



## THE EFFICIENCY PATHWAY



AROUND A QUARTER OF THE WORLD'S ENERGY IS LOST TO FRICTION, CORROSION AND WEAR!<sup>1</sup>

To achieve the Paris climate goals<sup>2</sup>, the world will need improvements in end use energy efficiency. In one estimate, 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>1</sup>Energy Technology Perspectives 2020 IEA, page 73

**“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.”**

A.S. Ramchander, CMO



## OUR 360 ROADMAP

Whilst we will continue to deliver, and pioneer efficiency 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.

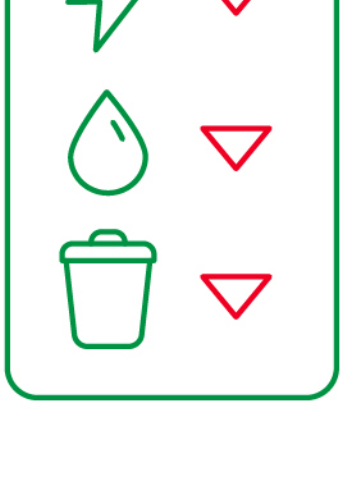
## OUR AIMS

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 now we are committing to making our operations carbon neutral<sup>3</sup> from 2021.

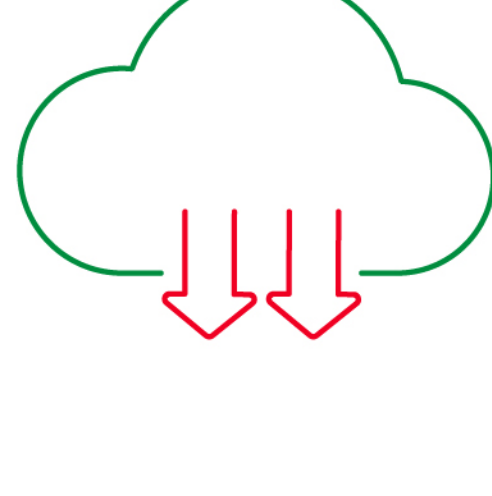
And we want to do more; our PATH360 plan maps our path to becoming a net zero brand by 2050 or sooner.

## BY 2030



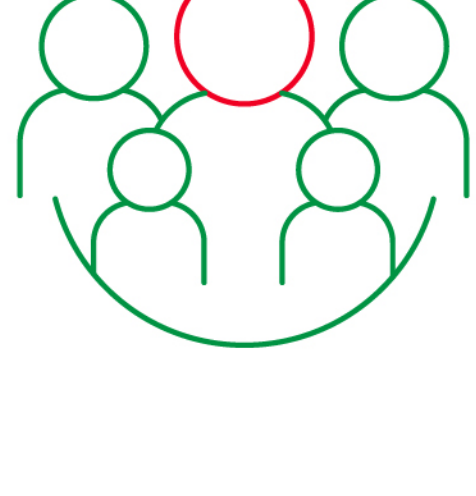
### SAVING WASTE

Continue to help our commercial customers save energy, waste and water as well as reduce our plastic footprint by half<sup>4</sup>.



### REDUCING CARBON

Halve the net carbon intensity per litre of our products<sup>5</sup>.



### IMPROVING PEOPLE'S LIVES

Through our offers and support we will continue to work to improve people's lives around the world<sup>6</sup>.

<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 include life-cycle emissions. The demonstration of carbon neutrality will be assured by an independent Third-Party and certified to ISO's PAS 2060 carbon neutral specification. See [www.castrol.com/carbonneutral](http://www.castrol.com/carbonneutral) for more information.

<sup>4</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 in our 2019 baseline. See [www.castrol.com/carbonneutral/castrolpath360](http://www.castrol.com/carbonneutral/castrolpath360) for more information.

<sup>5</sup>Castrol's net carbon intensity our products sold in 2019. See [www.castrol.com/carbonneutral/castrolpath360](http://www.castrol.com/carbonneutral/castrolpath360) for more information.

