



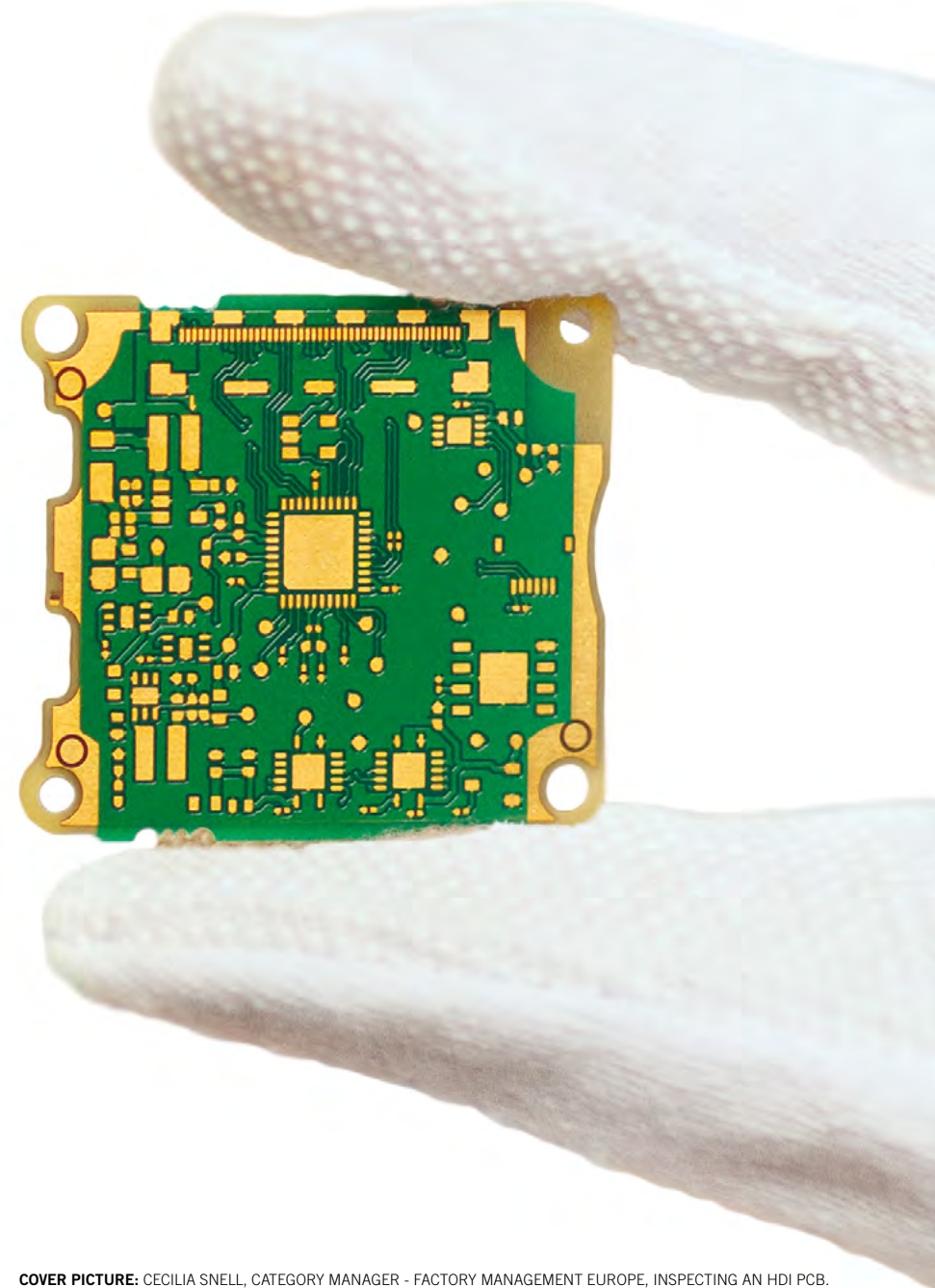
NCAB GROUP

# Sustainability Report 2021



# In this report

<b>Sustainability highlights</b>	<b>3</b>
<b>Our business</b>	<b>4</b>
<b>CEO's statement</b>	<b>6</b>
<b>Value chain</b>	<b>8</b>
<b>Strategy</b>	<b>9</b>
NCAB Group Sustainability Strategy 2022-2026	10
NCAB and the Sustainable Development Goals	12
<b>Supply chain</b>	<b>13</b>
<b>Operations</b>	<b>17</b>
<b>Customers</b>	<b>20</b>
<b>Appendix</b>	<b>23</b>
Climate report	23
Key findings and improvements audits	25
Reporting principles	27
<b>GRI content index</b>	<b>28</b>



## ABOUT THIS REPORT

Since 2014, we have annually published a sustainability report. Our last report was published in April 2021. This is our report for 2021 and covers NCAB's global business. It has been prepared in accordance with the GRI Standards: Core option and meets the requirements for sustainability reporting in the Swedish Annual Accounts Act. More information about this report on [page 27](#).

## WE INVITE YOU TO GIVE FEEDBACK

We warmly welcome any feedback you may have on the sustainability report to help us to develop our report and sustainability work even further. Please contact NCAB Group's Sustainability Manager, Anna Lothsson: [anna.lothsson@ncabgroup.com](mailto:anna.lothsson@ncabgroup.com).

**COVER PICTURE:** CECILIA SNELL, CATEGORY MANAGER - FACTORY MANAGEMENT EUROPE, INSPECTING AN HDI PCB.

**TEXT:** NCAB GROUP AND TROSSA **DESIGN:** TILLS.SE **PHOTO:** JESPER FERMGÅRD **PAGE 1-4, 6, 8, 13, 19, 20, 22, NCAB GROUP PAGE 3, 8, 14, 16, 17, 19, PETER JÖNSSON PAGE 7**

# Sustainability highlights 2021



## 99.6%

Quality Performance

Winner 2022

## Employer of the Year

Brilliant Awards  
- Employee experience

## 82

Customer Satisfaction Index

## 87

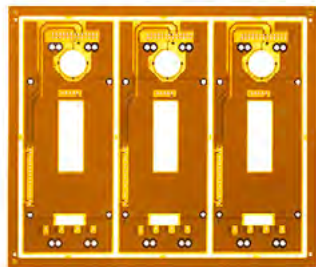
Employee Engagement Index



## Climate impact mapping

## 140

New colleagues welcomed



## Updated sustainability strategy

## 100%

Sustainability audited main factories

- improving work and safety conditions and environmental performance



# PCBs for demanding customers

NCAB Group is a leading global producer of printed circuit boards, PCBs. Our mission is to produce PCBs for demanding customers, on time, with zero defects, produced sustainably at the lowest total cost.

## PCBS - SMALL BUT CRITICAL

All electronic products contain a printed circuit board (PCB). The car you drive, the train you travel on or the ECG system that monitors your heart. We believe that the best PCB solutions can only be developed through dialogue with our customers and their customers. It all starts with the design, the right specifications and in choosing the right manufacturing partner. Our solution also includes efficient logistics, on-time deliveries and that the entire manufacturing process is conducted in a manner that fulfils our customers' and, not least, NCAB's sustainability requirements.

## TECHNOLOGY TRENDS

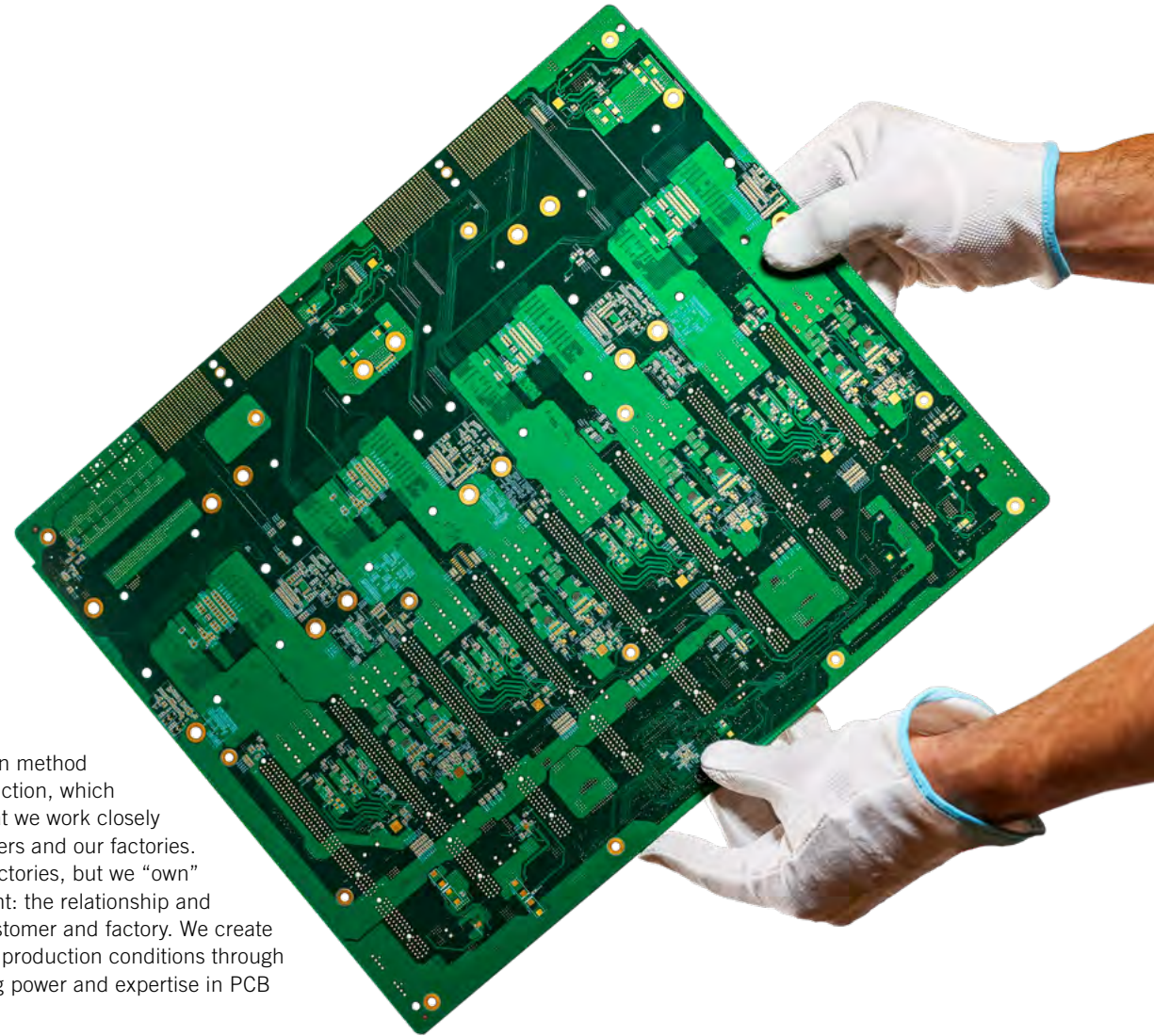
Several technology trends are today driving the applications in which PCBs are used. Internet of Things (IoT) and artificial intelligence (AI), in combination with the development of 5G systems, open up connectivity and communication between devices and things on a whole new level. With the component industry following similar trends, PCBs have to be adapted to changing requirements. The complexity of PCBs will continue to grow while devices get smaller. Technology looked upon as cutting edge today, will become standard tomorrow. In this transition, NCAB is keeping a close eye on the customers' demands and the factories' development plans.

