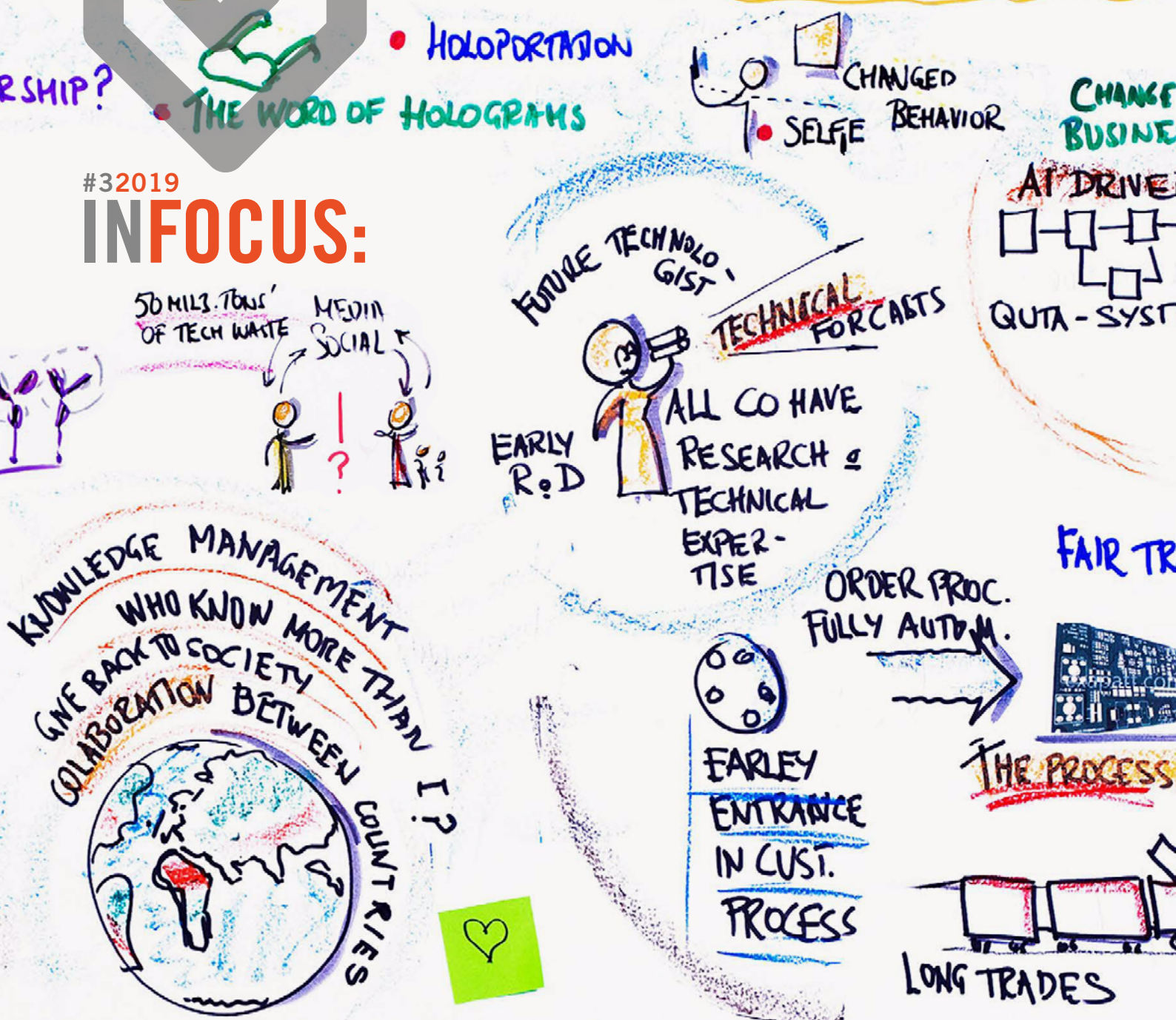


NCAB BE A SUSTAINABLE COMPANY 2025 AND BEYOND



Sustainable Operations

– a strategic priority



Our sustainability report contains a full review and details of our sustainability work, including the improvements we have introduced during the year within [the] three interest areas. It is published annually and available for download from our website.

Five years have passed since NCAB Group started to apply a sustainability strategy, which introduced principles to ensure the company conducted its business in a sustainable fashion. This newsletter looks at the significance of that move for NCAB, its employees and customers.

“For NCAB, sustainability is about conducting a long-term sustainable business that brings growth and profitability for NCAB, our customers, suppliers and investors. We also have a responsibility to be part of and contribute towards a globally-sustainable future. Continuing to be a reliable and responsible partner and an attractive employer is thus a prerequisite to achieving that. For us, sustainability is essentially a survival strategy,” says Anna Lothsson, Sustainability Manager at NCAB Group.



