About the report

Nordic Semiconductor is a signatory of the UN Global Compact. This report reflects our official Communication on Progress (COP), covering the period from January 1st to December 31st, 2020, unless otherwise stated.

This Environmental, Social, Governance (ESG) Report has been prepared in accordance with the principles of the United Nations Global Compact (UNGC) initiative and in line with the Responsible Business Alliance (RBA) Code of Conduct, and requirements of the Norwegian Accounting Act, Section 3-3. The report describes Nordic Semiconductor’s policies, goals, implementation, and outcome of its work on key ESG issues such as human- and labor rights, environmental impact reduction, anti-corruption, and occupational health and safety. The report’s chapters on Environmental, Social, and Governance perspectives describes Nordic Semiconductor’s operations.

Nordic Semiconductor supports UN Sustainable Development Goals (SDGs) and during 2020, the company started a program to progress on the goals through its products, operations, and engagements. This report outlines the most significant social and environmental impact that our company has on the progress of SDGs.

This is the eighth ESG Report (previously called Corporate Social Responsibility Report or CSR Report) published by Nordic Semiconductor, and it is published together with Nordic Semiconductor’s Annual Report for 2020. The reports are published on www.nordicsemi.com.

The name “Nordic” refers to Nordic Semiconductor wherever stated in this report.
<table>
<thead>
<tr>
<th></th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Statement from CEO</td>
</tr>
<tr>
<td>5</td>
<td>About Nordic Semiconductor</td>
</tr>
<tr>
<td>12</td>
<td>Materiality</td>
</tr>
<tr>
<td>16</td>
<td>UN Sustainable Development Goals</td>
</tr>
<tr>
<td>26</td>
<td>Environmental perspectives</td>
</tr>
<tr>
<td>33</td>
<td>Social perspectives</td>
</tr>
<tr>
<td>45</td>
<td>Company governance perspectives</td>
</tr>
</tbody>
</table>
Statement from CEO

Svenn-Tore Larsen, Chief Executive Officer

The Covid-19 pandemic has reminded us how strongly interconnected we are and how dependent we are on each other. To overcome this challenge, we have all had to act responsibly, as employers and employees, as human beings, and as global corporate citizens.

Together we have worked hard to keep our growing workforce and their families and communities safe and healthy. At the same time, we have also contributed with sponsorships and products to UN programs for detection, prevention and tracking of Covid-19, and our leading IoT products are powering many new devices and applications designed to combat the pandemic. This has helped thousands of people worldwide. I am very proud to see that we have shared a spirit of solidarity and willingness to make a difference in a difficult situation, and hope that we now have the worst of the pandemic behind us.

We are fully committed in our support to the UN Global Compact principles and UN’s Sustainable Development Goals (SDGs), and in this report we seek to communicate our efforts and achievements in a clear and transparent way to all our stakeholders. Our main focus is on issues that are highly important both for the society and for the company and its stakeholders. Working in the exciting field of IoT innovation we believe we really can have an impact on many of the SDGs. Our connectivity products and solutions are already being used in a multitude of applications that provide societal benefits or improved resource utilization, and with continued innovation we believe that we will see a multitude of disruptive IoT projects that can contribute tremendously to the SDGs in the coming years.

We are accountable for our impact on the society and the environment, and our support for the SDGs continues in the actions we take in our own daily operations. We continue to make progress in many areas, but I would like to highlight the positive results from our renewable energy initiatives and program for reduction of greenhouse gases. The renewable share of purchased energy for direct operations increased from less than 50% to 93% in 2020, contributed to a reduction in our direct greenhouse gas (GHG) emissions by more than 80%. We plan to reduce our remaining Scope 1+2 GHG emissions to zero by 2025.

Our position as a game changer in IoT technology is bringing Nordic recognitions not only for our products but increasingly also for our sustainability results and reporting. We will continue to set high standards for ourselves and embrace the introduction of the EU Taxonomy regime and look forward to sharing our commitments and achievements also going forward.

I am excited to continue our journey towards a sustainable future where our products, operations, partnerships, and customer engagements all contribute positively to a better world.

Svenn-Tore Larsen
Chief Executive Officer
About Nordic Semiconductor

Nordic Semiconductor is a Norwegian fabless semiconductor company specializing in wireless communication technology that powers the Internet of Things (IoT). Nordic was established in 1983 and has more than 1000 employees across the globe. Our award-winning Bluetooth Low Energy solutions pioneered ultra-low power wireless, making us the global market leader. Our technology range was later supplemented by ANT+, Thread, and Zigbee, and in 2018 we launched our low power, compact LTE-M/NB-IoT cellular IoT solutions to extend our IoT offering. The Nordic portfolio was further complemented by Wi-Fi technology in 2020.

We built our market reputation by supplying leading-edge wireless technologies supported by development tools that shield the designer from RF complexity, allowing anyone with a bright idea to build innovations based on Nordic IoT Solutions.

Today, our award-winning, high-performance, yet easy to design with, Bluetooth LE solutions are used by the world’s leading brands in a variety of products, including wireless PC peripherals, gaming, sports and fitness, mobile phone accessories, consumer electronics, toys, healthcare, and automation. Nordic is a member of the ANT+ Alliance, Bluetooth SIG, Thread Group, Zigbee Alliance, Wi-Fi Alliance, and GSMA.
Nordic Semiconductor at a glance

Worldwide top position
A market leader in ultra-low power wireless technology
- Market leader in Bluetooth Low Energy (LE)
- Long-time record as a key contributor to the evolution of Bluetooth LE as a wireless standard
- Products enabling IoT with short-, medium- and long-range technologies
- Highest possible standards on energy-efficiency and security
- Producing ~370 million devices per year
- BroRef product range to maximize customer value
- Nordic products recognized globally in multiple award programs: Norwegian Tech Awards, GSA Awards, China IoT Innovation Award, Elektra Awards, China Electronic Market Awards, among others

Target markets
High volume applications with leading brands in target market segments:
- Smart Home
- Professional lighting
- Drug delivery
- Disease monitoring and test
- Logistics/asset tracking
- PC and tablet accessories
- Wearables
- Mobile phone accessories
- Remote controls
- Gaming, VR, and AR
- Audio
- Toys
- Healthcare
- Metering
- Transportation
- Building and retail
- Home and Industrial Automation

Business structure
Innovation and high technology as the heart of the business, since 1983
- ~1000 employees in total
- >700 R&D engineers
- Publicly listed on Oslo Stock Exchange (NOD) with operations in Norway (Headquarters), USA, China, Hong Kong, Korea, Japan, Taiwan, Poland, Finland, Germany, Sweden, India, UK, and the Philippines
- FabRef company with world class manufacturing subcontractors: TSMC, AMKOR, and ASE
- Global distribution partners including Digi-Key, Mouser Electronics, Avnet, Arrow, Rutronik

Memberships:
- Global Semiconductor Alliance (GSA)
- The ANT+ Alliance
- Bluetooth SIG
- Thread Group
- Zigbee Alliance
- Wi-Fi Alliance
- GSMA
- ETSI
- Member and represented in the Board of wireless technology patents watchdog, the Fair Standards Alliance

Partnerships with:
- Amazon Gadget, Sidewalk and Amazon Common Software for Devices
- Tile, a leading Bluetooth tracker company
- TinyML specialist, a leading U.S. company, Edge Impulse
- HackerOne, to secure HW and SW products
- The Alibaba IoT Ecosystem
- Qorvo (Decawave), dual UWB and Bluetooth LE solution
- Partner program cellular data carrier iBASIS and Arkessa

Figure 1: Nordic Revenue (MUSD)
Our commitments and frameworks
Nordic’s engagement in sustainability is rooted in our business idea and long-term vision. Furthermore, our core principles and strategies on the material ESG topics are stated in individual policies while day-to-day responsibilities and routines are detailed in procedures.

Our vision
Simplified lives through all things connected.
Things
...we wear
...we carry around
...around us at home
...around us at work
...around us in the city
...around us in the countryside
A leading vendor of wireless connectivity and embedded processing solutions for internet connected things with a sustainable footprint

Our business idea
Develop, sell and deliver integrated circuits and related products and services
Define our own products, driven by market demands and opportunities
Offer customer defined, standardized solutions
Produce components using world class manufacturing subcontractors
Enable and encourage socially- and environmentally sustainable customer solutions
Sell and market our products worldwide through:
> highly skilled distribution partners
> directly to manufacturers of high volume consumer goods and industrial product and applications

Our policies
> Quality policy
> Corporate social responsibility policy
> Information Security policy
> Environmental policy
> Health & Safety policy
> Non-Discrimination policy
> Conflict Minerals policy
> Anti-Corruption policy

Nordic Semiconductor’s Policy on Corporate Social Responsibility
Nordic Semiconductor’s operating practices, decisions, and management systems shall be guided by, and in a transparent way reflect that:

- Nordic Semiconductor is accountable for its impact on the society and the environment.
- Nordic Semiconductor respects its stakeholder’s interests.
- Nordic Semiconductor behaves ethically and respects human rights at all times and will not tolerate any form of forced labor or child labor in our supply chain.
- Nordic Semiconductor respects the rule of law and international norms of behavior.
- Nordic Semiconductor prohibits any retaliatory action for reporting or inquiring about alleged improper or wrongful activity.

Specifically, Nordic and its tier one suppliers shall comply to the Responsible Business Alliance (RBA) code of conduct. Nordic shall actively encourage tier 1 suppliers to require the same from their suppliers.
Aligned with our policies, Nordic’s ESG commitment is based on three international initiatives, namely RBA Code of Conduct, UN Global Compact, and UN Sustainable Development Goals. Nordic requires its operations to comply with all relevant legislation, to uphold internationally recognized minimum standards.

Our commitments

<table>
<thead>
<tr>
<th>Our frameworks</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO 900I</td>
</tr>
<tr>
<td>ISO 1400I</td>
</tr>
<tr>
<td>ISO 4500I</td>
</tr>
<tr>
<td>ISO 2700I</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ESG main topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazardous substances</td>
</tr>
<tr>
<td>GHG emission reduction</td>
</tr>
<tr>
<td>Waste and recycling</td>
</tr>
<tr>
<td>Responsible supply chain</td>
</tr>
<tr>
<td>Health &amp; Safety</td>
</tr>
<tr>
<td>Conflict Minerals</td>
</tr>
<tr>
<td>Human Capital</td>
</tr>
<tr>
<td>Anti-Corruption</td>
</tr>
<tr>
<td>Data Privacy &amp; Security</td>
</tr>
<tr>
<td>UN SDGs contribution</td>
</tr>
</tbody>
</table>

Figure 2: Nordic Semiconductor’s commitments and frameworks for managing ESG topics.

**Responsibility Business Alliance (RBA) Code of Conduct**

Being an active business in the electronics industry, Nordic Semiconductor has since 2007 followed the Responsible Business Alliance (RBA) Code of Conduct as a core reference for our social responsibility.

The RBA Code of Conduct is a set of standards on social, environmental, and ethical issues in the electronics industry supply chain. The provisions set out in the Code of Conduct are in alignment with the UN Guiding Principles on Business and Human Rights and derived from key international human rights standards, including the ILO Declaration on Fundamental Principles and Rights at Work and the UN Universal Declaration of Human Rights. Our commitment scope is not only within the boundaries of Nordic organization but also including our supply chain.

