



xpore

**SUSTAINABILITY
WHITE PAPER**

ADVENTURE FOR LIFE

About Us

Xpore is a pioneer of technological solutions for the textile industry. Created around the “Adventure for Life” mantra, we’re on a mission to advance high-performance textile solutions in an eco-sustainable way.

Every aspect of our proprietary products and manufacturing processes is built on robust, sustainable principles. Our nanoporous membrane, adhesives, and lamination technologies are non-toxic and free of PFCs and solvents - a perfect alternative to existing ePTFE and PU-based products.

Our commitment to sustainability defines our engagement with global customers, supply-chain partners, and local communities. We find common ground with all stakeholders to solve shared environmental challenges and reshape conventional practices in the textile industry.

Xpore’s technology can be paired with any fabric. From membrane creation, lamination, and textile manufacturing to quality control, we offer both off-the-shelf and tailor-made solutions to fulfill our customers’ design and branding requirements every step of the way.



Our Commitment

Xpore never stops in pursuing sustainability and environmental protection.

That's why Xpore only develops innovative fabric technologies with high performance and sustainable value.

To minimize the impact to the earth, we make commitments to our earth and environment:

REDUCE CARBON FOOTPRINT

We decrease 50% of carbon dioxide emissions per yard every year.

REDUCE RESOURCE WASTE

By 2024, Xpore is committed to using fabrics made of 100% recycled material, providing eco-friendly waterproof breathable textile solutions to the market.

Let Xpore Become Your Top Gear in the Race to Zero.



Sustainable Manufacturing Process

Eco-sustainability is Xpore's religion and mission.

Xpore believes that it's not necessary to sacrifice the environment or harm the planet during any production.

From polymer extrusion, membrane extension, adhesive production, to textile lamination and the final product - eco-garment, all steps follow the environmental standards strictly. We also ensure that the whole manufacturing process is PFC-free and solvent free.

We believe a good product should find the perfect balance between external beauty (appearance and trend) and inner beauty (performance and sustainability).

