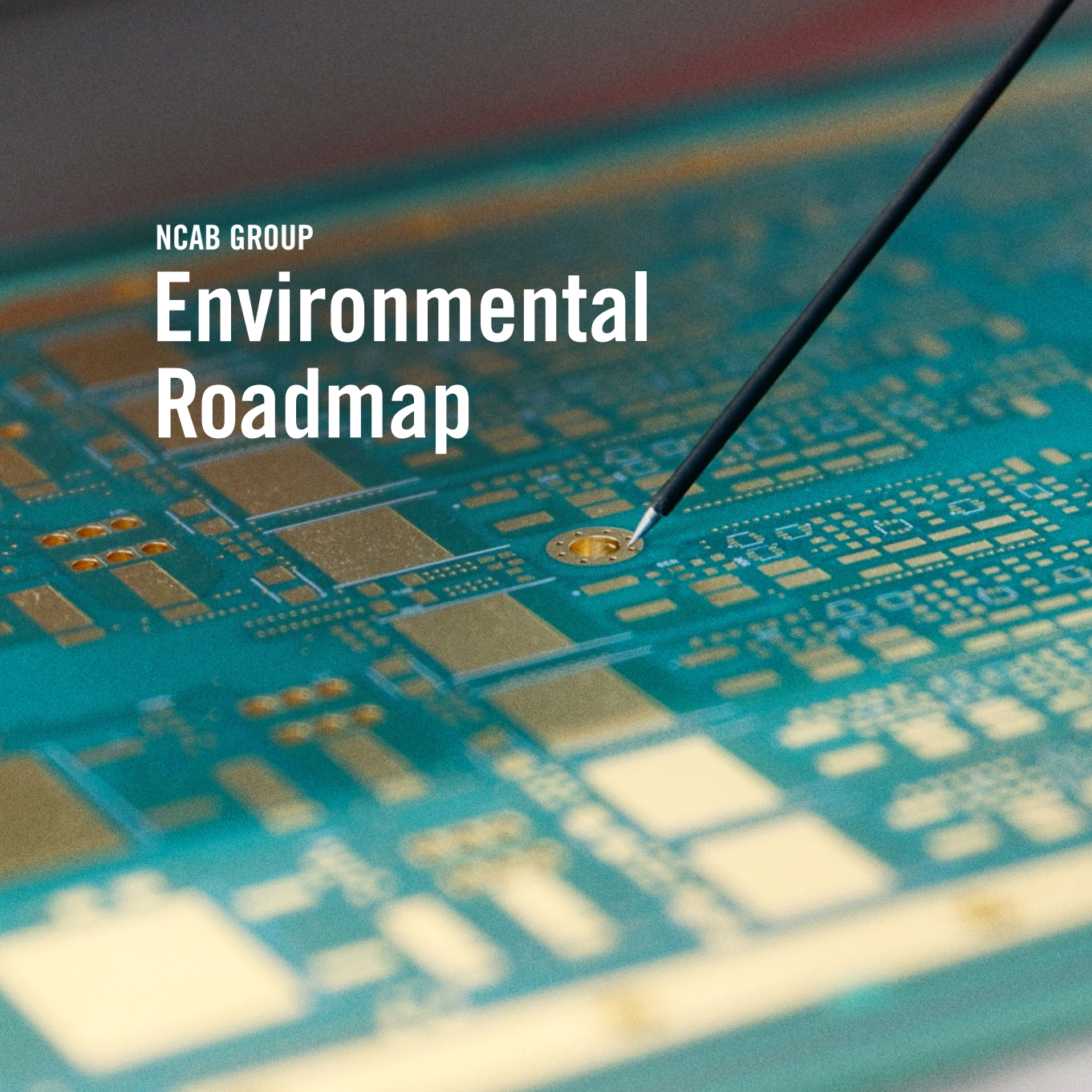


NCAB GROUP

Environmental Roadmap

Reducing our emissions with 50%

– Together we are driving the industry in a greener direction

We are facing massive challenges to protect our climate and our nature. On the one hand, PCBs are one of the key components of the green energy transition the world is currently undergoing. But on the other hand, the production of printed circuit boards has an impact on the environment with a lot of complex challenges to solve.

At NCAB Group, we strive to be a catalyst for a more sustainable PCB and manufacturing. Our goal is to ensure that our PCBs are produced in a way that minimizes the total environmental impact. Our overall climate impact goal is:

– Reduce our Greenhouse Gas emission intensity with 50% by 2030 (Scope 1-3). Baseline year 2021 (28.7 tCO2/MSEK).

We recognize that there is much work to be done in the industry to reduce the resource requirements of PCB production. We cannot reach this goal all by ourselves – we strongly believe in the power of collective action. Only by joining forces with our suppliers, customers, and fellow PCB companies can positive change occur. We have identified what we believe are the most important areas – renewable energy sources, efficient use of energy and water, minimizing material impact, and greener transportation – for the coming years and where we have the power to make an impact, PCB by PCB.

Fossil-free energy solutions

One of the biggest contributors to emissions is the energy consumption in our partner factories. Since 2022, we have mapped out what type of energy sources are used in factories. We strive towards a higher use of renewable energy and using less energy per PCB.

GOING FORWARD

We are shifting to factories and source factories with high usage of fossil-free energy.

All our main factories must have a plan to reduce emissions.

We will increase the percentage of fossil-free energy in our main factories (40% 2025)

We will have 100% renewable energy use in our offices and internal warehouses by 2030. (56% 2025)

Efficient use of water

Water is a major commodity used in PCB production. Fresh water consumption is a recent focus area, where data from factories is being collected. The internal recycling in our main factories varies between 4-80%. The aim is to clean and reuse as much water as possible to minimize the use of fresh water consumption.