For more information on the RBA and its work, please see [www.responsiblebusiness.org](http://www.responsiblebusiness.org)
The Ten Principles of the United Nations Global Compact

The Ten Principles of the United Nations Global Compact are fundamental responsibilities formulated for human rights, labor, environment, and anti-corruption.

Nordic Semiconductor has committed to the UN Global Compact 10 principles since 2016. By incorporating the Ten Principles of the UN Global Compact into Nordic Semiconductor’s strategies, policies, and procedures, we have ensured the foundation is in place for sustainable business operations and long-term success.

For more information on the Ten Principles and UN Global Compact’s work, please see www.unglobalcompact.org/

UN Sustainable Development Goals

While UN global compact is the baseline for Nordic businesses ethics basis, we consider SDGs as the general map to contribute to sustainability, battle the global challenges and find opportunities. In Chapter 3, Nordic’s approach towards the SDGs is outlined.

For more information on the SDGs, please see sdgs.un.org.

<table>
<thead>
<tr>
<th>The ten principles of the UN Global Compact</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Human Rights</strong></td>
</tr>
<tr>
<td>- Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights; and</td>
</tr>
<tr>
<td>- Principle 2: make sure that they are not complicit in human rights abuses.</td>
</tr>
<tr>
<td><strong>Labor</strong></td>
</tr>
<tr>
<td>- Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;</td>
</tr>
<tr>
<td>- Principle 4: the elimination of all forms of forced and compulsory labor;</td>
</tr>
<tr>
<td>- Principle 5: the effective abolition of child labor; and</td>
</tr>
<tr>
<td>- Principle 6: the elimination of discrimination in respect of employment and occupation.</td>
</tr>
<tr>
<td><strong>Environment</strong></td>
</tr>
<tr>
<td>- Principle 7: Businesses should support a precautionary approach to environmental challenges;</td>
</tr>
<tr>
<td>- Principle 8: undertake initiatives to promote greater environmental responsibility; and</td>
</tr>
<tr>
<td>- Principle 9: encourage the development and diffusion of environmentally friendly technologies.</td>
</tr>
<tr>
<td><strong>Anti-Corruption</strong></td>
</tr>
<tr>
<td>- Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery</td>
</tr>
</tbody>
</table>
Management systems
To ensure full commitment to the three initiatives above, ESG considerations are integrated across our business and built into our management systems - the framework that governs how the company operates.

Nordic Semiconductor’s management system has been certified to ISO 9001 Quality Management System since 1996. Since then, the company has expanded its management system certifications to include ISO 14001 Environmental Management System, ISO 45001 Occupational Health and Safety Management System, and ISO 27001 Information Security Management System. These standards provide the basis for the company’s management system to ensure a systematic approach to improving our business processes in general, including the company's performance on ESG topics.

Figure 3: A generic management system’s systematic approach to improvement: the Plan-Do-Check-Act circle.
Supplier management in a fabless structure
As a fabless company, Nordic Semiconductor relies heavily on its manufacturing partners to manage the production of physical goods and the production facilities. As such, a strong focus on supplier management is important not just to ensure high-quality deliverables, but also to guarantee proper management of ESG issues in our supply chain. See Figure 4 for a generic illustration of the company’s value chain.

Nordic Semiconductor has a dedicated Supply Chain department, with the Supply Chain Director as part of the company’s Executive Management Team. This part of the organization is responsible for managing the company’s manufacturing partners.

Performance management is a key element of Nordic Semiconductor’s supplier management in which the Supply Chain department conducts regular supplier audits and follow-up of audit results to improve supplier performance. Furthermore, the Supply Chain department’s normal operational routines include addressing targets and deadlines with suppliers and organizing business reviews at defined frequencies.

As typical for a fabless business model, Nordic Semiconductor has direct contact primarily with its tier 1 suppliers. To limit the risk of any unacceptable business behavior further upstream in the value chain, these suppliers are required to adhere to the RBA Code of Conduct and to promote and require such adherence from their suppliers (Nordic’s second-tier suppliers). The majority of Nordic Semiconductor’s subcontractors are RBA-certified, which is achieved through third-party RBA audits.

Applying the lean concept within the whole business structure, Nordic Semiconductor delivers its products to its customers through distribution partners. The “drop-shipment” method from the manufacturers’ warehouses directly to our distributors’ premises enables efficient delivery and more direct transportation routes which leads to less GHG emission.

Nordic Semiconductor’s manufacturing partners are required to be certified to ISO 9001, ISO 45001, and ISO 14001. Several also carry certifications to various automotive and other environmental standards.

![Image of Nordic Semiconductor's value chain, with indication of Nordic's contribution to relevant SDGs](image-url)

Figure 4: Nordic Semiconductor’s value chain, with indication of Nordic’s contribution to relevant SDGs
Materiality
Materiality

With a global business model and a rapidly growing business, Nordic Semiconductor faces multiple stakeholders with different needs and requirements. Communication with stakeholders is important for continuous improvement on our ESG performance. Our objectives are to:

- Understand stakeholders’ concerns and continue to improve ESG-related performance
- Gain stakeholders’ trust and respect for Nordic Semiconductor
- Report on Nordic Semiconductor’s efforts and performance to maintain and enhance our reputation

Stakeholders are internal or external people and organizations that influence Nordic Semiconductor or can be influenced by Nordic Semiconductor. The most relevant stakeholders are identified as investors, customers and distributors, employees and contractors, manufacturing partners, authorities, and the community/public. The process of deciding which topics are material and valuable to spend resources on improving is illustrated in figure 5. An illustration of the materiality evaluation 2020 can be seen in Figure 6.

![Materiality Diagram](image-url)

**Figure 5:** Nordic Semiconductor’s process for prioritizing actions and programs for our material ESG topics.
Figure 6: Materiality assessment of ESG topics. The assessment is performed by evaluating the topics that are important to our stakeholders and to Nordic Semiconductor’s success and relating these to the indicated UN SDGs. Greenhouse gas emissions and Renewable energy has become more material topics for Nordic in 2020.
<table>
<thead>
<tr>
<th>Stakeholders</th>
<th>Stakeholder dialogue examples</th>
<th>Main areas of interest (ESG)</th>
<th>Page reference to how we work with the topics</th>
</tr>
</thead>
</table>
| **Investors** | - Quarterly reporting  
- Annual report  
- Annual ESG report  
- Carbon Disclosure Project  
- Direct contact  
- Annual general meeting | Ethics and Anti-corruption | 46 - 47 |
|              |                               | Environmental Product Compliance | 30 |
|              |                               | GHG and renewable energy | 28 - 29 |
|              |                               | Water management | 30 - 31 |
|              |                               | IoT development for sustainability | 17 - 25 |
| **Customers and distributors** | - Direct contact  
- Nordic Semiconductor web page  
- Nordic Semiconductor DevZone  
- Customer surveys  
- Participation on exhibitions and seminars  
- Customer Audits  
- Contractual requirements | Environmental product compliance | 30 |
|              |                               | Eco Design | 29 - 30 |
|              |                               | Responsible sourcing | 35 - 36 |
|              |                               | GHG and renewable energy | 28 - 29 |
|              |                               | Water risk assessment | 30 |
|              |                               | Information Security, Product Security | 48 - 49 |
|              |                               | IoT development for sustainability | 17 - 25 |
|              |                               | Trade compliance | 48 |
| **Employees** | - Daily contact  
- Performance reviews  
- Employee satisfaction survey  
- Nordic Semiconductor intranet  
- Quarterly reporting meetings  
- Employee unions and representatives  
- Exit interviews  
- Whistle blower channel | Human Capital development | 39 - 40 |
|              |                               | Ethics and Anti-corruption | 46 - 47 |
|              |                               | Health and Safety | 41 - 42 |
|              |                               | Diversity | 38 |
|              |                               | Non-discrimination | 36 |
|              |                               | Information security, Data privacy | 48 - 49 |
| **Subcontractors** | - Quarterly operations reviews  
- Supplier audits  
- Yield improvement and waste reduction projects  
- Supplier qualification | Environmental product compliance | 30 |
|              |                               | Responsible sourcing | 35 - 36 |
|              |                               | Human and labor right | 34 - 37 |
|              |                               | Environmental management | 27 - 31 |
| **Authorities** | - Legislative requirements  
- Audits  
- Authorities advisory functions  
- Newsletter monitoring | Product compliance | 30 and 48 |
|              |                               | Waste management | 30 |
|              |                               | Anti-corruption | 47 |
|              |                               | Working environment | 36 - 42 |
|              |                               | Data privacy | 48 |
|              |                               | Trade compliance | 48 |
| **Community and public** | - Press releases  
- Business presentations at educational institutions  
- Annual ESG report | Ethics and Anti-corruption | 46 - 47 |
|              |                               | Community engagement | 43 |
|              |                               | Human Capital development | 39 - 40 |

Table 1: Stakeholders dialogue, main areas of interest related to ESG, and Nordic Semiconductor response
The 2030 Agenda for Sustainable Development adopted by all United Nations Member States in 2015, provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. At its heart are the 17 Sustainable Development Goals (SDGs), which are an urgent call for action by all countries - developed and developing - in a global partnership. They recognize that ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth - all while tackling climate change and working to preserve our oceans and forests.

UN Sustainable Development Goals contribution

According to World Economic Forum’s Global Risks Report 2020, over the next ten years extreme weather, climate action failure and human-led environmental damage are the biggest challenges to our society, in addition to digital power concentration, digital inequality, and cybersecurity failure. Underlying disparities in healthcare, education, financial stability, and technology have impacted certain groups and countries disproportionately. Covid-19 alone has caused more than two and a half million deaths so far, and a long-term adverse impact on economy and health is expected.

Considering the broader sustainable development challenges, and acknowledging our IoT products’ and -solutions’ ability to assist with these challenges, Nordic announced in 2020 its support for the UN’s Sustainable Development Goals (SDGs) and The 2030 Agenda for Sustainable Development.

Nordic Semiconductor has organized its SDGs contributions in three business scopes: products, operations, and engagements. The progress towards goals related to Nordic’s products is described in this chapter. The details on our engagements and sustainability work within our operations are described in chapters 4 to 6.
Internet of Things and the SDGs

To give a better understanding of how Nordic’s products may contribute to the SDGs, a conceptual illustration of the Internet of Things (IoT) is shown in Figure 7.

The “things” gather information about an environment through sensors. Common sensors measure temperature, moisture, pressure, position, acceleration, electromagnetic/static fields, light, air quality, etc., but we expect the future to bring forward affordable sensors capable of measuring virtually anything continuously in the field.

The things, which are also connected to the internet, transfer the essential measurement information to a mass data store somewhere in the cloud. Here the pieces of information are combined to better model the characteristics of the concerned environment.

Now, the information is ready to be analyzed further to learn more about the status and behavior of the environment. These learnings can be used, by man or machine, to take more effective actions and to continuously improve the analytic models.

If we view this in an UN SDG perspective, we can imagine that the things can measure any type of characteristic that describes the journey towards (or away from) the goal. And by analyzing those characteristics we can acquire a deeper knowledge and take better actions. Typically, affordable IoT will enable a more optimal resource usage in a broader sense. For instance, in agriculture, water, fertilizer, maintenance, and power consumption can be optimized for better yields under less favorable conditions.