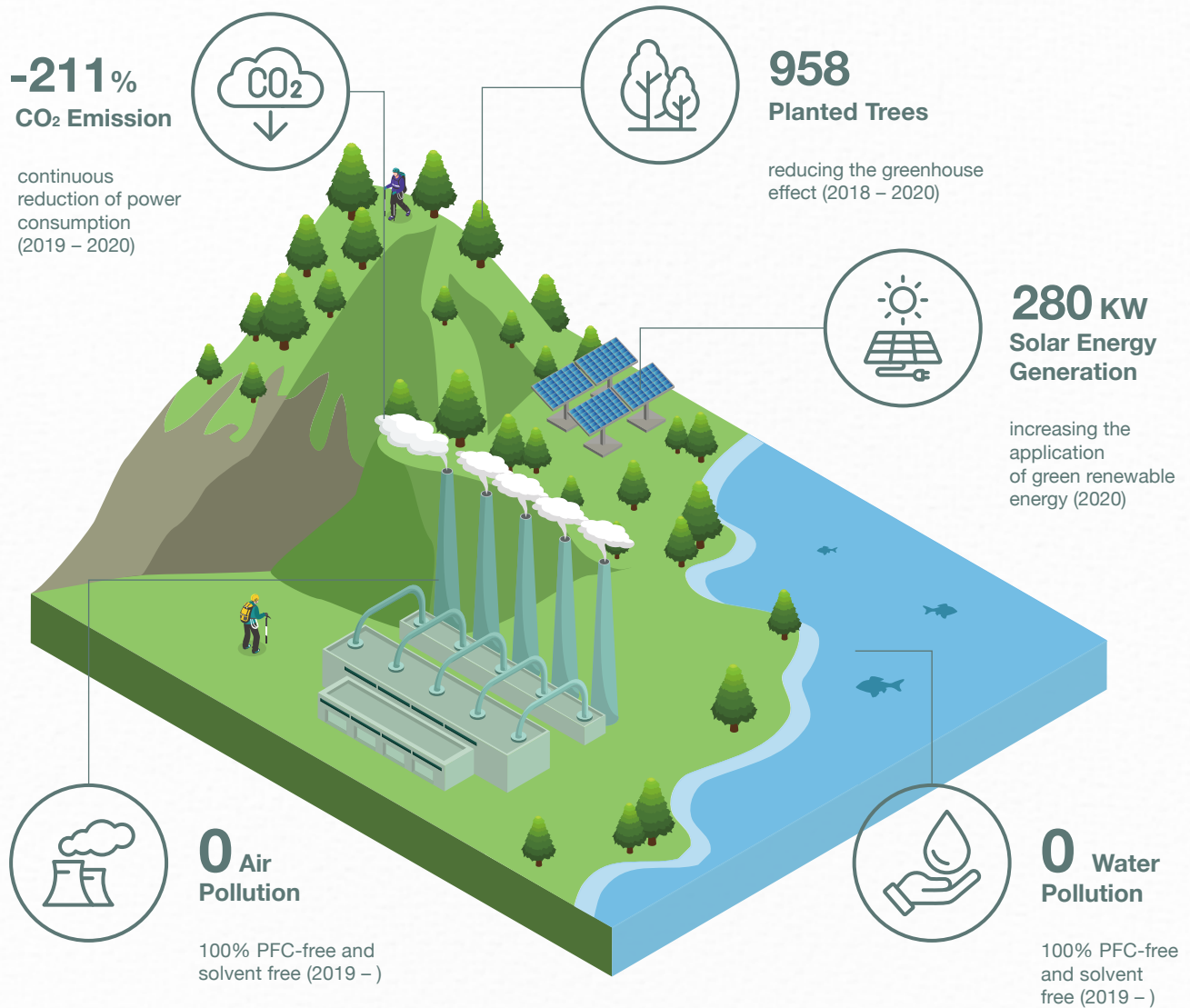
After all, there's only one earth left, and it's everyone's responsibility to save this beautiful planet from certain death.

Xpore has been doing it since the very first day, how about you?



Our Footprint

No Compromise in Earth Protection.



Why does Xpore dare to say that it provides eco-friendly waterproof breathable textile solutions?

First of all, no air pollutants or wastewater are produced during the production of textile. Second, our factory was designed to be a “Green Ecological Restoration Park”, which is a great habitat of bees and endangered tree frogs. In addition, we generate solar energy by ourselves to reduce CO₂ emissions.

Since the earth's resources are not inexhaustible, Xpore also gives our best to minimize the waste of resources. For example, we have significantly reduced electricity consumption and are dedicated to waste recycling and disposal.

Xpore sets a pretty high standard of environment protection to offer eco-friendly performance textile solutions to our sustainability-conscious partners.

Eco-friendly Materials

With global climate change taking center stage, Xpore continues to develop innovative fabric technologies with high-performance and sustainable values, aiming to reduce as many carbon footprints as possible and minimize the impacts to the environment and the earth.

Thus, we've launched 3 categories of textiles:

