



# Victrex Sustainability & ESG

March 2023

**We Bring Transformational & Sustainable Solutions  
That Address World Material Challenges Every Day**

SHAPING FUTURE PERFORMANCE™





## ENVIRONMENT

### AMBITION FOR NET ZERO CARBON EMISSIONS\*

Minimise use of resources (energy, waste, water) used in our own operations

2022: 35,905 Tonnes

**2030: Net Zero\***

\*scope 1 & 2 emissions ambition

Scope 3 aim to be determined 2023



## GOVERNANCE

ESG Centre of Excellence

- Increase disclosures and reporting
- Further validation of ESG strategy
- Signed up to SBTi Targets



SBTi

### 2030 SUSTAINABILITY VISION

WE BRING TRANSFORMATIONAL & SUSTAINABLE SOLUTIONS THAT ADDRESS WORLD MATERIAL CHALLENGES EVERY DAY

### SUSTAINABLE SOLUTIONS

ENABLE ENVIRONMENTAL & SOCIETAL BENEFITS



Develop and deliver sustainable polymer solutions that provide environmental and societal benefits evidenced by data

2022: 48% of revenue

**2030: Goal of 70% of revenue**

## SOCIAL

HAVE A POSITIVE IMPACT ON THE COMMUNITIES WHERE WE WORK



### STEM INSPIRATION

Science, Technology, Engineering & Maths

Inspire the next generation: increase annual contacts reached

2022: 3,225

**Goal: 2,500**



### COMMUNITY ACTIVITY

Maintain strong community engagement (cumulative hours target)

2022: 10,913

**Goal: 10,000**



### FEMALES IN LEADERSHIP

Enhance diversity, equity & inclusion

2022: 19%

**2030 goal: 40%**

## SAFETY, HEALTH & WELLBEING

Good progress towards achieving a Zero accident & Zero incident culture

**Recordable Frequency Injury Rate** | **Current:** 0.2  
**Goal:** 0.0

## Sustainability Strategy

Aligned to UN Sustainable Development Goals 2030



- Goal of carbon net zero emissions by 2030 (Scope 1 & 2 emissions)
- Increase the use of our sustainable & recyclable products which support CO<sub>2</sub> reduction
- Minimise resources (Carbon, Waste and Water) used in our operations
- Increase employee and community engagement on social responsibility



# STRONG SUSTAINABILITY PROGRESS

Key achievements for FY 2022



## RESOURCE EFFICIENCY

- 100% of UK electricity from renewable sources
- 48% less waste per unit of revenue since 2013 & decreased water by 5% per revenue unit since 2018
- Life Cycle Analysis (LCA) & scope 3 emissions inventory completed



## SUSTAINABLE SOLUTIONS

- 48% of revenues from sustainable products (products offering a quantifiable environmental or societal benefit) and growing
- 89% of R&D project investment focused on sustainable products



## SOCIAL RESPONSIBILITY

- 19% Females in Leadership, up from 10% 2021
- Good progress towards a Zero accident & Zero incident culture, Victrex RIFR (recordable injury frequency rate) 0.2 vs OSHA industry average 1.4.
- 34% increase and record numbers of employee volunteering in community events.

VICTREX SUSTAINABILITY & ESG

# SUSTAINABLE SOLUTIONS



## SUSTAINABLE SOLUTIONS

# ENABLING ENVIRONMENTAL & SOCIETAL BENEFIT FOR OUR CUSTOMERS



### AEROSPACE

## 3x CO<sub>2</sub> saving

... annual sales to Aerospace helps save 3x CO<sub>2</sub> saving vs. Victrex scope 1 & 2 CO<sub>2</sub> emissions\*



### AUTOMOTIVE

## 80,000 tonnes

... annual CO<sub>2</sub> saving in Europe for selected applications\*\*



### ELECTRONICS

## 100,000rpm

Supporting energy efficiency, durability & reliability at high rotation speeds in vacuum cleaners & hairdryers



### ENERGY & INDUSTRIAL

## Up to 80%

... lighter vs. metal for wind energy applications using VICTREX™ PEEK



### MEDICAL

## 25% improved brain function

... using PEEK-OPTIMA™ Natural in CMF skull plates\*\*\* vs. metal plates

## >90% union rate

Using carbon fibre PEEK trauma plate vs. 64% union rate for steel plates\*\*\*

Sustainable products are defined as those which offer a quantifiable environmental or societal benefits.

