



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



PAS 2060 Qualifying Explanatory Statement – Castrol Carbon Neutral Products

2nd Application Period: January – December 2021

This is a PAS2060 Qualifying Explanatory Statement to demonstrate that Castrol has achieved carbon neutrality with a commitment to maintain in accordance with PAS2060:2014 reporting

Carbon Neutrality Declaration

"Carbon neutrality of the products in scope achieved by Castrol in accordance with PAS 2060 at 31st December 2021 with the commitment to maintain to 31st December 2022, for the period commencing 1st January 2022, DNV certified"

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This Qualifying Explanatory Statement (QES) contains all the required information on the carbon neutrality of the given subject. All information provided within this report has been reviewed by DNV Business Assurance Services UK Limited¹, a third-party assurer. If provided with any information affecting the validity of the following statements, this document will be updated accordingly. This report will be made publicly available on Castrol's carbon neutral webpage: www.castrol.com/cneutral. The publicly available version will be redacted to protect commercially sensitive information and any internal milestones that underpin external aims.

This is Castrol's first declaration of achievement of carbon neutrality for this combined portfolio of products. Castrol has re-established its carbon neutral commitment with the launch of its PATH360 Sustainability Strategy in 2021 and subsets of this portfolio have achieved carbon neutrality over the 2014-2020 period. This combined and significantly increased set of products encompasses lead brands in every space Castrol sells to, all products sold in the Australia, New Zealand, and Vietnam markets, all products that have achieved carbon neutral historically and some additional ad hoc product lines having significant sales within key geographies. **Please see Annex D for a complete list of products in scope and their classification within this carbon neutral application.** As context, these products made up ~30% of Castrol's sales volume in 2021.

Castrol's carbon neutrality declaration has been reviewed and verified by an independent third party, DNV. Their Assurance Statement can be found in Annex B of this report.

¹ DNV is one of the world's leading certification and assurance bodies, helping businesses assure the performance of their organisations, products, people, facilities and supply chains through certification, verification, and assurance.

1. TERMS & DEFINITIONS

| | |
|--|---|
| 100-year Global Warming Potential | Factor describing the radiative forcing impact of one mass-based unit of a given greenhouse gas relative to an equivalent unit of carbon dioxide over a given period of time. NOTE: Carbon dioxide is assigned a GWP of 1, while the GWP of other gases is expressed relative to the GWP of carbon dioxide from fossil carbon sources. Global warming potentials for a 100-year time period are produced by the Intergovernmental Panel on Climate Change. ² |
| Carbon | Carbon is used as shorthand for aggregated greenhouse gas (GHG) emissions, reported as carbon dioxide equivalents (CO ₂ e). Throughout the report, the full term (CO ₂ e) is employed. A full list of GHG emissions included in the inventory is provided in Annex C of this report |
| Carbon Credit | A generic term to assign a value to the carbon offset. One carbon credit is usually equivalent to one tonne of carbon dioxide. |
| Carbon Offsets | Discrete reduction in greenhouse gas emissions not arising from the defined subject, made available in the form of a carbon credit meeting the requirements of 9.1.2 of PAS 2060:2014 and used to counteract emissions from the defined subject. PAS 2060:2014 specifies that carbon offsets are acquired to compensate for residual greenhouse gas emissions arising from a defined subject, after taking emission reduction initiatives into account. Offsets are calculated relative to a baseline that represents a hypothetical scenario for what emissions would have been in the absence of the mitigation project that generates the offsets. |
| GHG | Greenhouse Gas refers to carbon dioxide (CO ₂), methane (CH ₄), nitrous oxide (N ₂ O), sulphur hexafluoride (SF ₆), perfluorocarbons (PFCs), and hydrofluorocarbons (HFCs). A full list of GHG emissions included in the inventory is provided in Annex C of this report |
| GHGP | Greenhouse Gas Protocol sets the standards to measure and report GHG emissions. Annex C of PAS 2060:2014 Table C.1 includes the GHG Protocol, Product lifecycle accounting and reporting standard as an example of a document providing methodologies appropriate for use in the quantification and reduction of GHG emissions. Greenhouse Gas Protocol (ghgprotocol.org) |
| GHGP Product Standard | Greenhouse Gas Protocol Product Standard: Product Standard Greenhouse Gas Protocol (ghgprotocol.org) |