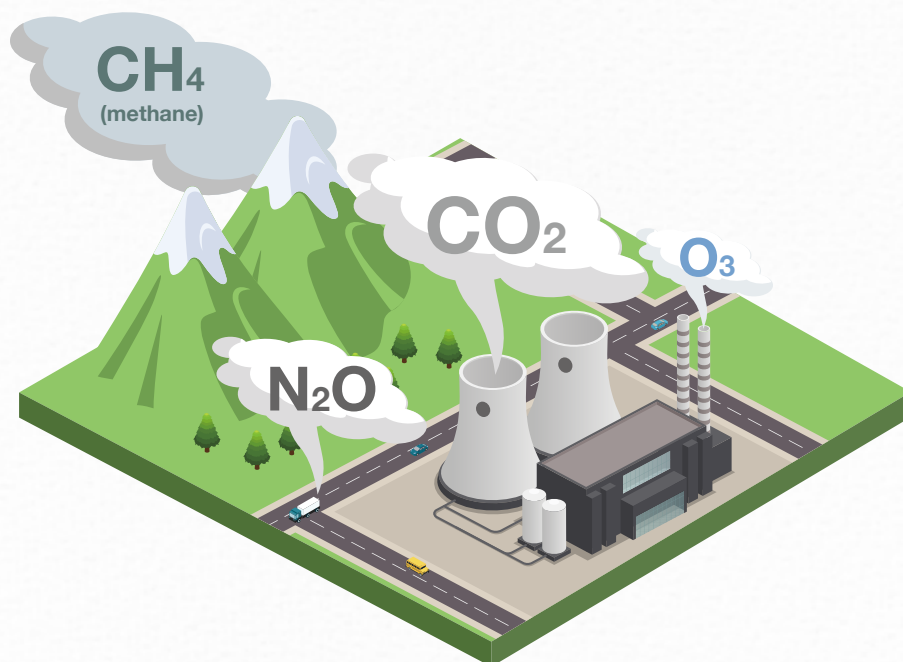
Bio & Natural, Mono Material, and Recycled.

BIO & NATURAL

Bio Nylon

According to the World Biogas Association, abating methane has become a focal point in global warming, since its greenhouse effect is 25 times that of carbon dioxide. The main component in biogas is methane. By burning biogas, the amount of methane can be reduced. In addition, it only releases water and carbon dioxide, which have a lower greenhouse effect than methane.

At Xpore, we use biogas as energy resource to produce several fabrics with carbon dioxide emissions three times lower than other fabrics.



Bio-PET

PET (polyethylene terephthalate) belongs to the polyester family, which is also petroleum-based. To avoid the consumption of petrochemical raw materials and the pollution during the manufacturing process, the renewable bio-PET is produced from plants, such as sugar cane, corn, rice straw.