\* Based on 10kg of PEEK replacement for metal, IATA carbon reduction & climate change 2018

\*\* Based on European annual mileage for passenger cars using PWC report 2021

\*\*\* Data on file, refers to Trauma outcomes in high-risk patients. 25% improved brain function based on paper by Zhang Q, Yuan Y, Li X, et al, World Neurosurgeon 2018





**80,000 tonnes**

Annual CO<sub>2</sub> savings in Europe for  
selected automotive applications  
made with VICTREX™ PEEK\*\*

\*\*Based on European annual mileage for passenger cars using PEEK





Victrex annual sales to aerospace supports

**3X CO<sub>2</sub> saving**

vs. Victrex scope 1 & 2 emissions\*







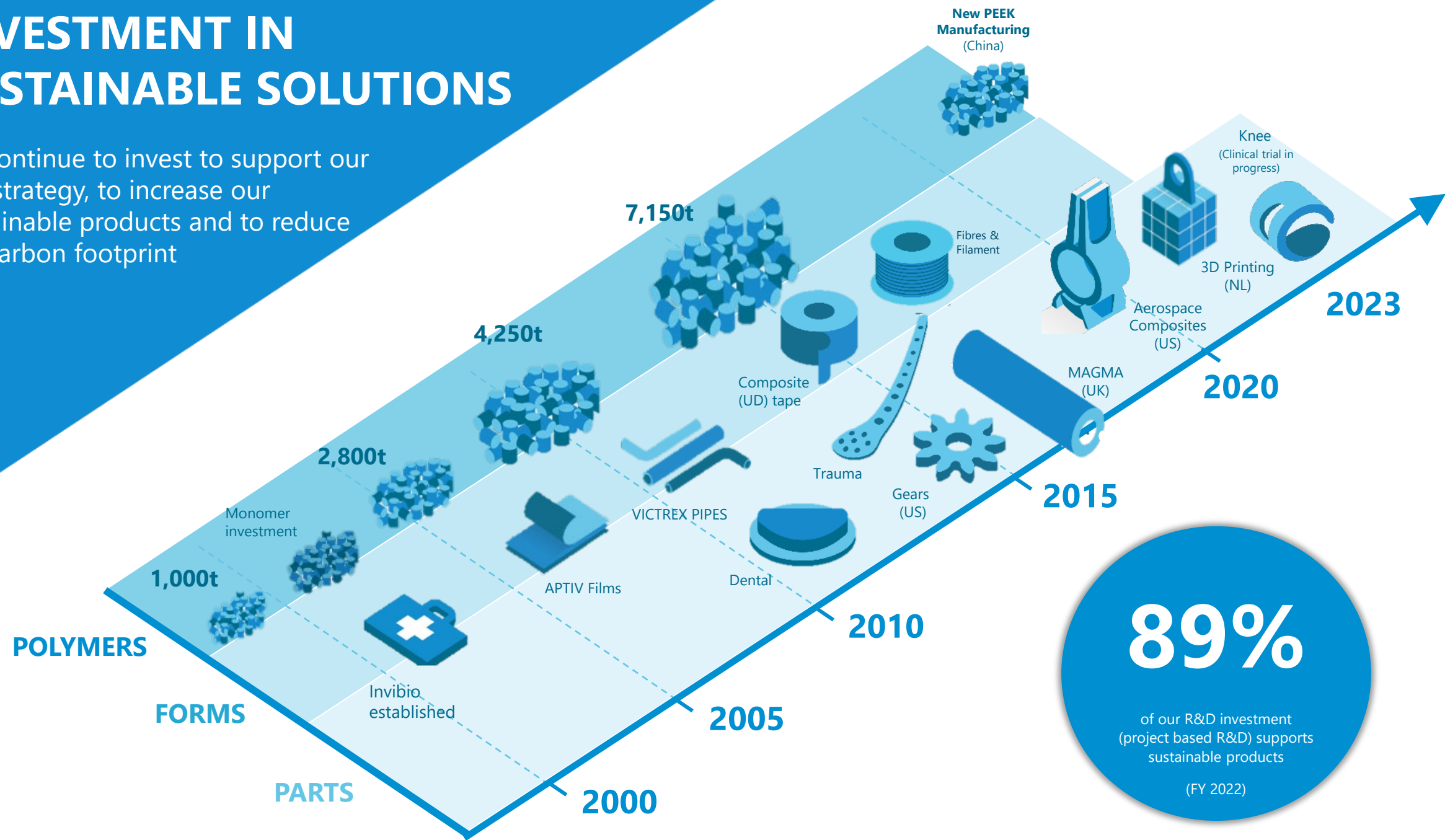
## 25% improved brain function

using Invibio's PEEK-OPTIMA™  
in CMF (cranio-maxillofacial)  
skull plates\*



# INVESTMENT IN SUSTAINABLE SOLUTIONS

We continue to invest to support our ESG strategy, to increase our Sustainable products and to reduce our carbon footprint



**89%**

of our R&D investment  
(project based R&D) supports  
sustainable products

(FY 2022)