## INTEGRATED PCB PRODUCTION

We call our production method integrated PCB production, which in practice means that we work closely with both our customers and our factories. We do not own our factories, but we "own" what is most important: the relationship and process with both customer and factory. We create optimum and flexible production conditions through our strong purchasing power and expertise in PCB production.

## GLOBAL AND GROWING COMPANY

The NCAB Group is a truly global organization, with offices around the world. Our headquarters are in Sundbyberg, Stockholm, Sweden. Growth is a priority for us; sustainable growth, together with our customers as we enter new markets. Growing sustainably with profit is an integral part of securing and developing our long-term business. In 2021, we acquired Prevent PCB (Italy), sas-electronics (Germany), RedBoard Circuits (USA), Elmatica (Norway), and META Leiterplatten (Germany). These acquisitions will strengthen our market position in Europe and US even further.

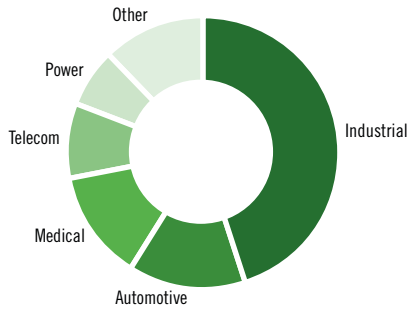


## OUR VALUES

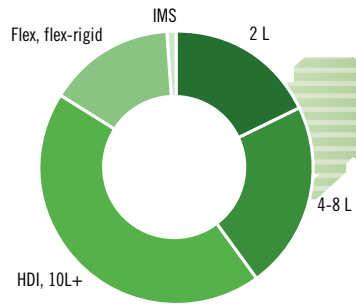
We work in accordance with our company values:

- > Quality First
- > Strong Relationships
- > Full Responsibility

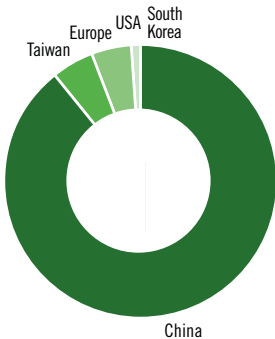
### SALES SHARE PER INDUSTRY SECTOR



### SALES SHARE PER PCB TECHNOLOGY



### SHARE OF PRODUCTION



**562**

TOTAL NUMBER OF EMPLOYEES

**308**

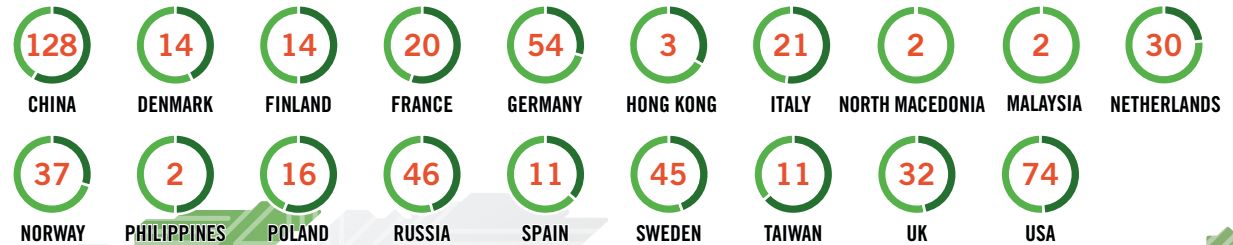
MILLION PCBs DELIVERED

**29**

FACTORIES

### EMPLOYEES / COUNTRY

Women Men NCAB Group office



### NET SALES

**3,219.5**

MSEK

### KEY PERFORMANCE INDICATORS

**92.7%**

DELIVERY PRECISION \*  
(Measured per order line)

**99.6%**

QUALITY PERFORMANCE \*  
(Measured per order line)

**100%**

SUSTAINABILITY AUDITED  
MAIN FACTORIES \*

All data per December 31, 2021.

\* DP: 92.4% (2020), continued challenges in supply chain due to the pandemic,  
QP: 99.3% (2020), Audits: 100% (2020)



# Our new strategy takes us to the next level

Climate change, resource scarcity, and the need for social safeguards along the supply chain have led to sustainability becoming a global priority. Stakeholders as well as policymakers are increasingly focusing on sustainability performance.

For NCAB, this is nothing new. Sustainability has been integrated in our business for the past ten years. Together, we have achieved

many milestones and goals, although there is still plenty left to do as we strive to raise our ambitions further.

## NEW STRATEGY RAISES THE BAR

At the end of the year, we updated our group sustainability strategy. While social responsibility in the supply chain has long been a top priority for us, environmental performance such as energy and resource efficiency, as well as reduction of greenhouse gas emissions are areas that will be subject to increasing focus going forward. Broadening our sustainability strategy will ensure that our sustainability performance improves and meets our vision, as well as the expectations of our stakeholders.

While we are on track to meeting many of our sustainability targets, others remain a challenge, particularly in areas such as materials, waste management and transportation where we need industry collaborations. Working closely with customers and being involved from the very beginning of their projects, we can add significant value to the PCB solutions.

## REDUCING CLIMATE IMPACT

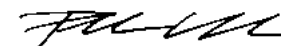
To ensure that we focus our efforts on activities that make a real difference, we have identified and calculated the greenhouse gas emissions linked to our business throughout the value chain. Now that we have a clear picture over our climate impact, we are in a position where we can prioritize and take actions to reduce our most severe impacts and set emission reduction targets in line with the 1.5-degree target of the Paris Agreement. This will also enable us to present data to our customers and to be more transparent in our offering.

## HIGHLY ENGAGED EMPLOYEES

Our success would not have been possible without the dedication of our highly engaged and competent employees. We are making progress in our sustainability work thanks to the commitment and hard work from everyone in the organization, and for this I am sincerely grateful. Despite the challenges posed by the pandemic, we continued to meet customer expectations, receiving high scores in the customer survey, as well as in our employee engagement survey.

Now, we are looking forward to continuing our sustainability journey together with our production partners and customers. We are committed to offering competitive, high quality and technically advanced PCBs, which are sustainably produced and thus making us the natural choice for collaboration.

Be safe and take care.



**Peter Kruk**

# We take on our challenges

The world is currently facing many and deep humanitarian, geo-political and environmental challenges. In Europe, the Russian invasion and war in Ukraine is causing enormous human suffering. Our view, is that businesses do have an important role in shaping society. Acting responsibly, in line with the values of our different stakeholders, including owners, employees, suppliers and customers and with a long-term perspective of our financial development, is the only way we can be a truly sustainable business. We are committed to continue focusing on social and environmental sustainability, even when times are difficult. And we firmly believe that the actions we take in these areas are vital for the successful development of NCAB.



**Christian Salomon**, Chairman of the board since 2007

I am convinced that the efforts NCAB is making to gain deeper knowledge about our climate impact throughout the value chain will pay off. We will get a clearer picture of where our footprint is greatest, and we can also support customers with important data. As a sustainability leader in our part of the industry, it is our responsibility to get the numbers right. Information to stakeholders needs to be trustworthy.

Looking forward, we will seek collaboration already in the design phase with customers and suppliers who are frontrunners. Innovation and partnerships are key to find new solutions. Let us remember that PCBs are an essential part in every electronic product. We should not lose any opportunities to reduce our climate footprint and improve resource efficiency at the same time as we build a stronger NCAB.

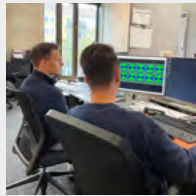


# Sustainable business – a value chain approach

Our focus is on creating value for our stakeholders and taking responsibility throughout our value chain. This approach helps us to identify opportunities to drive positive change and minimize negative impact.

Influence and control are substantial

Outside our direct control and influence



## SALES AND DESIGN SUPPORT

In the design phase we support our customers in optimizing the design of the PCBs for product reliability and for manufacturing. Optimized design means less scrap, material, water and chemicals used, as well as improved product quality. Providing a high service level and building strong relationships with our customers are key factors for our long-term business. [\(Read more on p. 20-21\)](#)



## TRANSPORT AND DISTRIBUTION

Demands for short lead times in the industry pose a challenge. Air freight from Asia to Europe and USA has a high climate impact. To reduce emissions, we need to up our efforts to find more efficient logistics solutions and offering our customer different freight alternatives. [\(Read more on p. 22\)](#)



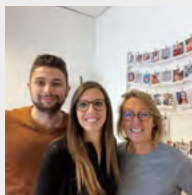
## WASTE/RECYCLING

Waste handling and recycling of the end product is normally beyond our sphere of influence. Any printed circuit boards returned to us and if found faulty, are disposed of according to local regulations on waste handling.



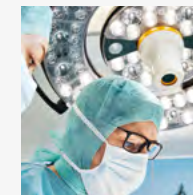
## PRODUCTION

In collaboration with our production partners, we focus on quality, social accountability and environmental responsibility in the supply chain. Important topics are working conditions, human rights, health & safety, resource efficiency, production and product quality, materials used (chemical content and conflict minerals), chemical handling, handling of waste and recycling. [\(Read more on p. 13-16\)](#)



## OUR OFFICES AND EMPLOYEES

As a knowledge-based company, our employees form the mainstay for the success of our operations. To create a stimulating culture, we focus on ethics, competence-development, diversity, equal treatment, a happy and healthy work environment, and high engagement. [\(Read more on p. 17-19\)](#)



## PRODUCT USE

PCBs are used in many kinds of technical devices and it is crucial that they never stop functioning. Product quality and reliability are key factors and of the utmost importance. Delivery precision, service, claims-handling, handling of waste and recycling are other important sustainability areas.



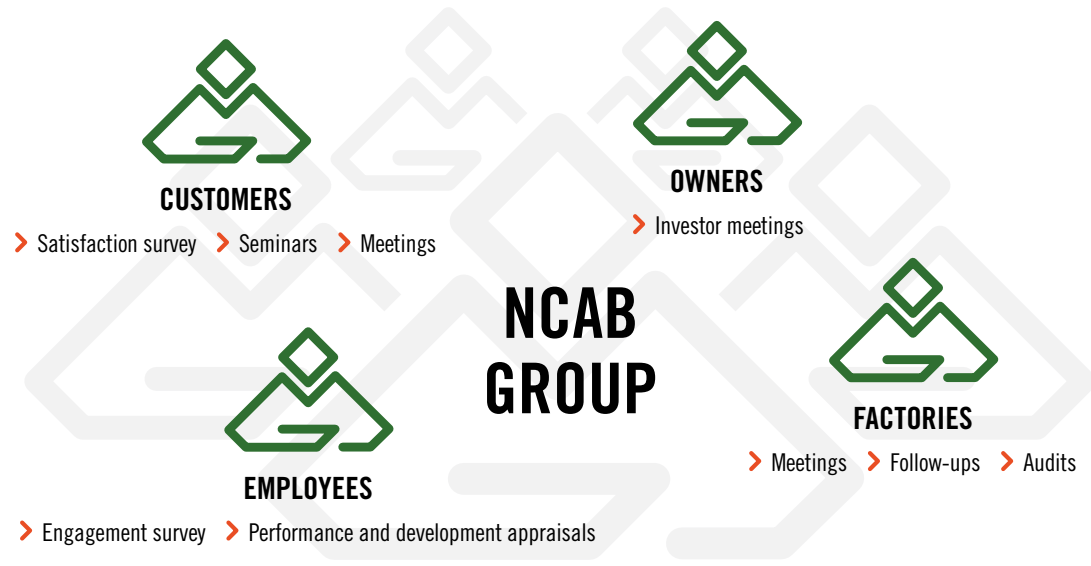


Illustration of our regular channels for main stakeholder dialogue.