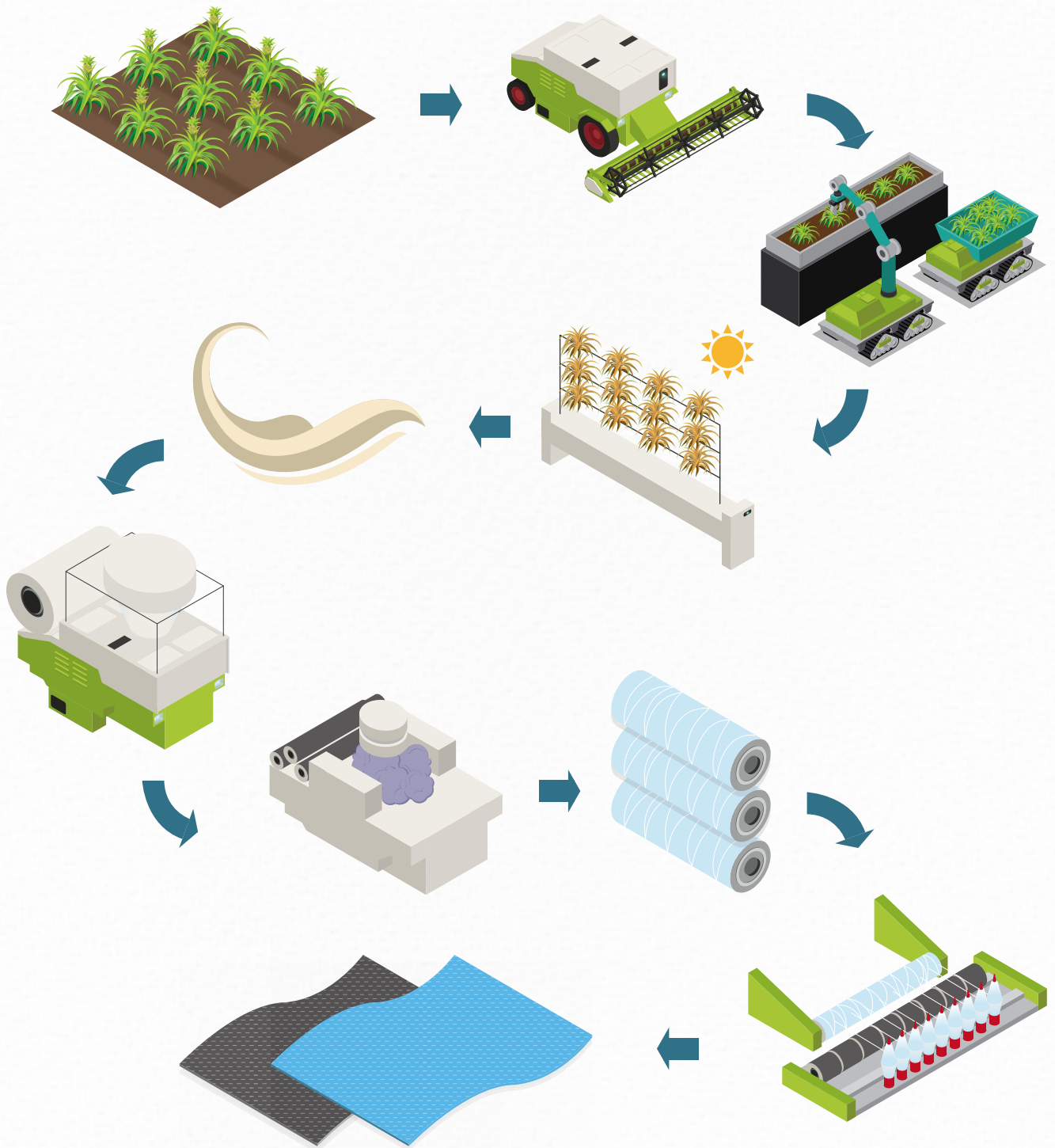
Bio-PET reduced 25% carbon emission, in comparison to virgin polyester.

Natural fibers

Besides bio-based material, we also provide textiles made of natural fibers, which are friendly to both humans and the environment, such as cotton, wool, Abaca, pineapple leaf fiber, etc.

Abaca is a fiber made from the long slim cells of leaves, originally made for paper production, with extraordinary resistance to saltwater. Pineapple leaf fiber is made from pineapple leaf waste. It reduces energy consumption (compared to polyester) and produces net-zero carbon emissions.

Production Process of Pineapple Leaf Fibers (PALFs)



MONO MATERIAL

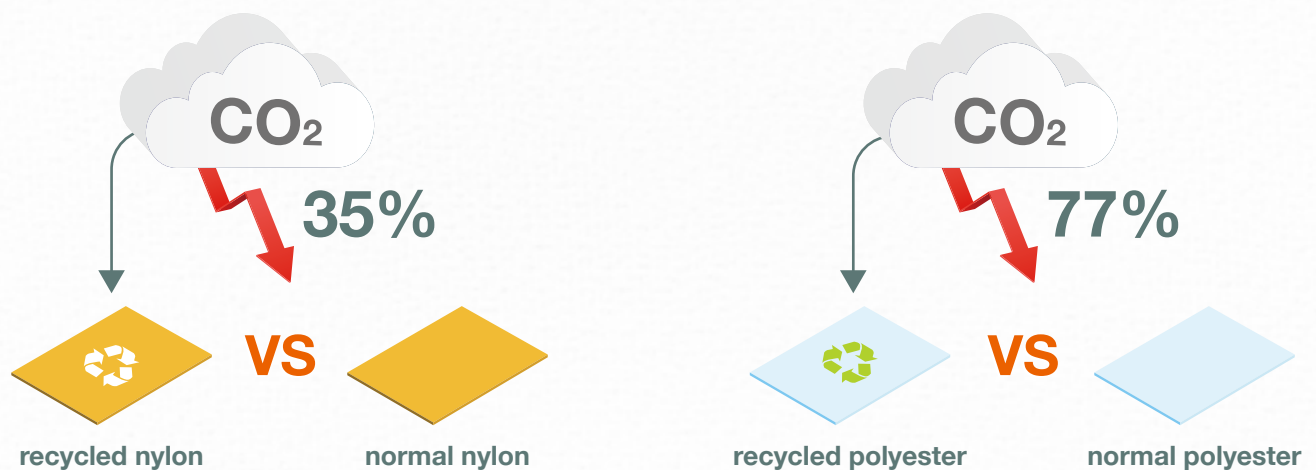
Since its establishment, Xpore has endeavored to provide environmentally friendly performance textiles. Now we have taken a bigger stride forward on textile recycling, circular economy, and life cycle assessment by developing performance textiles with mono-material - mono polyolefin compounds, offering the outdoor industry an innovative, eco-friendly, waterproof, and breathable performance textile solution.