² Taken from the Terms and definitions in PAS 2060:2014

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|---|--|
| IPCC Fifth Assessment Report | The Intergovernmental Panel on Climate Change (IPCC) provides an international statement on the scientific understanding of climate change IPCC — Intergovernmental Panel on Climate Change |
| I3P-1 (for third party) | The conformity assessment type as outlined in PAS2060, in this case: Independent 3P certification - commitment |
| I3P-3 (for independent third-party certification – unified) | The conformity assessment type as outlined in PAS2060, in this case: Independent 3P certification - unified (achievement of and future commitment to, carbon neutrality) |
| PAS 2060 | Publicly available Specification for the Demonstration of Carbon Neutrality. PAS 2060:14 (referenced in this document) refers to the latest 2014 version of the document |
| QES | Collation of evidence in support of the declaration of a commitment to carbon neutrality and/or the declaration of achievement of carbon neutrality, in compliance with PAS 2060 (as per PAS 2060:2014). |

2. INTRODUCTION

2.1 Foreword

This Qualifying Explanatory Statement (QES) demonstrates Castrol's achievement of carbon neutrality for its PATH360 Carbon Neutral Products at 31st December 2021 in accordance with PAS 2060, with the commitment to maintain such achievement to 31st December 2022, for the period commencing 1st January 2022. Please see Annex D for a summarized list of the scope of products and product types included in Castrol's Carbon Neutral Portfolio.

This QES provides details on how the carbon emissions of the products in scope were assessed, Castrol's carbon management plan inclusive of emission reduction initiatives and the carbon offset process which are used to demonstrate achievement of carbon neutrality. Castrol has been implementing carbon reduction activities in line with its carbon management plan but has made the decision in this first³ Declaration of Achievement of carbon neutrality to

³ This is Castrol's first Declaration of Achievement of carbon neutrality for this combined group of products. However, in the past, Castrol has demonstrated achievement of carbon neutrality for several of the individual product brands within this scope of products including Professional, Vecton, PCO Europe and Japan and 2 Optigear products

5 PAS 2060 Qualifying Explanatory Statement: Carbon Neutral Products

offset the footprint of its products in scope as if they were unabated⁴. Castrol is in the process of reassessing the product carbon intensity of its carbon neutral products, and once this assessment completes, it will inform Castrol's 2nd Declaration of Achievement of carbon neutrality. Castrol's 2nd Declaration will verify the carbon reductions already in progress (examples including the transition to renewable power across 9 of its 23 owned manufacturing sites and the lightweighting of bottles to reduce both carbon emissions and the use of virgin plastic) with any residual emissions offset through the purchase and retirement of carbon credits. A checklist of requirements to demonstrate conformance to PAS 2060 and their respective location within the QES can be found in Annex A.

Table 2.1 - General Information

| PAS 2060 Information Requirement | Information as it relates to Castrol Ltd |
|---|---|
| Entity making PAS 2060 declaration | Castrol Limited (hereafter "Castrol") |
| Individual responsible for the evaluation and provision of data necessary for the substantiation of the declaration including that of preparing, substantiating, communicating, and maintaining the declaration | Carolyn Bongard, Sustainability Accounting Manager |
| Subject of the declaration | Castrol's PATH360 carbon neutral products. See Annex D for a complete list of products in scope and their classification within this carbon neutral application. |
| Chosen consolidation approach (equity share, operational control, or financial control) | Operational Control |
| Characteristics of the subject | Castrol is a global lubricants manufacturing and marketing company offering a wide range of products and services across the automotive, industrial, marine and energy spaces. The subject of this carbon neutral declaration includes all products sold within a lead brand from each of these spaces. Some examples include EDGE in the passenger car motor oil space, VECTON for commercial vehicle engine oils, Industrial XBB and XBC products, Marine BIO |

⁴ This is done in accordance with the PAS 2060:2014 standard referencing Note 3 of Figure 1: Entities are able to make a Declaration of Achievement of carbon neutrality at the end of the first application period based solely on offsetting.

| | |
|---|--|
| | RANGE, BRAYCO and TRANSAQUA energy products and OPTIGEAR in the wind space. With the addition of all products sold in Australia, New Zealand and Vietnam, the subject includes 37 unique product types across 6 spaces as can be seen in Annex D, Table D.2. |
| Rationale for the selection of the subject and boundary | Castrol is making this selection of products carbon neutral in support of its recently launched PATH360 Sustainability Strategy. Subsets of this portfolio have achieved carbon neutrality over the 2014-2020 period, but Castrol is re-establishing its carbon neutral commitment with the launch of this strategy and combining into one QES the historical carbon neutral ranges and several new ones. This results in a significantly increased set of products which includes a lead brand in every space as well as all products sold in the Australia, New Zealand, and Vietnam markets. For ease, this group of products will be referred to herein as 'average Castrol product'. Please see Annex D for more details. |
| Conformity assessment type | I3P-3 Independent third-party certification – unified |
| Baseline date (Date of first determined footprint) | 1st Jan – 31 st Dec 2021 |
| Achievement period for carbon neutrality | 1st Jan – 31 st Dec 2021 |
| Commitment period for carbon neutrality | 1 st Jan – 31 st Dec 2022 |