This may increase farming efficiency in urban areas, providing locally sourced food and reducing environmental impact. According to the think tank CEPS’ report “IoT4 SDG”, such IoT enabled “precision farming” can contribute significantly to the #2 “Zero Hunger” and #8 “Decent work and economic growth” goals. Other future high IoT contributions mentioned are #1 “No poverty” through extreme weather prediction & reaction and #13 “Climate action” through for instance IoT based early warning systems for natural disasters.

In addition, goal #9 “Industry, innovation and infrastructure” is central since IoT already is and will continue to be an integral part of modern digital infrastructure. And as we will show with examples later, IoT can already contribute significantly to goal #3 “Good health and well-being” as well as other SDGs.

![Figure 7: Conceptual illustration of the Internet of Things. Nordic Semiconductor continuously adds more intelligence and capability into its products while using less energy. This enable the “things” to do efficient data analytics locally, minimize data transfers, and thereby offload the power-hungry data centers.](image-url)
Nordic products: Enabling sustainable solutions
Recognized as the world’s leading Bluetooth LE semiconductor chip company (measured by Bluetooth SIG end-product certifications), Nordic Semiconductor has evolved into a wireless IoT company enabling our customers to ‘connect anything’.

Solutions range from short-range wireless protocols to long-range wireless technologies such as the latest Cellular IoT solutions technology, LTE-M and NB-IoT. In late 2020, Nordic strengthened its range of solutions with Wi-Fi, thus bringing even new opportunities for wireless connectivity.

These IoT solutions are used in wide variety of applications optimizing resource usage in areas of energy, travel time/distance, transport, maintenance, manufacturing, agriculture, waste handling, smart cities, etc. Some examples of IoT solutions are described in the next sub-chapters of this report.

While the use cases for supporting the SDGs by Nordic’s products are virtually limitless, the impact on the environment from production and use of the components should also be considered.

Production of a typical Nordic chip has an average GHG emission of 50-300 g CO$_2$e per unit. To put this in perspective, this is similar to driving a fossil-fueled car 1-6 km, and any application that could reduce the need of such commute, e.g. by reducing the need for equipment maintenance or metering, would quickly result in a net gain for the environment. At the same time, Nordic’s components use very little power in their operation, and small amounts of minerals/metals are needed for the production.

Nordic is committed to reducing its environmental impacts from operations and has set short- and long-term goals for emission reductions. For more on this, please refer to this report’s chapter 4.

Nordic’s objective is to maximize our products’ and solutions’ contribution to sustainability, while at the same time minimizing the adverse impact of making and using them.

We invest continuously to increase the capability and efficiency in the “things”, offloading the power-hungry data centres. A clear direction for our products is to be able operate on energy harvested from ambient energy sources.
Healthcare revenue increased by 92% to USD 37.8 million for the full year 2020. The healthcare revenue, closely related to SDG 3, represents 9.5% of the company’s total revenue for 2020. This also includes deliveries for Covid-19 related applications, and the pandemic has accelerated the adoption of connected healthcare devices in general. Nordic sees the Healthcare segment as a market with potentially disruptive growth and as one of the key growth drivers for combined short-range and long-range products and solutions.

Heart health is a major indicator of overall well-being. Technology can be used to monitor an at-risk person’s heart health on an ongoing basis to help reducing cardiac risk factors and provide early warning of problems.

Korea-based digital healthcare solutions manufacturer, MEZOO, has designed a wearable electrocardiogram (ECG) monitoring system - using Nordic nRF52832 - that helps individuals monitor their own heart health, while also supporting remote patient monitoring and telehealth applications. Bluetooth LE-powered monitoring system allows healthcare professionals to review electrocardiogram and arrhythmia diagnosis data in ‘real time’

In the current global environment impacted by the Covid-19 pandemic, a wearable solution that checks the condition of people in their own homes and reports to remote healthcare professionals is beneficial.

More information [here](#).
In 2020 Nordic Semiconductor has contributed significantly to the battle against Covid-19, both by sponsorship and by commercial product supply. As a result, there are tens of success-stories with Nordic technology built-in that aimed to prevent, detect, and track the virus. A few examples are described in the following, while a complete list of applications with press releases relevant to Covid-19 are available on nordsemi.com.

**Nordic Semiconductor’s contribution to the fight against pandemic**

The Covid-19 pandemic hit the world population dramatically in 2020 and urged a massive, immediate action for new approaches to healthcare and well-being on a global scale. Considering the high infection rate, testing difficulties, uncertainty of a vaccine and the political untenability of gaining herd immunity by natural means, Covid-19 presents a challenging opponent.

In 2020 Nordic Semiconductor joined the UN Developer Program’s Covid-19 Detect & Protect Challenge which seeks to develop open-source products and solutions that will help slow or prevent the spread of Covid-19 in developing countries where its impact could be catastrophic.

The UNDP Detect & Protect Challenge focuses on accelerating invention and distribution of low cost, easy to produce, open-source innovations to support detection and prevention efforts of Covid-19 including surveillance, prevention and control, and case management. This will minimize the strain on already fragile healthcare systems by helping to flatten the Covid-19 infection curve.

As part of its effort Nordic is giving away free development kits for its nRF52840 Bluetooth System-on-Chip (SoC) up to $10,000 USD. Read more [here](#).


This Design Challenge called on creators of any kind (engineers, students, SMEs, or creative thinkers looking for something to do while stuck at home) who have an IoT technology-based idea for how to improve the lives of people struggling or left vulnerable due to Covid-19 lockdown-induced isolation.

Nordic took the initiative to supply both short- and long-range wireless development kits (Bluetooth Low Energy, Thread, LTE-M/NB-IoT cellular IoT) and giving wireless technical support to a Covid-19 design challenge to anyone.

Read more [here](#).
Kinsa Health, a U.S. health technology company, used data from millions of smart thermometers built on Nordic Semiconductor Bluetooth LE to gather anonymized data from users.

The information from smartphone apps to build a patient-temperature ‘heat map’ of the country that could be used to quickly identify potential Covid-19 hotspots and help agencies precisely target scarce resources. This IoT based solution gives early knowledge of where and when illness is spreading gives decision-makers the power to contain it, keeping communities safe and prosperous.

Health smart thermometers employ nRF52810 System-on-Chip (SoC) to provide Bluetooth wireless connectivity to a paired smartphone app.

For more information read [here](#) and [here](#).

Ellume, an Australia-based digital diagnostic company, has selected Nordic’s nRF52810 Bluetooth® LE System-on-Chip (SoC) for its 'Ellume Covid-19 Home Test'.

Nordic’s nRF52810 Bluetooth LE SoC powers Covid-19 Home Test kit set to ship in tens of millions. The at-home test will help tackle the pandemic by providing a simple-to-use method to acquire the information needed to reduce risk of transmission. The Covid-19 Home Test containing a Nordic device has been shown to be a safe and simple-to-use self-test that enables individuals to check for an active Covid-19 infection in 15 minutes or less. The antigen test has demonstrated 96 percent accuracy compared to an Emergency Use Authorization (EUA) molecular test in an independently-run, U.S. clinical study in five states. Ellume has received an EUA from the U.S. Food and Drug Administration (FDA) for their Covid-19 Home Test.

Ellume COVID-19 Home Test is the perfect example of how advanced digital diagnostics and IoT connectivity can help address the worst impacts of Covid-19 pandemic in country scale or globally.

Read more [here](#).
New York-based Crosby Technologies is using Nordic’s nRF9160 low power System-in-Package (SiP) with integrated LTE-M/NB-IoT modem and GPS in its ‘ShipSafe’ asset tracker. ShipSafe enables users to remotely monitor the location and condition of valuable shipments via mature and widespread cellular infrastructure.

ShipSafe asset tracker monitors critical items such as ventilators, biomedical equipment, human organs for transplant, and high-end industrial equipment. In normal operation, the product remains in a very low power sleep mode until remote activation by the user from a companion iOS or Android app.

Read more here.

One of the most important use cases of IoT for industries, is predictive maintenance. Previous maintenance methods dealt with machine failures as they or involved regular asset inspections based on time schedules and experience. Predictive maintenance, on the other hand, uses sensor data from machinery to predict machine failure and therefore enables maintenance right before the failure occurs. According to CEPS’ IoT4SDG report, predictive maintenance providers promise a reduction in maintenance costs of 5-10%.

German IoT design house, InnBlue, has partnered with Italian static and driven toolholder manufacturer, M.T., to develop the world’s first predictive maintenance and continuous usage-based warranty monitoring solution for high speed driven toolheads by using Nordic’s nRF9160 multi-mode LTE-M/NB-IoT System-in-Package (SiP).

Read more here.

Innovation has been the foundation of our vision, technology development and business idea from day one. Goal number 9 and its targets (specifically target 9.4) for Sustainable Development aligns perfectly with the core of Nordic’s business goals within IoT.

Cost reduction and increased efficiency are two drivers for using Nordic IoT solutions, both of which are of interest to the industry. In the recent years, with the growth of Nordic nRF91 series LTE products and utilizing cloud technology, the window of possibilities has become even wider with numerous IoT-based solutions.

In 2020, Nordic customers have used our IoT solutions mostly for logistics, asset tracking, construction, industrial monitoring systems, agricultural monitoring, and environmental monitoring & disaster prediction. In the following, two examples of how Nordic built-in solutions have helped industries improve efficiency and cost savings within asset tracking and maintenance. There are many other similar examples which can be found on nordicsemi.com.

### SDG #9: Industry, innovation and infrastructure

Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

SDG target 9.4: By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities.

Innovation has been the foundation of our vision, technology development and business idea from day one. Goal number 9 and its targets (specifically target 9.4) for Sustainable Development aligns perfectly with the core of Nordic’s business goals within IoT.

Cost reduction and increased efficiency are two drivers for using Nordic IoT solutions, both of which are of interest to the industry. In the recent years, with the growth of Nordic nRF91 series LTE products and utilizing cloud technology, the window of possibilities has become even wider with numerous IoT-based solutions.

In 2020, Nordic customers have used our IoT solutions mostly for logistics, asset tracking, construction, industrial monitoring systems, agricultural monitoring, and environmental monitoring & disaster prediction. In the following, two examples of how Nordic built-in solutions have helped industries improve efficiency and cost savings within asset tracking and maintenance. There are many other similar examples which can be found on nordicsemi.com.

New York-based Crosby Technologies is using Nordic’s nRF9160 low power System-in-Package (SiP) with integrated LTE-M/NB-IoT modem and GPS in its ‘ShipSafe’ asset tracker. ShipSafe enables users to remotely monitor the location and condition of valuable shipments via mature and widespread cellular infrastructure.

ShipSafe asset tracker monitors critical items such as ventilators, biomedical equipment, human organs for transplant, and high-end industrial equipment. In normal operation, the product remains in a very low power sleep mode until remote activation by the user from a companion iOS or Android app.

Read more here.

One of the most important use cases of IoT for industries, is predictive maintenance. Previous maintenance methods dealt with machine failures as they or involved regular asset inspections based on time schedules and experience. Predictive maintenance, on the other hand, uses sensor data from machinery to predict machine failure and therefore enables maintenance right before the failure occurs. According to CEPS’ IoT4SDG report, predictive maintenance providers promise a reduction in maintenance costs of 5-10%.

