

# **Environmental Manifesto**

## Sustainable? We are by nature!

Our work is shaped by our proximity to the natural world, as we are producing a natural product made of pure spring water and sustainable fibres. Hahnemühle have been manufacturing premium papers with an uninterrupted tradition since the founding year 1584. Our inimitable paper production site has been in the same place for over 400 years which is located in a landscape conservation area today.

## Environmental and climate protection are basics; biodiversity and the circular economy are now the order of the day

Sustainability has been a long-standing tradition at Hahnemühle for centuries. It all began with recycled clothing fibres to make paper in the medieval period. We meet today's challenges with fully recyclable papers, innovative tree-free papers or cascade fibre feedstock as raw material and resource-saving production methods.

We are certified for all our sustainability measures and environmentally sensitive actions according to the ISO 14001 guideline for environmental management. Our performance is audited annually, the certification is renewed every 3 years, thus proving long-term achievements and corporate commitments. Our highest quality, environmental and social guidelines are additionally verified using external sustainability assessments by EcoVadis and Sedex.

#### We are pioneering and market-leading in the paper industry

We are deeply rooted in a conservational tradition, on the way to a climate-neutral future and circular economy. Hahnemühle's measures for future sustainability are listed here in our Environmental Manifesto in detail:

#### Hahnemühle uses pure spring water since 1584

At the foot of the Solling, Hahnemühle has been producing the finest artist's papers with pure spring water for more than four centuries. The pure spring water from Hahnemühle's own artesian wells is just « borrowed » from nature. With a closed water cycle, the water needs no treatment prior to and after production, is reused several times and fed into the nearby river Ilme at the end – free from chemical cleaning agents, biocides and preservatives. The sole production site in Germany is located in an official landscape conservation area nowadays. Accordingly, Hahnemühle's paper production must be environmentally friendly, sustainable and strictly controlled.

#### Hahnemühle's sustainable pulps and pulp alternatives

As trees grow and continue to age, the more CO2 they absorb from the atmosphere. Hahnemühle only uses primary paper pulp that comes from sustainable and FSC- or PEFC certified wood plantations, where for every tree harvested, 3 -4 trees are replanted. No tropical rainforest in South America is destroyed either. The cellulose from eucalyptus is planted and extracted in certified plantations. The cotton rag fibres (linters) used by Hahnemühle are fine fibres that cling to the seed of the cotton plant and occur as a by-product of the textile and oil industries (food oil).

#### Hahnemühle's tree-free Natural Line paper family is growing

Hahnemühle has been producing high quality artist papers from innovative, rapidly renewable plant fibres since 2008. The Hahnemühle Bamboo paper was and is the pioneer. In addition, Hahnemühle re-invented hemp fibres and uses agave and Sugar <u>Cane</u> (Bagasse) fibres for painting and drawing papers as well as digital fineart printing papers. Digital printable hemp paper for books and brochures also comes from Hahnemühle. All these fibres grow quickly, require no pesticides and little water for cultivation. All plants produce considerable biomass (with a quicker turnaround time than trees), which binds a lot of CO2 and make them carbon neutral.

#### All Hahnemühle papers are vegan

As early as 1965, Hahnemühle was the first paper manufacturer worldwide to produce exclusively <u>vegan</u> papers. What does this mean? Animal glues made of gelatine or substrates of animal origin are banned from Hahnemühle papers. Hahnemühle papers contain glue based on a synthetic compound. It is biodegradable, contains no genetically modified organisms, harmful or toxic substances. It is even approved by international regulatory authorities for use in food contact papers.

# Hahnemühle products are designed for a circular economy in cradle-to-cradle approach

Hahnemühle papers are made of natural resources only, which means they are perfectly and fully recyclable. Digital FineArt or artist papers made by Hahnemühle are the best manifestations of circular economy attributes and capabilities. As the paper cycle is carbon neutral, recycling keeps the carbon locked up for longer and conserves resources. Additionally, Hahnemühle joints collaborations with universities, start-ups and the paper industry's very own fibre innovation center to qualify further plant-based fibres for paper production. Those fibres are by-products, leftovers or cascade used fibres which fulfil the cradle-to-cradle approach and highest longevity criteria for archival fine art papers.

#### Hahnemühle PE-free Photo Paper for a world with less plastic

Hahnemühle is revolutionizing the Photo Paper market by launching the world's first PE-free photo paper. A global market of 50 million square meter per year or the equivalent of wrapping Paris' Arc de Triumph 2000 times. Hahnemühle Sustainable Photo Satin is the alternative to PE-based inkjet photo papers without bound plastic components. The newly developed paper with its bio inkjet barrier coating is free of plastic composites, is FSC® certified and 100% recyclable via the wastepaper cycle. The paper uses a bio-based barrier coating on the front and backside which replaces extruded waterproofing (resin) PE (polyethylene) barrier films that are typically merged to the paper. "Normal" RC (resin-coated) photo papers have to be removed from collected paper waste due to the inferior repulpability of their plastic film layers. Hahnemühle Sustainable Photo has been tested under lab conditions and has zero plastic detected. This paper is currently a first in the industry and demonstrates Hahnemühle's continual efforts to reduce the environmental footprint of its products.