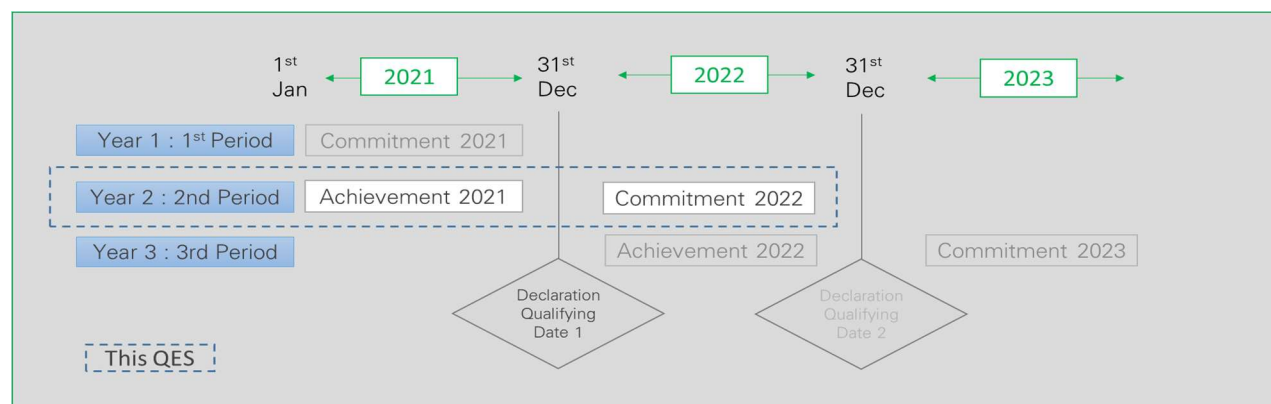
2.2 PAS 2060 Carbon Neutrality

Castrol will demonstrate carbon neutrality as set out in PAS 2060:2014 using an independent 3rd party certification in accordance with 10.3.2 of PAS 2060:2014. For the application period following the baseline date, declaration I3P-1 from Annex A of PAS 2060:2014 has been used. For this second application period and all subsequent application periods with an unchanged subject, declaration I3P-3 modified as per A.2 of PAS 2060:2014 shall be used. In the event that material change to the subject occurs, the sequence shall be re-started on the basis of a newly defined subject.

Castrol is following the timeline for carbon neutrality in accordance to Figure 2.1 - Carbon Neutral Declaration Periods. This is Castrol's second application for carbon neutrality for this selected group of products. In 2021, Castrol demonstrated commitment to carbon neutrality. This aligned well with the launch of Castrol's PATH360 Sustainability Strategy. Now, in 2022, Castrol is submitting its Declaration of Achievement of carbon neutrality with the commitment to maintain ongoing. The baseline period remains 2021 (based on calendar year 2020 data), the subject has been defined (as described in Table 2.1) and its carbon footprint quantified. The QES is officially released to the public after the independent third-party assurance of Castrol's carbon neutral program and will be updated accordingly to reflect any changes and actions that could affect the validity of the declaration of achievement with the commitment to maintain.

A carbon management plan has been developed and implementation initiated to reduce emissions across the lifecycle of Castrol's products, and 100% of the emissions for the first achievement period have been offset through the purchase and retirement of carbon credits. See Table 6.1 for details on the projects associated with these carbon credits and the amounts that have been purchased and retired.