# Sustainability strategy and goals

NCAB’s sustainability strategy defines our long-term goals and actions to meet stakeholder expectations. With clear priorities it guides our sustainability work in the right direction.

We are committed to drive positive changes throughout the value chain together with our customers and production partners. Having a value chain approach to sustainability, our strategy helps us to understand what we must do to reduce negative impact and accelerate positive change.

### MOST MATERIAL SUSTAINABILITY TOPICS

To ensure that our sustainability strategy addresses the material topics that are most relevant to our business and stakeholders, we identify and assess our impacts through a materiality assess-

ment process. The latest one was carried out in autumn 2021. Listening to our stakeholders is crucial when identifying our focus areas. Topics that stakeholders considered being most material are presented on [page 27](#). The most significant changes in 2021 compared with the previous materiality assessment are the increased importance of climate change, circularity, and sustainable products.

NCAB’s most material sustainability topics are presented as focus areas in NCABs sustainability strategy ([see page 10](#)). For each focus area, NCAB will set long-term objectives, KPIs and

performance targets. The sustainability strategy was reviewed and approved by NCAB’s management team and board in February 2022.

In this report, targets and descriptions can be found for most focus areas. However, as waste management, business travel and sustainable product offerings are newly added focus areas in the updated strategy, there is no performance information for these areas in this report.

### CLIMATE ACTIONS IN FOCUS

Climate change is an urgent long-term global challenge and NCAB has a responsibility to manage topics related to climate impact. In close collaboration with our customers and suppliers, we aim to reduce greenhouse gas emissions in line with the 1.5 degree target of the Paris Agreement. Our value chain approach helps us to identify emissions in NCAB’s own operations as well as in our supply chain. Key areas of importance to reduce climate impact are energy usage in our main factories and NCAB’s facilities, transportation, and business travel. In 2021, we mapped emissions throughout our value chain to be able to prioritize actions and track yearly progress. We calculated emissions in both NCABs own operation (scope 1 and 2) and in our value chain (scope 3) in accordance with the Greenhouse Gas (GHG) Protocol, Corporate Standard. Next, we are aiming to use this base year calculations of 2021 to set emission reduction targets in line with the 1.5 degree target of the Paris Agreement.

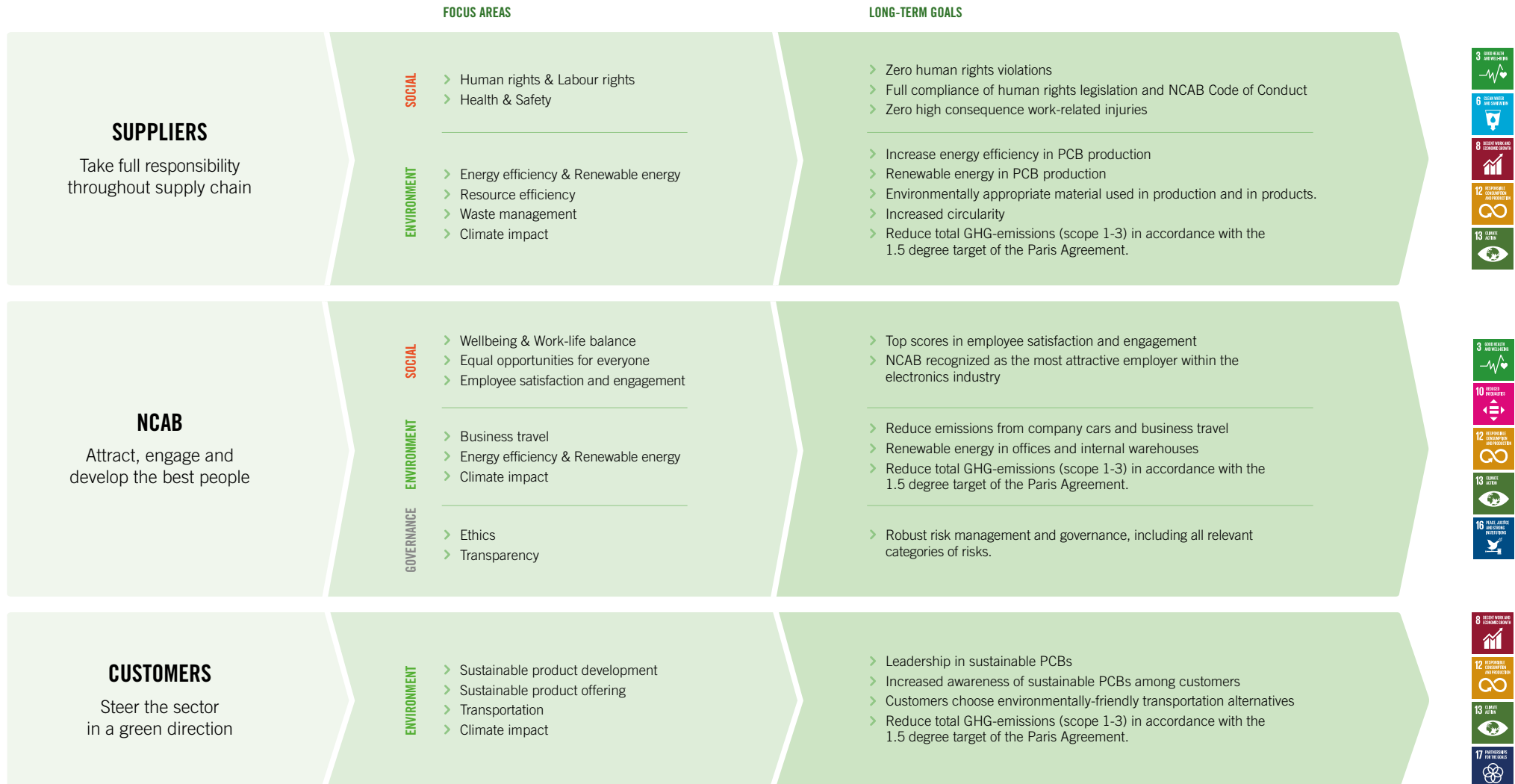
More information about our emissions (scope 1, 2, 3) on [page 23](#).

### ENVIRONMENTAL AND SOCIAL GOALS

Because production of PCBs is outsourced, a responsible supply chain is highly important to us. By requiring sustainable practices along our supply chain, we promote responsible management, safe working environment for factory workers and adherence to human rights & labour rights. But to deliver on our vision, we are also focusing more on our own as well as suppliers’ environmental performance in the coming years.

## NCAB GROUP SUSTAINABILITY STRATEGY 2022-2026

Together with our suppliers and customers we want to create a more sustainable industry with growth and profitability for all. We believe that strong relationships and transparency are key to achieving this.





The Global Goals for Sustainable Development. [www.globalgoals.org](http://www.globalgoals.org)

### SUSTAINABLE DEVELOPMENT GOALS

NCAB's sustainability strategy is linked to the Sustainable Development Goals (SDGs), with the main contribution being to 8 out of the 17 goals (see page 12). In the strategy we illustrate how our prioritized sustainability areas from our materiality analysis is connected to the SDGs. The Global Goals, and its targets, serves as an important guide to develop our business in line with the direction the world needs to go to build a better future for everyone. For a full picture of the SDGs, please visit <https://sdgs.un.org/>.

### SUSTAINABILITY GOVERNANCE

The sustainability strategy is governed by the NCAB Group management team, with a clear division of responsibility for the different focus areas. The Group Sustainability Manager is responsible for driving the overall sustainability work, such as sustainability strategy, policies and goals.

Working in a responsible and sustainable way is a responsibility that all our employees take on. Sustainability is integrated into our business model and processes, with each process owner responsible for activities and for reporting on the progress made towards achieving their set goals. Sustainability performance is monitored monthly and discussed at

SUSTAINABILITY RISKS			Probability (P) Impact (I)	
Types of risk	Description	Management	P	I
Environment	NCAB's main environmental risks arise from the PCB manufacturers' resource use, chemicals and waste management, emissions to water and air, and contamination of soil. Another main area is transportation; most of NCAB's carbon emissions are caused by transportation from manufacturer to customer. NCAB primarily uses air transportation as customers place high demands on quick deliveries.	NCAB has clear policies governing environmental work and assessing the risks and impact. NCAB imposes demands on, and monitors, that PCB manufacturers have identified and comply with local environmental demands and the RoHS and REACH directives. NCAB maintains close dialogue with customers and manufacturers about how the supply chain can reduce its environmental impact in the design and production phases. NCAB offers various transport alternatives (air, sea, rail, road), all with a different impact on the environment.	●	●
Human rights	In its business, NCAB can be exposed to challenges involving human rights. NCAB operates in a global environment where certain markets limit insights into human rights.	The company applies a Code of conduct that encompass suppliers and employees, that include support and respect for human rights. Amongst other things NCAB has set up a whistleblower function. NCAB has zero tolerance towards discrimination and harassment. NCAB employs working methods that provide systematic prevention and follow up, both internally and externally.	●	●
Social conditions	Shortcoming in efforts by NCAB and PCB manufacturers in work environment, health and safety, labour and work conditions may have adverse implications at an individual and company level.	NCAB imposes demands on, and monitors, that PCB manufacturers, and their own operations, have identified and comply with local demands. The company applies Codes of Conduct that encompass suppliers and employees. NCAB employs working methods that provide systematic prevention and follow up, both internally and externally. A whistleblower function is available on NCAB's website, where any misconduct can be reported.	●	●
Corruption	Corruption is present in all countries and industries to varying degrees. NCAB and NCAB's suppliers are exposed to various ethical risks in their operations, including corruption, business ethics and bribery.	NCAB has procedures and processes in place to avoid and counteract bribery and corruption. In addition, NCAB employees and suppliers are trained using the Code of Conduct and through courses.	●	●

management team meetings.