#### Hahnemühle papers are highly resistant to ageing

What is the most sustainable paper? The one which stands the test of time! Hahnemühle papers last for generations as they meet the high requirements of ISO standard 9706 for <u>ageing resistance</u> of paper and extreme lightfastness. In combination with museum conditions, archival and acid-free artist materials such as ink and paints, artworks will last for hundreds of years.

#### Hahnemühle recycles in its own production process

Recycling at Hahnemühle starts in paper production, where the paper mill recycles its high-quality production offcuts back into the production cycle. Primary fibres are reused and are utilized in a cascade manner.

## Hahnemühle is on its way to becoming a climate neutral paper manufacturer

According to the Greenhouse Gas Protocol Hahnemühle is currently implementing a certified system to measure and improve its corporate carbon footprint and become a Net Zero company. What is achieved so far? Energy used for manufacturing comes exclusively from 100% renewable wind, water and solar energy. Employing a certified system to improve energy efficiency, all energy data is recorded, evaluated and continuously reduced in a professional and traceable manner. Hahnemühle uses the exhaust heat from the paper machines to warm the production site and office building. Currently, the company is transitioning its small fleet of vehicles to alternative drives and offers job bikes to its employees.

#### Hahnemühle prints catalogues and brochures on its own Hemp paper

Saving resources and energy, significantly reducing the carbon footprint - that's why Hahnemühle prints all marketing materials on its own Hybrid Hemp paper in print-ondemand. With its own climate-neutral paper, Hahnemühle is a pioneer in using less tree-based paper. In addition, print-on-demand saves printing ink, energy and transport routes as well as wastepaper. Hahnemühle Hybrid Hemp is the sustainable paper for environmentally conscious print products in inkjet, digital and analogue offset printing.

#### Hahnemühle holds ISO14001 certification for environmental management

Hahnemühle meets and exceeds the highest standards of environmental protection laws and guidelines. The company is certified for all sustainability measures and environmentally sensitive actions. Manufacturing according to the <u>ISO</u> <u>14001</u> guideline for environmental management is part of Hahnemühle's journey to a carbon neutral future and circular economy which only uses resources within planetary boundaries.

#### Hahnemühle uses environmentally friendly packaging

The certified longevity of the premium papers is a top priority for Hahnemühle as manufacturer and for customers. The packaging is not tolerated to have a negative impact on the papers. Therefore, all packaging materials must meet the highest standards and are tested for this. Hahnemühle is researching alternative packaging and - where possible - uses material that has already been recycled. Cardboard tubes for papers in reels and packaging cartons are made of recycled paper, annually saving more than 200 tonnes of primary resources or 20 tonnes of greenhouse gas emissions. The filling material for transport boxes is composed of recycled paper or corn chips from 100% compostable corn starch. Adhesive tapes and delivery note envelopes are made of paper to reduce plastic. Machine stretch films used for wrapping pallets have been changed to a product made of 60 % recycled plastic content.

#### Hahnemühle papers are shipped sustainably and climate-neutral

Hahnemühle's central logistics hub is in Göttingen, in southern Lower Saxony not far from our production site. The logistics provider supports our climate protection efforts with carbon neutral or carbon compensated transport. We bundle our shipments to more than 130 countries in order to make the best use of our means of transport and - where possible - rely on climate-neutral shipping. The majority of Hahnemühle products are transported by ship or rail.

## Sustainable and environmentally sensitive production for best Hahnemühlequality

Innovative raw materials, resource-saving processes and high ethical standards in production are key values and success factors for Hahnemühle. From verifying the quality of the raw materials to carrying out stringent controls in the supply chain and the AI-controlled production process provide the certainty that all papers meet Hahnemühle's high standards. Hahnemühle is proud to be certified according to the highest German quality, environmental and social standards and by external sustainability ratings such as EcoVadis or Sedex.

#### Hahnemühle's Green Rooster - giving back to nature and society

The red rooster is Hahnemühle's well-known trademark. With the Green Rooster initiative, which is unique in the industry, the company supports environmental stewardship projects and social initiatives on a regional, national, and international scale. A share of the profits from Hahnemühle's Natural Line papers contribute to environmental and climate protection efforts. By supporting reforestation, species protection, ocean clean-up projects, biodiversity conservation campaigns and educational programmes, Hahnemühle contributes wholeheartedly to its corporate social responsibility. These efforts align with the United Nations' 17 sustainability goals and the Gold Standard for environmental protection projects.