German IoT design house, InnBlue, has partnered with Italian static and driven toolholder manufacturer, M.T., to develop the world’s first predictive maintenance and continuous usage-based warranty monitoring solution for high speed driven toolheads by using Nordic’s nRF9160 multi-mode LTE-M/NB-IoT System-in-Package (SiP).

Read more here.
SDG #4: Quality Education

Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

SDG Target 4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship

Developing innovative education tools and applications with Nordic devices is popular with customers that want to enhance the educational experience for children at schools or home. This is specifically relevant for the target 4.4. Below is a good example of how Nordic technology, along with our willingness to make a difference, has resulted in a successful project which not only provides quality educational tools for children, but indirectly contributes to several other SDGs.

Similar examples of IoT solutions within Quality education goal are available in nordicsemi.com.

Make it Digital

The original BBC micro:bit was created at the BBC (British Broadcasting Corporation) in partnership with world-class technology and product design co-creators, including Nordic Semiconductor. In 2016 the BBC “Make it Digital” campaign gave away one million micro:bits for free to students across the UK as computing was added to the school curriculum.

Since then, more than five million micro:bits have been used in classrooms around the world, inspiring every child to create their best digital future, with a particular focus on girls and those from disadvantaged groups.

The last year has proved challenging with the world-wide Covid-19 pandemic. However, the micro:bit team provided remote teaching guides and launched the micro:bit classroom to allow the learning to continue safely at home.

The micro:bit Educational Foundation, the non-profit organization now responsible for the micro:bit, announced the latest version. Similar to old version of Micro:bit, Nordic Semiconductor is at the heart of this new board with the nRF52833 providing the core processing and wireless connectivity.

In 2020, Nordic Semiconductor donated micro:bits to NTNU for an Embedded Systems course, which were sent to each student directly to enable them to follow the course on-line during the Covid-19 period. Read more here.
Other Sustainable Development Goals

As discussed in previous chapters, there is a wide variety of IoT applications that can contribute to potentially all the different SDGs. The following table illustrate examples of IoT applications that contribute to some of the SDGs not previously discussed in this chapter, that are made possible with Nordic Semiconductor’s technology solutions. Numerous additional examples can be viewed at nordicsemi.com.

<table>
<thead>
<tr>
<th>Sustainable Development Goal</th>
<th>Application description</th>
<th>How it contributes to the goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 AFFORDABLE AND CLEAN ENERGY</td>
<td>Ensure access to affordable, reliable, sustainable, and modern energy for all</td>
<td>SODAQ is using Nordic’s nRF9160 System-in-Package (SiP) in the world’s first solar-powered, perpetual operation cellular IoT asset tracker. Read more here.</td>
</tr>
<tr>
<td>11 SUSTAINABLE CITIES AND COMMUNITIES</td>
<td>Make cities and human settlements inclusive, safe, resilient, and sustainable</td>
<td>Hellobike employs Nordic Semiconductor’s ultra-low power Bluetooth LE in one of China’s largest bike-sharing platforms for both bikes and e-bikes with a user base of 230 million in more than 200 cities across the country. Read more here.</td>
</tr>
<tr>
<td>13 CLIMATE ACTION</td>
<td>Take urgent action to combat climate change and its impacts</td>
<td>Apricity utilizes both Nordic cellular IoT nRF9160 and Bluetooth Low Energy nRF52840 to help multiple power utilities optimizing power consumption. Read more here.</td>
</tr>
<tr>
<td>15 LIFE ON LAND</td>
<td>Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss</td>
<td>The ‘Code of Conscience’ Proof-of-Concept uses the Nordic Thingy:91 to help Non-Governmental Organizations (NGOs), governments and communities around the world to monitor and restrict the use of heavy-duty vehicles in protected land areas. Read more here.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The Avnet community Hackster.io and pro-conservation organization Smart Parks are coming together with leading technology and conservation partners including Nordic Semiconductor, Microsoft, and Western Digital to develop the world’s most advanced wildlife tracker for protecting endangered elephants in Africa, utilizing Nordic’s nRF52840. Read more here.</td>
</tr>
</tbody>
</table>

Table 2: Some examples of Nordic customer applications that support various SDGs.
Environmental perspectives

Nordic Semiconductor has integrated a sustainability approach into its company strategy and recognizes that environmental responsibility and sustainability is key to producing world-class products and long-term business strategies. Product compliance is a prerequisite for selling Nordic Semiconductor’s products worldwide, meeting international legislation as well as customer-specific requirements to product design and production. At the same time, we see customers, markets and the society becoming more aware of, and concerned with, carbon footprints and energy usage.

Nordic Semiconductor designs and develops ultra-low power products, enabling energy efficient end products for the consumer. Furthermore, the company is targeting reduction of greenhouse gas (GHG) emissions, specifically from own operations, while also engaging with our manufacturing partners to manage and reduce our environmental impact.

This chapter outlines our system of managing environmental aspects of our business. It is also a response to the Norwegian Accounting Act (Regnskapsloven) on Social responsibility presentation.

Nordic Semiconductor’s Environmental Policy

Being a preferred partner to environmentally conscious stakeholders, Nordic Semiconductor shall incur no loss of business or profitability due to incidents or issues related to disturbance to health or environment.

Nordic Semiconductor is committed to:

- comply to applicable legal requirements, and regulations, and protect the environment through sound management practices and decisions
- protect the natural environment by minimizing waste generation, pollution and GHG emissions, resource- and water consumption, and the use of hazardous materials in our products, as well as develop and use environmentally friendly technologies
- promote environmental responsibility and ensure that our suppliers live up to Nordic Semiconductor’s environmental standards
- establish and evaluate achievable environmental performance goals to ensure continuous improvement of our environmental management system
- regularly monitor and report on environmental performance, and to consult with relevant stakeholders on environmental issues
Nordic Semiconductor carefully considers its potential environmental impact in its decisions and systematically analyzes company’s environmental aspects and the associated risks and opportunities, considering activities and the product life cycle. Environmental aspects noted as having a high risk or connected with legal requirement are considered significant and are subject to actions to reduce and mitigate aspects and their adverse impact on the environment.

Nordic Semiconductor has implemented guidelines and procedures into its management system to supplement legal requirements and integrate them in daily working routines. To identify and mitigate any possible risk and integrate the changes into our activities, we have a proactive approach towards regulatory compliance.

Nordic Semiconductor is ISO 14001 Environmental Management Systems certified. All Nordic Semiconductor’s main subcontractors are required to be certified with this standard, as well as to be compliant to RBA Code of Conduct and its provisions on environmental topics.

Raising awareness amongst employees on environmental issues relevant for Nordic Semiconductor is regularly done by internal training, and as part of the mandatory introduction program for new employees. Employees who deal with environmental issues as part of their regular process flows, undergo designated training for the relevant topics.

Monitoring data in relation to environmental topics and engaging with suppliers are relevant parts of decision-making and risk analysis. Data from Nordic Semiconductor’s manufacturing partners are periodically analyzed, and supplier audits are used to follow-up on suppliers’ compliance with standards, specifications, and legislative requirements. Results and measurements from the environmental programs are reviewed annually in the Management review.

Nordic Semiconductor has set a target of zero environmental product or company compliance incidents. Any incidents are handled through Nordic Semiconductor’s non-conformity procedures, with root cause analysis and corrective and preventive actions. In 2020, there were no environmental incidents or non-conformities.

As a long-term target, Nordic Semiconductor is working towards a goal of zero Scope 1+2 GHG emissions by 2025. In 2020 we made good progress on this and will continue the work towards the goal during 2021. See separate section on Greenhouse Gas emissions.

**Greenhouse gas emissions and renewable energy program**

Nordic Semiconductor has monitored annual greenhouse gas (GHG) emissions since 2011 and reports annually to the Carbon Disclosure Project’s Climate Change questionnaire (www.cdp.net), detailing how climate change risk and opportunities related to climate change are managed, as well as GHG accounting results. Overall, climate change represents low risk for Nordic Semiconductor’s direct operations. However, our supply chain faces stronger risks and challenges, both in the form of carbon taxations or other legislative requirements but also draughts, storms or typhoons and floods, depending on location.

Nordic Semiconductor’s methodology for accounting greenhouse gas emissions follows the Greenhouse Gas Protocol, with differentiation between Scope 1 (direct GHG emissions), Scope 2 (GHG emissions from purchased electricity) and Scope 3 (all other indirect GHG emissions, including our supply chain). From 2019 to 2020 there is a slight increase in energy consumption, mainly due to new lab test infrastructure as well as expansion of the server room in Trondheim. Despite the increased energy

---

Figure 8: Scope 2 GHG emission by office site and energy purchase by type. The increase in energy usage (non-renewable) is mainly due to the new lab test infrastructure and expansion of the server room in Trondheim office.
consumption, Scope 2 GHG emissions from 2019 to 2020 have significantly decreased. This is due to the transition to renewable energy for direct operations in Trondheim office in 2020.

In 2020, 93% of all purchased energy for direct operations originated from renewable energy sources, backed by Renewable Energy Certificates. The plan is to reduce the remaining Scope 2 GHG emissions to zero by 2025.

Scope 3 GHG emissions are closely related to our production volume, and our subcontractors’ capacity utilization in production, and will to some extent fluctuate beyond our control. Production facilities may need to operate machinery and infrastructure, even in the event of low production, leading to greater emission per production unit. Data from suppliers are typically received as an average of their total emission by total production volumes and does not calculate for differences in the production unit (no. of wafer layers, size, and complexity of components). This leads to some uncertainties in the reported Scope 3 figures.

Eco design

Nordic Semiconductor strives to make products as environmentally friendly as possible through environmentally conscious product design and manufacturing, by conserving natural resources and raw materials, avoiding hazardous substances, preferring recyclable material, and ensuring products are easy to recycle at the end of life.

Nordic Semiconductor’s strategic target for eco design is the reduction of environmental impact throughout the life cycle of Nordic’s products. Analysis of a product’s potential impact on the environment is done from the very beginning of the design phase for new products or product types. While designing to introduce additional functionality or use cases, targets are defined to improve energy efficiency, reduce materials consumption, and ensure minimal environmental harm throughout all life cycle phases. Scarcity of natural resources and conservation of raw materials are considered important from both an environmental and financial perspective. By identifying substitute alternatives, such as copper for gold in almost all products, Nordic Semiconductor has been able to reduce costs and environmental impact without sacrificing quality or performance.

The environmental impact from a product’s end-of-life, whether it is recycled, incinerated, or ends up in a landfill, is to a large degree dependent on the product’s content. Product content is managed in Nordic’s design phases at specific milestones to prevent hazardous substances from being included. This is based on applicable regulations, customer requirements, and Nordic Semiconductor’s commitments. These controls are prerequisites for product milestone approval prior to transferring into production.

In 2020, Nordic Semiconductor implemented an initiative to reduce the environmental impact by replacing the rubber enclosure on new Thingy products with recyclable plastics. Nordic Semiconductor recognizes that material recycling is one of the key issues in conserving natural resources, which will become more prevalent in the future.
Besides product design, Nordic focuses on reducing the impact on the environment through product packaging. In 2020 Nordic established eco-friendly packaging design principles for development kits and introduced FSC certified, recyclable paper packaging material for all new development kits. For 2020, recyclable packaging accounts for 33% of all development kit categories.

