



XEROS TECHNOLOGIES

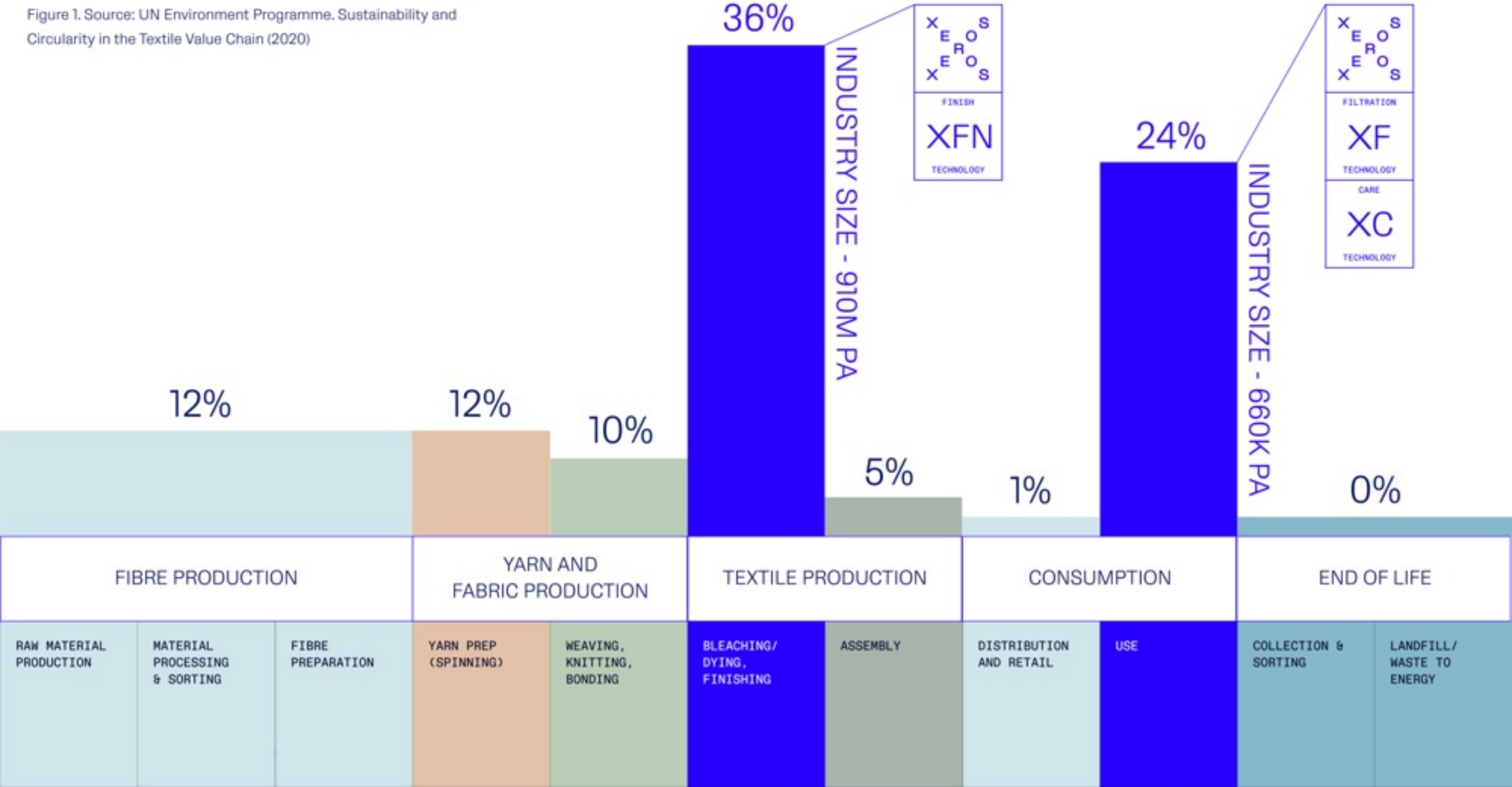


Xeros license sustainable proprietary technology solutions for the laundry and apparel industries.

These deliver energy, water and pollution reductions in the production and care phase of clothing manufacture and consumer use.

Climate impact across the global apparel value chain

Figure 1. Source: UN Environment Programme. Sustainability and Circularity in the Textile Value Chain (2020)



STRATEGY FOR MARKET PENETRATION

01.

LICENSING PARTNERSHIPS

Commercial deals in place with IFB for Domestic and Commercial laundry, and Ramsons and KRM/Yilmak for garment finishing equipment. Significant engagement with other leading global OEMs across all of Xeros' technology platforms.

02.

DIRECT ENGAGEMENT

Xeros is working with major fashion and consumer brands to showcase the benefits of and build the market for our technologies.

03.

DRIVE INFLUENCE

As a global leader in microplastic expertise, Xeros works with legislators and NGOs to show the scale of the environmental challenge and demonstrate the effectiveness of our solutions.

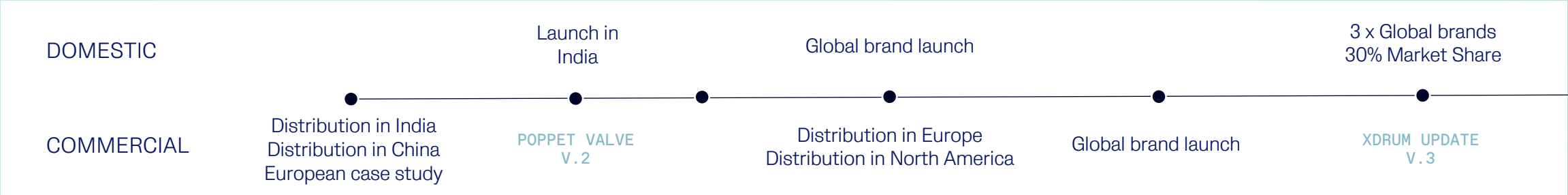
STRATEGY ROADMAP

TODAY

18 - 36 MONTHS

3 YEARS+

CARE



FILTRATION



FINISH



R&D



INVESTMENT CASE

01.