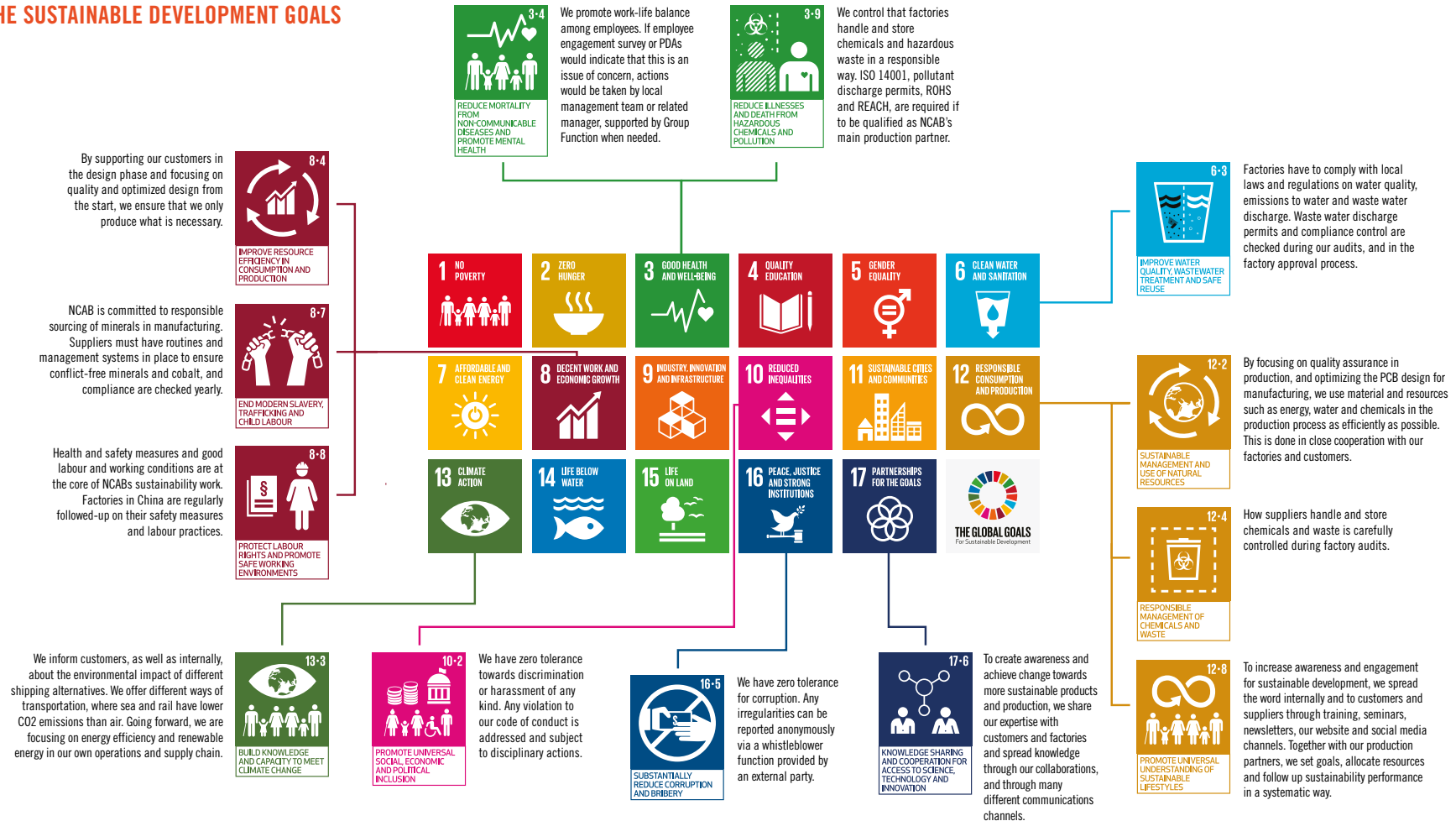
NCAB's COO is responsible for the quality management system, while NCAB Group, as well as contracted factories, are ISO 9001 and ISO 14001 certified to ensure all our processes are unified and of the highest quality. NCAB's sustainability work is also based on ISO 26000, an international standard that provides guidance on how businesses may operate in a sustainable way. Read more at: [www.iso.org](http://www.iso.org). NCAB issues a social responsibility self-declaration, including external verification audits every third year.

At Board level, the Chairman is responsible for ensuring that sustainability is on the agenda. Since sustainability is an integral part of NCAB's business, sustainability matters are discussed continuously at Board meetings.

### RISK IDENTIFICATION AND ASSESSMENT

Our approach to risk management has provided NCAB with a system that allows us to identify and understand emerging and existing risks, and to prioritize on the basis of existing actions and the impact of the risk. This approach enables us to focus on the highest risks. The risk management process also forms part of our preparations for the annual business plan. This includes an analysis of trends, business opportunities, and risks at local company and Group level (SWOT). The aim is to enable us to anticipate and rapidly respond to any changes in societal, environmental and legislative demands. Each process owner is responsible for the ongoing evaluation, development and implementation of risk control methods and processes. The highest risks identified within each of NCAB's focus areas are presented in the table above.

## NCAB AND THE SUSTAINABLE DEVELOPMENT GOALS



### IDENTIFIED SDG TARGETS

- 3.4** By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being.
- 3.9** By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.
- 6.3** By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, increasing recycling and safe reuse globally.
- 8.4** Improve progressively, through 2030, global resource efficiency in consumption and production.
- 8.7** Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, by 2025 end child labour in all its forms
- 8.8** Protect labour rights and promote safe and secure working environments for all workers
- 10.2** By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status
- 12.2** By 2030, achieve the sustainable management and efficient use of natural resources
- 12.4** By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment
- 12.8** By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature
- 13.3** Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.
- 16.5** Substantially reduce corruption and bribery in all their forms.
- 17.6** Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism.



# Our responsibility in supply chain

We work closely with our long-term production partners to improve work and safety conditions and environmental responsibility in the factories.

## COMMITMENT

- Take full responsibility throughout the supply chain.

## MEASURABLE GOAL

- 100 % sustainability-audited and approved main factories.
- Continuously improve sustainability performance throughout the supply chain.

### OUR STRENGTHS

- Clear demands, strong relationships, close dialogue and cooperation, detailed sustainability audits.

### GREATEST RISKS

- Toxic chemicals, health and safety risks and overtime work.

### GOING FORWARD

- Continue our sustainability audit programme, focus on the environment, and health and safety working conditions.

### NEW GOALS FROM 2022:

- Increase energy efficiency and use of renewable energy in PCB production.
- Environmentally conscious material used in production and in products.

Status December 2021 ● = not started/far from achieved ● = on track ● = completed/achieved



### NCAB'S SUPPLY CHAIN IN BRIEF

The factories we cooperate with are listed in our Preferred Supplier List (PSL). We divide them into Main, Spot and Special Project factories. 73%\* of our total spend is on the main factories that are located in China (20), in Europe (4), and in the USA (1). Since the highest risks, but also our strongest impact is in the main factories in China, these are the ones we focus on in our sustainability work. The 20 main factories in China include 29 NCAB approved manufacturing sites.

### OUR RESPONSIBILITY AS A GLOBAL COMPANY

NCAB Group is a global producer of printed circuit boards. Our vision is to be “The number 1 PCB producer wherever we are”. This means that we must apply a responsible approach in everything we do; socially, environmentally and ethically, and we expect that our suppliers also do that. We support the Principles

of the UN Global Compact as well as the UN Guiding Principles on Business and Human Rights (UNGPR). Our commitment to respect human rights and to prevent and mitigate negative environmental impacts is defined in our Sustainability policy and Code of Conduct for Suppliers.

Our approach to sourcing minerals and metals is in line with the Responsible Minerals Initiative (RMI), including the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas. In addition to tin, tantalum, tungsten and gold, cobalt has been added to the list of minerals for which NCAB requests information from suppliers.

The most significant risks in our main factories in China are primarily related to occupational health & safety (especially handling of chemicals), human rights & labour rights, and environmental impact. These risks have been identified during our audits and in dialogue with factory workers and factory management.

### HIGH DEMANDS IN THE QUALIFICATION PROCESS

We work with our production partners in long-term partnerships and put high demands on them. To be qualified as a main factory, listed on NCAB's Preferred Supplier List (PSL), factories must:

- Sign and comply with our Code of Conduct for Suppliers, which is aligned with the Responsible Business Alliance (RBA) requirements.
- Pass our quality and sustainability audits
- Be ISO 9001 certified (quality management system)
- Be ISO 14001 certified (environmental management system)
- Report on conflict minerals and cobalt according to the frameworks provided by the Responsible Minerals Initiative (RMI) and follow the Responsible Minerals Assurance Process (RMAP)
- Follow legislation covering raw material content (RoHS, REACH, TSCA, and California Proposition 65)
- Comply with local regulations covering social compliance and environmental impact

In 2021, two new factories passed NCAB's sustainability audits in the approval process and were approved as Main factories and added to the Preferred Supplier List (PSL).

### REGULAR AUDITS IN MAIN FACTORIES

To continuously improve sustainability performance, NCAB conducts audits in the Chinese main factories on a regular basis on site. The actual and potential impact of our production partners are assessed within the parameters of human rights, working conditions, health and safety, environment, and business ethics. All factories must have management systems in place to ensure continuous improvements in these areas.

Sustainability audits of all main factories in China are conducted every other year. In between those periods, follow-up audits on specific improvement areas are carried out. Conducting regular audits enables us to get a clear picture of factories sustainability performance and clarifies what we need to focus on in each factory. In 2021 we conducted 11 full scope audits, (whereof 2 in potential factories, i.e. those undergoing the NCAB approval process), and 10 follow-up audits. Read more about how we conduct our audits on [page 16](#).

\* Our share of total spend in the Main factories fell in 2021 compared to the previous year (76%). Part of our total spend goes to new factories used by our newly acquired companies. New factories linked to our acquisitions are categorised as Special Project factories, and are subject to evaluation for either approval and included in the Preferred Supplier List (PSL) or phasing out.

## RISK ASSESSMENT AND KEY FINDINGS

### Occupational Health & Safety

Everyone has the right to a safe workplace. In our sustainability audits, we thoroughly review how chemicals are stored in factories and used in production. Common areas that we address include personal protection equipment (PPE), training on how emergency leakages can be prevented and handled. We check the installations of illuminated evacuation signs, fire alarms and equipment, as well as fire drills and first aid preparedness.

Despite the many improvements that have been made within Health and Safety, this is an area where key findings are still being identified related to for example occupational health checks, incorrect use of personal protective equipment (PPE), missing emergency exits, evacuations signs and lack of fire-fighting equipment.

### Human rights & Labour rights

The most relevant human rights risks assessed in our audit processes are related to wages and benefits, working hours, discrimination, youth and child labour, occupational health and safety, sourcing of raw materials, freedom of association and forced labour. Going forward, we will expand our risk-analysis to identify salient human rights risks beyond our first tier of suppliers. We aim to align our risk-processes with the UN Guiding Principles for Business and Human Rights (UNGP).

Within human rights & labour rights, many factories still lack solutions to handle overtime work. Even among those factories that have secured minimum wages, provide overtime payments, annual vacation and insurance payments, there is still room for improvements in factory processes and management systems.

### Conflict-free minerals

NCAB is committed to only use conflict-free minerals. The 3TG minerals (tin, tantalum, tungsten and gold) as well as cobalt must not be linked to violence and human rights abuses in conflict areas. Tin and gold are metals frequently used in the production of PCBs. Cobalt is sometimes used when plated gold is specified. We require our factories to work exclusively with smelters that are compliant with the Responsible Minerals Initiative (RMI). We train our factories in how to apply the RMI audit scheme to control their supply chain. The supply chain is reviewed at least once a year, and when NCAB check routines and documentation on site in the audits.

### Environmental responsibility

NCAB sets environmental requirements for production partners that cover handling of waste water and emissions to air, checking compliance to local law and that valid discharge permits are in place, handling of chemicals, and waste management. Waste prevention and waste handling are core topics during factory audits.

We measure and compare the factories' monthly yields against their targets in the production process. Deviations are followed-up through factory meetings, where among other things, measures for improvements are discussed. We also engage with our customers at an early stage to optimize the PCB design in order to reduce the amount of scrap, materials, chemicals and energy used in the manufacturing process. We are not reporting on waste this year as the information is either incomplete or unavailable for us. Going forward, we will be focusing more on this topic.

### SUMMARY OF AUDIT FINDINGS

The main areas regarding non-compliance for the 2019-2021 are:

- Occupational Health & Safety: missing personal protective equipment (PPE) control and insufficient occupational health examination control.
- Human rights & Labour rights: exceeding working hours and lack of overtime compensation and insufficient social insurance for employees.
- Environmental responsibility: insufficient non-hazardous waste control and insufficient chemical management.
- Management systems: absence of policies and insufficient internal follow-up and internal audits.