“We audit both the factories we are already working with as well as the ones that we will be bringing on board through our sourcing process.”

ANNA LOTHSSON, SUSTAINABILITY MANAGER, NCAB GROUP

As a framework for its sustainability work, NCAB Group uses the international standard of guidance for social responsibility, ISO 26000. This covers several aspects of sustainability, both environmental, social and ethical.

“We chose this standard very much because it provides us with a methodology when it comes to the challenge of firstly, identifying what sustainability is for us, and secondly, what areas we need to apply and prioritize in our work. Moreover, the dialogue with our

stakeholders provides invaluable input for this work,” says Anna Lothsson.

FOCUS AREAS FOR NCAB GROUP'S SUSTAINABILITY WORK

The supply chain

- Human rights and social conditions
- Environmental impact, with a focus on the use of chemicals
- Conflict Minerals

Co-workers

- Employee satisfaction
- Gender equality
- Anti Corruption
- Internal environmental work

Customers

- Sustainable product development
- Transport/green logistics
- Communicating our sustainability work



Based on three stakeholder groups - the supply chain, employees and customers - the strategy identifies a number of focus areas (see fact box) which NCAB believe will have the biggest impact. Measurable targets have been set for these areas. These are then followed up, as are other key figures. NCAB's Sustainability Manager emphasizes that sustainability is not something you work on separately, but is integrated into the company's operations and business model.



A sustainability audit comprises, among other things, interviews with factory employees in order to monitor the actual status of the factory's sustainability work. Have they been instructed in the use of their safety equipment? What kind of insurance does the factory provide them with? Do they know about the regulations governing time spent at work, minimum wages, etc.?

FACTORIES AUDITED ACCORDING TO PLAN

The most obvious stumbling blocks on the road to achieving sustainability are found in the supply chain. Over the years, NCAB has established a dedicated local sustainability team within its Factory Management organization in China. At present, two experts work full-time on conducting and following up sustainability audits at the factories that NCAB works with. The company focuses its sustainability work on the main factories in China, where the risks are most apparent, but also where the sustainability measures we apply will have the most effect.

"Thanks to our having allocated the necessary resources, we have achieved our goal of conducting audits covering the environmental and social conditions in all our main factories in China," says Anna Lothsson and continues: "We audit both the factories we are already working with as well as the ones that we will be bringing on board through our sourcing process. With all the factories having been inspected at least once, we can move forward with our work on continuous improvements and renewed audits."

The fact box shows some of the improvements attained as a result of our sustainability efforts at the factories.

SUSTAINABLE VALUE FOR THE CUSTOMER

Our sustainability work with NCAB's customers is top priority. Without satisfied customers who get added value from doing business with us, NCAB would not survive. An important aspect of NCAB's strategy is helping customers to see the intrinsic value of a sustainable supply chain.

"Our aim is to be a reliable and stable partner in our customers' supply chain, contributing with our expertise towards creating high-quality and high-reliability PCBs. This, in turn strengthens the customers' business," says Anna Lothsson.

Nothing affects the cost and quality of PCB manufacturing so much as the design. A good design is also an important contributing factor towards achieving sustainable production. Helping customers to optimize their PCB designs, enables us to attain smoother production, reduce waste, minimize material use and thus reduce

environmental impact.

"We have succeeded relatively well in achieving our goal of communicating our sustainability work to customers, among other things, through our annual sustainability report and seminar. Customers are also showing a growing interest in these issues. There is certainly room for further improvement when it comes to addressing sustainability issues with our customers as well as contributing with the knowledge we have built up. We need to be transparent regarding the challenges involved and seek to find solutions together with our customers," says Anna Lothsson.

"Nothing affects the cost and quality of PCB manufacturing as much as the design. A good design is also an important contributing factor towards achieving sustainable production."

ANNA LOTHSSON, SUSTAINABILITY MANAGER, NCAB GROUP

ENGAGED CO-WORKERS

The dedication and well-being of our own employees is an important factor that enables us to offer customers a high level of service and run our business in a sustainable way.

"Our corporate culture enables our people to have a proper say on work issues while assuming a high level of personal responsibility. So it's vital to remember that a sustainable business calls for a value-driven and ethical approach. All new employees thus receive training in NCAB's Code of Conduct, which provides them with guidelines as to conduct themselves towards colleagues and business partners," says Anna Lothsson.

Once a year, all employees are invited to a global conference that helps underpin NCAB's shared values. The company strives for a business environment where all employees feel committed, thrive and are able to grow. To succeed in the long run, the company must remain attractive in the labor market and retain its competent employees. The level of commitment is measured in recurring employee surveys.