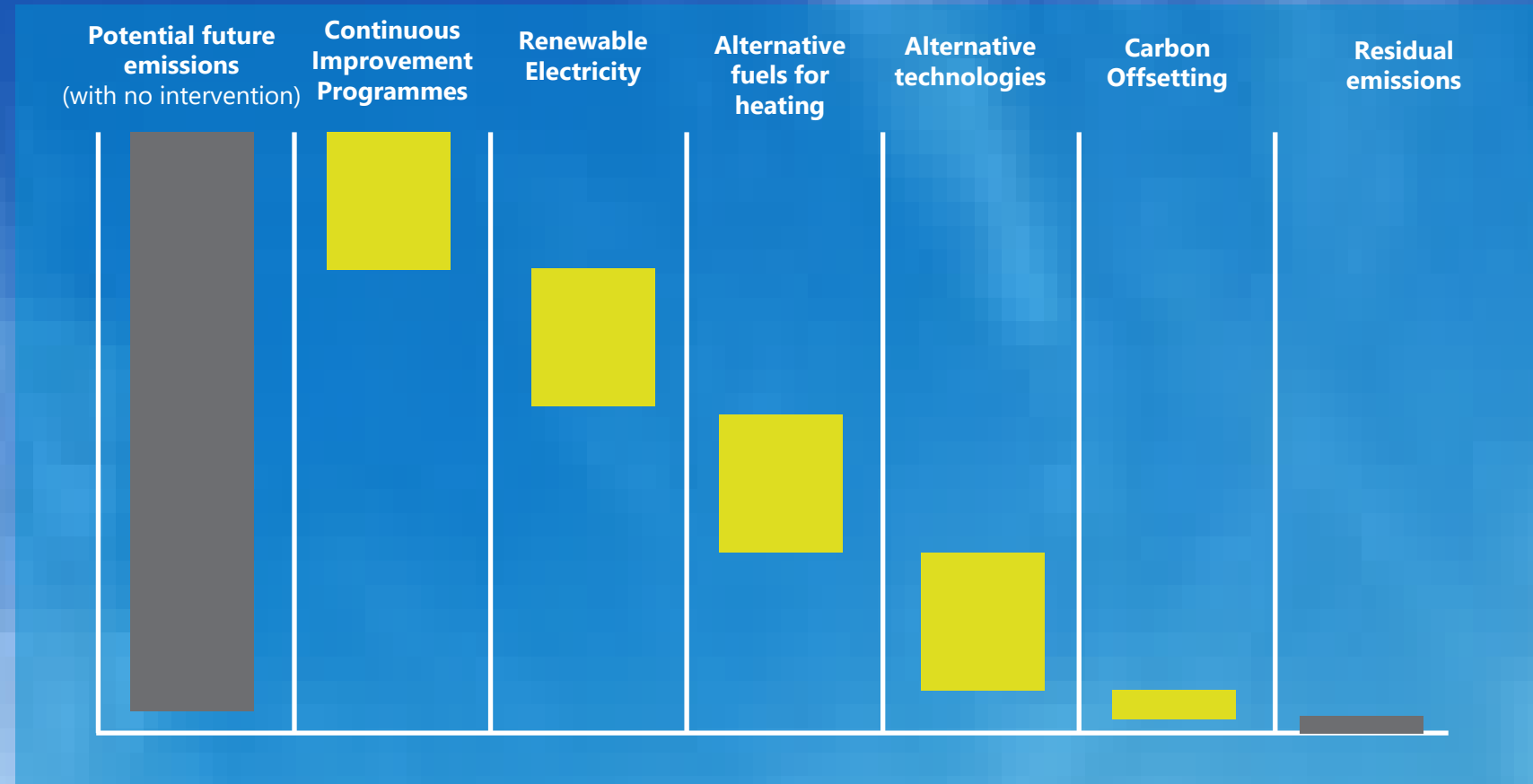


# VICTREX PATH TO CARBON REDUCTION

Our Net Zero ambition is centred on reducing climate impacts **from our own operations**

## Our aspiration

In 2020, we established our Net Zero aspiration for 2030 for our own operations (scope 1 & 2 emissions). We continue to assess options and the potential to deliver this aspiration, whilst noting consideration for external factors beyond our control



# LIFE CYCLE ANALYSIS



VICTREX PEEK has lower global warming potential (GWP) than industry standard PEEK\*