**Environmental product compliance**
Nordic Semiconductor’s products are subject to several environmental compliance requirements from regulations, industry standards, customer requirements, and Nordic’s own initiatives. While the managerial responsibility for product environmental compliance lies with the company’s Quality Director, the Supply Chain manages Hazardous Substances compliance and is responsible for assuring that our products follow defined environmental requirements and specifications in close collaboration with manufacturing suppliers.

Product environmental compliance and use of hazardous substances are regularly addressed with Nordic Semiconductor’s manufacturing partners and communicated through Nordic Semiconductor’s Hazardous Substances Specification for Suppliers. As a confirmation of compliance with the requirements stated in the Hazardous Substances Specification, manufacturing partners are required to provide Nordic Semiconductor with signed Supplier Declaration of Conformity for each revision of the Specification.

To verify product content, hazardous substances testing is carried out by a third party. To ensure transparency, certificates for Hazardous Substances testing and Material Composition reports for all products are published on Nordic Semiconductor’s website (www.nordicsemi.com).

In 2020 there were no findings of prohibited substances above limitations, or any other environmental product compliance incidents in any Nordic Semiconductor products.

**Waste management and recycling**
Nordic Semiconductor works systematically to monitor, reduce, and eliminate waste and its impact on the environment. We work continuously with our suppliers to maximize our yields, and thus to minimize the number of devices that need to be disposed of. Scrapped electronic components from production are sorted and recycled according to local waste management regulations and the WEEE Directive. Supplier audits have been performed at our manufacturing partners to verify that waste management is performed according to Nordic Semiconductor’s standards.

Nordic Semiconductor has implemented routines for sorting and disposing of material from offices and warehouses in a responsible manner, using certified waste handling and recycling companies. The main focus is on EE-waste such as chemical components from laboratories, and paper and packing material. Recycling of EE-waste allows for re-use of metals, such as copper, from waste or damaged products.

To reduce waste, Nordic Semiconductor encourages re-use of materials where applicable. Usable IT-equipment and furniture are donated to schools or volunteer organizations rather than being scrapped and internal auctions are held to let interested employees purchase outdated lab equipment.

**Green Program**
Nordic Semiconductor has controls in place for design and production processes to ensure “green products” by compliance to the following:

- RoHS (Restriction of use of Hazardous Substances)
- REACH (Registration, Evaluation, Authorization and Restriction of Chemicals)
- EU POPs regulation (Persistent Organic Pollutants)
- IEC Halogen-Free

Being a fabless semiconductor company, close communication, and cooperation with the manufacturing partners of our products are crucial to managing hazardous substances.

**Water management**
Nordic Semiconductor has monitored annual water consumption since 2015 and reports annually to Carbon Disclosure Project’s Water questionnaire. Due to the fabless structure of the company, and the location of its offices in low water-risk areas, water waste and scarcity is a low risk for Nordic Semiconductor directly. However, water scarcity is a factor for some of our subcontractors, specifically related to limited production capacity due to drought or failure to comply with local legislative requirements. These are assessed as part of overall company risk management and business continuity planning.
Subcontractors report annually on details regarding their water programs, including water withdrawal, consumption, recycling, and discharge. A consolidated risk analysis, based on reported data and WWF’s Water Risk Filter and WRI’s Aqueduct, is presented as part of the Management Review. Supplier audits are performed according to a pre-defined audit program to verify that our suppliers manage water and wastewater according to Nordic Semiconductor’s standards.

**Air emission**

Nordic Semiconductor’s environmental policy includes a commitment to reduce air pollution, such as ozone depleting substances, dust, particles, or other polluting agents, in addition to the previously described greenhouse gases. As Nordic Semiconductor is a fabless company, the relevant sources of air emission are in outsourced manufacturing processes for wafer production, assembly, and testing. Nordic Semiconductor communicates air emission restrictions to its supply chain, e.g. restricting use of ozone-depleting substances and Persistent Organic Pollutants in line with applicable legislations. Manufacturing partners are annually signing off on adherence to these requirements, and Nordic Semiconductor follows up to ensure that suppliers at minimum comply with any local air emission requirements and permits.

**Green procurement**

Compliance to environmental requirements is considered when choosing manufacturers as part of initial supplier assessment and related audits.

In addition to the closely monitored production process and engagement with our subcontractors, Nordic Semiconductor has implemented procurement guidelines for purchases of products and services not directly related to the production of our products. This includes evaluating and choosing suppliers, such as suppliers of office material, based on their ethical and environmental profile.

In 2020, Nordic took further improvement steps towards green procurement and initiated a campaign to reduce the use of plastic and increase recycled material usage within the company. The campaign was started by focusing specifically on marketing materials and office administration with the goal of ensuring that goods made from recycled material are preferred and selected wherever possible.
### Measurements

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Target value</th>
<th>Target year</th>
<th>2020</th>
<th>2019</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Environmental management</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of environmental incidents</td>
<td>0</td>
<td>2021</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Suppliers with documented environmental policy</td>
<td>100%</td>
<td>2021</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Nordic Semiconductor offices energy use(^1) (MWh)</td>
<td>2,469.6</td>
<td>2021</td>
<td>2,151.2</td>
<td>1,885.8</td>
<td>2,205.3</td>
<td></td>
</tr>
<tr>
<td>Nordic Semiconductor offices energy use per area(^1) (MWh/m²)</td>
<td>0.142</td>
<td></td>
<td>0.125</td>
<td>0.121</td>
<td>0.153</td>
<td></td>
</tr>
<tr>
<td>Renewable energy purchase ratio (%)</td>
<td>100%</td>
<td>2025</td>
<td>93%</td>
<td>47%</td>
<td>47%</td>
<td>40%</td>
</tr>
<tr>
<td>EE-waste (tons)</td>
<td></td>
<td></td>
<td>2.5</td>
<td>2.7</td>
<td>2.4</td>
<td></td>
</tr>
<tr>
<td><strong>GHG emissions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Scope 1+2 emissions(^1) (tons CO(_2)e)</td>
<td>0</td>
<td>2025</td>
<td>107.5</td>
<td>598.9</td>
<td>523.9</td>
<td>553.4</td>
</tr>
<tr>
<td>Scope 1+2 emissions per full time employee(^1) (tons CO(_2)e/FTE)</td>
<td>0</td>
<td>2025</td>
<td>0.140</td>
<td>0.887</td>
<td>0.859</td>
<td>1.004</td>
</tr>
<tr>
<td>GHG emission per average wafer (kg CO(_2)e/8&quot; wafer)</td>
<td>285.6</td>
<td></td>
<td>284.2</td>
<td>313.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GHG emission per average assembled unit (g CO(_2)e/EA)</td>
<td>31.2</td>
<td></td>
<td>29.8</td>
<td>16.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Scope 3 emissions (tons CO(_2)e)</td>
<td>51,446</td>
<td></td>
<td>48,407</td>
<td>43,761</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CDP score(^2) Climate Change [Industry average]</td>
<td>B</td>
<td></td>
<td>A-[C]</td>
<td>C [C]</td>
<td>B-[B-]</td>
<td>C [C]</td>
</tr>
<tr>
<td>CDP score Supplier Engagement Rating(^3) [Industry average]</td>
<td>B</td>
<td></td>
<td>A-[B-]</td>
<td>B [C]</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Water management</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3: Measurements related to Environmental performance. Note that several environmental measurements are ready at end of Q2 due to the reporting schedules of external stakeholders. Hence, some of the reported numerical values are tied to uncertainties at the time of publishing this ESG report.

\(^1\) Energy increase is due to new lab test infrastructure as well as expansion of the server room at Nordic’s headquarters. This impacts metrics for energy use per office area.

\(^2\) Decrease in Scope 1+2 emissions is due to transition to renewable energy at Nordic’s headquarters. This impacts metrics for Scope 1+2 emissions per full time employee.

\(^3\) Scoring of annual CDP reports. The annual reporting to CDP takes place in Q2 each year and includes performance data on previous year.

\(^4\) CDP evaluates organizations’ engagement with their suppliers on climate change. Purchasing organizations have the potential to incentivize significant environmental changes through engagement with their suppliers. By evaluating suppliers’ engagement and recognizing best practice, CDP aims to accelerate global action on supply chain emissions. Supplier Engagement Rating is new from 2019.
Social perspectives

Nordic Semiconductor is a growing business with offices, employees, and suppliers in different parts of the world. We aim to secure a diverse environment and ensure equal employment opportunities across all operations by professional human capital management. Fair recruitment and non-discrimination are important to attract and retain qualified, competent, and loyal personnel. At the same time, the organization is determined to foster an inclusive, safe, and motivating working environment for existing and newly hired employees.

It is important for Nordic Semiconductor to ensure that we are not in any way complicit in human rights or labor rights violations. Unfortunately, the electronics industry sees incidences of trafficked and/or forced (bonded) labor or child labor in its supply chain, particularly in Asia and via means of debt bondage and document seizure. Based on our risk assessment, the issues of Conflict Minerals and forced labor in the value chain have been specifically identified as relevant topics pertaining to the Human Rights and Labor principles, due to their severity.

Human Rights and Labor Rights

Nordic Semiconductor is committed to respect and support Human Rights and Workers’ rights, as reflected in our CSR policy, the support for UN Global Compact Principles and the RBA Code of Conduct. Nordic Semiconductor shall uphold and protect internationally proclaimed human rights and workers’ rights and treat workers with dignity and respect as understood by the international community. It is our goal that no form of human rights abuses or labor issues shall occur at any stage of our operation, including the manufacturing of Nordic Semiconductor products by subcontractors. The policies and support for RBA Code of Conduct is approved by the Executive Management Team. Nordic Semiconductor adheres to the principle that all employment shall be freely chosen and that workers shall be free to leave their employment with reasonable notice. Child labor must not be used at any stage of manufacturing. Working hours and wages shall comply with applicable local laws or RBA Code of Conduct paragraphs (whichever is stricter).

As a fabless producer, engagement with our supply chain is important when addressing risks related to human- and labor rights. Nordic Semiconductor requires all tier 1 manufacturing partner to formally sign an agreement to comply with the RBA Code of Conduct, and that they shall also require the same from their suppliers, hence making the standards of the Code of Conduct applicable to Nordic Semiconductor’s second-tier suppliers.

As of today, all our direct suppliers have their own documented corporate social responsibility policy including adherence to RBA Code of Conduct, with commitment to communicate this to next tier suppliers. Currently 5 of our main subcontractors have their own memberships in RBA. TSMC, which is the primary wafer foundry used in Nordic Semiconductor chip production, is ranked as one of the most sustainable companies in Asia and has received several certifications and other awards/achievements.

Supplier audits are used to review implementation of the RBA Code of Conduct, such as tracing of information for conflict mineral reports, inspecting Human Rights and Labor performance, and follow-up of next tier suppliers. Our suppliers are regularly audited by third parties, such as their certification bodies for applicable certifications, and by Nordic’s customers.

Raising employee awareness on Human Rights and Labor principles and relevant issues are done through internal training and as part of the introduction program for new employees. Measurements and results are
reviewed annually by the Executive Management Team in the Management Review.

To date, Nordic Semiconductor has never experienced an incident of Human Rights abuse or Labor violation.

