# TAKING LEAPS TOWARDS A SUSTAINABLE ENVIRONMENT

Hands-on actions and goals





For over eight decades, we have worked diligently towards our purpose of rethinking solutions to save lives and improve patient care.

At the same time, we always act responsibly towards our colleagues, our business partners and the planet on which we all live.

Britt Meelby Jensen, Ambu CEO



## WE CARE ABOUT THE ENVIRONMENT



As a signatory to the UN Global Compact, Ambu supports its ten principles for human rights, labour rights, the environment and anti-corruption, and we contribute to the UN Sustainable Development Goals (SDGs).

Our main contributions in the area of environment relate to the following four SDGs.



Ambu medical devices inherently contribute to good health and well-being. With this in mind, we continually evaluate the substances used to improve product performance and consider if and how they affect human health and the environment. The completion of the phasing out of harmful phthalates in our products produced since 2019/20 is an example of our long-term efforts in this area.



procurement.



Through our energy efficiency activities and our engagement with the Science Based Targets initiative, we will increase our use of renewable electricity and thereby combat climate change and support affordable and clean energy.

We contribute to responsible consumption and production by monitoring and reducing our energy and water consumption, minimising waste and focusing on sustainable

## **IMPROVED RATINGS**

Our environmental targets are directly linked to the UN SDGs mentioned on the previous page. Our improvements have been driven by a number of continually monitored environmental and climate indicators, which have helped us assess our own performance and have guided our work with suppliers during the total life cycle of products.

We continuously strive to improve our performance and engage in dialogue with stakeholders on how we manage environmental, social and governance (ESG) risks and opportunities.

In order to be transparent and facilitate improvement, we are assessed and rated by the independent ESG organisations, MSCi, Systainanalytics and CDP, according to our exposure to ESG risks.



### Sustainalytics: Improved from High to Medium risk

Rates how well we manage ESG risks relative to peers. Risk rating goes from negligible, low, medium, high, severe.



### MSCI: Maintained AA rating

For the second year in a row, we received an AA environmental, social and governance rating based on our commitment to safety and quality, and our efforts to reduce carbon emissions.



### CDP: Improved from B- to B

Despite increasingly stringent criteria in 2020/21, we improved our management level score in climate change from B- to B, signifying a level of action in line with the Paris Agreement.

## **OUR SUSTAINABILITY STRATEGY**

Our sustainability strategy focuses on two key areas: circular products and packaging, and responsible operations. Circular products and packaging are key to reducing the environmental impact of our products. Here, we are aiming at releasing pvc-free products, using bioplastics and partnering with customers and other stakeholders on recycling programs. With regard to operations, we are working towards reducing our carbon emissions with an ambitious commitment to approaching net-zero (delete emissions) in collaboration with suppliers and other partners.













100% recyclable, reusable or compostable packaging applied

by 2025\* \*if solutions and/or technology exist

**ON TRACK** 



Work towards reducing our carbon emissions by 50% by 2025, compared to 2019 baseline

**ON TRACK** 



## **DEVELOPING SUSTAINABLE PRODUCTS**

From raw material extractions to disposal, the choices we make throughout the life cycle of our products not only affect our own operations, but also our suppliers and customers.

We are therefore focused on improving the sustainability of our products by minimising their impact on the environment and, if possible, contributing to the circular economy.

	SHORT-TO- MEDIUM TERM
DESIGN	Reduce material use Eliminate use of PVC
PRODUCTION	Prevent plastic pellet loss Via Operation Clean Sweep program Minimise carbon emission Energy efficiency measures & renewable energy production Reduce packaging material Identify & eliminate unnecessary iter
END-OF-USE	Contribute to recycling ecosystem In collaboration with the Plastic Band social enterprise Incineration & energy recovery Take-back program (US) Recycling Take-back pilot program (DE)



## **DESIGN & PRODUCTION**

### FOCUS ON HIGH IMPACT AREAS

At Ambu, we offer single-use products for the benefit of patient safety while, at the same time, contributing to the circular economy (a system that is restorative or regenerative by intention and design). However, this contribution does not come in the form of reusable products, but rather, in prolonging the lifetime of the material used in our single-use products. Initiatives include refurbishment, upgrades, recycling and other alternatives.

### **FOCUS AREAS**



### HEALTHY SUBSTANCES

$\frown$

### **CIRCULAR PACKAGING DESIGN**

L-T



### MATERIALS INNOVATION

	_

### MANUFACTURING CASCADES

and water from the side streams of our

### **CIRCULAR PRODUCT DESIGN**



### SYSTEM INNOVATION

### **ENVIRONMENTAL PARTNERSHIPS**

Ambu has partnered with Operation Clean Sweep® because we recognise the importance of keeping plastic pellets out of the environment.

S-M-T

Operation Clean Sweep

### **OPERATION CLEAN SWEEP®**

Signing with the international program commits Ambu to handle plastic pellets, flakes and powders that materialise in our manufacturing facilities with the care they deserve, so they do not end up in nature or waterways.

### FACTS:

- Pellet spills can occur at all stages along the plastics value chain.
- Stages include production, handling, transportation, conversion and recycling.
- The number of research reports of wildlife ingesting plastic items is increasing.



## **END-OF-USE**

### HOW WE OFFSET AND TAKE BACK PLASTIC WASTE



### TAKE-BACK PROGRAMS

As we work towards recycling, we are determined to finding solutions for efficient take-back systems and recycling methods together with partners in our key regional markets. These initiatives move us away from landfills and towards incineration that can transform our products from waste into energy.