<sup>6</sup>Through offsetting as part of Castrol's carbon neutral programme see [www.castrol.com/saving/castrolpath360](http://www.castrol.com/saving/castrolpath360) for more information.

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

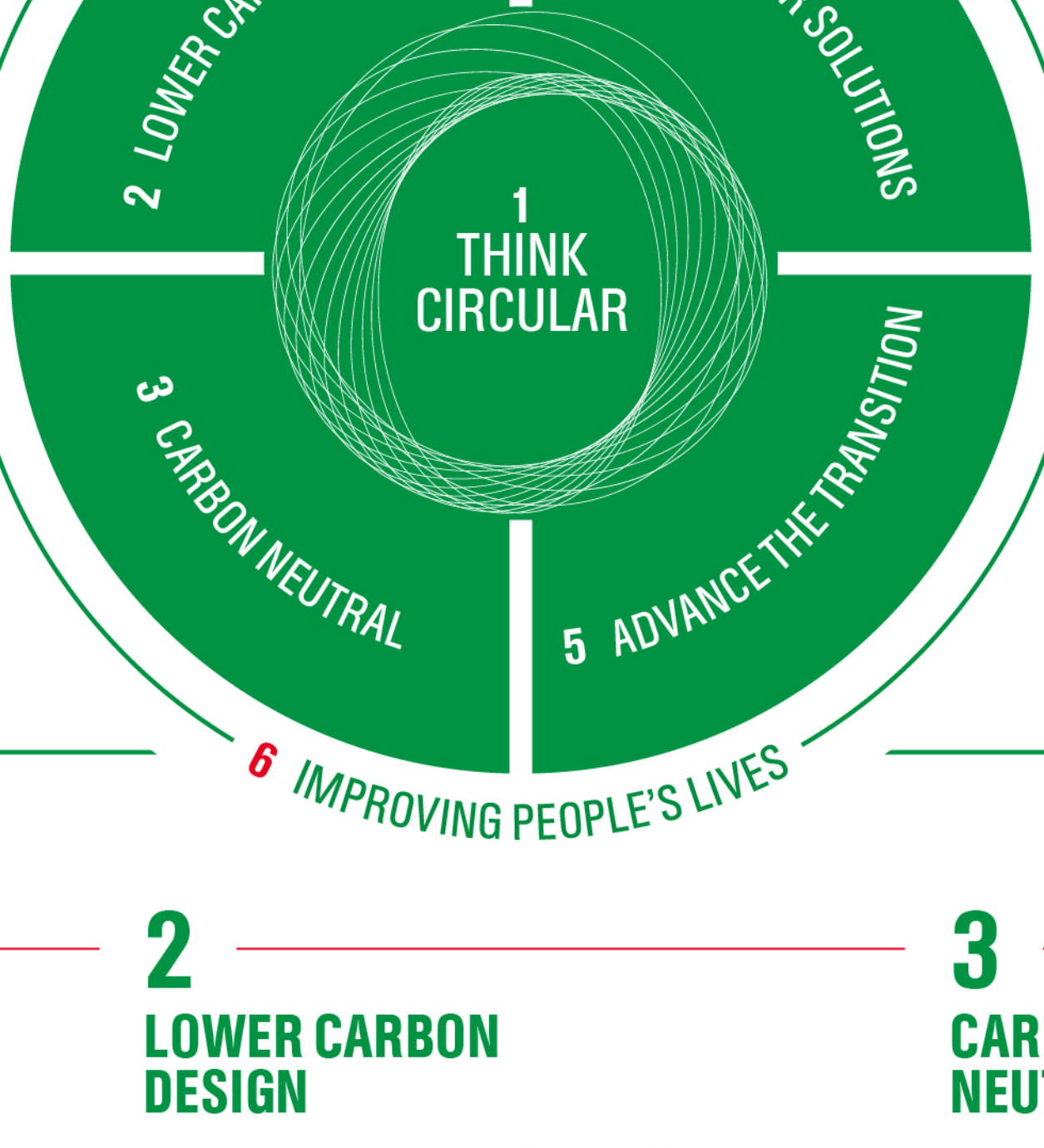
3  
FOCUS  
AREAS

### SAVING WASTE

### REDUCING CARBON

### IMPROVING PEOPLE'S LIVES

6  
GUIDING  
PRINCIPLES



### 1 THINK CIRCULAR

We look at the life-cycle carbon profile of our products from "cradle to grave" and are using circular economy thinking to help us improve them.