PROPRIETARY TECHNOLOGY

Compelling commercial advantages in the form of reduced water consumption (50%) power (50%) and chemistry (50%+) offering substantial savings.

Market leading microplastic capture (99% 3rd party verified)

38 patent families created to enable the licensing of intellectual property to global partners.

02.

LICENSING MODEL

High-margin licensing business model.

8 x Key licence agreements in place including IFB, Ramsons & Yilmak.

In direct, meaningful conversations with 4 of the top 10 global washing machine manufacturers. Licenses in place with 3 x major European component manufacturers.

03.

GLOBAL MARKET SOLUTION

Environmental drivers Xeros technology can save more than 50% of water used in apparel washing process

Growing awareness of microfibre pollution. Legislation in France comes into force in 2025. Similar legislative considerations currently in the UK, EU and California.

Water stress problems in the countries where garments are processed.

04.

CURRENT FINANCIALS

Operational cash outflow of £3m in H1 2023, reduced from £4m in H1 2024.

Adjusted EBITDA loss for H1 2023 of £2.6m, reduced from £3.9m in H1 2022.

Monthly cash burn expected to be below £500k for the full year 2023.

Month on month cashflow and EBITDA breakeven expected half 2 2024.

HIGHLIGHTS

01. COMMERCIAL

LICENSING AGREEMENTS

3 x New licensing agreements
signed in 2023.

2 x in Filtration

1 x with Market leader in Finish

02. NPD

FILTRATION OFFER EXTENDED

XF³ External filter concept
launched to market at IFA in
Sept 2023 (Europe's premier
consumer electronics fair).

Market leading combination of
costs, performance and
usability.

03. STRUCTURAL

NEW MANAGEMENT TEAM

Following appointment of Neil
Austin as CEO in Aug 2022 a
new management team has
been installed headlined by new
FD and highly experienced CCO
appointment.

04. EFFICIENCIES

COST CONTROL

New licensing & product
development progress made
whilst managing to reduce
running costs.

£2M of annualised cost taken
out of business.

FINANCIAL SUMMARY

01.

CASH

Cash outflow from operations:

H1 2023 £(3.0)m
H1 2022 £(4.0)m

Cash outflow from operations £1m less than prior year following cost reductions and increased contribution from gross margin.

02.

REVENUE

Revenue:

H1 2023 £0.1m
H1 2022 £0.0m

Revenue increased against prior period. H2 2023 expected to be more significant due to the timing of progress by license partners.

03.

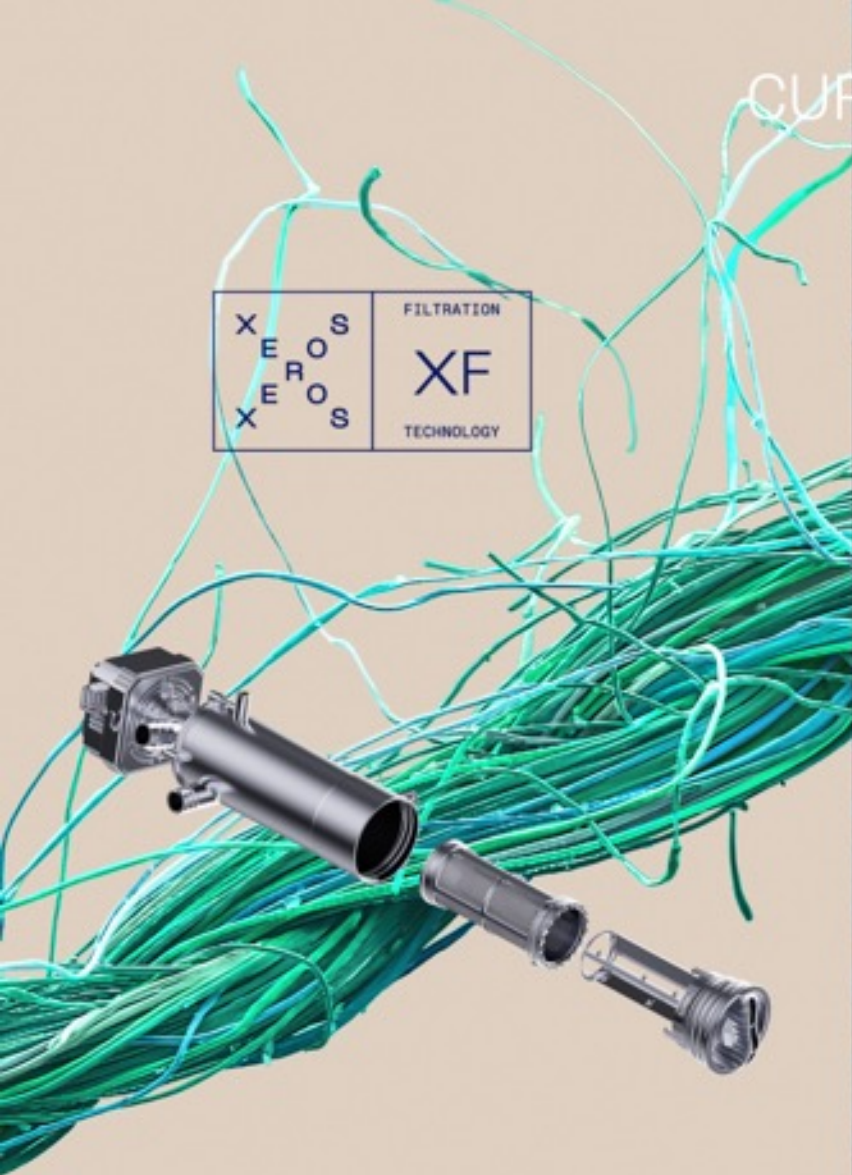
EBITDA

Adjusted EBITDA:

H1 2023 £(2.6)m
H1 2022 (4.2)m

Reductions in operational costs – particularly with regards to headcount and around the timing of costs in relation to the Group's IP portfolio.