"The surveys have not only returned excellent results, but the response rate has also been high. We use the results, to further build what already works well, and to improve the areas that have

EXAMPLES OF IMPROVEMENTS IN THE SUPPLY CHAIN

- Overall better knowledge and compliance with relevant legislation at the factories.
- Improvements in the factories' processes for controlling conflict minerals in the supply chain.
- Better procedures for calculating overtime and ensuring correct pensions and insurance for factory employees.
- Improved fire safety at the factories.
- Improved control of the factory's water discharge status and compliance control.

Download our [sustainability report](#) to learn more about our sustainability work and improvements in the production phase.



Team building during NCAB's global conference. NCAB strives to establish and maintain a business environment where all employees feel committed, thrive and are able to grow.

not measured up to our standards. In addition, we have gone further and upped the challenge to ourselves by further raising the targets," she explains.

"Our corporate culture enables our people to have a proper say on work issues while assuming a high level of personal responsibility. It's thus vital to remember that a sustainable business calls for a value-driven and ethical approach."

ANNA LOTHSSON, SUSTAINABILITY MANAGER, NCAB GROUP

Something people feel good about is being able to share. That's why NCAB 2018 started the "Give Back Day" initiative, which allows all employees to devote one working day to a wholly optional, non-profit activity.

"It has been a real success with many local initiatives from both groups and individual employees around the world. Being able to "give back" to the society we live and work in feels important, and it has also generated a great deal of positive energy and pride among us internally," says Anna Lothsson.

DEVELOPING A SUSTAINABILITY STRATEGY

"The environmental footprint of our business is something we need to look at particularly closely. A lot remains to be done in this area, where we are increasingly concerned that a substantial proportion of climate impact comprising emissions emanating from the transport of PCBs. Going forward, our aim here is to get a better grip of our total climate impact. Then, based on that, we will be able to identify the areas where our efforts to reduce it can be best put to use," comments Anna Lothsson.

The year after NCAB adopted its sustainability strategy, world leaders at the UN set 17 common goals for sustainable development (UN Sustainable Development Goals). More and more companies and organizations are now using these global goals as a guide for their own sustainability work.

"We are about to review NCAB's sustainability strategy. We will be bringing in our stakeholders to partake in a dialogue to find the best ways to move forward. This time, apart from suppliers, employees and customers, we will also be including our investors, who through our IPO in 2018 have become an important stakeholder group for us. This process will see us looking into ways of using and contributing towards attaining the UN's global goals," Anna Lothsson concludes.



"We are about to review NCAB's sustainability strategy. This process will among other things, see us looking into ways of using and contributing towards attaining the UN's global goals going forward," says Anna Lothsson.

How we integrate sustainability into our processes

NCAB Group is working towards integrating sustainability into its processes. We turned to three employees who work locally in different parts of the value chain to hear how it is working in practice.



“We conduct two to three audits each month. This involves going through their routines, compliance and practices covering aspects such as the environment, safety/security and human rights.”

JENNY ZHANG, SUSTAINABILITY MANAGER, NCAB GROUP CHINA

THE SUPPLY CHAIN

“There are two of us working full-time on reviewing, following up and improving sustainability at the factories NCAB is working with in China. We conduct two to three audits each month. This involves going through their routines, compliance and practices covering aspects such as the environment, safety/health and human rights. We go through documents, carry out inspections onsite and interview the factory personnel. The factory is given time to remedy the issues we have identified. We then follow that up to verify that the necessary measures have been taken.

“This year we started a second round of sustainability audits. After the first round, our main factories introduced systems for controlling their sustainability work. They now have routines, policies and objectives in place and put more focus on these issues. How far the factories have come with this work varies, and we devote more time to the ones that are lagging behind. In the second round, we focus a lot on the environment, health and safety areas. We monitor the applicable legislation, which is becoming more comprehensive, at the same time as the government is increasing its controls. The factories are very positive about the help they are getting to improve their practice in this area.

“Our involvement can include such things as helping to introduce routines to ensure employees are paid the correct overtime compensation and insurance, or that emissions are kept below the set limits. One recurring aspect is safety, with regard to both the equipment as well as staff, where we emphasize the importance of regular training in safety issues. Otherwise, it is easy to relapse into old, unsafe ways of working. We also put a great deal of emphasis on storage and operations.”



“Going forward, I believe we can further strengthen both flexibility at work and diversity in the workplace to create an even better atmosphere.”