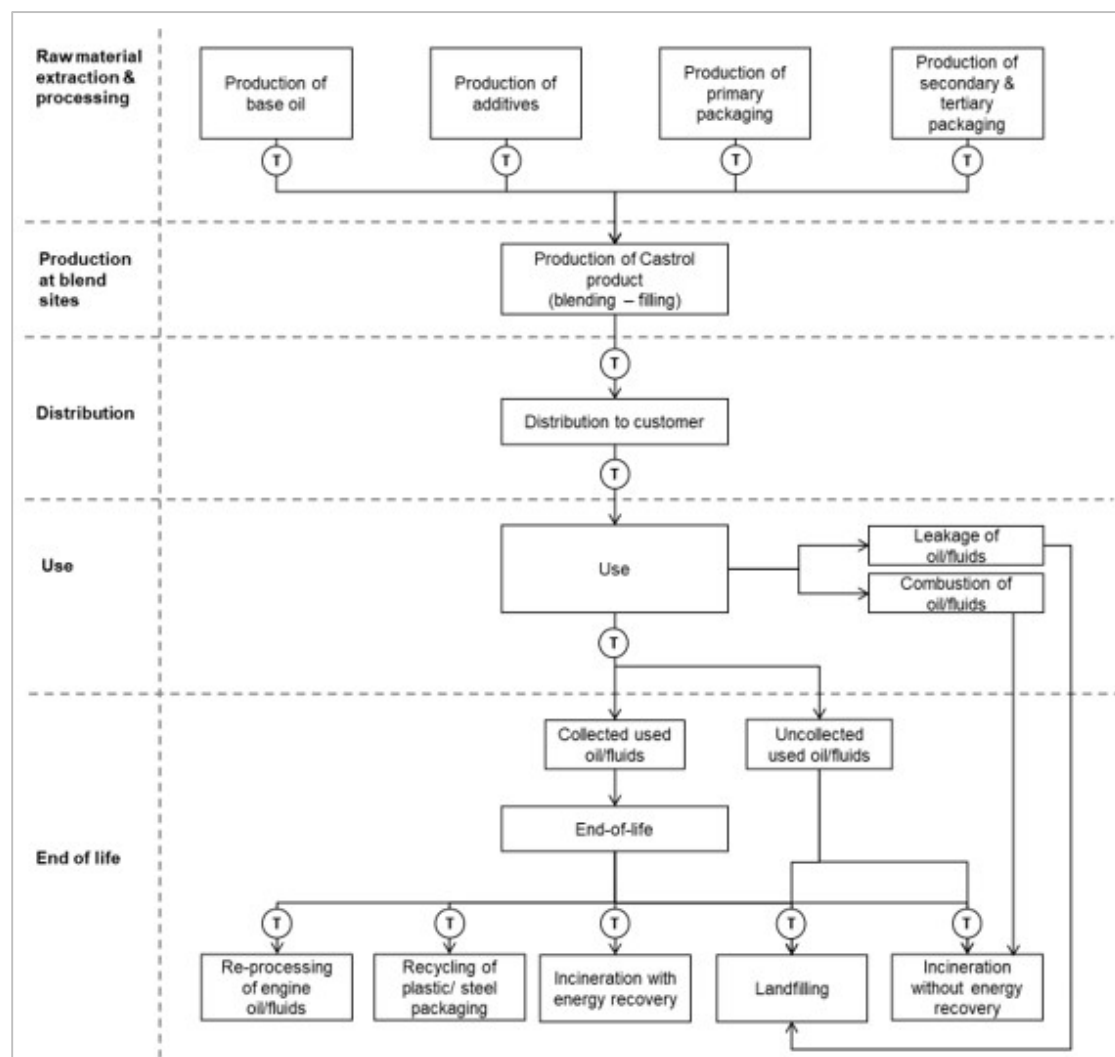
Figure 2.1 – Carbon Neutral Declaration Periods



2.3 Boundaries of the Subject

The declaration of carbon neutrality covers GHG emissions relating to all of the activities that are material for the subject. The subject includes over 1000 products variants and 5400 stock keeping units (SKUs) sold in 55 markets across the globe. Having the % system loss for each of the product types associated with these product variants and the country detail for where products are sold allows for losses-in-use and end-of-life treatment assumptions to be applied at the SKU level. Together, this makes it practical to conduct 'cradle-to-grave' lifecycle analysis in accordance with the requirements of the Greenhouse Gas Protocol Product Life Cycle Accounting and Reporting Standard (GHGP Product Standard). The system boundary considered in assessing the carbon footprint of these products is described in Figure 2.2.

Figure 2.2 – Process Map



3. QUANTIFICATION OF CARBON FOOTPRINT

3.1 Standard Chosen and Emissions Sources

The GHGP Product Standard was used to quantify the GHG emissions associated with the subject. This method was chosen as it provides an internationally recognised approach to the calculation of product CO₂e footprints and meets the requirements of PAS 2060 for the substantiation of GHG emissions (PAS 2060:2014 5.2.2 to 5.2.4). The GHGP Product Standard was applied in accordance with its provisions and the principles set out in PAS 2060. The product CO₂e footprints have been prepared by a specialist third party (ERM).

GHG emissions that are accounted for in the study are based on the 100-year Global Warming Potential figures published in Table 2.14 of the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report (2014) and include those required by the GHGP Product Standard, which specifies emissions to and removals from the atmosphere of: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), sulphur hexafluoride (SF₆), perfluorocarbons (PFCs), and hydrofluorocarbons (HFCs). A full list of GHG emissions included in the inventory is provided in Annex C of this report.

100% of the Scope 1 and 2 emissions relevant to the product are included in the carbon footprint in Table 3.1 below and the quantified carbon footprint covers at least 95% of the Scope 1,2 and 3 emissions from the subject. Sources of biogenic carbon in the average Castrol product system are limited to the production of selective ingredients, cardboard, and wood packaging materials, which are identified as negligible. Therefore, the carbon footprint results from this study do not provide separate reporting of biogenic carbon emissions. Any exclusions are anticipated to be less than 1% of the total GHG emissions and no weighting factors have been included for delayed emissions. Offsetting has not been included in calculations and no avoided emissions have been included in calculations.

