

We aim to create long-term value for all our stakeholders – our customers, shareholders and the societies we are part of – and our vision is to be recognised as the most trusted financial partner by making important financial decisions and daily banking easy.

Danske Bank
Holmens Kanal 2-12
DK-1092 København K

Tel. +45 33 44 00 00
CVR-no. 611262 28-København
[danskebank.com](https://www.danskebank.com)