CLAIRE-LISE SARNIN, HR & MARKETING MANAGER, NCAB GROUP GERMANY

CO-WORKERS

“From an HR perspective, a sustainable operation is about our employees feeling good and engaged in their work. We strive to achieve this from the very first time we meet candidates at the recruiting stage. Personality and the extent to which an applicant can live up to our core values of Quality First, Strong Relationships and Full Responsibility, are prime factors that can decide who we hire. We are also investing

in upping our recruitment of women and younger people. Diversity and broader perspectives greatly benefit and strengthen any organization.

“Applying sound and appropriate principles when recruiting will give you a workforce that is flexible and resourceful. We support our employees through helping them grow their strengths. This includes holding at least three individual development meetings each year. Based on an open dialogue and responsiveness to the employee's wishes, we create personal development plans that both meet the individual's needs and contribute to NCAB's success. I have even been instrumental in creating a new role that is adaptive to a particular individual's development potential.

“Another important area concerns creating a climate in the workplace that encourages respect between colleagues and a good platform for cooperation. In workshops and meetings, in larger or smaller groups, we continuously discuss what works well and what could be improved in this area. It is very much about open communication and mutual respect, which are important preventive factors with regard to health. When employees are open to and aware of each other and react to warning signals, it can create the ideal conditions for a happy and healthy work place.

“Going forward, I believe we can further strengthen both flexibility at work and diversity in the workplace to create an even better atmosphere.”



“Looking ahead, logistics will be a core factor affecting sustainability, given the significant impact of air transport on the climate.”

KIM FAGERSTRÖM, MANAGING DIRECTOR, NCAB GROUP FINLAND

CUSTOMERS

“We discuss sustainability issues with customers on a daily basis.

NCAB was among the first player in the electronics industry to address these issues, and in the beginning many customers were asking questions. Eventually they became more aware and interested. A number of our customers are contract manufacturers for large product owners, who, over the years, have also begun to put higher demands on sustainability throughout the supply chain. They also often carry out their own audits of aspects relating to working conditions and environmental impact. This makes the solid work offered by NCAB a real added value factor and serves as a competitive advantage for our customers.

“We have customers who have used us as a benchmark and reference point when getting their own sustainability work going. We have actually also held customer seminars that focus solely on sustainability. When we have our next Production Insight Trip this autumn, sustainability will be the focus issue. These trips see customers travel to China to view our operations and visit our production sites. This gives them an opportunity to see for themselves that the way we work does make a difference in practice.

“Looking ahead, logistics will be a core factor affecting sustainability, given the significant impact of air transport on the climate. In most cases, using maritime transport means that delivery times take too long for customers, but we are looking into the possibilities of rail transport as an alternative.”



Sustainable operations for the future

HANS STÄHL
CEO NCAB GROUP



During the five years that we have been actively focusing on sustainability, we have seen a positive change among customers and suppliers when it comes to their interest in the subject. Of course, I still get questions as to how we can afford to work with sustainability, but most people are beginning to see it as an obvious part of PCB manufacturing and the supply chain. For us, integrating the sustainability aspect into all our operations was a strategic decision and quite simply a way of ensuring the future of the company.

Focusing on sustainability throughout the production process can also benefit our customers financially. Take Design for Manufacturing as an example: it serves a very important function

towards achieving cost-effective production. By designing for manufacturing right from the start and following our design guidelines, less materials are used and waste is also reduced. This benefits both the environment and production costs. Our [design guidelines](#) can be downloaded from the web and now include guidelines for Multilayer, HDI and Flex / flex-rigid cards.

Through our design support we help find solutions to enable design to be optimized as sustainably and efficiently as possible.

Regardless of the focus areas, our sustainability efforts are a continuous process that we will work with and develop as needs change.



NCAB Group in Social Media

To get the latest news from NCAB, follow us on Twitter, LinkedIn, YouTube and Facebook and read our blog

where we immerse ourselves in the versatile world of circuit boards!

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Join us!

We're always looking for competent people. If you are a well skilled technician, customer service or

sales person, don't hesitate to contact us or send your resume to: career@ncabgroup.com

Subjects we have covered earlier

Do read our earlier newsletters. You will find them all on our website, www.ncabgroup.com/newsroom/

» Reliable PCBs

2019 05 27 | NEWSLETTER 2 2019

» The electronics industry in Europe

2019 03 18 | NEWSLETTER 1 2019

» The PCB Industry in the United States

2018 12 14 | NEWSLETTER 4 2018

» More advanced boards and shorter product life cycles

2018 10 23 | NEWSLETTER 3 2018

» A better future

2018 06 18 | NEWSLETTER 2 2018

» Factory management

2018 04 12 | NEWSLETTER 1 2018

Are we taking up the wrong subjects?

We are always looking for interesting subjects that we could take a more in depth look at.

If there is something you would like to learn more about, or perhaps you would like to comment on anything we have written, do get in touch with us and tell us more.

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