



## THE WORLD IS ON AN UNSUSTAINABLE PATH AND ACTION IS NEEDED. We are in the United Nations' "Decade of Action". We have

developed a holistic programme to help accelerate the move to a more sustainable future – PATH360.

# THE EFFICIENCY **PATHWAY**

Energy Technology Perspectives 2020 (windows.net) pg73



AROUND A QUARTER OF THE WORLD'S ENERGY IS LOST TO FRICTION, CORROSION AND WEAR! Influence of tribology on global energy consumption, costs and emissions Kenneth Holmberg & Ali Erdemir

To achieve the Paris climate goals, the world will need improvements in end use energy efficiency. In one estimate<sup>2</sup>, these improvements can provide almost 40% of the necessary GHG reductions.

Today, around a quarter of the world's energy is lost to friction, corrosion and wear<sup>1</sup>.

With 120 years' experience in efficiency and performance, we, at Castrol, have helped our customers save energy by fighting friction, reducing corrosion and minimising wear. Castrol wants to go further,

looking at everything we do. Our approach is 360; holistic, whole system thinking.

<sup>2</sup>Energy efficiency includes enhanced technology performance as well as shifts in end-use sectors from more energy-intensive to less energy-intensive products (including through fuel shifts)

Our approach is 360, holistic, whole system

thinking. It's looking at how we can deliver what we do in a lower carbon, more efficient, more sustainable way, and helping our customers do the same too. Nicola Buck, CMO, Castrol



## **ROADMAP** Whilst we will continue to deliver, and pioneer efficiency

**OUR 360** 

through performance, we decided to do more.

So we have developed a 360 roadmap for Castrol that embraces circular economy thinking – looking at the life-cycle of every product that we make to see how it can be improved, extended, reused or recycled; and we are driving our business in supporting newer, growing sectors like renewable energy and e-mobility.

## **OUR AIMS**

We are in the United Nations' "Decade of Action". We have examined our entire business and set ourselves goals under our three focus areas of Waste, Carbon and People.

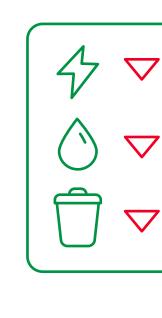
This builds on work we have been doing to make our business more sustainable, and from 2021, our operations are committed to carbon neutrality<sup>3</sup>. And we want to do more; our PATH360 plan

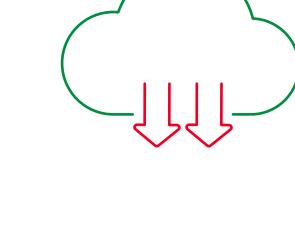
or sooner.4 <sup>3</sup>Castrol is committed to making its Scope 1 and 2 emissions certified carbon neutral from 2021. The CO2 emissions are calculated in accordance with the Greenhouse Gas Protocol's Corporate Standard and includes life-cycle emissions. The demonstration of carbon neutrality will be

maps our path to becoming net zero by 2050

assured by an Independent Third-Party and certified to BSI's PAS 2060 carbon neutral specification. For more information visit www.castrol.com/cneutral

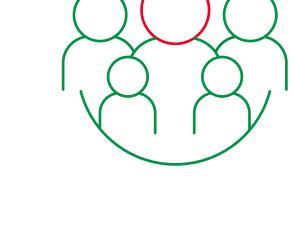
<sup>4</sup>As part of bp's ambition to be net zero by 2050 or sooner and to help the world get to net zero





REDUCING

**CARBON** 



Continue to help our commercial customers

**SAVING** 

**WASTE** 

save energy, waste and water as well as reduce our plastic footprint by half<sup>5</sup>. <sup>6</sup>vs Castrol's net carbon intensity our products sold in 2019. For more information visit www.Castrol.com/PATH360/Definitions

intensity per litre of our products<sup>6</sup>.

Halve the net carbon

Through our offers and support we will continue to work to improve people's lives around

**IMPROVING** 

**PEOPLE'S LIVES** 

the world $^7$ . <sup>5</sup>To promote the responsible design and management of plastic packaging along its life-cycle. Castrol defines its plastic footprint as the amount of virgin plastic included in our packaging per litre that isn't recycled vs our 2019 baseline. For more information visit www.Castrol.com/PATH360/Definitions

<sup>7</sup>For example, through offsetting as part of Castrol's carbon neutral programme and other activities as detailed in www.Castrol.com/PATH360/Definitions

## **HOW WE'RE GOING TO DO IT: OUR PATH360 FRAMEWORK**

FOCUS AREAS





WASTE

SAVING

**IMPROVING** 

<sup>8</sup>As part of bp's ambition to be net zero by 2050 or sooner and to help the world get to net zero

WER CARBON DESIGN 4 CUSTOMERSOLUTIONS THINK 5 ADVANCE THE PARK **CIRCULAR** S CARBON NEUTRAL

**AIMING TO BE** 

**REDUCING CARBON** 

**PEOPLE'S LIVES** 

**DESIGN** 

6 IMPROVING PEOPLE'S LIVES

**NET ZERO** BY 2050 OR SOONER<sup>8</sup>

### **THINK CIRCULAR** We look at the life-cycle carbon emissions of

improve them.

our products from "cradle to grave" and are

using circular economy thinking to help us

#### We consider life-cycle carbon emissions as part of our product development process to deliver high performance lower life-cycle carbon solutions.