**Responsible sourcing of minerals**

Nordic Semiconductor has worked with the issue of Conflict Minerals since 2010 and engages regularly with our suppliers to provide accurate and transparent information on the origin of minerals to concerned stakeholders. The company’s Quality Director is responsible for the Conflict Minerals program. Our Conflict Minerals Policy is stated on our website and has been communicated to all relevant suppliers. As Nordic Semiconductor’s products can contain 3TG (Tin, Tungsten, Tantalum, and Gold) and Cobalt, due diligence is conducted based on OECD guidelines to ensure no direct or indirect financing of ongoing conflicts in the DRC-region or elsewhere under the category called “Conflict-Affected and High-Risk Areas”.

Nordic Semiconductor is not required to report to the US SEC for Conflict Minerals.

Nordic Semiconductor has a commitment to source minerals only from conflict free smelters, also within the DRC and covered countries. Identification of smelters, and assessment of country of origin of the minerals, are investigated based on the supply chain reporting scheme set out by the Responsible Minerals Initiative (RMI), an initiative by RBA and the Global e-Sustainability Initiative (GeSI).

Since 2015 Nordic Semiconductor has required suppliers to source from conflict-free smelters only, i.e. only smelters that are verified as RMI compliant by RMI’s audit scheme. Our target is to always use 100% conflict-free smelters, and we report at the smelter/refinery level to customers and other stakeholders on a weekly basis by use of RMI’s Conflict Minerals Reporting Template, which has become industry standard. The reporting contains information on smelters compliance status, mine locations, and Nordic’s management on Conflict Minerals.

**Nordic Semiconductor’s Conflict Minerals Policy**

The eastern portion of the Democratic Republic of the Congo (DRC) has long been the site of one of the world’s worst humanitarian crises, and the conflict there continues.

Conflict minerals are defined as the metals Tantalum, Tin, Tungsten, and Gold (3TG), which are the derivatives of the minerals cassiterite, columbite-tantalite, and wolframite, respectively, and regardless of whether or not these minerals finance conflict in the Democratic Republic of the Congo (DRC) or adjoining countries.

As part of Nordic Semiconductor’s commitment to social responsibility and compliance to the Responsible Business Alliance (RBA) Code of Conduct, it is our policy to only have part in trade where the respect for human rights is upheld, and where trade is not contributing to violent conflicts. It is our goal that our products and our supply chain shall be “conflict free”, i.e. free of materials that directly or indirectly finance or benefit armed entities.

In support of this policy, Nordic Semiconductor commits to:

- Exercise due diligence with relevant suppliers consistent with the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas and encourage our suppliers to do likewise with their suppliers.
- Work with our suppliers to enable products that are conflict-free.
- Provide due diligence information to confirm the conflict free status of relevant material in our supply chain.
- Transparent implementation of this policy by making available reports on our progress to relevant stakeholders and the public.

To reasonably ensure conflict-free supply chains, suppliers are expected to adopt policies and due diligence measures, and to require their suppliers to adopt similar policies and measures.
Nordic Semiconductor is distanced from the minerals’ smelters/refiners in the value chain and has no direct contact with smelters or providers of material. All such contact is handled through our subcontractors’ supply chain, and as such, Nordic Semiconductor needs to rely on 3rd party auditing such as RMI’s audit program.

In case of changes to smelter list or smelters’ compliance status, these changes are investigated and handled by company routines for managing non-conformities and corrective actions. Corrective actions can include requiring suppliers to stop using a non-conformant smelter, changing raw material of suppliers as well as conducting training and education in the Supply Chain, in cooperation with the relevant suppliers. Ongoing initiatives to reduce the use of Gold in finished products by replacing it with copper where applicable, help minimize the risk of indirectly financing or benefiting armed groups in conflict areas.

To date, no incidents of minerals supporting armed conflicts have been discovered. For 2021 we expect Conflict Minerals to remain a highly relevant issue related to Human Rights in our supply chain. Nordic Semiconductor will continue to engage its suppliers to precisely identify the origin of all material used in Nordic Semiconductor’s products.

Anti-Modern Slavery
Forced labor takes different forms, including debt bondage, trafficking, and other forms of modern slavery. The California Transparency in Supply Chains Act of 2010 and The UK Modern Slavery Act of 2015 are two extensive legislative requirements, which require certain businesses to disclose their efforts to address the issues of slavery and human trafficking in their supply chains. Nordic Semiconductor is not required to be compliant with these acts, but we have taken the principles from these regulatory acts to govern our Anti Modern Slavery program.

Nordic Semiconductor does not tolerate forced labor practices to be used in any of our operations, as stated in our CSR policy. The RBA Code of Conduct explicitly bans trafficked and forced labor, as well as any form of child labor. Nordic Semiconductor uses sources like the Global Slavery Index to assess risks of modern slavery, and the topic has been addressed in supplier audits.

To date there has been no known incidents of or indications of forced or trafficked labor in Nordic Semiconductor’s supply chain.

Working hours
As an employer, Nordic is concerned about our employees’ well-being and work-life balance. Working hours, wages and working conditions in Nordic shall comply with the applicable local laws and/or RBA Code of Conduct paragraphs, as a minimum. This includes regulations for rest periods, night work, holiday, and salary. All employment contracts include a paragraph describing local working hours for us to clearly communicate expectations and ensure that we adhere to local laws and regulations.

Nordic’s suppliers are required to adhere to the RBA Code of Conduct, setting requirements for working hours, working conditions, and wages and benefits for their operations. Suppliers’ adherence to RBA Code of Conduct are addressed in supplier audits and self-assessment surveys.

Collective bargaining
Collective bargaining and the right to organize in labor unions are protected by law in most countries where Nordic Semiconductor operates. Our company policies, which also applies to all Nordic Semiconductor ASA’s subsidiaries and office locations, allow employees to exercise these rights. Collective bargaining and the right to organize is also required from our suppliers through their commitment to RBA Code of Conduct.

Non-Discrimination/ Non-Harassment
Nordic Semiconductor does not tolerate harsh or inhumane treatment of workers, including any sexual harassment, sexual abuse, corporal punishment, mental or physical coercion or verbal abuse.

Nordic Semiconductor has implemented a Non-Discrimination Policy to clearly state that employees have the rights to not be harassed or discriminated. This is communicated to all employees in the internal company manual and in introductory training when onboarding.

Employees are encouraged to report any potential discrimination (or other ethical misconduct) through the company’s whistleblower channel. Regular employee satisfaction surveys and appraisal reviews also includes questions regarding discrimination to detect and address potential discrimination issues.

In 2020 there was no reported discrimination issues, or findings from internal surveys that indicated any sign of discrimination or harassment in the organization.
**Nordic Semiconductor’s Non-Discrimination Policy**

- All Nordic Semiconductor employees shall be treated equally and with dignity, courtesy and respect.
- Nordic Semiconductor prohibits any form of discrimination against and/or harassment of employees or applicants for employment due to race, color, nationality or ethnic origin, age, religion, disability, political opinions, gender, or sexual orientation, as described by ILO conventions.
- Nordic Semiconductor’s organizational culture shall be characterized by openness and good internal communication so that any misconduct or problems can be addressed, discussed and resolved in a timely manner.
- Nordic Semiconductor’s employees are encouraged to report any incident of discrimination to their nearest leader or through the applicable whistle-blower channels. Retaliation against any employee who has reported misconduct, is prohibited. There shall be no unfavorable treatment to any whistle blowers.

**Equal pay**

Nordic strives to ensure that work of equal value shall receive equal pay, regardless of cultural diversity, gender, etc. Salary levels are determined based on objective measures, such as actual work performance, responsibility, seniority, education, experience, and local market expectations.

Nordic Semiconductor’s Board has appointed a designated People and Compensation Committee (PCC) to evaluate and oversee the organization’s overall compensation strategies. The Committee is composed of members from the company’s Executive Management Team, as well as Board members. Further details on the PCC can be read in the company’s annual report for 2020.

To continuously develop employee competence and ensure that all employees advance according to personal and professional career goals, a standardized framework to determine and adjust salary levels have been implemented. Salary increases are initiated through a globally aligned salary review process, where employees’ salary levels are adjusted according to their positions and related responsibilities. This decreases the risk of subjective salary assessments based solely on personal preferences, reducing the risk of making biased salary decisions.

Standardized programs are also implemented to ensure fair and equal pay related to short- and long-term incentive program and entry level salaries. Table 4 shows the gender gap ratio statistics for Nordic Semiconductor in 2020.

Within the R&D department in Norway, the average salary in 2020 for women is 92% of the average salary for males. The average salary for female employees in all departments was 77%, excluding executive management. Within the top management, the average salary of female employees was 76%.

The salary gap between women and men is largely due to the fact that there is still a majority of men in the company’s senior and management positions.

Furthermore, gender differences in salary are also affected by department and location. A larger relative proportion of the women in administrative functions are based in the Philippines, where the salary level is below the Group average.

<table>
<thead>
<tr>
<th>Category</th>
<th>Males</th>
<th>Females</th>
<th>Gender Pay Ratio (Median Male Salary to Median Female Salary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall (excl EMT)</td>
<td>762</td>
<td>125</td>
<td>77%</td>
</tr>
<tr>
<td>Executive Management Team (EMT)</td>
<td>8</td>
<td>2</td>
<td>76%</td>
</tr>
<tr>
<td>Administration and business support</td>
<td>79</td>
<td>65</td>
<td>71%</td>
</tr>
<tr>
<td>Research and development</td>
<td>611</td>
<td>52</td>
<td>93%</td>
</tr>
<tr>
<td>Sales</td>
<td>72</td>
<td>8</td>
<td>71%</td>
</tr>
</tbody>
</table>

Table 4: Gender Pay Ratio statistics for 2020, by Category
Diversity
Nordic Semiconductor considers having a diverse workforce as a competitive advantage for fostering innovation and having an inclusive and respectful working environment. Diversity across employee’s age, gender and cultural background represents an opportunity for the company to attract, maintain and develop valuable specialized competence in a highly competitive industry.

Nordic Semiconductor’s People and Compensation Committee (PCC) work actively to enhance diversity and human capital focus, a topic which is also frequently discussed at Board level.

The topic of diversity is closely connected with Human Capital Development, see separate section for a description of this below.

Cultural diversity
Nordic Semiconductor desires to hire competent employees from across the world, regardless of ethnicity and cultural background, which increases the company’s competitive edge in a challenging marketplace for talent.

Today, Nordic Semiconductor’s business is composed of a culturally diverse, highly specialized and skilled workforce. With 42 different nationalities represented at the company’s headquarters, Nordic has a unique position for fostering an inclusive and diverse company culture based on different perspectives.

In Norway, where we see the largest volumes of relocated employees from abroad, Nordic uses a third-party integration service for onboarding to contribute to efficient and professional integration. The services provided are tailored to the various steps of the recruitment and onboarding process, and employees are offered language courses, social meetings and networking arenas.

Phase of life policy
Nordic Semiconductor aspires to be a healthy and attractive workplace for employees in all age groups and during all phases of life across the globe. We have implemented a Phase of Life Policy, aiming to facilitate employee development and knowledge growth throughout the employee journey. Each phase is based on the perception that employees will have different needs and selected priorities throughout various stages of their lives. This gives us an opportunity as an employer to accommodate personal needs and requirements for employees.

This was established in Norway at an early stage, and further expanded to include several countries during 2020. The global implementation process will continue in 2021.