3.2 Emissions Profiles of the Subject

Table 3.1 – Cradle-to-grave GHG Emissions per litre of product (Carbon Neutral KPI)

| Inventory results: kg CO ₂ e per unit of analysis | | |
|---|------------------------------------|---|
| Product group description | GHG Emissions per litre of product | |
| Global (products in scope for the Castrol Carbon Neutral Portfolio) | ██████ | Kg CO ₂ e per litre of average Castrol product from the Castrol Carbon Neutral Portfolio |

Using 2020 calendar year data, the average Castrol product from the Castrol Carbon Neutral Portfolio has a per litre carbon intensity of ██████ Kg CO₂e/L. The total GHG emissions of Castrol's Carbon Neutral Portfolio based on 2020 sales volume and product intensity at the SKU (most granular level) is 1,252,014 tonnes of CO₂e. Applying the same SKU level intensities to the 2021 sales volume of sales volume of ██████████ liters equates to 1,335,314 tonnes of CO₂e. This calculation is explained further in Section 6 as part of the Carbon Offset Program.

Figure 3.1 – Value (% of total CO₂e) by Life Cycle Stage

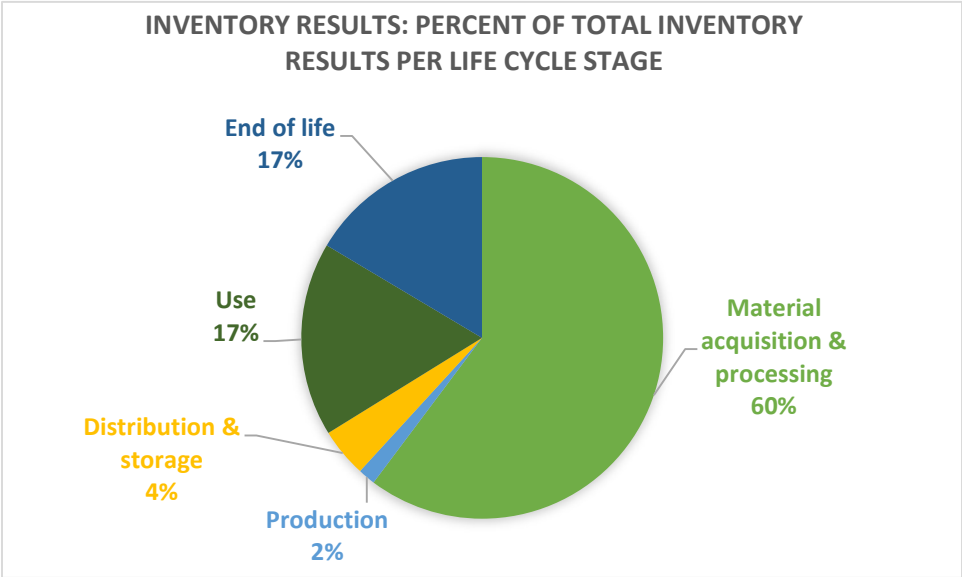


Table 3.2: Description of GHG emissions

| Boundary setting | |
|---|--|
| Life cycle stage definition | |
| Material acquisition and pre-processing | <p>Raw material extraction and processing to produce base components for use in the average Castrol product production process for all products in scope for the Castrol Carbon Neutral portfolio.</p> <p>The following processes are included within the boundary of this life cycle stage:</p> <ul style="list-style-type: none">• Production of base oils, comprising extraction of crude oil; transportation of crude oil to refining; and refining of crude oil to produce base oil and co-products, with burdens allocated to base oils on a mass basis• Production of additives, comprising production of chemicals and processing to make average Castrol product additives and viscosity modifiers, and associated transport; and• Production of packaging materials (plastics, steel, wood), comprising extraction and transportation of raw materials; processing to packaging base materials; and fabrication of packaging products. |