RECYCLED

As its literal meaning, we reuse the waste and turn it into recycled material for our textiles. This recycled category is mainly composed of textiles made of recycled Nylon and recycled Polyester. To compare virgin polyester, recycled polyester can reduce 77% of the carbon emission.

Likewise, recycled Nylon 35% to compare with the virgin Nylon. In other words, the textiles made of recycled material reduce the amount of waste and carbon footprints.

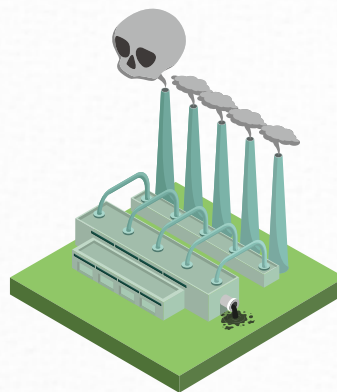


Why PFC-free?

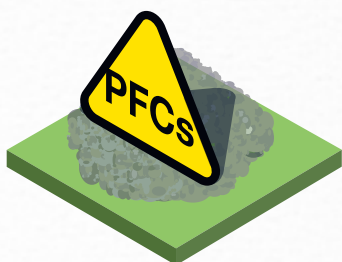
Before reaching the conclusion, let's check the effects of these "forever" chemical PFCs (Perfluorocarbons).



It can be easily released and spread out through water or air.



It harms the health of humans and animals.



It pollutes the environment (it even breaks down slowly!)



It can be accumulated and stay in the human body for long periods of time.

You can find PFCs in lots of outdoor gears due to the waterproof function, as well as water and stain repellency.

However, We only provide PFC-free textiles with even better waterproof function and breathability performance.

Since its establishment, Xpore has abandoned ePTFE, a toxic raw material that releases PFCs and other toxic gases after being burned, and widely used in the outdoor industry.

We chose to walk on our lonely and long path.

At the moment, Xpore has become one of the leading suppliers of eco-friendly waterproof breathable textiles in the world, based on our advanced nanoporous membrane technology.

If you're searching for textiles that are both friendly to the human body and the planet, well, what are you still waiting for?

Why Solvent Free?



Textile industry



world's major polluter?



Fashion industry



one of the dirtiest industries?

As a solution provider of these 2 industries, Xpore decided to change things up with unshakable determination from the very beginning.



We not only say no to widely-used PFCs, but also refuse to release or use any solvents during the whole manufacturing process, which harms both the health of the earth, humans, and animals as PFCs.



With sustainability and eco-friendliness as core principles, Xpore's membrane is manufactured through a process that is 100% free of solvents.



Furthermore, Xpore selected environmentally friendly glues with excellent performance in terms of adhesion strength, weather and aging resistance, and won't release harmful substances such as VOCs (volatile organic compounds) to the environment.

Why solvent free? Our motivation can't be much simpler than this: we protect this wonderful world and amazing humans so that we can safeguard people's outdoor adventures and explore wonders alongside them.