Gender diversity
In order to increase the proportion of women in our workforce, Nordic has engaged in several initiatives:

- The women’s network Ada, see separate description in page 44.
- Global Semiconductor Alliance, Nordic’s global industry organization, and their women’s initiative.
- Ensuring participation from female employees at trade fairs, recruitment initiatives, advertising campaigns and employer branding related external communication.
- Increased awareness of objectivity in recruitment processes through standardizing global recruitment practices.

Engaging in such activities has strengthened our competitive edge towards attracting female employees. Nordic has experienced an increase in the number of female students and graduate candidates applying for entry level positions, and we continuously work on developing employer branding to enhance equality and diversity focus. In 2020, 33.3% of internship students hired into full-time employment were female.
Human Capital development
Nordic Semiconductor’s business is based on a diverse composition of highly specialized and skilled employees. Their level of competence, ideas, and wellbeing are our core focus. Our talented employees play a key role in creating long-term value for our business. We believe that our business success is dependent on how well we identify, recruit, train, and retain qualified key employees. The fundament for Nordic Semiconductor’s strategic pillars is “Employee engagement”, with highly skilled and motivated employees in focus.

To strengthen our human capital foundation, we implemented in 2020 a new human capital management system to serve as a basis for operational HR, managerial support, and reporting purposes. At the same time, we also strengthened human capital, competence, and capacity within the Human Resources (HR) function to keep pace with the rest of the organizational development.

Talent recruitment and onboarding
With Nordic’s ambition to be a world-leading provider of a wide range of IoT solutions, Nordic Semiconductor needs to attract and maintain highly specialized human capital. Nordic Semiconductor has an ambitious growth strategy, and recruitment levels were stable with a global outreach throughout 2020 despite the pandemic situation. 2020 required targeted recruitment in several areas to meet competency needs.

Our recruitment strategy is defined by our growth strategy, which during 2020 required targeted recruitment in several competence areas. As a focus on diversity is high on the agenda and so forth a priority in any recruitment process, targeted recruitment is related to competency need and not diversity aspects. However, we also engage in activities to attract more females to the industry in addition to focusing on our work-life policy and how to accommodate to attract a wide range of employees worldwide.

During 2020, we conducted an analysis of candidates’ experience with our recruitment process. The purpose was to understand what candidates go through when interacting with Nordic throughout the various steps in the recruitment process, with an aim to improve the quality of our candidate experience by ensuring consistency and a seamless experience at all touchpoints. Overall, new hires described our recruitment process as professional, but findings also revealed a need to revisit best practice and globally align both our onboarding and recruitment processes.

- **17% increase in total headcount** — Dramatic growth in Human Capital in 2020.
- **25% of new hires located outside of Norway** — Adressing company growth strategy in a challenging marketplace for talent.
- **15% of new hires re-located to Norway** — Inclusive onboarding and introduction program to ensure the integration to Nordic Semiconductor culture.

We believe that a professional, globally aligned onboarding and integration process, is valuable for our employees to be able to perform from day one and to ensure employee engagement and cultural adaption. This is particularly important for employees that move from a foreign country, as we know local integration might take time and be challenging.
All new employees go through an onboarding and introduction program to make sure they become a part of the Nordic culture. The program is continuously being developed in line with the international expansion, growth, and needs of the organization. All new hires are assigned a designated colleague acting as a temporary mentor during the onboarding period to help navigate and integrate in a good manner.

Employee development and retention
It is important to Nordic Semiconductor that employees are enabled to fulfill their own ambitions, in addition to developing the company and its products by retaining valuable competence. Employee engagement is a key foundation for reaching our strategic company goals. Internal and external training and knowledge-sharing activities are arranged to encourage our employees to take on new tasks and responsibilities, and to develop their careers within the company.

As a part of our employee journey and to ensure talent retention, we have a mandatory annual appraisal conversation between the employee and the personnel manager. The main purpose of the dialogue is to foster employee involvement and engagement, facilitating performance and employee development, and ensuring employee well-being. This is an important tool for clarifying goals and expectations, as well as a means of giving feedback between employee and manager. The intention is to enhance the employee-leader relationship and give both parties the opportunity to take a proactive role in setting objectives as a part of an open and honest dialogue.

A structured succession planning was initiated in 2020 by the Executive Management, and we are currently in the process of establishing a current and future practice for such. More so, with the implementation of our new HCM system we have further strengthened succession planning with a platform guiding the process and streamlining the identification and selection of suitable successors.

We have an Employer Value Proposition (EVP) offering competitive benefits, including competitive salary, insurances, pension schemes etc. Our strategy for talent retention is further based on a notion that we strive to be perceived as a solid employer with anchored values offering employees the opportunity to develop and prosper as part of our business while maintaining a good work-life balance.

Covid-19 has given us some challenges in 2020 related to employee engagement. Nevertheless, we have initiated several activities for employees to maintain a sense of belonging while not being in the office, further described under health and safety. We have also experienced difficulties with external training activities and conferences being cancelled, forcing us to increase focus on digital activities and events to keep developing our employees. This has been a learning process, also offering new opportunities to strengthen our company culture globally, as reach increases when communication and initiatives are digital.

Turnover and exit interviews
Nordic’s HR department offers and encourages exit interviews with all permanent employees resigning, and throughout 2020, 95% of the resigned employees globally participated in exit interviews.

The purpose of the exit interview is to obtain valuable feedback based on the employee’s experience, including the context for their decision to leave the company. This provides valuable and detailed feedback highly relevant when setting improvement objectives. The exit interviews are conducted by HR to obtain as objective information as possible, and to ensure a professional experience throughout the employee journey.

In 2020, the employee turnover rate was 3.1% which is significantly below our operational target (<5%) and below the average of the preceding 3 years.
Nordic Semiconductor’s Occupational Health and Safety Policy

Nordic Semiconductor recognizes that in addition to minimizing work-related injuries and illness, a safe and healthy work environment enhances quality of products and services, consistency of production and worker retention and morale.

As a fabless company, the risk of injury or incidents in relation to direct operations is considered low. There is no use of heavy machinery and equipment or operation of vehicles and only limited handling of hazardous chemicals that can cause notable damage or injuries. Only trained personnel may work with hazardous chemicals and emergency routines are in place and regularly rehearsed.

Nordic Semiconductor’s OHS (Occupational Health and Safety) risk assessment has highlighted ergonomic injuries and negative stress in the working situations as one of the main focus areas for improvements. Due to the Covid-19 situation in 2020, the risk assessments have naturally been largely focused on the pandemic.

As Nordic Semiconductor’s number of employees has grown considerably in recent years, the target has been to maintain a low level of sick-leave and high employee satisfaction from previous years. Due to the growth, necessary changes have been made to the organizational structure. Ensuring motivated and competent leaders on all levels in the organization is important to continue developing and producing world class products.

To ensure a positive and continuously improved working environment, Nordic Semiconductor has implemented an Occupational Health and Safety management system, certified to the standard ISO 45001 Occupational Health and Safety Management System by DNV GL. Nordic Semiconductor has established local Occupational Health and Safety Committees for operations in Norway, Finland, the Philippines and Taiwan, working to continuously improve the working conditions and ensure a safe working environment. Other locations are covered by the corporate Occupational Health and Safety Committee (AMU) body in Norway. In 2020 Nordic Semiconductor expanded its ISO 45001 certificate scope to include Finnish sites.

All Nordic Semiconductor subcontractors are certified to ISO 45001 or similar standards, and this is a prerequisite to become a Nordic Semiconductor manufacturing partner. Subcontractors are also required to follow the RBA Code of Conduct and must sign off on compliance to this document.

Nordic Semiconductor’s Occupational Health and Safety Policy

Great employee satisfaction, with low level of employee absence, a stable competent workforce, and no work-related incidents in order to achieve high productivity and quality, by ensuring:

- that employees have a protective working environment
- safe employment and meaningful work for the individual employee
- consultation and participation of workers and worker’s representatives
- that our suppliers live up to Nordic Semiconductor’s OH&S standards
- compliance with legal requirements, as well as internal policies and guidelines
- continuous improvements
Health and Safety during the Covid-19 pandemic
The global Covid-19 pandemic has affected all areas of business throughout the world this year, and it has become a corporate social responsibility to act accordingly. Nordic Semiconductor is making utmost efforts to protect the health and safety of its employees, and to help prevent the virus from spreading. From the initial stage of Covid-19, a dedicated management team and the OHS organization including Nordic Semiconductor’s Personnel Safety Representatives have been collaborating in decision-making and response based on relevant development across our global organization. The Executive Management Team is continuously risk assessing the outbreak as it evolves and implemented mitigating actions at early stages in the best interest of people and the business. Amongst other things, this includes business travel restrictions, anti-infection measures at all offices, facilitations for employees to work from home, downsampling Nordic’s presence at external events and increased use of virtual meetings, webinars and trainings. In addition, company policies and guidelines with local adjustments as relevant has been implemented with proactive actions and procedures to caretake both employees’ well-being and the company’s business continuity.

One of Nordic Semiconductor’s main focuses throughout the pandemic has been to follow local and international health authorities’ guidelines and restrictions, and to continuously ensure employees’ well-being and a safe and healthy psychosocial work environment despite the challenging circumstances we are facing. As an employer, Nordic Semiconductor takes responsibility for people safety seriously, and are hence often taking precautions that go beyond what is suggested by health authorities.

Covid-19 survey
As part of the continuous efforts taken by company, an internal survey for all employees was conducted in December 2020. The purpose of the survey was to obtain valuable input from employees and to map how the Covid-19 pandemic had affected their work lives so far, enabling the company to follow-up with even better efforts going forward.

With 80% survey participation, 70% of the respondents experience that Nordic Semiconductor’s flexibility and safety measures due to the Covid-19 situation has made a positive impact in terms of reduced stress level, while 74% of the respondents stated that they feel motivated, innovative, and productive despite the Covid-19 pandemic. Overall, employees express great satisfaction and appreciation of the company’s pandemic crisis handling. Nordic Semiconductor will continue to protect the health and safety of employees by continuous risk assessments, monitoring employees’ well-being and implement mitigating actions and improvements going forward.

Mental health while working from home
As most employees in Nordic Semiconductor have been working from home for longer periods of time during the year of 2020 following the pandemic, a variety of activities for virtual interaction and socialization have been encouraged and successfully initiated. Nordic employees across the globe have arranged everything from weekly social Friday afternoon meetings, quizzes, virtual coffee breaks, yoga sessions and gaming-sessions.

Social integration
It is imperative for Nordic Semiconductor that employees integrate well both within the workplace, but also as a part of local society. During 2020 this has been difficult as communities across the globe has been in various phases of lock-down and restrictions. Local facilitations have been made to ensure that employees don’t feel left in solitude, as some of them might be unable to travel to their home-countries or meet acquaintances. One initiative example is that employees were encouraged to host Christmas holiday season get-togethers for other colleagues in line with local authority guidelines, and teaming up colleagues up with each other preventing that employees were involuntarily alone during the holiday season.
Community engagement

Promoting engineering education to student with focus on female candidates.

Every year Nordic Semiconductor gets involved in activities and collaboration programs with both local and international universities to introduce the practices of the Electronics industry to engineering students, specifically focusing on inspiring female students to pursue a career within the semiconductor industry.