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| | <p>The following processes are not included within the boundary of this life cycle stage.</p> <ul style="list-style-type: none"> Capital goods and infrastructure (i.e., manufacture and maintenance of buildings and machinery), which are considered to be negligible in relation to one litre of average Castrol product. |
| Production | <p>Blending of base components (base oils and additives) to produce average Castrol product and filling into product packaging (plastic bottles, steel drums, Intermediate Bulk Containers (IBCs), etc.) for all products in scope for the Castrol Carbon Neutral portfolio.</p> <p>The following processes are included within the boundary of this life cycle stage:</p> <ul style="list-style-type: none"> Incoming transport of average Castrol product ingredients and packaging to Castrol sites Blending operations for production of average Castrol products at Castrol sites Filling to packaging (including plastic bottles, steel drums, bulk packaging, etc.) of average Castrol products; and Management of wastes and emissions from Castrol sites producing average Castrol products worldwide. <p>The following processes are not included within the boundary of this life cycle stage.</p> <ul style="list-style-type: none"> Capital goods and infrastructure (i.e., manufacture and maintenance of buildings and machinery), which are considered to be negligible in relation to one litre of average Castrol product and Personnel activities (e.g., commuting to and from work). |
| Distribution and storage | <p>Distribution of packed products in scope for the Castrol Carbon Neutral portfolio from Castrol blending sites to customers (e.g., dealerships and retailers) comprising:</p> <ul style="list-style-type: none"> Transportation by third party fleet to distribution hub in the market country; and |

| | |
|-----|--|
| | <ul style="list-style-type: none"> • Transportation by in-country third party carrier from distribution hub to customer (e.g., car dealerships). <p>The following processes are not included in the boundary of this life cycle stage.</p> <ul style="list-style-type: none"> • Capital goods and infrastructure (i.e., manufacture and maintenance of buildings and machinery), which are considered to be negligible in relation to one litre of average Castrol product • Storage at distribution warehouse. Average Castrol products are stored at ambient temperature and do not require any additional treatment for storage. The impact from storage, comprising energy for lighting, is considered to be negligible per litre of product. • Personnel activities (i.e., commuting to and from work). |
| Use | <p>The Castrol Carbon Neutral portfolio has several use applications (e.g., engine oils, gear oils, greases, coolants and cleaners) across several product categories (e.g., automotive, marine, energy, and industrial).</p> <p>In these application groups, Castrol products are used to facilitate the efficient running of, for example, engines, equipment, and machinery. They are not typically consumed during use, although there is inevitably some average Castrol product loss through leakage or, where combustion is applicable, with the fuel. Leakage and use rate percentages have been applied to these cases and it is assumed that the percentage leaked or combusted degrades to carbon dioxide. In contrast, some applications (e.g., greases, marine lubricants, and cleaners etc) have a high loss rate in use. In these cases, it is assumed that 80% to 100% is lost and eventually degrades into carbon dioxide.</p> <p>Use of average Castrol product includes the following:</p> <ul style="list-style-type: none"> • Filling of product application system (e.g., vehicles, equipment, and machinery) with average Castrol product • Leakage of average Castrol product during use • Where applicable, combustion of average Castrol product with fuel during use |

| | |
|-------------|---|
| | <p>The following processes are not included in the boundary of this life cycle stage.</p> <ul style="list-style-type: none"> • Capital goods and infrastructure (i.e., manufacture and maintenance of buildings and machinery), which are considered to be negligible in relation to one litre of average Castrol product. • Draining of used average Castrol product from product application system as this is a manual operation. • Personnel activities (e.g., commuting to and from work). <p>Also not included within the boundary of this lifecycle stage nor within any life cycle stage within the boundary of the subject is the beneficial impacts of the product in use (e.g., fuel economy, reduced friction and durability/extended drain, etc.).</p> |
| End-of-life | <p>Depending on the percent loss during the use phase, there will be different end of life considerations. For applications with 100% loss (e.g., greases and marine), there is no further end-of-life treatment as it is assumed the average Castrol product is 100% released into the environment during the use phase.</p> <p>In contrast, for average Castrol products which do not have 100% loss during the use phase, the used average Castrol products can be re-refined, incinerated for energy recovery, incinerated without energy recovery, or landfilled, the packaging must also be treated. It is assumed that no improper disposal (e.g., dumping to land) occurs for products sold via 'dealership' marketing channels. The following processes are included in the boundary of this life cycle stage:</p> <ul style="list-style-type: none"> • Transportation of used average Castrol product to a waste management facility • Used average Castrol product incineration with and without energy recovery, landfill, or re-refining; and • Treatment of waste packaging to recycling, incineration with energy recovery, incineration without energy recovery or landfill. <p>In line with the recycled content method (Chapter 9 of the GHG Product Protocol), the following processes are not included in the boundary of this life cycle stage:</p> |

| | |
|--|--|
| | <ul style="list-style-type: none">Processes that transform waste to a useful material in another process (e.g., re-refining of used oil and recycling of plastic). |
|--|--|

4. DATA METHODS

4.1 Data Sources

Data used for this footprint study was derived from a mix of primary and secondary sources. Where possible, primary data was used. Secondary data was used only where primary data was not available or where the impact on the carbon footprint result was nominal.