KPMG Life Cycle Analysis reports positive findings on VICTREX PEEK

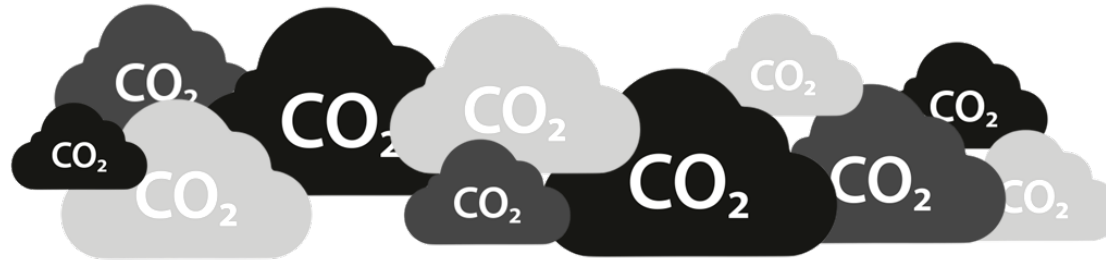


\*Based on KPMG Life cycle analysis report with Victrex UK produced BDF. Victrex PEEK 450g 13kgCO<sub>2</sub>/kg of PEEK vs industry standard 15.6kgCO<sub>2</sub>/kg of PEEK (GaBi materials database)



# SCOPE 1, 2 & 3

The different levels of 'Scope'



## SCOPE 2

INDIRECT  
EMISSIONS FROM  
ENERGY USED

## SCOPE 1

DIRECT  
EMISSIONS FROM  
SOURCES (ON SITE)