CURRENT TECHNOLOGY PLATFORMS



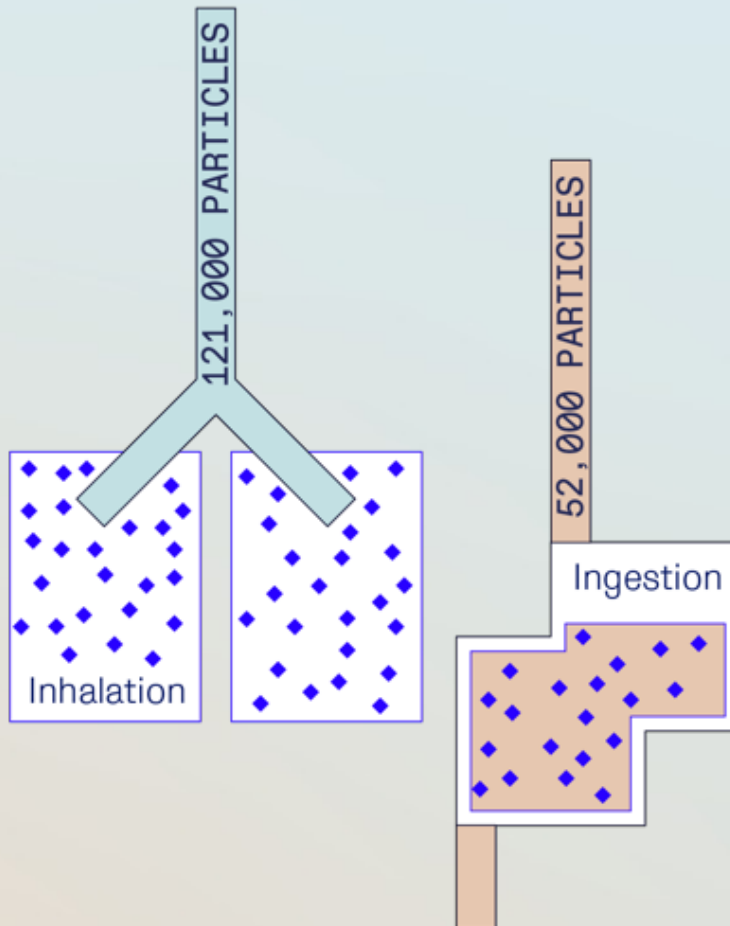


XF FILTRATION

MICROPLASTIC FILTRATION TECHNOLOGY

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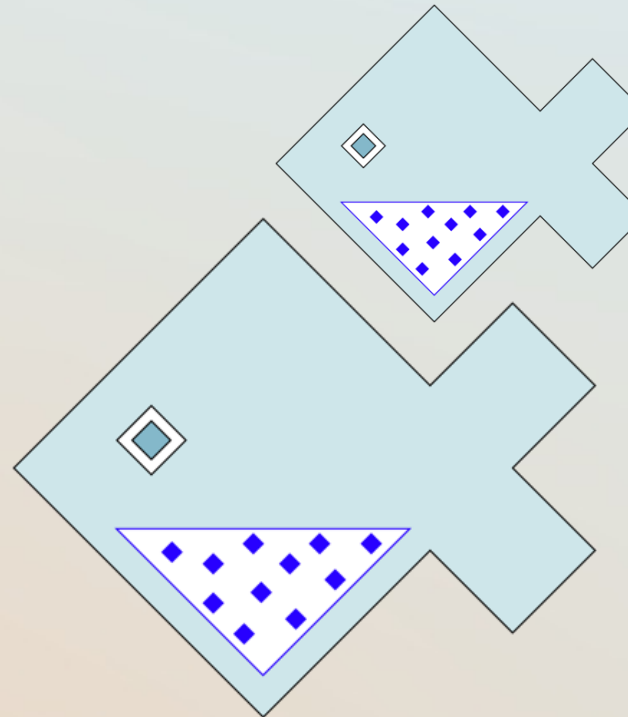
HUMAN IMPACT



Microplastic exposure
for a single person every year¹.

02.

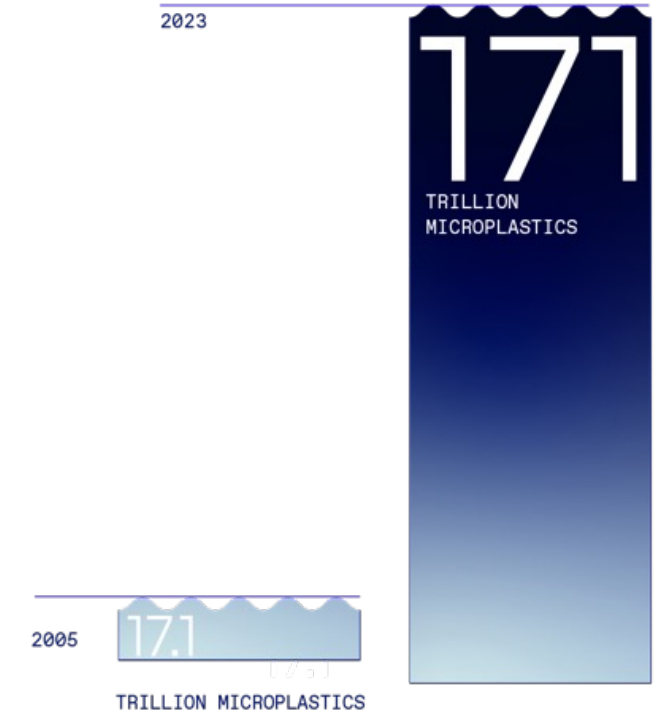
BUSINESS IMPACT



Studies have shown that ingestion of microplastics by fish has the potential to decrease the fish stocks and quality of catch. To reduce these risks, local authorities spend up to 26% of their municipal operating expenditure for waste management cleaning plastic pollution and illegal dumping².

03.

PLANET IMPACT



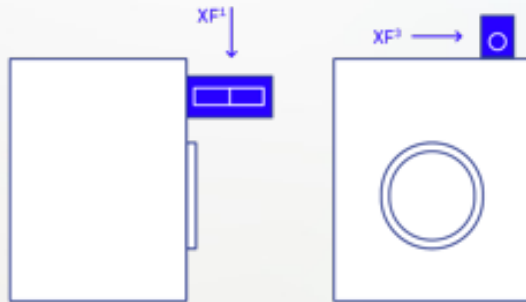
It is reported that microplastic pollution has increased 10-fold since 2005, with over 171 trillion microplastic particles now floating in our oceans.