Primary data was sourced for all Castrol activities, comprising product specifications and formulations; operational data at blend sites; production output from blend sites; sales data in market countries; packaging material inputs; incoming material transport distances; and distribution modes of transport. Primary data was also sought and obtained from a number of Castrol’s suppliers for base oil, additives, and primary packaging as part of previous GHG inventories. Where primary data was not made available, secondary data was used to fill gaps based on documented assumptions.

Distribution routes and distances were estimated based on the regional location of the blending site where a product is manufactured and the regional location of Castrol warehouse facilities in the market country.

Secondary data was sourced to define appropriate use and disposal scenarios and for all other activities associated with the life cycle of average Castrol product, comprising: GHG emission factors, which were sourced from reputable published databases; secondary and ancillary packaging materials; and average country specific waste management rates for used oil and packaging materials.

4.2 Data Quality and Uncertainties

Data quality assessments were undertaken for all activity data and emission factor data. Activity data was assessed for the following data quality criteria geography, time period, and reliability. Emission factor data was assessed for the following data quality criteria; technology, geography, time period, completeness and reliability for each data quality criterion, a score was assigned on a scale of 1 to 4 (1 being poor; 4 being good). A single data quality score was calculated as the simple average of all five representativeness categories (equal weighting for each category). The quality of the overall dataset was appraised as a percentage of the total carbon footprint result that relies on data is appraised as ‘poor’ (<1.5), ‘fair’ (1.5 – 2.5), ‘good’ (2.5 – 3.5) and ‘very good’ (>3.5)

The following table provides an overview of the Activity Data Quality Appraisal for all products in scope:

Table 4.1 – Activity Data Quality Appraisal

| Data Quality Appraisal - Activity Data | % contribution to total GHG footprint |
|--|---------------------------------------|
| Poor | 0.00% |
| Fair | 10.97% |
| Good | 77.76% |
| Very good | 11.27% |

The following provides an overview of the Emission Factor Data Quality Appraisal for all products in scope:

Table 4.2 – Emissions Factor Data Quality Appraisal

| Data Quality Appraisal - Activity Data | % contribution to total GHG footprint |
|--|---------------------------------------|
| Poor | 0.00% |
| Fair | 0.64% |
| Good | 81.22% |
| Very good | 18.11% |

The following identifies specific areas of uncertainty in the product carbon footprint results:

Raw material inputs – for raw material inputs for which primary data was not received, secondary data was used. The nature of key raw material inputs (base oil and additives) is such that there is potentially a high degree of variability between suppliers and consequently the GHG impact can vary accordingly. Given the contribution to total GHG emissions from the production of raw materials, the assumptions made relating to raw material impacts have the potential to have a significant effect on the overall result. In the absence of supplier-specific data, the average-data method has been applied as recommend by the GHG Protocol Scope 3 Guidance document. In addition, Castrol continues to request supplier-specific data from its key suppliers to reduce the reliance on secondary data and improve the variability of raw material production emissions.

End-of-life management – waste management rates are assumed based on national/ regional averages. Waste management rates can vary significantly between different countries in the same region or between different areas in the same country. Similarly, given the contribution to total GHG emissions from the end-of-life management, the assumptions made relating to waste management rates have the potential to have a significant effect on the overall result.

Improvements to data quality

Not applicable as first GHG inventory.

4.3 Key uncertainties, assumptions, estimations, and allocations

4.3.1 Scenario Uncertainty

Blending Locations - In some cases, data to link the production of a formulation at a specific blend site and its subsequent sale to an end market were not available. Therefore, some assumptions were required to map the formulation through the life cycle. Castrol sales data provide volumes sold to each end market, broken down by product code. Product codes were

then mapped to formulation codes and blend sites. Where formulations were blended at more than one blend site, a blend site was selected based on geographic proximity to the end market. The assumption for blending site location only significantly affects impacts associated with blending and distribution processes. Given the availability of data and the relatively small contribution to the total footprint from blending and distribution, this is considered a reasonable approach.

Use Profile – Average Castrol product are used in different product application systems to enhance the intended application system efficiency and are not typically consumed by the application system.

Average Castrol product are not intended to be consumed by the product application system. However, depending on the application there is either 100% direct loss (e.g., greases and marine), leakage of fixed % of the product, as well as unintended combustion (where applicable) with fuel in the product application system. Information relating to the quantity of average Castrol product that is lost, leaked, or is burned with fuel is limited. Therefore, in order to remain conservative, it is assumed the following:

- 100% direct loss: Degrades completely to carbon dioxide.
- Leakage of fixed % of product and/or combustion: Assumed 100% combusted (i.e., incinerated without energy recovery).