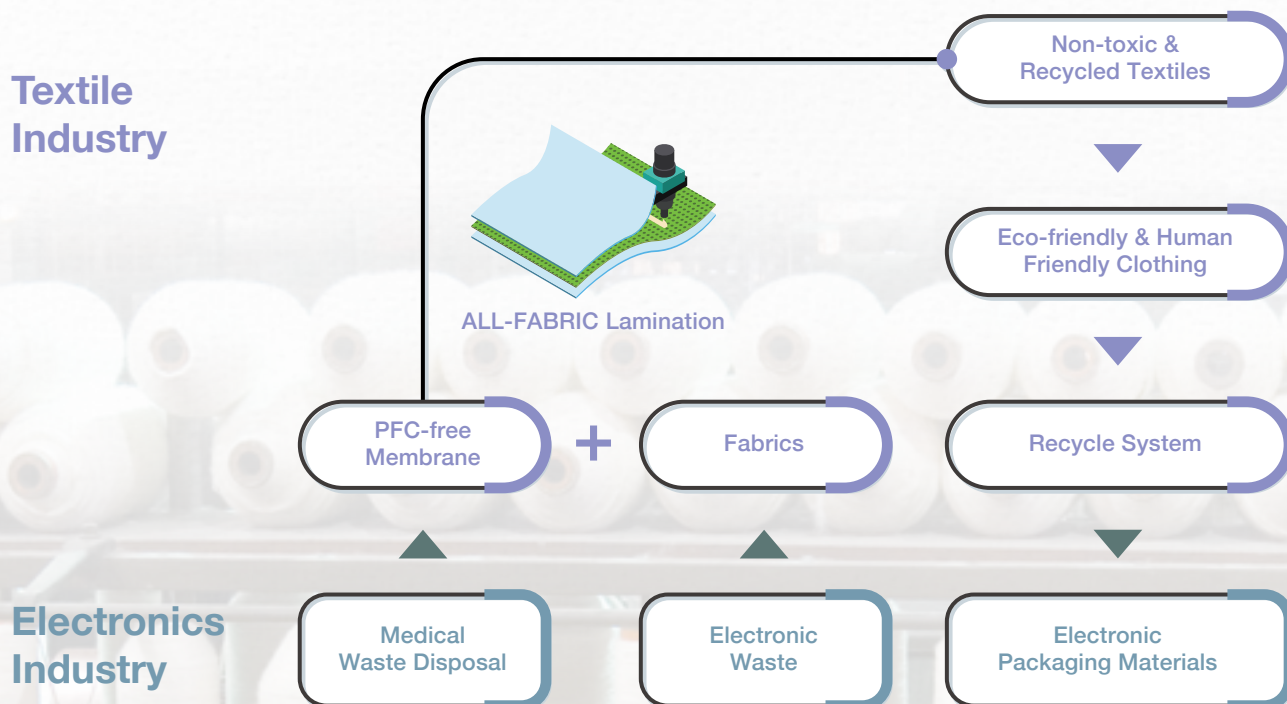
Circular Economy

Rooted from BenQ Materials, a Taiwan-based corporation established in 1998 specializing in materials science applications of the electronics industry, Xpore is dedicated to developing high-performance and sustainable textile solutions for outdoor industry.

Since it is established, Xpore takes sustainability as our mission and responsibility. We' ve been asked a question since day one: "Can the garments made of Xpore textiles be recycled?" To be honest, it' s almost an impossible mission for most of the waterproof breathable fabrics with 3 layer structure. However, where there' s a will, there' s a way. Except for our new try - "Mono-material" , we also found another way out.

We collect the electronics waste and medical waste from our mother company and related branches, and use both physical and chemical recycling methods to crash or melt them. Then they will become the raw material for our textile and membrane. The garments made of Xpore fabrics can be recycled to produce the packaging materials we need for the electronics industry.