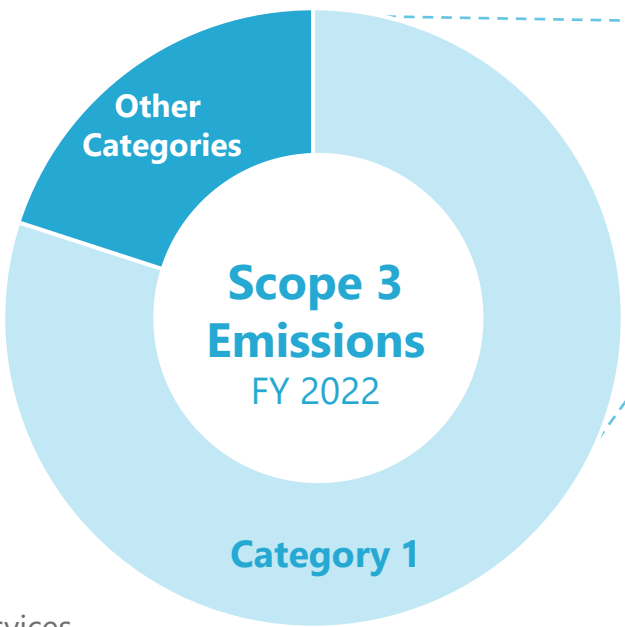
## SCOPE 3

INDIRECT  
EMISSIONS OF THE  
SUPPLY CHAIN OR SERVICE

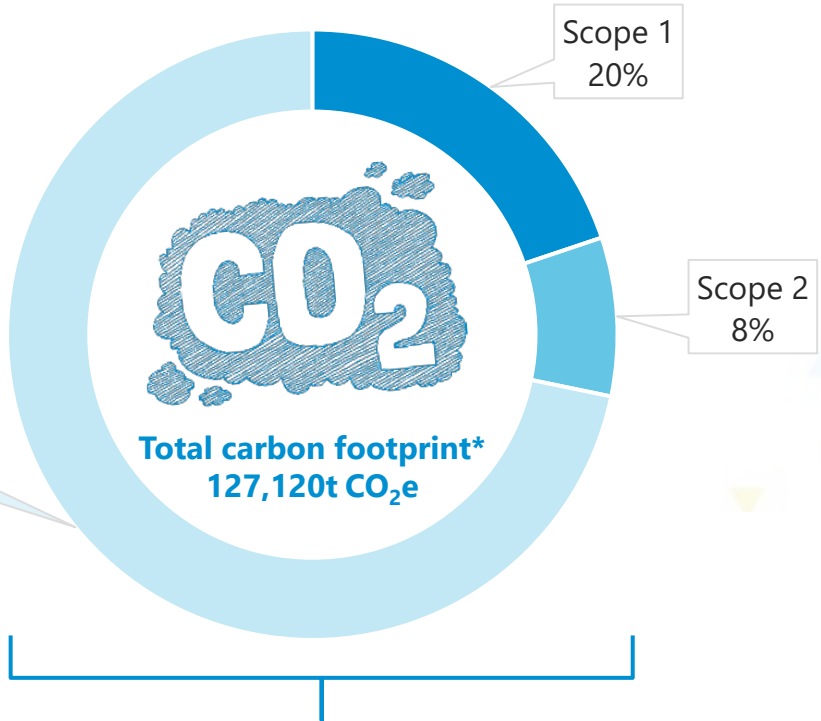
THINGS WE CAN DIRECTLY CONTROL

# SCOPE 3 EMISSIONS ASSESSMENT

Victrex PEEK is indicatively favourable vs other PEEK manufacturers for its carbon emissions across all scopes



Scope 3  
72%



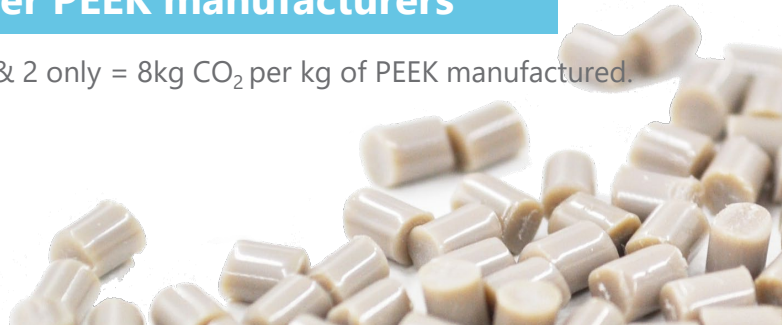
**\*28kg** CO<sub>2</sub> per kg of PEEK manufactured  
Scope 1, 2 & 3

**Indicatively favourable  
vs other PEEK manufacturers**

NOTE: Scope 1 & 2 only = 8kg CO<sub>2</sub> per kg of PEEK manufactured.

**Category 1:**  
Purchased goods and services

**Other categories:**  
Capital goods, fuel & energy (outside scope 1&2), upstream transportation, waste generation, business travel, employee commuting and investments





VICTREX SUSTAINABILITY & ESG

# GOVERNANCE



# GOVERNANCE

Framework used to demonstrate governance approach

## VICTREX BOARD

Review and approve the Victrex ESG goals (as overseen by the CR Committee) and has oversight of implementation and reporting, ensuring sustainability remains at the core of our purpose, values and strategy

## CORPORATE RESPONSIBILITY COMMITTEE

Board oversight to review development and execution of the 2030 sustainability strategy and commitments including progress towards targets.