XFILTER TECHNOLOGY



02.

WHAT IT IS



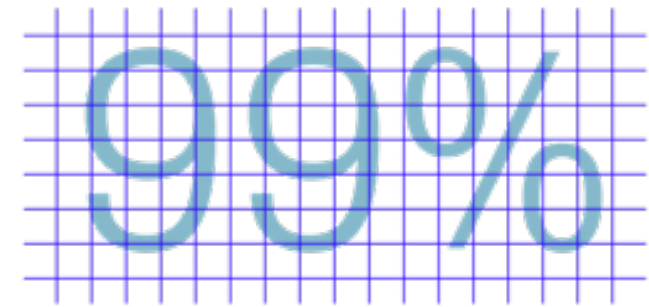
XFilter is a washing machine filtration solution designed to capture the microfibres that our clothes release during a wash.

We offer several filtration products:

XF ¹	Can be integrated into any brand of domestic washing machine during its manufacture
XF ²	Is a stand-alone solution for commercial laundry
XF ³	Is an external filtration solution

03.

WHAT IT DOES



Able to capture over 99% of microplastics.

04.

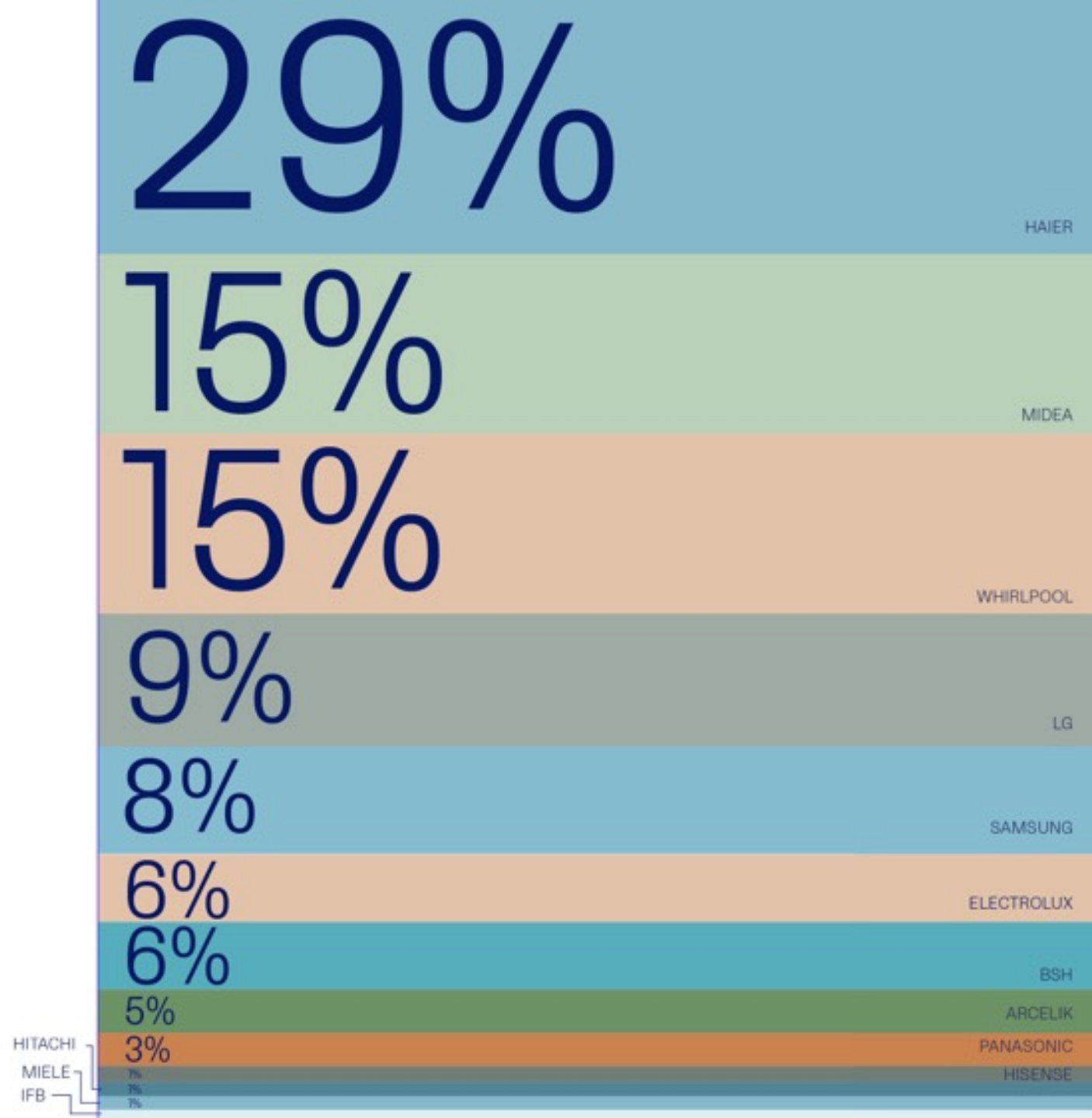
ADDRESSABLE OPPORTUNITY*

XF¹ - £250M PA

XF² - £1B

XF³ - £100M

WE ARE
MARKET READY
AND HAVE ACCESS
TO 99M UNITS³
OF WASHING
MACHINES PER
YEAR VIA THREE
OF THE MAJOR
COMPONENT
MANUFACTURERS



THE OPPORTUNITY TODAY

01.

DRIVING CHANGE THROUGH PARTNERSHIPS



Working in partnership with NGO's, experts, industry and scientists Xeros are sought out as a technology leader in this space.

02.

PRESS

'Move quickly and make small changes:
how to reduce the impact of your polyester clothes'
– Guardian

'Companies race to stem flood of microplastic fibres
into the oceans' – Guardian

'The Company Behind the Fight Against Microplastics'
– WWD

'Microplastics: Laundry filters 'dramatically' reduce
fibres' – Science Focus

THE OPPORTUNITY TOMORROW

01.