### 2 LOWER CARBON DESIGN

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

### 3 CARBON NEUTRAL

To make a carbon neutral offer we follow the PAS 2060 standard to calculate the life-cycle carbon of the product, develop a carbon reduction plan, purchase and retire sufficient carbon offset credits to compensate. Carbon offsetting is an efficient way to compensate a product's life-cycle carbon while we work to bring it down.

### 4 CUSTOMER SOLUTIONS

We know that the biggest difference we can make is by working together with our customers and partners and helping towards their sustainability goals. Our products can help our customers save energy, waste or water and we are focused on high performance solutions to maximise this contribution.

### 5 ADVANCE THE TRANSITION

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

### 6 IMPROVE LIVES

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.

## OUR WHEELS ARE ALREADY IN MOTION - WHAT WE'VE DONE SO FAR

In 2020 products and services that would meet the PATH360 qualifying criteria<sup>7</sup>

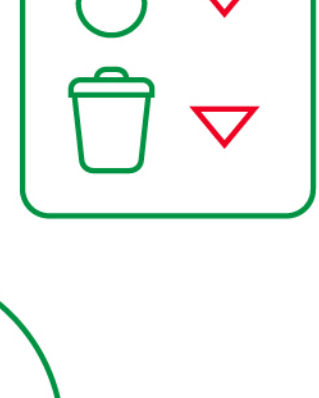
**MADE UP 24% OF CASTROL GLOBAL SALES**



We estimate that in 2019 our lower viscosity lubricants saved our passenger car customers

**270 MILLION LITRES OF FUEL**

compared to what would have been used by vehicles using an industry average portfolio of lubricants<sup>8</sup>.



Through our partnership approach and advanced metalworking fluids offer, **RENAULT SAVED 1 MILLION LITRES OF WATER AND 1 MILLION LITRES OF WASTE** in their automotive engine plant<sup>9</sup>.



We've invested and developed a range of e-fluids for electric vehicles and today,

**OVER HALF OF THE WORLD'S**

major vehicle manufacturers use Castrol e-fluids as part of their factory fill<sup>10</sup>.



Since 2014 Castrol has contributed to an offset programme that has helped to improve the lives of over

**1.8 MILLION PEOPLE<sup>11</sup>**

through better health, decent work, training and gender equality.



### COMPENSATING FOR CARBON AND IMPROVING HEALTH COOKSTOVES, MEXICO

An example of the bp Target Neutral projects Castrol supports is a cookstove project in Mexico.

This project is helping to equip rural communities in Mexico with 37,000 cookstoves that burn much more efficiently than open fires, saving firewood, reducing indoor air pollution and improving respiratory health. The project is saving almost 92,000 tCO2e per year<sup>12</sup>.

<sup>11</sup>[https://www.bp.com/en\\_gb/target-neutral/home/offsetting-projects/cookstoves-mexico.html](https://www.bp.com/en_gb/target-neutral/home/offsetting-projects/cookstoves-mexico.html)

## WORKING TOGETHER FOR THE FUTURE

At Castrol we see this as just the beginning - we want to do more. We believe it's by working together with customers, communities and partners where we can make the biggest positive difference. This is our new, holistic path to help create **a more sustainable future, and help Castrol reach net zero by 2050 or sooner.**

**“This is about holistic and collective responsibility. We will take action across our business. I believe that we can also make a positive impact by helping and enabling others with their sustainable goals, and ultimately help accelerate the world's path to a more sustainable future.”**

Mandhir Singh, Senior Vice President, Castrol



IT'S MORE THAN JUST OIL. IT'S LIQUID ENGINEERING.