## VICTREX MANAGEMENT TEAM (VMT)

The VMT embeds sustainability target reviews into regular performance reviews undertaken with their respective teams

## SUSTAINABILITY WORKSTREAMS

1. Safety, Health & Wellbeing

2. Sustainable Solutions

3. Resource Efficiency

4. Social Responsibility



# ACCREDITATIONS & PARTNERSHIPS

External recognition of  
how Victrex enables  
environmental  
& societal benefits



Ranked in top 5% of companies



Climate change assessment



Commitment to the science-based emission reduction targets



Committed to an ethical and sustainable supply chain



The most widely adopted Automotive Supplier Assurance standard



A key ESG rating agency for investors & listed companies  
A Rating



Inclusion in FTSE Russell Green Revenues Index



Victrex one of Europe's climate leaders



Clean Energy Supplier

Committed to Apple's Supplier Clean Energy program

Community Partnerships



Science Industry Partnership

VICTREX SUSTAINABILITY & ESG

# SOCIAL RESPONSIBILITY



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Inspiring our employees & communities  
to positively impact our ESG goals



## Inspire the next generation in STEM\* education

### TARGET

**2,500 contacts with young people**  
3,225 2022

- Develop our network of social responsibility ambassadors and support community initiatives through collaboration with education community partners
- Examples include 52 STEM ambassadors, apprenticeship week, UK enterprise advisor programme.

*\*Science, Technology, Engineering & Maths*



## Employees devoted to community activity

**TARGET: 10,000 accumulative hours  
devoted to community activity**  
10,913 in 2022

- Global, employee-led charity and community teams support their local communities aimed at social mobility and giving back
- Examples include Foodbank donations, litter picks, fundraising events e.g. Movember and coffee mornings.



## Drive forward Diversity, Equity & Inclusion

### TARGET

**40% Females in leadership**  
19% in 2022

- Foster an inclusive culture through mentoring, reverse mentoring, training and Employee Resource Groups (ERG)
- Diversity data collection & reporting
- Review policy & procedures including performance management, talent and recruitment





# OUR EMPLOYEES PLAY AN INTEGRAL ROLE IN DELIVERING OUR SUSTAINABILITY STRATEGY



Advocating our sustainability agenda to key stakeholders, including customers, suppliers and investors



Playing their part to reduce waste, save energy and resources.



Championing Victrex behaviours, and getting involved in employee resource groups.



Supporting STEM, Community & charity events

# APPENDIX



## ACCELERATING THE REDUCTION OF CO<sub>2</sub> EMISSIONS IN THE SKY IN THE POST COVID WORLD

# 39,000+

new planes to enter service by 2040<sup>1</sup>



# 76%

of the new planes to enter service are single-aisle planes for short-mid haul flights<sup>2</sup>

WHAT IF WE COULD MAKE...

Unlike the B787 and A350s, Single-aisle planes are made mostly out of METAL<sup>3</sup>



# 50%

of all new single-aisle planes with PEEK composites<sup>4</sup>

# 60% LIGHTER

PEEK composites can replace metal parts and be up to 60% lighter with higher specific strength<sup>6</sup>



>2M TONNES CO<sub>2</sub> SAVED with VICTREX PEEK solutions so far (2003 -)

VICTREX  
AEROSPACE  
SOLUTIONS

# 53M



Potential saving of 53 million tonnes of CO<sub>2</sub>\* in 15 years if all of these new single-aisle planes could be made from 50% PEEK composites<sup>4</sup>

\*Approx 2% of CORSIA requirement

# CO<sub>2</sub>

REDUCTION

2.6 billion CO<sub>2</sub> reduction required in the aviation industry by CORSIA\* between 2021 -2035<sup>5</sup>

\*Carbon Offsetting and Reduction Scheme for International Aviation



VICTREX IS PART OF THE CLEAN SKY 2 PROGRAM, PARTNERING WITH MAJOR AIRFRAMER TO CO-DEVELOP LARGE PRIMARY/SECONDARY STRUCTURE WITH PEEK COMPOSITES.