GOING FORWARD

All our main factories must have a water efficiency plan to reduce water consumption.

All our main factories using closed-loop water systems or plan to implement.

Minimize material impact

Material consumption, primarily in PCB production, with different interlinked materials in combination with several chemical processes has a big environmental impact. Here, all involved parties can contribute and collaborate with a higher awareness: from a lean PCB design, optimized material selection and panel yield, and efficient production processes with minimum waste and scrap, all the way to recycling materials aimed at circularity.

GOING FORWARD

We support and advice our customers in optimizing PCB design for manufacturing, which minimizes scrap and resources used.

Our R&D projects are exploring more environmentally friendly material and technologies (UHDI, additive manufacturing).

We are optimizing the manufacturing process for high yield to reduce the environmental footprint.

Greener transportation

Transportation of PCBs is the second biggest contributor to our emissions. Sea and train freight generally have a much lower carbon footprint compared to air and road freight, resulting in significantly lower greenhouse gas emissions per shipment. Business travel and commuting within the NCAB Group also have an impact on our emissions.

GOING FORWARD

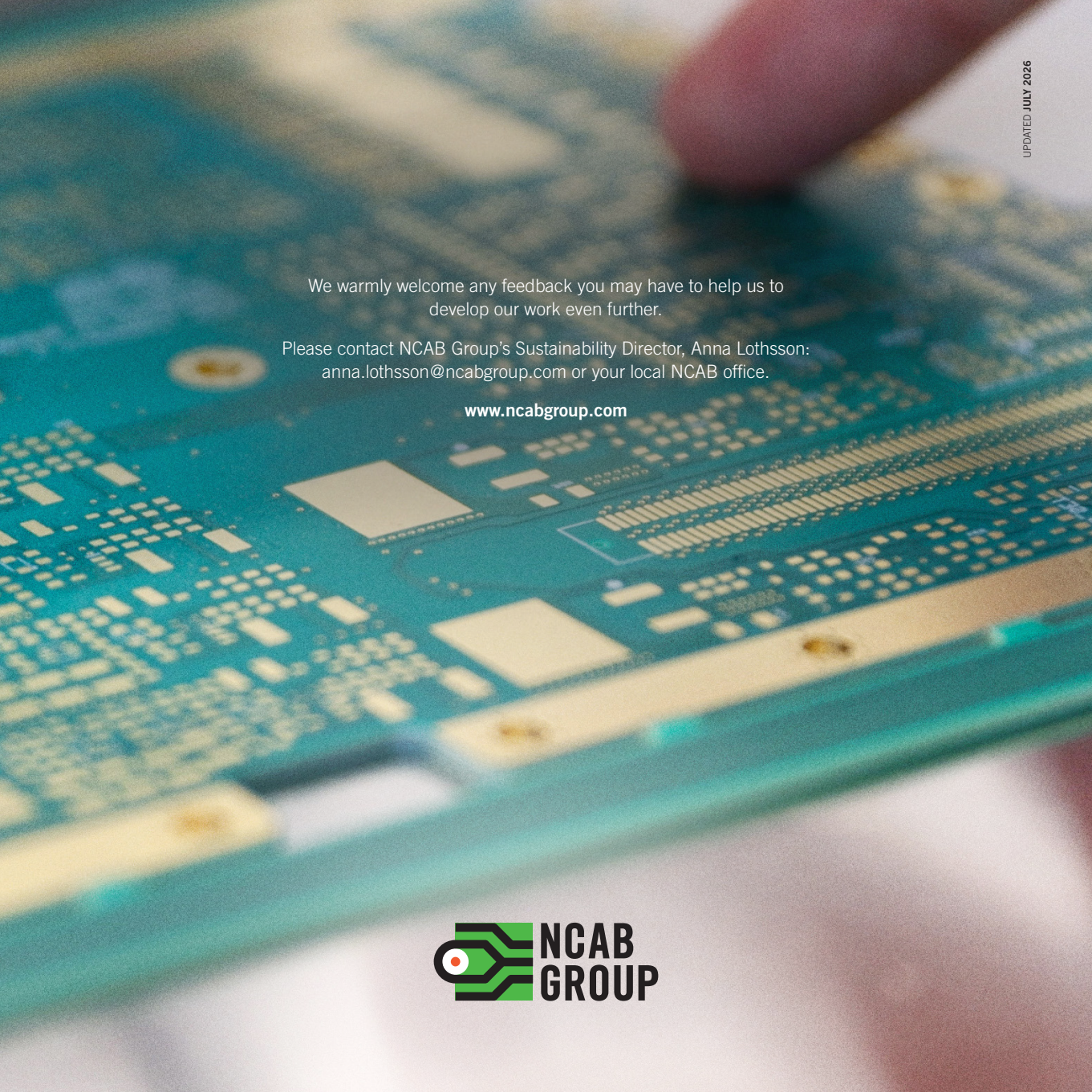
We promote and encourage our customers to choose low emission freight options that align with their logistics needs.

We work with forwarders with ambitious reduction targets, focusing on fleet efficiency, optimizing routes, consolidation shipment.

We are evaluating fuel alternatives like SAF (Sustainable Aviation Fuel).

We will optimize our packaging from a material, circularity, and weight perspective.

We will reduce our emissions from PCB transportation by 50% by 2030.



UPDATED **JULY 2026**

We warmly welcome any feedback you may have to help us to develop our work even further.

Please contact NCAB Group's Sustainability Director, Anna Lothsson: anna.lothsson@ncabgroup.com or your local NCAB office.

www.ncabgroup.com

NCAB GROUP