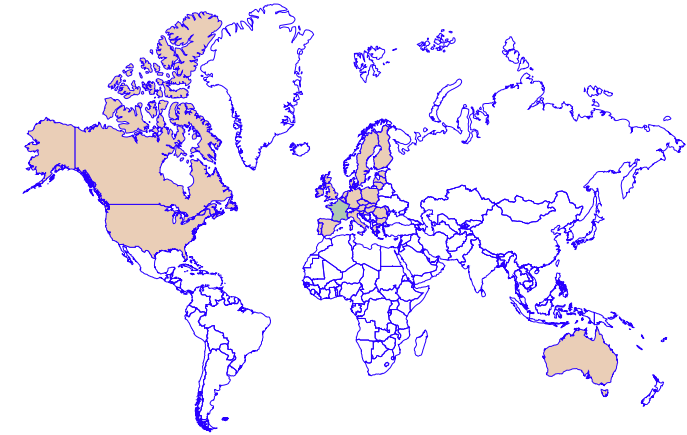
FUTURE GROWTH



An estimated 1.3 million factories around the world are involved in garment supply chains⁴, of which approximately half are involved in the garment-making stage of the supply chain with a potential requirement for filtration, an addressable market of **£1B**.

02.

LEGISLATION



WASHING MACHINE FILTRATION IS ON THE POLITICAL AGENDA

In order to deal with unintended microplastic pollution governments are facing growing pressure to mandate for solutions. France has led the way with washing machine filtration a legal requirement in new machines from January 2025. Similar laws are now being considered in the EU, California, the UK, and Canada.

LEGISLATION STATUS GLOBALLY

REGION	UNIT SALES PA (K)	INSTALL BASE (K)	KEY MARKETS	LEGISLATION STATUS	DEADLINE
WESTERN EUROPE	23,055	276,660	FRANCE	PASSED	2025
			UK	PENDING	2027
			GERMANY	PENDING	2027
			ITALY	PENDING	2027
			IBERIA	PENDING	2027
EASTERN EUROPE	7,527	71,507	RUSSIA	NONE	
			POLAND	NONE	
NORTH AMERICA	19,966	159,728	USA	PENDING	2029
LATIN AMERICA	6,321	56,889	BRAZIL	NONE	
MIDDLE EAST & AFRICA	3,102	27,918	SOUTH AFRICA	NONE	
ASIA PACIFIC	41,411	414,110	CHINA	NONE	
			INDIA	NONE	
AUSTRALASIA	1,210	14,520	AUSTRALIA	PENDING	2030
GLOBAL	102,592	1,021,332			



XFN FINISH

FABRIC FINISHING TECHNOLOGY

THE FASHION INDUSTRY IS REPORTEDLY
RESPONSIBLE FOR AROUND 4% OF TOTAL
GLOBAL CO₂e EMISSIONS – THE EQUIVALENT
OF FRANCE, GERMANY AND THE UK COMBINED⁵

ONE GARMENT FINISHING MACHINE FITTED
WITH XFN TECHNOLOGY SAVES 44 TONNES OF
CO₂e EVERY YEAR

01.

HUMAN IMPACT



Substances used at all stages of the production process often remain in textiles, both intentionally and unintentionally.

This raises concerns due to the adverse effects they can have on people and the environment. Reported impacts range from allergic reactions, to respiratory diseases and increased instances of cancer in humans⁶.

02.

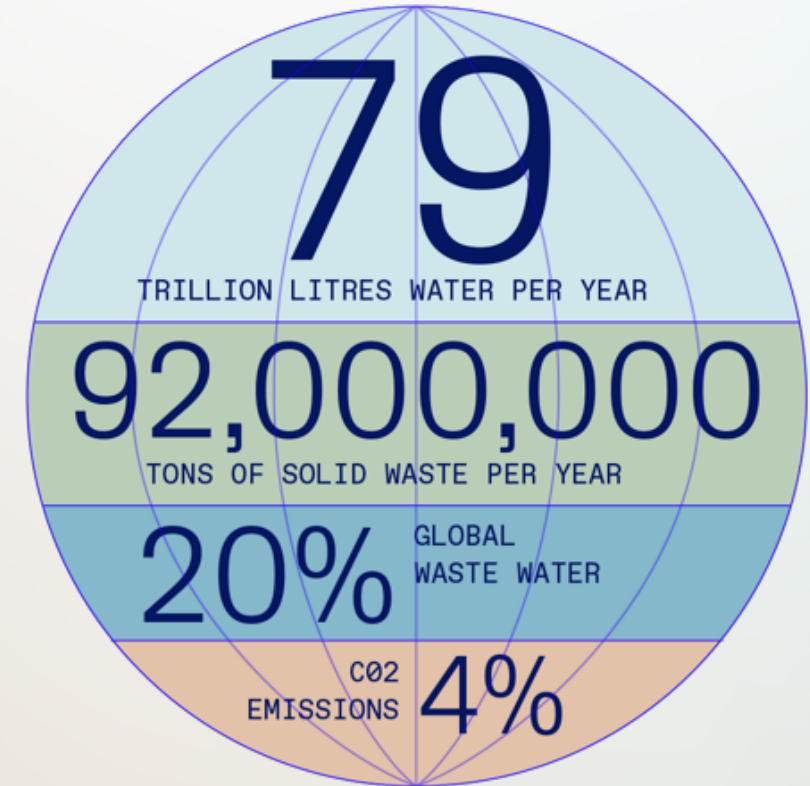
BUSINESS IMPACT

The fashion industry is valued at around USD 2.4 billion globally and directly employs 75 million people throughout its value chain. It is the world's third-largest manufacturing sector⁷ after the automobile and technology industries. 2 billion pairs of jeans are made every year⁸.



03.

PLANET IMPACT



The fashion industry as a whole is reported to be responsible for consuming 79 trillion litres of water per year, producing over 92 million tons of solid waste per year, and contributing up to an estimated 20% of global wastewater⁹ and 4% of CO2 emissions¹⁰.

01.

FINISH TECHNOLOGY

THE OPPORTUNITY TODAY

01.