No critical findings were recorded in any audit in 2021. We have not found any evidence of child labour in our audits, nor have we faced any cases of forced labour. Major part of non-compliance are related to the absence of policies and insufficient management systems to control risks. For detailed information on key findings and improvements see [pages 25-26](#).

### FOLLOWING UP PROGRESS

We regularly follow up if progress has been made in factories on specific issues that we've found in audits. Critical findings are followed up as soon as possible and major finding within six

months. When non-conformances are found, a corrective action plan is agreed upon with the factory within two weeks after audit. NCAB conducted 10 follow-up audits in 2021.

### ENGAGEMENT BEYOND AUDITS

We want to work together with our production partners and share knowledge to reduce cases of non-conformances and improve their sustainability performance. We aim to have a long-term and trustful relationship with our factories and emphasize and support on developing the skills and competencies of factory employees responsible for social compliance, health and safety. We also ensure these topics are part of the workers' annual internal training plan.

# Our way of conducting audits

We make a point of having the audits conducted by our local employees. It helps us to get the true picture, put relevant demands on sustainability performance and collaborate effectively with our production partners.

[Learn more on our website](#)

## HERE IS OUR AUDIT PROCESS, IN BRIEF:

Normally it takes two-three days to conduct the full sustainability audit, and one day to do the follow-up audit. Every audit is done on factory site and follows a detailed template consisting of six parts:

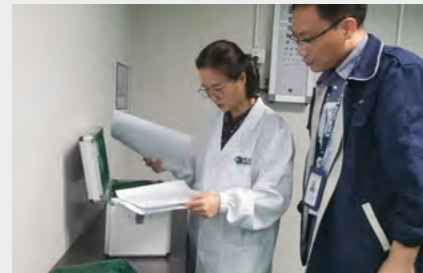
- > Management System
- > Human Rights
- > Labour and Working Conditions
- > Health and Safety
- > Environment
- > Business Ethics

In 2021, in total 11 full sustainability audits were conducted and 10 follow-ups. You can read more about key findings and improvements on [page 25-26](#).



### 1 OPENING MEETING

to explain the aim of the audit, why it is important, processes and how reporting is done. The meeting is attended by factory management and sustainability representatives.



### 2 REVIEWING DOCUMENTS

and records covering policies, management systems, training plans and attendee lists, time sheets, payrolls, insurances, accidents/incidents reports, list of regulations etc.



### 3 FACTORY TOUR

where we check fire protection systems and equipment, emergency exits, personal protection equipment, hazardous chemical handling, hazardous waste handling, wastewater/air handling, the canteen, dormitory etc.



### 4 EMPLOYEE INTERVIEWS

focusing on obtaining a more in-depth picture of working conditions at the factory.



### 5 CLOSING MEETING

summing up the findings to give factory management a clear picture of what they are expected to improve and why, and the steps they need to take after the audit.



### 6 AUDIT REPORT

includes results and findings for each of the six areas. Factory management is given time to review the report and respond with corrective actions plan.



### 7 FOLLOW-UP AUDITS

on-site to review implementation and the result of the corrective measures within six months.





# Our employees our success

As a knowledge-based company, it is our employees who make us successful. The high engagement level indicates that our people like what we offer – a unique culture and a stimulating global environment, as well as possibilities for continuous learning.

## COMMITMENT

➤ Attract, engage and develop the best people.

## MEASURABLE GOAL

● Employee engagement, leadership, and team efficiency.

### OUR STRENGTHS

- Our culture
- High level of engagement among our employees
- Global working environment

### GREATEST RISKS

- Failure to attract and recruit the right people and with technical competence in a competitive market.
- Maintaining corporate culture during growth

### GOING FORWARD

- Empowering every individual to make decisions in line with our values.
- Maintain a continuous learning culture

### NEW GOALS FROM 2022:

- Reduce emissions from company cars and business travels.
- Increase energy efficiency and use of renewable energy in offices and internal warehouses.

Status December 2021 ● = not started/far from achieved ● = on track ● = completed/achieved

### MAINTAINING A VALUE-BASED CULTURE WHILE GROWING

NCAB welcomed 140 new employees into the group in 2021. Since 2018 our global workforce has grown by 48 percent. Maintaining strong values while growing rapidly is vital for us to continue attracting, engaging, and developing our colleagues. Onboarding programmes for new employees, training sessions and leadership programmes are all important parts in upholding strong values, a clear strategic direction, and a collaborative culture across the organisation. Leadership forums and global employee meetings, such as NCAB Live, were held remotely, making it possible for employees regardless of geographic location to participate.

### EMPLOYEE ENGAGEMENT REMAINS HIGH

Our employee engagement survey resulted in high scores despite a small drop in the indexes for engagement 87 (89), leadership 85 (86) and team efficiency 83 (84). All three indexes still stand out well above the benchmark (see table). The response rate was 97 %. Questions about NCAB's culture and values, such as knowing overall goals and values, willingness to make an extra effort to succeed, and being free from discrimination got the highest scores (96-97). Topics receiving the lowest scores in the engagement index were related to stress and development opportunities. Managers are responsible for communicating the results in their organisations and together with their teams take actions based on the survey result. The next survey will be conducted in 2023.

NCAB was named the winner of the Employer of the Year in the Brilliant Awards - Employee experience in the Construction, Manufacturing and Industrial sectors, based on the results of the employee engagement survey 2021.

### LEARNING AND DEVELOPMENT IN FOCUS

NCAB is operating in a fast-developing industry. Therefore, learning and development is a constantly evolving process in the company. Through NCAB Academy – a digital learning and development platform – all employees can access a range of digital courses online and complete them at their own pace. This makes it easy for employees to continuously develop competencies. Training programmes are provided on a global level, by and with NCAB's own skilled people, tailored to the company's wants and needs. In 2021, employees participated in development programs and courses, such as inside and outside sales programs, onboarding, complaint handling, technical education.

### PERSONAL DEVELOPMENT APPRAISALS

The Personal Development Appraisal (PDA) contain an Individual Development Plan, which is a critical strategic tool that contributes to increased commitment and motivated employees. Managers hold PDA

meetings and follow-ups yearly with employees to discuss goals, motivation, work-life balance, leadership, cooperation, and development. 87 percent of the employees had PDA meetings in 2021.

### DIVERSITY AND INCLUSIVENESS

Diversity is important to NCAB Group. We have zero tolerance towards harassment or discrimination of any kind, whether we are talking about unequal opportunities, sexual harassment or bullying on the basis of ethnicity, religion, gender, sexual orientation, political opinion, age, disability, or anything else. To create awareness of our zero-tolerance policy towards discrimination and harassment, the topic is highlighted and discussed in global introductions and onboarding programs. Incidents can be reported to VP People & Culture via internal channels and anonymously via NCAB's whistle-blowing function. No incidents were reported in 2021.

DIVERSITY				EMPLOYMENT	
	AGE <30	30-50	>50		
TOTAL	53	372	137	PERMANENT	98.6%
MD	0	12	7	FULL TIME (100%)	95.7%
MGMT TEAM	0	6	6	TURNOVER	6.2%
BOARD	0	2	6		

### ANTI-CORRUPTION AND WHISTLE-BLOWING

Being a global company, we are aware of the risk of corruption within our value chain. Corruption aggravates poverty in the world, undermines democracy and protection of human rights, damages trade and reduces trust in societal institutions and the market economy. Consequently, it is vital to counteract any form of corruption. NCAB Group's Code of Conduct includes zero tolerance for corruption. Business ethics and anti-corruption are important topics that are always discussed with new employees at the Global Introduction, led by our CEO. NCAB's whistle-blowing function is available for customers and other stakeholders to use to report any irregularities that may violate our Code of Conduct or laws. The service is provided by an external party, which means that reports can be sent in anonymously. Concerns are handled by the VP People & Culture and reported to the Group Management Team. During 2021, no incidents were reported.

### ENVIRONMENTAL RESONSIBILITY IN OWN OPERATIONS

To reduce climate impact in our own operations we will focus on improving energy efficiency in our facilities and using renewable energy. We are also aiming to reduce GHG emissions from business travels and company vehicles. Read more about GHG emissions in scope 1-3 on [page 23-24](#).

#### EMPLOYEE ENGAGEMENT SURVEYS

The results of our employee engagement surveys years 2017-2021. The next survey will take place in 2023.

# 87

## ENGAGEMENT INDEX

[Learn more on our website](#)

# “Innovations for our future” and “Celebrate”

Like last year all colleagues were invited to the NCAB Group Live event - online. Instead of our NCAB Global Conference, where colleagues from all around the world physically come together in workshops and team-building activities, we moved online in 2020. We know that our Global Conference provides a massive motivational boost, and unites us as a global company, and in these times it's even more important to keep us all together. We broadcasted live from Stockholm, Sweden, two

events under the themes of “Innovations for our future” and “Celebrate”. A mix of interviews with new members of the NCAB Group around the world, colleagues sharing greetings videos and photos, live chat, music, dancing, learning about sustainability and exponential technologies, sustainable cooking, and more. We know that when we share – thoughts, opinions, ideas, feedback, challenges and successes - real magic happens. We also want to come together, and show that we care about each other.



*Spain - Team Spain planted trees in a nature reserve for protection of nature and wild-life.*



*Finland - Teemu participated in a 1500 km charity cycling trip raising money for critically ill children.*



*China - Colleagues from Factory Management in China participated in first-aid training, ready to act in emergency situations in our office and in the society around us.*



*Netherlands - Team Benelux visited a community for disabled people, renovating a garden and baking sweets together. They also hosted a big party and presented a piano to the community.*

## Give Back Day

Since 2018, all employees are given one working day per year to spend on any non-profit activity of their choice – a Give Back Day. We know that giving makes people happier, and we are convinced that this day is not only an opportunity for joy and wellbeing, but also inspires us and others to give back to society. In 2021, colleagues around the world gave back in many different ways; planting trees in a natural reserve,

first-aid training for employees, clearing outdoor areas from garbage, rescuing street dogs finding them new homes, supporting as a safety kayaker at a swim-run event raising money for veterans, helping out at a dinner for veterans, participating in a charity cycling trip raising money for critically ill children, helping renovate gardens at a community for disabled people including baking sweets and hosting a party.



# Sustainable products through close cooperation

Working together with both customers and factories, we make high quality PCBs, focusing on sustainability, by selecting the right factory for each project and constantly keeping an eye on the processes. For a more sustainable design we look to engage with our customers in the product development phase.

## COMMITMENT

➤ Steer the sector in a green direction.

## MEASURABLE GOAL

- Top scores in customer satisfaction including sustainability.
- Continuously reduce our environmental footprint.

### OUR STRENGTHS

➤ Systematic work with sustainability and quality issues, close relationships and dialogue with customers and factories, PCB technology and manufacturing knowledge and experience.

### GREATEST RISKS

➤ Environmental impact through transportation.

### GOING FORWARD

- Continued quality work in the factories, and cooperation with customers for optimized design of the PCB to reduce environmental impact through reduced waste and resource use in production.
- Examine and assess transport flows and more actively offer different transportation alternatives for reduced environmental impact.