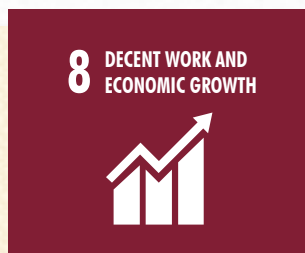
Our final goal is to recycle the garments and use this material to produce another garment, and at the moment it' s still an ongoing project with the top priority of our advanced R&D team. We will share the good news with the public once it has been perfectly achieved!



Decent Work & People First

At Xpore, we always ensure that we align with all aspects of international standards. For instance, following the paragon of our parent company BenQ Materials, we are committed to the 17 Sustainable Development Goals (SDGs) set out by the United Nations.

Regarding SDG Goal 8, “Decent Work and Economic Growth” , Xpore adheres to following guidelines:



8.2 Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors

8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services

8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value

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, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms

Furthermore, Xpore shares the same values as BenQ Materials when it comes to ESG (Environment, Social, and Governance) and we regard employees as our most valuable asset. By providing welfare excellence, work-life balance, diversity and inclusion, and access to healthcare we have created a safe and comfortable working environment with a friendly atmosphere. Our efforts have been recognized by winning the Best Companies to Work For in Asia award.

Recognitions

BLUESIGN



In 2021, Xpore has been recognized as a bluesign® system partner. Bluesign is a sustainability and safety standard of the textile and similar industries with stringent criteria.

There are 3 focuses of bluesign® SYSTEM: People, Environment, and Resource.

People: We ensure our staff work in a safe and ISO 9001 certified factory and working environment. Our products are also non-toxic and human-friendly.



Environment: No air pollutants or wastewater during manufacturing processes. We generate solar energy to reduce CO2 emissions.

Resource: We keep reducing electricity consumption every year and are dedicated to waste recycling and disposal.

GLOBAL RECYCLE STANDARD (GRS)



Xpore keeps striving for environmental protection, reducing resource waste, circular economy, and transforming waste into new products, etc. Thus we're recognized by GRS in 2022.

To be acknowledged by GRS, the product needs to utilize materials that contain at least 20% of recycled fibers and are 100% non-polluted. Also, GRS has enforced strict regulations for production, such as pollution protection, disposal, and chemical limitations.

Xpore has adopted GRS regulations by using recycled materials, reducing the waste of resources, and lowering the possible omitted toxics when producing clothing.

OEKO-TEX



OEKO-TEX® Standard 100 test is one of the top labels for textiles tested for harmful substances. Xpore agrees with this philosophy. In turn, we will continue to develop safe, high performance fabrics.

We treat every customer like family. Providing the best quality products, our fabrics are all 100% PFC-free, solvent free, guaranteeing it's not harmful to your body.

We've applied for the OEKO-TEX certification, yet it takes a long time to finish the approval process. We will announce it once we get the official certification in 2023.

Why Xpore?

At Xpore we have positioned ourselves as “a pioneer of technology-driven solutions for the textile industry” .

We believe Sustainability, People, and Innovation takes precedence over everything else.



SUSTAINABLE BY PRACTICE

- 100% PFC-free and Solvent Free
- Eco-friendly and Pollution-free Manufacturing Processes
- Generate solar energy to reduce CO2 emissions
- Factory Designed as a “Green Ecological Restoration Park”
- Moving Forward with a Circular Economy



TOGETHER, EXPLORING FORWARD

- Employee Field Tests
- Focus on User Experiences
- Collaborations with Outdoor Experts



BIG ON INNOVATION

- Pioneer in Nanoporous Membrane Technology
- Self-innovated Solvent Free Glue
- Outstanding & Experienced R&D Team
- Extraordinary Waterproof and Breathable Performance

Xpore will continue offering eco-friendly performance textile solutions to our sustainability-conscious partners.

Let Xpore become your top gear in the Race to Zero.

Save the earth for our future generations.

xpore



Website



LinkedIn



Instagram



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