DENIM STRATEGY AND LEATHER BUSINESS EVIDENCE

In denim finishing Xeros have established their technology into centres of excellence in Turkey, Bangladesh and the UK for regional partner engagement in live production environments.

In 2019 Xeros licensed its leather finishing technology to Qualus, together with the first contract at a tannery in Mexico. The technology is now live and Qualus are processing leather in Mexico, Brazil, India and Vietnam.

02.

PRESS

‘Xeros and Yilmak team up on water-saving finishing technology’
– Sourcing Journal

‘Xeros signs licensing agreement, opening new markets’
– Apparel Resources

‘Xeros signs 10-year deal’
– Ecotextile News

‘ABA group adopts Xeros denim finishing technology’
– Fibre 2 Fashion

‘No-Stone Future - XOrbs distribute enzymes and chemicals evenly to achieve a consistent and reproducible finish’
– Inside Denim



XFN 3D RENDER

02.

WHAT IT IS



Chemicals used in the process escape with wastewater polluting our planet. Today, jeans are still made using pumice stones, which constantly need replacing and create chemically contaminated sludge.

03.

WHAT IT DOES



Our XFN¹ technology uses patented reusable XOrbs to replace pumice, and reduces water and chemistry use by up to 50%.

04.

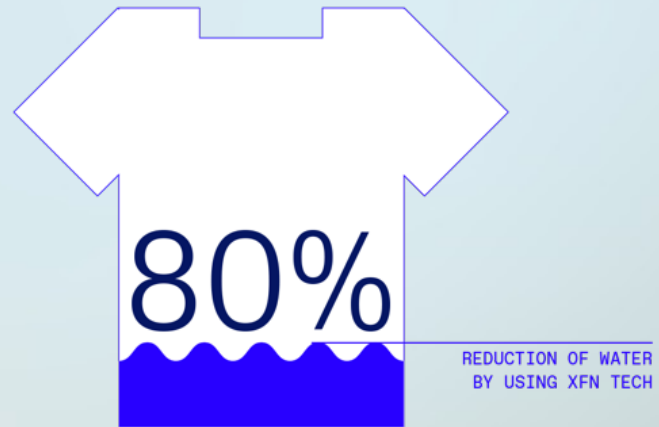
ADDRESSABLE OPPORTUNITY

£132M

THE OPPORTUNITY TOMORROW

01.

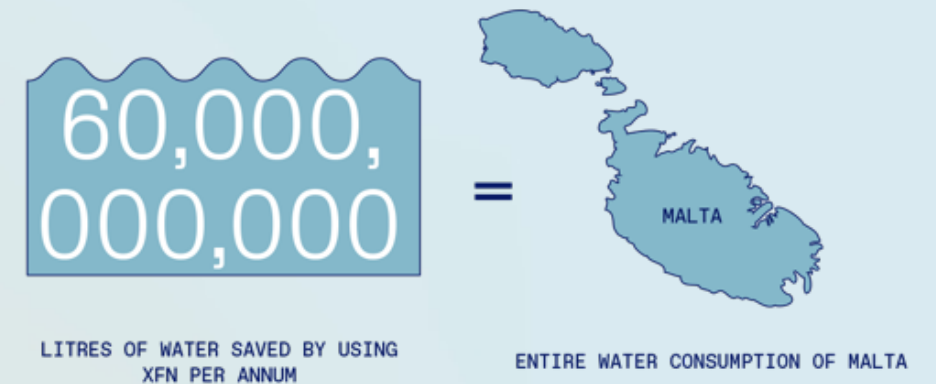
FUTURE PARTNERSHIP BENEFITS



Nearly all garments are washed at the end of the manufacturing process where Xeros technology can cut water consumption by up to 80%. Over 100 billion items of clothing are produced each year.¹¹ Garment dyeing offers an **£66M** addressable market, with garment washing being around **£660m**.

02.

XEROS POTENTIAL SAVINGS



XOrbs can save 50 litres of water for every pair of jeans made, or 60,000,000,000 litres in the jeans manufacturing industry per annum alone. This is equivalent to the entire water consumption of Malta.

The background of the slide is a high-magnification, blue-tinted microscopic image of a fabric's surface. It shows a complex, wavy texture with numerous small, circular features that resemble pores or droplets. A central rectangular area is highlighted with a thin blue border, containing a more detailed view of the fabric's weave.

XC CARE

FABRIC CARE TECHNOLOGY

XEROS' CARE TECHNOLOGY LETS YOUR CLOTHES
LAST MUCH LONGER. EXTENDING THE LIFE OF
CLOTHES BY AN EXTRA NINE MONTHS IS
ESTIMATED TO REDUCE THEIR CARBON, WATER,
AND WASTE FOOTPRINT BY AROUND 20-30%, AND
CUTS THE COST IN RESOURCES USED TO SUPPLY,
LAUNDER AND DISPOSE OF CLOTHING BY 20%.¹²

01.

HUMAN IMPACT



We are buying 60% more clothing than 15 years ago.¹³

02.