Status December 2021 ● = not started/far from achieved ● = on track ● = completed/achieved

### SUSTAINABLE PCB OFFERING

Sustainable development is not something we can achieve alone – we need to work together with our customers and partners to reduce the environmental impact of the PCB. Together with our customers we can develop PCBs that provide environmental and economic benefits over the whole life cycle while protecting people's health and rights. In 2021 we had a close dialogue with key customers to gain more knowledge how we as a global PCB producer can support them in their sustainability journey, such as sustainable supply chain, reducing CO2 emissions and using more environmentally friendly material.

### HIGH SCORES IN CUSTOMER SATISFACTION SURVEY

Our customer survey for 2021, with over 1200 responses, showed that our greatest strength lies in our high level of technical expertise and high quality of PCBs, our high service level as well as our ability to deal with quality issues in a good way. Areas that received lower scores are in not meeting lead-time requirements, and prototype offer. Going forward we want to increase customer awareness about product development and how to reduce the environmental impact of the PCB. Our next customer satisfaction survey is scheduled for 2022.

### SUSTAINABILITY STARTS IN THE DESIGN PHASE

Sustainable product development starts already in the design phase. We support our customers in their design of the PCBs. It is important to ensure that the design is as robust as possible, without compromising any level of functionality or building-in any unnecessary complexity, to avoid pitfalls later in the production process. Focus on quality means optimized manufacturing as well as reliable circuit boards which last in the field. But doing it right the first time round not only relates to quality, it is a mind-set that also reduces environmental impact. We know that optimized design means less scrap, less waste, less energy and smaller volumes of chemicals used in production.

Looking forward, we are now also looking into the possibilities to use more environmentally friendly materials in the production of PCBs. For example, copper is a material that can be recycled repeatedly without any loss of performance and there are also other more environmental-friendly materials, such as halogen free laminate.

### HIGH QUALITY PERFORMANCE

Quality management has been important for the NCAB Group for many years. We always work directly with the factories which produce our PCBs and we see them as long-term partners. Being present on site where we monitor and consult our factories is vital for quality in production. We share our knowledge with factory workers and continuously

work to improve processes and enhance on-site factory management. A well-defined process for identifying and evaluating potential factories helps us to select the best factories suited to the technical and commercial requirements of each specific customer product. [Read more about how our factories are evaluated.](#)

In 2021, the total ratio of defective parts per million produced PCBs declined from a final figure of 1891 in 2020 to 500 in 2021 (target 2021: 1000 ppm). Quality performance (measured per order line) improved from 99.3% to 99.6%, which is better than our target. Because of disruptions in the production and supply chain as a consequence of the pandemic, we were unable to meet our delivery precision target of 97%, delivery precision rising from 92.4% in 2020 to 92.7% in 2021.

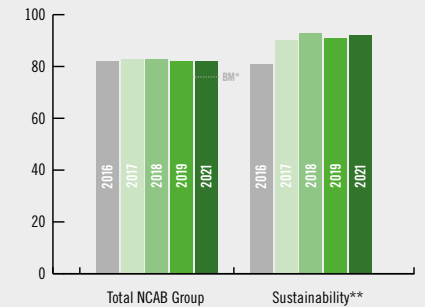
### KNOWLEDGE SHARING TO INFLUENCE THE SECTOR

By sharing our expertise in public webinars, we aim to not only influence our customers but steer the sector in a green direction. In 2021, we hosted 52 webinars with 2586 people attending from many different markets. The webinars covered a range of PCB topics, from highly technical to design tips, business-related solutions, sustainability and factory management. Our tools and design guidelines for different types of PCBs can be [downloaded](#) from our website. We also continued communicating, sharing our knowledge, through our social media channels, [newsletters](#), and [website blog](#).

### GETTING READY FOR THE FUTURE

Internet of Things (IoT) and artificial intelligence (AI) in combination with increased data transfer rates available through 5G, will open up a whole new level of connectivity and communication between devices and things. As more and more products are developed in pace with these technical trends, the need for more complex PCBs will increase too. This means that technology looked upon as cutting edge today, will become standard technology tomorrow. That is why our more technologically advanced production partners are gearing up to ensure that they will be positioned to support higher complexity, greater structures, such as any layer builds, finer pitch and occasionally different materials. This will lead to demands for new equipment, new raw materials and production lines taken to the next level. NCAB keep a close eye on the factories' development plans and approve new technology when we know the processes are stable and proven in terms of producing end-product that meets our customer demands. [Read more about new technology trends.](#)

CUSTOMER SATISFACTION INDEX

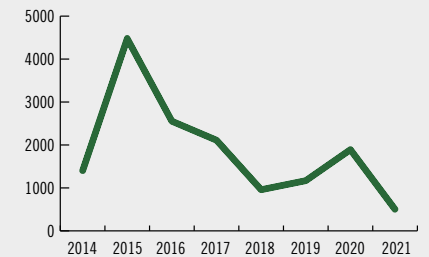


\* Benchmark - average result among other companies using the survey.

\*\* No benchmark for Sustainability, as this is a specific NCAB question in the survey.

Next survey is scheduled for 2022.

QUALITY STATISTICS - DEFECTIVE PARTS PER MILLION (PPM) PRODUCED



[Learn more on our website](#)

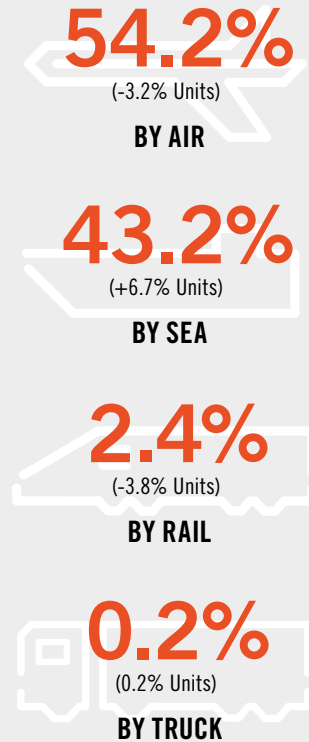


**WE OFFER LOW CARBON TRANSPORTATION ALTERNATIVES**

Short lead times is a climate challenge in our industry. Sea and rail transportation modes are both cheaper and result in lower emissions, but due to demands for short lead times, customers still mainly choose the air alternative. A major part of our CO2 emissions from transportation arises when shipping products from Hong Kong to Europe and the USA. We have chosen transportation partners with ambitious targets to reduce their CO2 emissions. However, to drop the CO2 emissions

in the short-run, customers need to choose the low-carbon shipment alternatives we are offering. In 2021, 54.2 % of shipments from Hong Kong were by air, 43.2 % by sea, 2.4% by rail, and 0.2% by truck. We saw an increase of goods transported by sea (+6.7 %-units), while rail shipments decreased by 3.8%-units. Total cargo weight shipped increased by 56% compared to 2020. As transportation capacity worldwide is highly impacted by the pandemic, lead times and costs increased in 2021.

**CARGO WEIGHT (%) SHIPPED BY:**



**OUR CO<sub>2</sub>e EMISSIONS**

EMISSION	2019		2020		2021	
	t* CO <sub>2</sub> e	kg CO <sub>2</sub> e/kg GOODS	t* CO <sub>2</sub> e	kg CO <sub>2</sub> e/kg GOODS	t* CO <sub>2</sub> e	kg CO <sub>2</sub> e/kg GOODS
Air	10 484	6.41	10 363	5.60	16 722	6.14
Sea	43	0.07	126	0.11	309	0.14
Rail	44	0.25	50	0.25	44	0.37
Truck	N/A	N/A	N/A	N/A	9	0.70
<b>Total</b>	<b>10 570</b>	<b>4.42</b>	<b>10 539</b>	<b>3.27</b>	<b>17 085</b>	<b>3.40</b>

Emissions from our transportation activities from Hong Kong to our warehouses in Europe and the USA. \*t - tonne. Year 2019 and 2020 data TtW (Tank-to-Wheel), year 2021 changed to WtW (Well-to-Wheel).

# Climate report

NCAB's ambition is to reduce the climate impact of its own operations as well as emissions in the supply chain. This is the first time NCAB measures emissions covering all three scopes (1-3) according to the GHG protocol standard. Data collected and included in calculations are described below, and where data were not yet available NCAB will continue to work to get this data ready during 2022.

NCAB's reported emissions are quantified based on the methodology of the Greenhouse Gas (GHG) Protocol, Corporate Standard. In 2021, calculations of NCAB's emissions in its own operation (scope 1 and 2) corresponded to 565 tonnes CO2e and in the supply chain (scope 3) 91 839 tonnes CO2e (see which emissions are included in scope 3 below). The calculations of emissions are based on data collection from internal sources (19 different functions within NCAB Group local companies and Factory Management team). External data has come from sources such as production partners who provided data on energy consumption within the PCB manufacturing, and logistic partners who provided information about transportation. Whenever possible, primary data sources have been used. When specific data hasn't been available, screening calculations of emissions have been done based on standard estimates.

**SCOPE 1** includes direct emissions from own operations. For NCAB, this means GHG emissions from fuel used in company cars. Data was collected on Diesel, Petrol and HVO company cars. Calculation emissions for company cars in scope 1 are based on estimated fuel consumption and emission factors for petrol- and diesel driven cars.

**SCOPE 2** includes emissions from indirect energy from electricity and heat purchased and used in NCAB offices and internal warehouses. Local NCAB companies were asked to account for the purchased electricity, district heating or other heating source used in NCAB offices and owned warehouses. The emissions

were calculated based on emission factors for each country (source: UNFCCC\*) where offices and internal warehouses are located. The type of the purchased energy was also taken into account, meaning that contracts for renewable energy were included in the calculations. This led to a lower climate impact figure being obtained. Heating for two of our offices come from the combustion of natural gas, as part of heating of the building where offices are leased.

*Non-renewable electricity:* The climate impact of purchased non-renewable electricity was calculated by multiplying the kWh of purchased electricity with the emission factor for the energy mix in each country (source: UNFCCC\*).

*100% Renewable:* The climate impact of purchased 100 % renewable electricity was calculated by multiplying the kWh of purchased electricity with the emission factor from the EPD (Environmental Product Declaration) standard of Swedish hydro-power from Vattenfall. This EPD was used to represent 100 % renewable energy.

**SCOPE 3** includes data representing the manufacturing of PCBs, transportation and business travels. The energy consumed in the manufacture of the PCBs represents the largest part of the greenhouse gas emissions in scope 3. The energy consumed in manufacturing was collected directly from the main factories in China, covering 77% of NCAB's total spend in China. The data was extrapolated to cover 100% of manufacturing in China, which stands for 89% of NCAB's total spend. GHG emissions calculations were based on estimated country emission

factors (source: UNFCCC\*). Data from PCB manufacturers in Europe, Taiwan, USA are to be included during 2022.

Transportation of the PCBs stands for the second largest emissions. The scope of the calculations covers transportation of PCBs from Hong Kong to Europe and USA sourced by NCAB. Transportation between local warehouses and customer, "last mile", were not included in the calculations. The majority of the reported emissions from transportation are based on data reported by logistic service providers, with a smaller part being estimated.