**LOWER CARBON** 

#### **CARBON NEUTRAL** To make a carbon neutral offer we follow the PAS 2060 standard to calculate the life-cycle

carbon emissions (or carbon footprint) of the product, develop a carbon reduction plan, purchase and retire sufficient carbon offset credits to compensate for residual emissions. Carbon offsetting is a rapid way to compensate for a product's carbon footprint<sup>9</sup> while we work to bring it down.

#### **CUSTOMER SOLUTIONS** We know that the biggest difference we can

water and we are focused on high performance solutions to maximise this contribution. <sup>9</sup>GHG Protocol's product lifecycle accounting and reporting standard

make is by working together with our customers

and partners and helping them towards their

sustainability goals. Our products can help our

commercial customers save energy, waste or

# We are investing in and developing products

**TRANSITION** 

and services that support the world's transition to renewable energy and sustainable technologies - like lubricants for wind turbines and fluids for e-mobility.

**LIVES** 

**IMPROVE** 

And we build in positive outcomes for people around the world as we work. Our activities range from aiming to improve mechanic education, helping to support more sustainable livelihoods and a focus on customer inclusion.

## meet the PATH360 qualifying criteria<sup>10</sup> **MADE UP 34%** OF CASTROL GLOBAL

**OUR WHEELS ARE ALREADY IN MOTION -**

WHAT WE'VE DONE SO FAR

**SALES** 

In 2021 products and services that



We've invested and developed a range

of EV Fluids for electric vehicles and today,

2 OUT OF 3

OF THE WORLD'S

major car manufacturers

of their factory fill<sup>13</sup>.

use Castrol ON EV Fluids as part

these packs out in 7 countries

**SAVING OVER** 

**OF PLASTIC** 

**2,000 TONNES** 

We estimate that in 2021 our lower viscosity

lubricants saved our passenger car customers

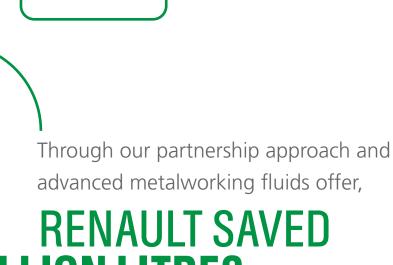
compared to what would have been

used by vehicles using an industry

average portfolio of lubricants<sup>11</sup>.

**280 MILLION** 

LITRES OF FUEL



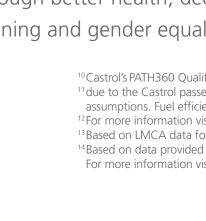
LITRES OF WASTE in their automotive engine plant<sup>12</sup>.

We've redesigned our plastic packaging to be stronger, lighter and more efficient through distribution. We expect this will REDUCE OUR PLASTIC **USE BY 7,000 TONNES** PER YEAR BY 2023 compared to 2019 baseline. In 2021 we rolled

**OF WATER** AND 1 MILLION

Since 2014 Castrol has contributed

to an offset programme that has helped



A MILLION PEOPLE<sup>14</sup> through better health, decent work, training and gender equality. ¹ºCastrol's PATH360 Qualifying Criteria 2021. For more information visit www.Castrol.com/PATH360/Qualify <sup>11</sup>due to the Castrol passenger car portfolio sold in 2021 being made up of a larger proportion of lower viscosity lubricants based on a set of assumptions. Fuel efficiency determined via the Industry M111FE test. For more information visit www.castrol.com/PATH360/Saving-fuel  $^{12} For more information visit \ https://www.castrol.com/en\_gb/united-kingdom/home/indutrial/industrial-case-studies.html\#tab\_renault-engine-plant$ <sup>13</sup>Based on LMCA data for top 20 selling OEMs (total new car sales) in 2019. Used as part of OEM factory fill <sup>14</sup>Based on data provided by offset project suppliers and publicly available in CDM, Gold Standard and VCS monitoring and impact reports For more information visit www.bp.com/en\_gb/target-neutral/home

to improve the lives of over



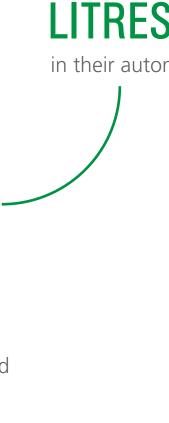
saved almost 92,000 tCO2e per year<sup>15</sup>.



This is about holistic and collective responsibility. We are taking action across our business. Castrol can also make a positive impact by helping and enabling others with their sustainability goals, and ultimately help

Michelle Jou, SVP, Castrol







indoor air pollution and improving respiratory health. The project

<sup>15</sup>https://www.bp.com/en\_gb/target-neutral/home/offsetting-projects/cookstoves-mexico.html