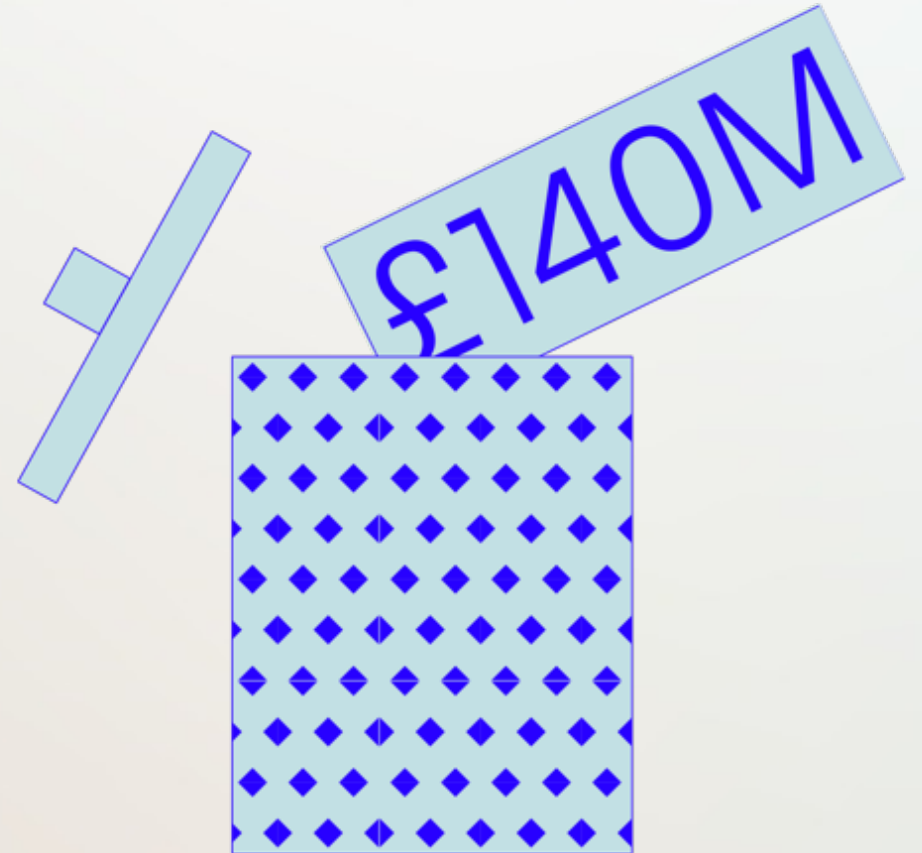
PLANET IMPACT

73% IN LANDFILL

73% of waste clothing is directly landfilled or incinerated.¹⁴

03.

BUSINESS IMPACT



The estimated cost to the UK economy of land-filling clothing and household textiles each year is approximately £82 million.¹⁵
Around 350,000 tonnes of clothes, with an estimated value of £140 million, go to landfill every year in the UK.¹⁶

01.

CARE TECHNOLOGY



02.

WHAT IT IS

Our Care technology uses XOrbs, reusable polymer spheres, to wash and care for clothes. It's scalable from domestic washes to heavy industrial use, and it's designed to save 10s of millions of litres of water everyday.

XC¹ 3D RENDER

03.

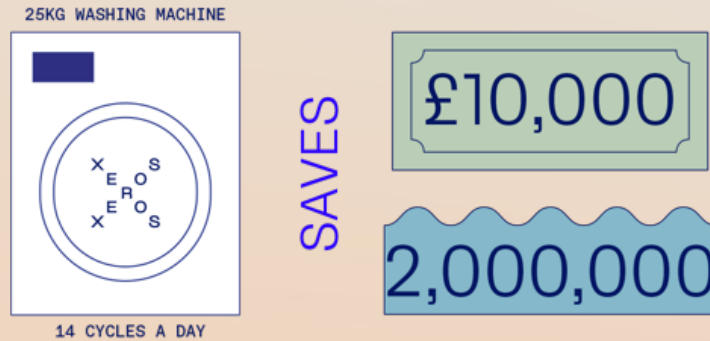
WHAT IT DOES



THE OPPORTUNITY TODAY

01.

COMMERCIAL + DOMESTIC PARTNERSHIPS



Xeros Care technology has been proven in the commercial laundry sector evidenced by Georges, a commercial laundry in France, with 18 Xeros enabled machines across 8 laundry sites caring for the 55,000 uniforms they process for SNCF and Airfrance. The commercial addressable market is approximately £10B or £1B p.a.

In India, Xeros Care technology is now available for use by consumers in homes following the launch of the 11kg semi-professional machine.

02.

PRESS

‘Xeros bead washing machine system set to save water and energy in the home’
– Guardian

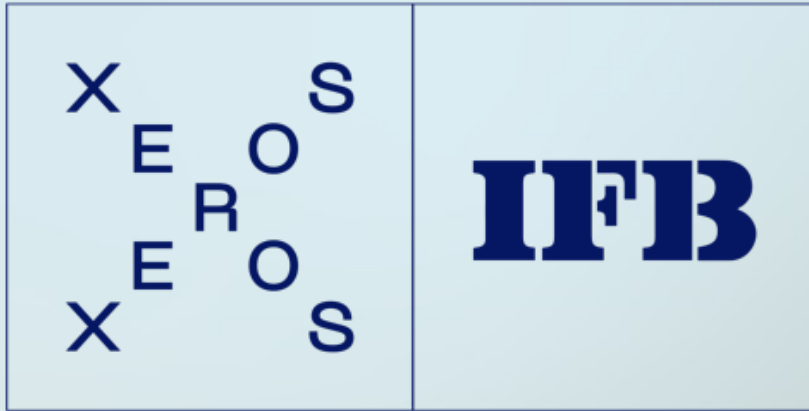
‘The system cleans 25kg of clothes – about 100 shirts – using its bead technology, which cuts down on water and electricity as well as claiming a better standard of cleaning.’
– Guardian

‘The system uses a whopping 80 per cent less water than the most economical conventional washers’
– Science Focus

THE OPPORTUNITY TOMORROW

01.

TECHNOLOGY VALIDATION

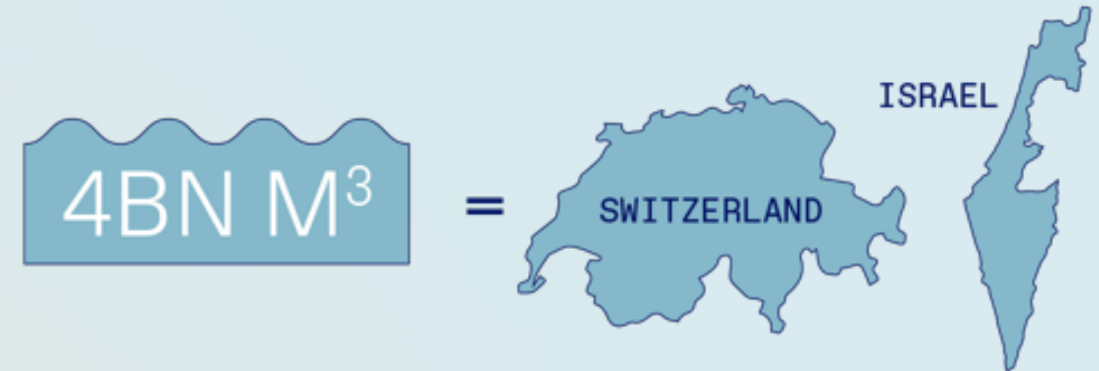


Xeros' launch partner for domestic laundry, IFB, is based in India – the world's largest user of water ranking 13th in the world in terms of baseline water stress. Almost all of the country suffers from “high” or “extremely high” levels of water stress.