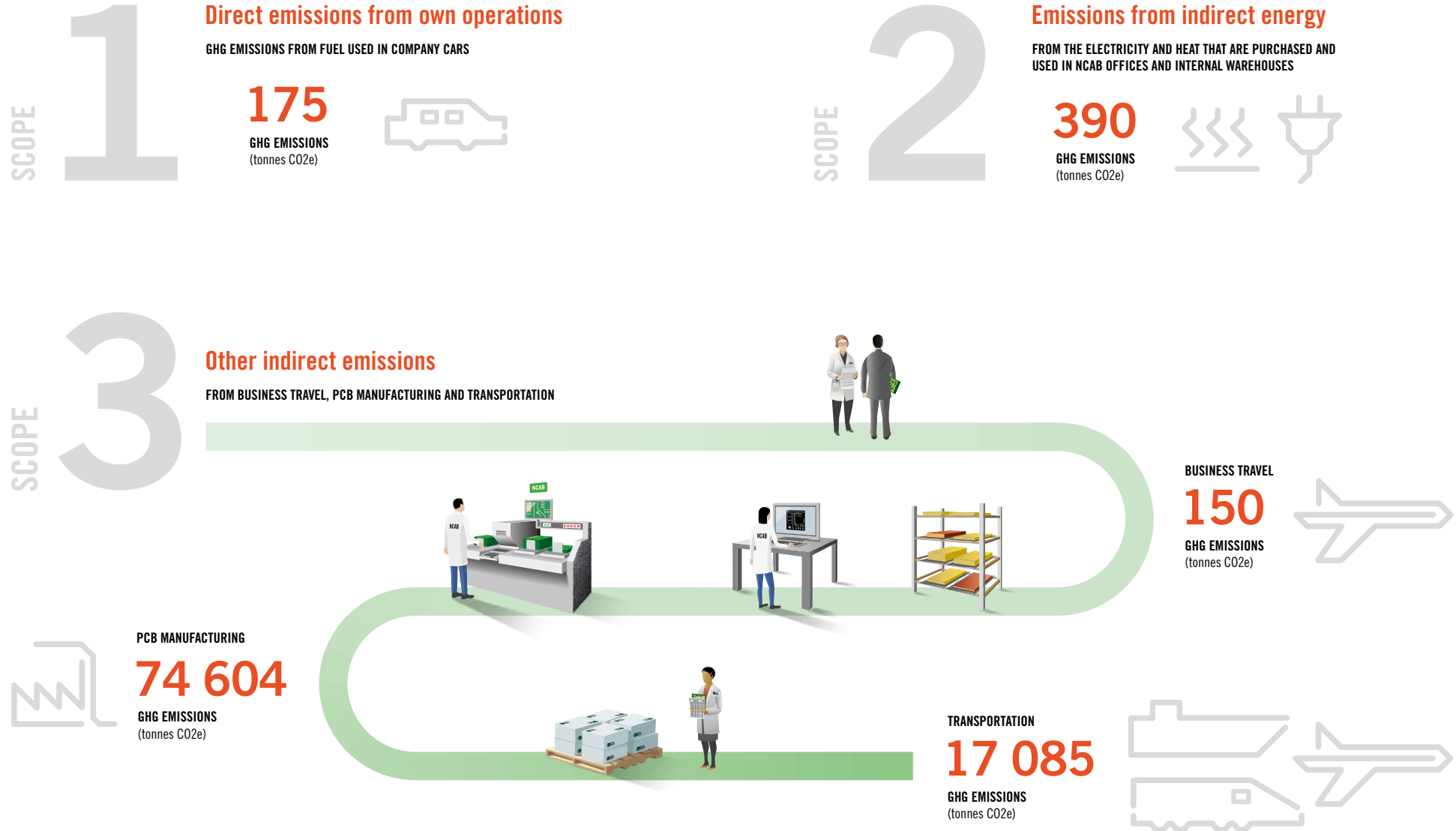
In 2021 we didn't include the following in the scope 3 calculations: waste, emissions from mining and production of raw materials that are sourced and used in the manufacturing, emissions from the use of sold PCBs, and emissions from the end-of-life processing of sold PCBs. Due to lack of data, we are not able to report the amount of emissions from these sources 2021.

GHG Emissions (tonnes CO2e)	2021
<b>Direct GHG Emissions (scope 1)</b>	
Company vehicles	175
<b>Indirect GHG Emissions (scope 2)</b>	
Facilities energy usage (Market based)	390
<b>Other indirect GHG Emissions (scope 3)</b>	
Business travel	150
Transportation of products	17 085
Energy usage in PCB factories	74 604
<b>Total (scope 1-3)</b>	<b>92 404</b>
<b>GHG emissions intensity (tonne CO2e/MSEK)</b>	<b>28.70</b>

Greenhouse Gas (GHG) Emissions are calculated as carbon dioxide equivalents (CO2e). CO2e is defined as the amount of a particular GHG, expressed as the amount of carbon dioxide that gives the same greenhouse effect. CO2e figures includes the following GHG gases: CO2, CH4, N2O, HFCs and PFCs. NCAB reports GHG emissions according to the GHG protocol.

\*) Source UNFCCC, The IFI Dataset of Default Grid Factors v.3.0, Year 2021, <https://unfccc.int/documents/198197>

## NCAB EMISSIONS





# Key findings and improvements 2021

Since 2017, NCAB has conducted sustainability audits in a systematic way, and auditing is a well-established work method for both NCAB and the factories. Below are some examples of what improvements our audits have contributed to during that period, and what challenges remain.

## MANAGEMENT SYSTEMS

### Areas of assessment:

Management systems and implementation (ISO45001, ISO14001, QC080000, SA8000, RBA standards), policies, goals, governance, implementation, action plans. Roles and responsibilities. Training. Communication and awareness. Audit and non-conformity handling. Compliance with legal and customer requirements. Supplier and sub-supplier assessment.

### Improvements 2017-2021:

- Policies for sustainability including social accountability, health and safety, and the environment have been set up.
- Goals and targets for sustainability established, as well as actions to achieve these goals.
- Improved risk-management systems.
- Training programmes introduced for all employees.
- Improved law compliance process.
- Greater awareness among factories of SA8000 and RBA (Responsible Business Alliance) standards through external training.
- Factories have at least one person trained in SA8000 or RBA.
- Potential factories are evaluated starting from the sourcing project.
- Dedicated team in the factories being developed.

### Key findings to be resolved:

- Management system review and internal audits regarding Social Accountability (7/23).
- Systems/routines for overall sustainability work need to be fully developed to avoid risks of non-compliance to local regulations and NCAB's requirements. (3/23)
- Employees not fully trained with further training required. (5/23)

- Comprehensive management including procedure and audit checklist, CAP follow up for sub-suppliers (7/23).
- Management system review and internal audits regarding EHS (2/23).

## HUMAN RIGHTS

### Areas of assessment:

Human rights impact/risk assessment. Human rights policies. Humane treatment. Discrimination. Responsible sourcing of minerals.

### Improvements 2017-2021:

- Lessened risk of discrimination and abuse.
- Improved process and knowledge for better follow-up of conflict-free minerals in supply chain.
- Cobalt is included in conflict mineral investigations.
- Improved procedures for complaints from employees without fear of retaliation.

### Key findings to be resolved:

- Factories no longer levy fines (affecting salary) on their workers if they fail to comply with the factories' work rules (eg, arrive late for work), a few factories still need to update their procedure documentation (5/23).

## LABOUR AND WORKING CONDITIONS

### Areas of assessment:

Labour & Working Conditions impact/risk assessment. Forced labour and freedom of movement. Child labour/Young employees. Working Hours. Wages and benefits. Freedom of association.

### Improvements 2017-2021:

- Procedures in place to make sure no child labour or forced labour occur in the supply chain.

- Factories now implement comprehensive procedures for young employees including regulated work time, no night shifts, no work with harmful processes to prevent negative effects on the health of young personnel and improve safety.
  - Procedures in place to calculate correct times and salary for overtime work.
  - Procedures now clearly stipulate that employment contracts must be signed within one month from the first day of employment and salaries accordingly paid to comply with the local law.
  - Amended employment contracts to secure that overtime work, medical insurance and pensions are correctly calculated and paid as required by law and from the start date of employment.
  - One of our sourcing approval projects was put on hold due to unpaid factory worker insurances. No contract was signed until the factory paid the insurances.
  - Procedure in place to make sure permanent employment contract be signed by employees as stipulated by law, with personal file statistics kept for all employees in line with applicable regulations.
  - Temporary workers' benefits and salaries are applied in accordance with applicable regulations.
  - Employees can resign their job as stipulated by law: with 3 days notice during their probationary period, and 1 month after their probationary period.
  - Improved procedure for employees leave without prior notification to the factory.
  - One of the sourcing approval projects was on hold until the employees' overtime compensation was correctly worked out.
  - Salaries are arranged at least monthly.
  - Five insurances have been bought for employees in accordance with law.
- Key findings to be resolved:**
- Insufficient management of young workers' working hours, night shift restrictions, dangerous working positions, occupational sickness checks.
  - Overtime hours exceed the local regulations (common issue in all industries in China).

- › More overtime during peak seasons and before/after Chinese New Year due to shortage of workers. (19/23 sites)
- › One of the sourcing approval projects is on hold until the employees' overtime compensation has been correctly worked out.

## HEALTH AND SAFETY

### Areas of assessment:

Health and safety impact/risk assessment. Occupational safety training and competence. Accidents, incidents and injury. Medical treatment and first aid. Machine safety aids. Personal protective equipment. Chemical exposure. Physically demanding work. Workplace noise, temperature and light. Emergency preparedness and control. Fire alarms, emergency exits, firefighting equipment. Inspections by fire authorities. Workplace hygiene and cleanliness. Dormitories and canteen. Rainstorm/sewage monitoring. Occupational health checks.

### Improvements 2017-2021:

- › Improved risk assessments and related actions included in the audit process in order to minimize risks in the storage and production process.
- › Procedures in place and better management regarding handling hazardous chemical and hazardous waste.
- › Ability to manage all necessary calibrations for special equipment with qualified training implemented to avoid health and safety accidents/incidents.
- › Correct classification for hazardous waste, collecting and storage, based on applicable regulations.
- › Improved accident/incident handling processes and follow up actions to avoid similar injuries happening again.
- › Improved routines covering Personal Protective Equipment (PPE) including PPE configuration, distribution, control of expiry dates.
- › Improved chemical management, including storage in warehouse and production areas.
- › Increased training in the high-performance factories.
- › More dialogue with factory top management, drawing attention to the importance of sustainability issues.
- › Broadened knowledge about health and safety risks and labour rights among factory workers.
- › Improved root cause analyses and follow-ups of incidents.
- › Improved routines for canteen monitoring with canteens

needing authorization to handle, cook and serve food, and food samples required to be retained 48 hours after being served, training to canteen employee to prevent transmission of communicable disease also included.

- › Improved first aid procedure, at least one first aider on site available both on day and night shifts, direct access to ample amount of first aid equipment, based on the production line or nearby, same conditions apply to the dormitory and canteen.
- › Improved firefighting system, fire extinguishers not to be placed directly on the floor, emergency exit door to be free of any obstructions, fire hose, fire hydrant, fire protection snap connections, fire nozzles, fire hose reel etc. equipment regularly checked and kept in good condition.
- › Improved emergency exit/lighting, or evacuation signs placement on site, with regular checks and records being kept in aisles and stairways.
- › Fire drills to be conducted both day and night times, with particular consideration taken of persons with special needs.
- › Factory geography to be included as another key factor when planning emergency preparedness, this includes preparedness for confined spaces.
- › Occupational health checks to be undertaken on certain designated workers before/during/after the post, job transfer is arranged when necessary.
- › Safe drinking-water testing procedure and test reports in place.
- › Improved warning signs on site, for example; electric shock warning, confined space warning, machine safety warning, with bilingual language.
- › Materials/Carton stored correctly and secure on site (stability, height, width) in production area and warehouse.