In order to increase the percentage of female participants in the industry, Nordic has cooperated with the Girl project ADA since 2015. The Girl Project ADA is a Norwegian University of Science and Technology (NTNU) project which aims to recruit, motivate, and educate females within the Norwegian IT industry. ADA promotes the education of more female engineers and Master graduates from the Faculty of Information Technology, Mathematics and Electrical Engineering (IME) at NTNU. Nordic provides office visits, presentations, and network opportunities for female students in NTNU. Read more at www.ntnu.edu/girls

Nordic is main sponsor/partner for the student organization Omega who engage students who study electronics or cybernetics. We hold presentations and events for the students when they start their student life, they are part of our Strava competition.

In addition to this, we have been engaged with several English and Scottish universities. We have also offered students 6-11-month internships in Norway, Finland and Poland. The purpose is to offer them a permanent employment after they graduate, and goal is to increase collaboration with more universities.
# Measurements

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Target 2021</th>
<th>2020</th>
<th>2019</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Human Rights and Labor Rights</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of incidents of Human Rights abuses</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Number of incidents of labor principles violation</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Percentage of smelters verified as RMI non-compliant</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Human Capital and Diversity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of employees</td>
<td>897</td>
<td>767</td>
<td>685</td>
<td>601</td>
<td></td>
</tr>
<tr>
<td>Percentage female employees</td>
<td>13.8%</td>
<td>14.4%</td>
<td>14%</td>
<td>13%</td>
<td></td>
</tr>
<tr>
<td>Employee turnover rate (%)</td>
<td>&lt; 5.0%</td>
<td>3.1%</td>
<td>6.8%</td>
<td>3.7%</td>
<td>3.5%</td>
</tr>
<tr>
<td>Number of students/interns from universities</td>
<td>46</td>
<td>80</td>
<td>64</td>
<td>57</td>
<td></td>
</tr>
<tr>
<td>Number of consultants</td>
<td>35</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of temporary workers</td>
<td>6.8%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Health and Safety</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work related incidents</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Lost Time Incident Rate (LTIR)</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Fatality rate</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Contractor fatality rate</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total sick leave (Norway)</td>
<td></td>
<td>1.35%</td>
<td>2.41%</td>
<td>2.32%</td>
<td>2.21%</td>
</tr>
<tr>
<td>Short time sick leave^\textsuperscript{a} (Norway)</td>
<td></td>
<td>&lt; 2.50%</td>
<td>1.03%</td>
<td>1.51%</td>
<td>1.30%</td>
</tr>
</tbody>
</table>

* Short term sick leave is defined as less than 16 days.

Table 5: Measurements related to social perspectives.
Company governance perspectives
Company governance perspectives

The Board’s statement on corporate governance is set in Nordic Semiconductor’s Annual Report for 2020, under the chapter “Standards of Corporate Governance”. It complies with the structure adopted by the Norwegian Corporate Governance Board (NUES). The statement also meets the information requirements set out in Section 3-3b of the Norwegian Accounting Act and Section 5-8a of the Securities Trading Act. In this chapter of the Annual Report, details of relevant governance topics such as auditing committees, tax disclosure, risk management, Board of directors and Executive Management Team (EMT) are described, hence, they are not described here.

Commitment to the highest standards of business ethics and integrity is crucial for us to earn the continued confidence of our stakeholders. This applies to subjects like Anti-corruption, fair business practices, Intellectual property rights, political involvement, and Data Privacy.

Incidents of unethical behavior within these areas can impose legal, reputational, and financial risks for the company and would ultimately impact the trust and confidence in the company by its stakeholders.

This chapter of Nordic Semiconductor’s ESG Report 2020 is meant to describe how the company addresses material governance topics in its daily operations, including its policies, implementations, results, and expectations.

The illustration in Figure 10 shows an extract of regulations on corporate governance topic which Nordic Semiconductor needs to comply with.

![Figure 10: An extract of regulations on corporate governance topics that are applicable to Nordic Semiconductor](image-url)
Anti-Corruption

Nordic Semiconductor and its employees shall respect the rule of law and international norms of behavior. Nordic Semiconductor has adopted a zero-tolerance policy on corruption and bribery - as clearly stated in the RBA Code of Conduct.

Nordic Semiconductor anti-corruption program is based on standard management system practices, with UK Bribery Act and ISO 37001 Anti-Bribery Management as guidelines. The issue of anti-corruption is regularly addressed by internal training and as part of mandatory introduction program for new employees. All Nordic Semiconductor employees are required to read and sign off on a Non-corruption acknowledgment form, which includes the company’s anti-corruption policy, definitions, and guidelines for acceptable behavior.

Business courtesies (gifts, hospitality, or favors to or from persons or firms that Nordic Semiconductor may do business) of modest value, conforming to normal social customs and not intended for influence, are not considered bribes or unlawful payments. All business courtesies exceeding the value of USD 50 shall be reported to Nordic Semiconductor’s administration. Employees shall not accept a business gift for personal use that exceeds the value of USD 50 on an annual basis. Employment contracts contain provisions to prohibit conflicts of interest in line of work.

Nordic Semiconductor requires all subcontractors to follow the RBA Code of Conduct, which prohibits any and all forms of corruption, bribery, extortion, and embezzlement. Subcontractors are followed up with supplier audits to raise subjects from the RBA Code of Conduct.

Any suspected or reported instances of corruption are investigated through Nordic Semiconductor’s whistleblowing group (see description in Whistleblower program), with potential initiation of corrective and preventive actions.

Registered incidents and results are reviewed annually by the Executive Management Team in the Management Review. To date, Nordic Semiconductor has not had any incident of corruption, bribery or unethical business behavior.

Whistleblower program

To ensure reporting of potential incidents relating to business ethics, Nordic Semiconductor has defined a whistleblower process. Internal and external stakeholders are encouraged to report any misconduct related to Nordic Semiconductor’s business by use of whistleblower channels as published on Nordic Semiconductor’s intranet and external website. Reports of misconduct are handled by Nordic Semiconductor’s Whistleblowing Group, led by the company’s Legal Director. Any reported concerns shall be investigated for root-cause, corrective and preventive actions, including potentially involving authorities, while preserving reporter confidentiality.

To allow for anonymous reporting, a third-party service is set up as whistleblowing channel, and in case of such reporting only anonymized information will be addressed to the Whistleblowing Group.

According to Nordic Semiconductor’s Social responsibility policy, Nordic Semiconductor does not tolerate any unfavorable treatment of or retaliation against the person who reports the misconduct is not allowed.

In 2020, one report was made through available whistleblower channels. The incident was investigated and handled according to company’s procedure.

Nordic Semiconductor’s Anti-Corruption Policy

- Corruption includes bribery and trading in influence. Nordic Semiconductor and its employees shall respect the rule of law and international norms of behavior.
- Nordic Semiconductor prohibits any and all forms of bribery, corruption, extortion and embezzlement.
- Nordic Semiconductor employees may be held liable for bribery or any other corrupt acts, based on the laws of Norway or any applicable region.
Trade and export compliance

Supply chain security program

Lawful trade and transportation of our products is an important topic for our Corporate Governance. We shall ensure that the shipments of the products are performed under safe and secure condition reaching customers.

Due to Nordic’s fabless structure, shipping of the products is performed from the suppliers’ warehouses to Distributors’ warehouses and to customers premises. To secure the journey of products to customers, Nordic requires all of its suppliers and distributors to comply with international supply chain security program such as U.S. C-TPAT, EU AEO or any mutually recognized program. These programs aim to improve the security of private companies’ supply chains with respect to terrorism.

Export control

Nordic has implemented export control compliance mechanisms to ensure that relevant export requirements are followed. This is done by evaluating and studying the applicable laws and their scope, implementing required actions and achieve relevant licenses and approvals to ensure the products are shipped correctly, legally, and on-time.

With its global business headquartered in Norway, products manufactured in Asia and world-wide shipments, the most relevant regulations affecting the company include the Norwegian Export Control Act, EU Regulation 1334/2000, the US Export Administration Regulations (EAR).

Data privacy and personal data protection

Protection of personal data is a central topic related to legal obligations for any Information Security Management System. The EU GDPR (EU General Data Protection Regulative) puts strong requirements for protection of personal data on Nordic Semiconductor.

Nordic Semiconductor ASA (including subsidiaries) are committed to individuals’ privacy and the protection of registered personal data. Nordic Semiconductor has implemented internal policies and procedures to support its compliance with applicable privacy law, as well as published privacy policies for describing the personal data processed, the purpose of the processing, and the legal basis for doing so. Furthermore, personal data is protected by relevant measures as identified through our ISO 27001 certified Information Security Management System.

Data privacy is a part of regular information security awareness programs for employees, while employees responsible for processing activities of personal data are further trained in how to ensure legal, justified, accurate, and rightful processing of personal information. A dedicated Privacy Responsible, reporting to the Legal Director, is defined to follow-up on required evaluations of activities and communication with internal and external stakeholders on matters of privacy. Annual reports from Privacy Responsible are presented in Management Review.

Any incidents of non-conformities related to privacy are handled according to company defined routines for registration, investigation, corrective, and preventive actions (including notifications to affected parties and authorities).

Information security and IP protection

Information Security concerns protection of information’s confidentiality, integrity, and availability. Nordic Semiconductor is committed to the protection of valuable business information and information systems, such as proprietary design data as well as external stakeholders’ intellectual properties entrusted to Nordic. Business Continuity and strategies are in place for protecting against cybercrime incidents or other disasters putting Nordic Semiconductor’s operations and information at risk. Nordic Semiconductor is ISO 27001 Information Security Management System certified.

Nordic’s IPR policy provides visibility and control over relevant in-house IP and patent filing, and it is embodied in project management workflows and milestones, with related checklists.

Product security

In the world of connected devices, security is essential. Nordic Semiconductor is at the forefront of supplying solutions, ICs, and software that enable our customers to build highly secure products. Throughout our development organization, there is a focus on designing secure products, optimizing security features, and ensuring that we bring products and services to the world with unsurpassed quality, security, and reliability. Our Product Security Officer is responsible for leading the effort and they report directly to the CTO.
Our systematic security development process considers leading edge best practice, regulatory requirements, and customers’ input to define our products and services. Nordic’s product security strategy is aligned with the Platform Security Architecture (PSA) initiative by ARM, which offers a framework for securing connected devices. Nordic’s devices will be certified to comply with PSA requirements.

Nordic Semiconductors Product Security Incident Response Team (PSIRT) responds to reported security vulnerabilities in Nordic Semiconductors products (hardware and software), documentation, and services. The PSIRT ensures that security vulnerabilities are analyzed, documented, and communicated in a responsible manner. To help secure its latest hardware and software portfolio, Nordic Semiconductor sponsors a bug bounty program on a top hacker-powered security platform, HackerOne.

**Measurements**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Target</th>
<th>2020</th>
<th>2019</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of corruptions, bribery or unethical business behavior incidents</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Numbers of reports made through whistle-blowing channels</td>
<td></td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Numbers of whistleblower reports investigated and resolved</td>
<td></td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Suppliers documented RBA Code of Conduct policy</td>
<td></td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Suppliers communicating RBA Code of Conduct to next tier</td>
<td></td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Suppliers audited on RBA Code of Conduct</td>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total number of board members</td>
<td></td>
<td>11</td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total number of female board members</td>
<td></td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total number of independent board members</td>
<td></td>
<td>7</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total number of committee chairs</td>
<td></td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total number of committee chairs occupied by women</td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Table 6: Measurements related to governance performance.*