The domestic addressable laundry market is approximately £2B.

02.


FUTURE PROCESSES



If all domestic washing machines were Xeros-equipped, we estimate that global water savings could reach 4bn m³ per year, or the total annual water usage of Switzerland and Israel combined.



SUMMARY

A close-up photograph of a welding process. Bright sparks are flying from the point of contact between the welding torch and the metal workpiece. The welder's protective gear, including a helmet and gloves, is partially visible in the background.

01. Market leading technology built by experts in the field

A horizontal band with a textured, paper-like background. The texture is a mix of light and dark grey tones, giving it a fibrous appearance.

02. Lean, highly profitable business model

A photograph of a bird's nest, likely made of twigs and lined with soft, greyish material. Several white, oval-shaped eggs are visible, some in sharp focus and others blurred in the background.

03. Commercial agreements in place

A horizontal band with a blue, textured background that resembles water or a fine mesh. The texture is composed of light and dark blue waves or ripples.

04. Global market growth driven by environmental initiatives and new legislation

A photograph of several vibrant red roses. The petals are tightly packed and show a rich, deep red color. The background is slightly blurred, focusing attention on the roses.

05. Significant IP, in 38 patent families

PROFIT AND LOSS

CASHFLOW STATEMENT

PROFIT AND LOSS

H1 2023

REVENUE	113
COST OF SALES	(28)
GROSS PROFIT	85
ADMINISTRATIVE EXPENSES	(2,791)
ADJUSTED EBITDA	(2,642)
SHARE BASED PAYMENT EXPENSE	9
DEPRECIATION OF TANGIBLE FIXED ASSETS	(73)
OPERATING LOSS	(2,706)
NET FINANCE EXPENSE	(19)
LOSS BEFORE TAXATION	(2,725)
TAXATION	(1)
LOSS AFTER TAX	(2,726)

LOSS PER SHARE (P)

(1.81)

CASHFLOW AND FINANCING

H1 2023

LOSS BEFORE TAX	(2,725)
ADJUSTMENT FOR NON-CASH ITEMS	
DEPRECIATION OF TANGIBLE FIXED ASSETS	73
SHARE BASED PAYMENT	(9)
INCREASE IN INVENTORIES	2
DECREASE IN TRADE AND OTHER RECEIVABLES	130
DECREASE IN TRADE AND OTHER PAYABLES	(379)
FINANCE INCOME	-
FINANCE EXPENSE	19
CASH USED IN OPERATIONS	(2,889)
TAX RECEIPTS	(1)
NET CASH OUTFLOW FROM OPERATIONS	(2,890)

CASHFLOW STATEMENT

CASHFLOW AND FINANCING	2023
INVESTING ACTIVITIES	
FINANCE INCOME	-
FINANCE EXPENSE	(19)
PURCHASE OF PROPERTY, PLANT + EQUIPMENT	(38)
CASH PLACED ON/(REMOVED FROM) DEPOSIT	-
NET CASH INFLOW/(OUTFLOW) FROM INVESTING ACTIVITIES	(57)
FINANCING ACTIVITIES	
PROCEEDS FROM ISSUE OF SHARE CAPITAL, NET OF COSTS	-
PAYMENT OF LEASE LIABILITIES	(31)
NET CASH INFLOW FROM INVESTING ACTIVITIES	(31)
INCREASE/(DECREASE) IN CASH AND CASH EQUIVALENTS	(2,978)
CASH AND CASH EQUIVALENTS AT START OF YEAR	6,465
EFFECT OF EXCHANGE RATE FLUCTUATION ON CASH HELD	7
CASH AND CASH EQUIVALENTS AT END OF YEAR	3,494

SHARE REGISTER

FUND	% VOTING RIGHTS	NUMBER OF SHARES
ENTREPRENEURS FUND LP	23.7%	35,767,534
CANNACORD GENUITY WEALTH MANAGEMENT	14.3%	21,598,119
LOMBARD ODIER INVESTMENT MANAGERS	8.5%	12,893,266
DOWGATE CAPITAL	8.0%	12,142,612
SPREADEX	6.7%	10,093,834
W H SALOMON ESQ	4.3%	6,548,631
HARGREAVES LANSDOWN	3.7%	5,627,187

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TO THE POWER OF CHANGE



SOURCES

1. United Nations Environment Programme (UNEP). From pollution to solution - a global assessment of marine litter and plastic pollution. 2021.
2. A report for WWF by Dalberg. Plastics: The cost to society, the environment and the economy (2021).
3. Euromonitor statistic.
4. Common Objective, Global Garment Manufacturing: Turning Fabric into Fashion.
5. Fashion on climate: How the fashion industry can urgently act to reduce its greenhouse-gas emissions, McKinsey 2020.
6. Ellen MacArthur Foundation, A new textiles economy: redesigning fashion's future. (2017)
7. The World Bank. How much do our wardrobes cost to the environment (2019).
8. Ellen MacArthur Foundation. How redesigning jeans could change the way we think about the fashion industry (2021).
9. Niinimäki et al., 2020; UN Climate Change, (2018)
10. Fashion on climate: How the fashion industry can urgently act to reduce its greenhouse-gas emissions, McKinsey 2020.
11. McKinsey & Company. Style that's sustainable: A new fast-fashion formula (2016).
12. Global Fashion Agenda and Boston Consulting Group, Pulse of the fashion industry (2018), p.4
13. McKinsey & Company. Style that's sustainable: A new fast-fashion formula (2016).
14. Ellen MacArthur Foundation, A new textiles economy: redesigning fashion's future. (2017)
15. Ellen MacArthur Foundation, A new textiles economy: Redesigning fashion's future, (2017), p.20
16. WRAP, 'Valuing our clothes: the evidence base' (2012), p.2