# MINUTES VS. HOURS\*

PEEK composites also speeds-up the parts manufacturing process helping airframers reduce backlogs<sup>7</sup>

\*Thermoplastics vs. Thermoset annealing process time



### References

1,2 – Airbus Global Market Forecast 2021-2040

3 – About 85-95%, source:

<https://www.intechopen.com/books/aerospace-engineering/the-evolution-of-the-composite-fuselage-a-manufacturing-perspective>

4 – Based on Victrex calculation, details can be provided upon request

5 – IATA Fact Sheet "Climate Change & CORSIA" May 2018

6,7 – Victrex source, details can be provided upon request



# SUSTAINABILITY

Victrex has been awarded a Gold medal of the Ecovadis Sustainability Rating

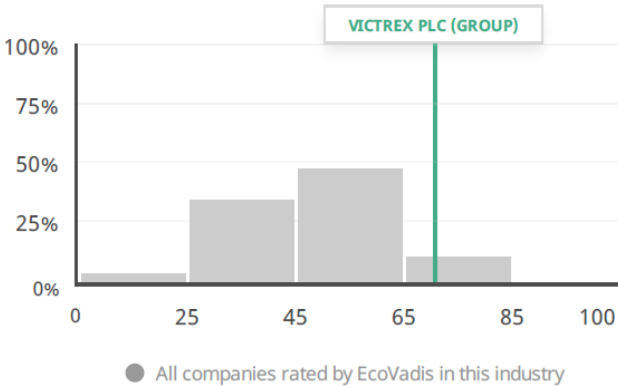


## HIGHLIGHTS

Amongst all companies rated by Ecovadis in the 'Manufacture of basic chemicals, fertilizers & nitrogen compounds, plastics and synthetic rubbery in primary forms industry' sector, Victrex positioned:

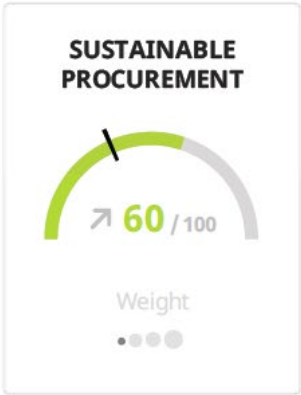
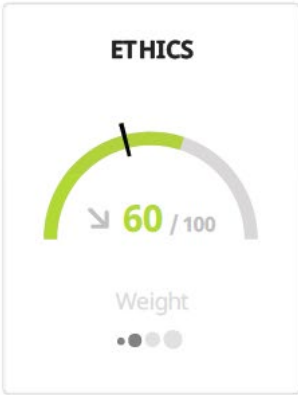
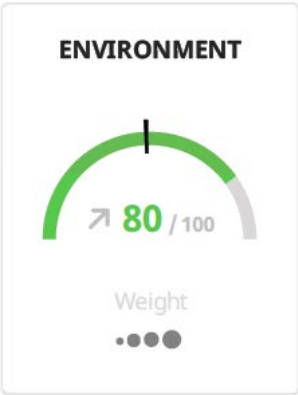
Top 5% : Overall score  
Top 6% : Environment

Overall score distribution



EcoVadis is the world's most trusted provider of business sustainability ratings

- 100,000+ Companies assessed
- 200+ Sectors
- 175+ Countries



- Victrex has a Corrective action plan in place, working on improving the sustainability management system.
- Full report is available upon request (next review October 2023)

# MODERN SLAVERY

## A Zero Tolerance Approach



# DRIVE FORWARD DIVERSITY, EQUITY & INCLUSION

↑  
STRATEGIC INITIATIVES  
↓

**Progression**

**Retention**

**Recruitment**

## AIMS

- Achieve 40% women in leadership by 2030
- Positive Employee Survey trends
- Increase representation of women in Victrex
- Achieve annual appointments from under-represented populations for external hires, including apprentices, & graduates

## FOCUSED INTERVENTIONS

- Gender based coach or mentoring
- Focussed DEI training
- Positive action approach for appointments
- Diversity data collection
- Established ERGs (Employee resource groups), e.g. gender, race, disability
- Policy updates e.g. Flexible working
- "Diversity lens" for people processes e.g. Talent management, recognition
- New methods, systems & processes for candidate attraction
- Recruitment considers under-represented populations (gender, age, ethnicity, disability) as part of short-lists
- All job advertisements promote Victrex as an equal opportunities employer







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