Ambu has partnered with Sharps Compliance who facilitate a take-back solution for Ambu single-use endoscopes, and we are in the process of setting up a similar take-back and recycling pilot project in Germany.

**Waste conversion:** In the US, plastics are treated in the Sharps Compliance patented waste conversion process to generate electricity. (The metals are recycled.)

Through the Sharps partnership, we have collected 4.7% of the endoscopes we sold in the US during 2021/22 (twice the amount collected in 2020/21) and generated 13 MWh of electricity, which is the annual average energy consumption of almost eight persons.

**Incineration:** In Italy, we have initiated a new pilot program together with EcoEridania, which will work with select customers to collect and incinerate Ambu single-use endoscopes with energy recovery.

**Recycling:** In Germany, we initiated a pilot project for take-back and recycling of aScope<sup>™</sup> 4 Broncho.



S-M-T

## A PLASTIC-NEUTRAL PARTNERSHIP WITH PLASTIC BANK<sup>®</sup>

Plastic Bank<sup>®</sup> is an organisation that builds ethical recycling ecosystems and reprocesses the materials for reintroduction into the global manufacturing supply chain. Ambu will prevent over 100 tons of plastic from entering the ocean in partnership with Plastic Bank<sup>®</sup>.

### FACTS:

- Collectors in coastal communities gather plastic waste that otherwise would have ended up in the ocean in exchange for a premium.
- The quantity collected will correspond to the plastic used in all of the Ambu single-use aScope products in EMEA and Latin America throughout the year.
- Plastic Bank's blockchain platform, Alchemy™, ensures that the amount of plastic collected is transparent and traceable.

## THE BIG PICTURE REGARDING SINGLE-USE AND THE ENVIRONMENT

## THREE FACTS ABOUT SINGLE-USE ENDOSCOPES AND THE ENVIRONMENT

- 1. The main challenge: Rules for handling medical devices. The EU Waste Directive states that in order for the recycling process to be safe for medical devices that come in contact with bodily fluids, the risk of infection must be removed. We are currently assessing how to safely decontaminate our devices while ensuring that the transportation and decontamination does not emit more  $CO_2$  than is saved by recycling.
- 2. The promise: 85% can be recycled. A recyclability analysis of aScope 4 Broncho showed that theoretically this endoscope can be safely collected and disassembled and more than 85% of its weight can be recycled.
- 3. The current situation: Single-use vs. reusable endoscopes. A growing number of studies have mapped the environmental impact of reusable vs single-use products. Due to personal protective equipment, pre-cleaning tools and detergents used during reprocessing, the indication is that reusable endoscopes are associated with the same or a higher level of material and energy consumption and CO<sub>2</sub> emissions as Ambu<sup>®</sup> aScope<sup>™</sup> single-use scopes.<sup>1, 2,3</sup>

### How these facts add up

With the facts above in mind, we continue to advocate for single-use products in order to stop cross-contamination of patients, while at the same time, working vigorously to reduce the environmental impact of our products.

<sup>1</sup>Davis NF, McGrath S, Quinlan M, Jack G, Lawrentschuk N, Bolton DM. Carbon Footprint in Flexible Ureteroscopy: A Comparative Study on the Environmental Impact of Reusable and Single-Use Ureteroscopes. J Endourol. 2018 Mar;32(3):214-217. doi: 10.1089/end.2018.0001. Epub 2018 Feb 21. PMID: 29373918.

<sup>2</sup>Sørensen B. L. and Grüttner H. Comparative Study on Environmental Impacts of Reusable and Single-Use Bronchoscopes. AJEP, 2018; 7(4) 55-62.

<sup>3</sup>Baboudjian Et al. Life Cycle Assessment of Reusable and Disposable Cystoscopes: A Path to Greener Urological Procedures. Eur Urol Focus. 2022 Dec



## REDUCING CARBON EMISSIONS ACROSS OUR VALUE CHAIN

In august 2021, we signed a letter of commitment to the Science Based Targets initiative (SBTi), which commits us to set carbon emission targets to meet the goals of the Paris Agreement.

We have committed to a 1.5° science-based reduction target. In other words, as a company we will have to reduce carbon emissions across our entire value chain, corresponding to what is needed to limit a global temperature rise to 1.5°C above pre-industrial levels.

### WE HAVE EMPLOYED A THREE-STEP STRATEGY



Purchase Renewable Energy Certificates (RECs) with focus on new installations and suppliers that offer the ability to expand renewable energy production sites. Establish Power Purchase Agreements (PPAs) in the countries where we have production facilities in order to ensure the expansion of renewable energy production.

management

### SOURCES OF CO2 EMISSIONS AT OUR OWN OPERATIONS

formulation

extraction

Some emissions are under our direct control, like company cars and production site fuel emissions. In other areas, such as purchased utilities, we only have indirect control. However, we are determined to continue to improve with a strong focus on production, which accounts for 81% of our overall carbon emissions.

& product assembly



### CO2 PER MANUFACTURED PRODUCT

As the chart below indicates, we have reduced our CO2 emissions in 2021/22 compared to the previous year. This is attributable to purchasing renewable energy certificates and a decrease in emissions at production sites and headquarters where changing to LED lights, reducing the operating time of ventilation systems, replacing machinery and the use of solar panels contributed to the decrease.

### Tonnes CO2e per tonnes manufactured







Find out more about our environmental standpoint https://www.ambu.com/about/sustainability/ourwork/working-with-sustainability

### Ambu FOREVER FORWARD

Ambu A/S Baltorpbakken 13 2750 Ballerup Denmark +45 72 25 20 00 ambu.com