### Key findings to be resolved:

- › Improve workers' awareness in use of the provided Personal Protective Equipment (PPE).
- › Insufficient chemical management on site; second container usage for chemicals in production line and in chemical lab.
- › Correct occupational hazardous notification card to be set up in clearly visible location.
- › Improvement of factories' dedicated team for on-site monitoring beyond NCAB governance.

## ENVIRONMENT

### Areas of assessment:

Environmental impact/risk assessment. Environmental policy. Environmental permits and reporting. Resource use. Production content restrictions. Chemical handling. Waste handling. Emissions into water, air. Noise pollution. Ground contamination. Rainwater drainage.

### Improvements 2017-2021:

- › Better control to ensure the factory has updated and valid pollutant discharge permit and compliance control in place.
- › Factories have identified and are following environmental requirements, including ROHS, REACH, POPs, TSCA and customer requests.
- › Noise level within the factory perimeters are tested yearly and comply with regulations.
- › Improved hazardous waste management, including collecting and storage.
- › Procedure on rainwater/sewage discharge monitoring and statistic recording.
- › Monitoring of the external parties who handle the hazardous wastes, eg., driver license/routines.

### Key findings to be resolved:

- › Non-hazardous waste collecting, storage and handling.
- › Valid Material Safety Data Sheets (MSDS) for all chemicals used in production line shall be easy to fetch and well classified (7/23).

## BUSINESS ETHICS

### Areas of assessment:

Business ethics impact/risk assessment. Business ethics policy. Anti-corruption. Whistle blower procedures. Disclosure of financial information. Intellectual property. Fair advertising and competition.

### Improvements 2017-2021:

- › Procedures and training to avoid bribery and corruption.
- › Systems for confidential reporting.

### Remaining challenges:

Despite our current policies, anti-corruption and whistle blowing processes and training programmes, the nature of bribery and corruption makes control an ongoing and difficult challenge.

# Reporting principles

## ABOUT THIS SUSTAINABILITY REPORT

Various stakeholders use this report as their source of information when assessing NCAB's sustainability performance. Important target groups for the report include customers, employees, and investors.

Since 2014, NCAB has annually reported on the company's environmental and social impact throughout the value chain in accordance with the Global Reporting Initiative (GRI) framework. The report is prepared in accordance with the GRI Standards: Core option. This includes applying principles for defining report content such as stakeholder inclusiveness, materiality and completeness. This report also meets the requirements for sustainability reporting in the Swedish Annual Accounts Act. By applying the GRI Standards, NCAB aims to report sustainability-related information that is relevant to its stakeholders in a transparent and balanced way. The GRI Content Index can be found on [pages 28-30](#). Topic-specific Disclosures are reported with respect to the material topics for NCAB.

The previous report was published in April 2021. The board of directors are responsible for the statutory sustainability report.

## UN GUIDING PRINCIPLES REPORTING FRAMEWORK (UNGP)

We are in an ongoing process to increase transparency on managing human rights related issues by responding to the disclosure requirements of the United Nations Guiding Principles Reporting Framework (UNGP). We will continue to develop our reporting in the future.

## BOUNDARIES

This report covers NCAB Groups (org.nr 556733-0161) operations data that has been collected throughout the 2021 calendar year. It excludes climate impact data on the recent acquisition of Elmatica, related data has not yet been consolidated within the Group.

## MATERIAL TOPICS

Based on a materiality assessment, the sustainability report reflects the sustainability areas most relevant to NCAB and the stakeholders, see [page 9-10](#). Significant topics from the latest materiality analysis (autumn 2021) are shown in the table below.

Based on mega trends and upcoming legislation, competitor benchmark, best practice information and stakeholder dialogues, focus areas were identified in the assessment process.

Environment	Social	Governance
Energy	Human rights & Labour rights	Ethics
Resource efficiency	Health & Safety, factories	Transparency
Waste	Well-being/work life balance	
Climate	Equal opportunities	

## TOPICS IMPORTANT TO STAKEHOLDERS

We maintain an understanding of our material topics through dialogue with our key stakeholders. Stakeholder dialogues is an important part of our materiality analysis and we also engage with our stakeholders on a regular basis through various channels.

Key stakeholders	Channels for interaction	Key topics 2021
Customers	Customer Survey In-depth interviews	Climate footprint, human rights, circularity, management and board commitment, quality.
Employees	Employee engagement survey	Meeting and sharing, collaboration, development opportunities, work load (stress levels).
Investors	Investor meetings In-depth interviews	Climate footprint, circularity, human rights & labour rights, risk management processes & governance

## EU TAXONOMY

As NCAB operates within the area of distribution of electronics components (printed circuit boards), we assess that the economic activities we conduct are linked to the NACE codes G46.5 2 and M70.1.0. When reviewing the activities included in the taxonomy, these NACE codes are not listed and the various business descriptions are not applicable to NCAB's financial activities, thereof we do not report any share of taxonomy-related turnover, capital expenditures and operation costs for the financial year 2021.

## CONTACT INFORMATION

For further information about the topics covered in this report, please contact Anna Lothsson, Sustainability Manager, NCAB Group: [anna.lothsson@ncabgroup.com](mailto:anna.lothsson@ncabgroup.com).

# GRI content index

The following GRI content index will help you navigate through the report. You will find more information about GRI on [www.globalreporting.org](http://www.globalreporting.org).

DISCLOSURE	DESCRIPTION	PAGE/COMMENT
<b>GRI 102 (2016)</b>	<b>GENERAL DISCLOSURES</b>	
<b>ORGANIZATIONAL PROFILE</b>		
102-1	Name of the organization	Front page. Registered company name NCAB Group AB (publ).
102-2	Activities, brands, products, and services	4-5
102-3	Location of headquarters	4
102-4	Location of operations	4-5
102-5	Ownership and legal form	See bottom of page *
102-6	Markets served	4-5
102-7	Scale of the organization	4-5
102-8	Information on employees and other workers	18
102-9	Supply chain	13-15
102-10	Significant changes to the organization and its supply chain	4-5
102-11	Precautionary Principle or approach	13-15
102-12	External initiatives	11, 14
102-13	Memberships of associations	IPC, local trade organizations
<b>STRATEGY</b>		
102-14	Statement from senior decision-maker	6-7
<b>ETHICS AND INTEGRITY</b>		
102-16	Values, principles, standards and norms of behaviour	4, 18
<b>GOVERNANCE</b>		
102-18	Governance structure	4-5, 11
<b>STAKEHOLDER ENGAGEMENT</b>		
102-40	List of stakeholder groups	9
102-41	Collective bargaining agreements	0 % among employees

\* NCAB Group AB (publ), org.no: 556733-0161, was listed on Nasdaq Stockholm on 5 June 2018. The number of shareholders in NCAB as of December 31, 2021 was 6 300 according to Euroclear Sweden AB. NCAB's ten largest owners held shares corresponding to 65.6% of both votes and capital in the company. Foreign ownership amounted to approximately 26% as of December 31, 2021.

102-42	Identifying and selecting stakeholders	9, 27
102-43	Approach to stakeholder engagement	9, 27
102-44	Key topics and concerns raised	27
DISCLOSURE	DESCRIPTION	PAGE/COMMENT
<b>REPORTING PRACTICE</b>		
102-45	Entities included in the consolidated financial statements	NCAB Group AB (publ) and subsidiaries included both in financial statements and Sustainability report
102-46	Defining report content and topic boundaries	27
102-47	List of material topics	10, 27
102-48	Restatements of information	No restatements
102-49	Changes in reporting	More comprehensive climate report in 2021, including scope 1-3, p. 23
102-50	Reporting period	2021
102-51	Date of most recent report	27
102-52	Reporting cycle	27
102-53	Contact point for questions regarding the report	27
102-54	Claims of reporting in accordance with the GRI standards	27
102-55	GRI content index	28-30
102-56	External assurance	Not externally assured.
<b>TOPIC-SPECIFIC DISCLOSURES</b>		
<b>205: 103-1, 2, 3</b>	<b>ANTI-CORRUPTION (2016)</b>	<b>18, 26</b>
205-2	Communication and training on anti-corruption policies and procedures	18
205-3	Confirmed incidents of corruption and actions taken	18
<b>305: 103-1, 2, 3</b>	<b>EMISSIONS (2016)</b>	<b>10, 22</b>
305-1	Direct (Scope 1) GHG emissions	23-24
305-2	Energy indirect (Scope 2) GHG emissions	23-24
305-3	Other indirect greenhouse gas (GHG) emissions (Scope 3)	22-24
305-4	Greenhouse gas (GHG) emissions intensity	23
<b>308: 103-1, 2, 3</b>	<b>SUPPLIER ENVIRONMENTAL ASSESSMENT (2016)</b>	<b>13-16, 26</b>
308-1	Percentage of new suppliers that were screened using environmental criteria	14
308-2	Negative environmental impacts in the supply chain and actions taken	15, 26
<b>404: 103-1, 2, 3</b>	<b>TRAINING AND EDUCATION (2016)</b>	<b>17-18</b>
404-3	Percentage of employees receiving regular performance and career development reviews	18
<b>405: 103-1, 2, 3</b>	<b>DIVERSITY AND EQUAL OPPORTUNITY (2016)</b>	<b>18</b>
405-1	Diversity of governance bodies and employees	5, 18

<b>414: 103-1, 2, 3</b>	<b>SUPPLIER SOCIAL ASSESSMENT (2016)</b>	<b>13-16, 25-26</b>
414-1	Percentage of new suppliers that were screened using social criteria	14
414-2	Negative social impacts in the supply chain and actions taken	15, 25-26
<b>103-1, 2, 3</b>	<b>QUALITY</b>	<b>20-21</b>
NCAB Group disclosure	Sustainable product development and quality assurance	20-21
<b>103-1, 2, 3</b>	<b>CONFLICT MINERALS</b>	<b>14-15</b>
NCAB Group disclosure	Work for conflict mineral-free supply chain	14-15

## Auditor's report on the statutory sustainability report

To the general meeting of the shareholders in NCAB Group AB (publ), corporate identity number 556733-0161.

### ENGAGEMENT AND RESPONSIBILITY

It is the board of directors who is responsible for the statutory sustainability report for the year 2021 and that it has been prepared in accordance with the Annual Accounts Act.

### THE SCOPE OF THE AUDIT

Our examination has been conducted in accordance with FAR's auditing standard RevR 12 The auditor's opinion regarding the statutory sustainability report. This means that our examination of the statutory sustainability report is substantially different and less in scope than an audit conducted in accordance with International Standards on Auditing and generally accepted auditing standards in Sweden. We believe that the examination has provided us with sufficient basis for our opinion.

### OPINION

A statutory sustainability report has been prepared.

*Stockholm, 5 April 2022*

ÖHRLINGS PRICEWATERHOUSECOOPERS AB  
 Johan Engstam  
 Authorised Public Accountant

**WE INVITE YOU TO GIVE FEEDBACK**

We warmly welcome any feedback you may have on the sustainability report to help us to develop our report and sustainability work even further. Please contact NCAB Group's Sustainability Manager, Anna Lothsson:

[anna.lothsson@ncabgroup.com](mailto:anna.lothsson@ncabgroup.com)