Data relating to the proportion of average Castrol product that leaks or is combusted (where applicable) with fuel is taken from both Castrol technology experts and Kline (2010), 'Global Used Oil 2009: Market Analysis and Opportunities.'⁵ This report from Kline is the only known industry report to assess % system loss by product application type. Subsequent reports have been issued by Kline in 2016, 2019 and 2020, but these reports do not include a comparable global average system loss% by product type. The data from this report was reviewed by Castrol and adjusted accordingly to reflect Castrol's knowledge on product application systems in the market.

End of Life – For products which are not 100% directly lost during the use phase, the average Castrol product can be drained from the product application system for end-of-life treatment.

Following the drainage of used product from the product application system, it is assumed a fixed % of used product is collected by a reputable waste contractor for management. At end-of-life, used oil can be recycled (requiring a re-refining process to remove impurities and produce a re-refined average Castrol product); incinerated with recovery of energy; incinerated without recovery of energy; or landfilled. The proportion of used average Castrol product following each waste management route is estimated, based on country-specific or region-specific average rates.

Sales Data – The sales data which is pulled through Power BI at the Country/ Channel/SKU level to calculate the product carbon intensities varies from the financial reporting data by 0.33%.

⁵ Current Kline (2019) is not applied due to ambiguity of information and lack of details on methodology

Castrol's Carbon Neutral product range is ~30% of the sales portfolio and therefore this variance accounts for less than 1 % of total, making it reasonable to rely on this data source.

4.3.2 Parameter Uncertainty

The model contains complete referencing of all GWP factors. The sources are:

- 2020 Guidelines to Defra / DECC's GHG Conversion Factors for Company Reporting for UK grid electricity, liquid and gaseous fuels and freight transport.
- Ecoinvent 3.6.
- Confidential supplier data; and
- 2020 International Energy Agency (IEA) grid factors.

4.3.3 Model Uncertainty

Not applicable. Material issues relating to uncertainty are covered under parameter and scenario uncertainty.

4.3.4 Allocation

Production of base oils - Impacts from crude oil refining have been allocated to base oil and co-products on a mass basis. As per Chapter 9 of the GHG Product Protocol, allocation has been based on the underlying relationship between the quantity of the co-products and quantity of emissions generated. Refining of crude oil results in several co-products, none of which can be assumed to be the primary reason for refining. It is therefore considered reasonable to allocate emissions on a mass basis, assigning impacts relative to the quantity (by mass) of each co-product output.

Incineration with energy recovery (use of used oil as fuel) - Cut-off approach has been applied for impacts from incineration at end-of-life with energy recovery as per the direction made in Chapter 9 of the GHG Product Protocol. This accounts for the use of used average Castrol product as a fuel for the generation of heat and electricity and is reflected in the applied emission factor (0 kg CO₂e per kg of used oil). This is equivalent to the recycled content approach where 100% of the emissions are allocated to the generation of electricity and useful heat. Emissions associated with energy recovery processes are already included in electricity grid mix datasets, so these have been omitted to avoid double counting these burdens.

Incineration without energy recovery - In this case, the waste is not incinerated for a useful purpose and the associated emissions are allocated to the average Castrol product system (e.g., incineration of used oil without energy recovery).

Recycling/re-refining at end-of-life - The recycled content approach has been used to account for recycling of materials at end-of-life. All impacts associated with recycling processes (e.g.,

cleaning, sorting, chipping) are allocated to the system using the recycled material as input (i.e., the next life cycle). This method has been applied to all materials that are recycled at end of life.

In this inventory, recycling relates to the end-of-life stage and refers to used oil and packaging materials. It is reflected in the relevant emission factors for recycling at end of life (all 0 kg CO₂e per kg of waste):

- Used oil recycling (i.e., re-refining) – 0% of re-refining process allocated to Castrol system and 100% allocated to system that uses re-refined oil; and
- Packaging materials – 0% of recycling processes allocated to Castrol; 100% allocated to system that uses recycled materials.

Site operational data - Castrol's blend sites typically produce more than one type of product. However, the process for blending and filling is comparable regardless of product. Therefore, total site operational data have been allocated to products in scope for the Castrol Carbon Neutral portfolio on a mass basis.

Displaced emissions and removals using the closed loop approximation method - Not applicable.

4.3.5 Inclusions (External to the boundary)

While Castrol has chosen 'operational control' as its consolidation approach, it has identified and included within this QES, 4 products being manufactured and sold by a non-operated joint venture. Castrol is choosing to include these product variants as they fall under 2 of the lead brands where Castrol is claiming carbon neutrality for 'all products sold'. The 2021 sales, [REDACTED] L, while insignificant in volume when compared to the balance of the portfolio (<0.01%) have been used to estimate GHG emissions of 79 t CO₂e (as per the 5-step process described in Section 6 of this document) and the required equivalent offsets have been included in Table 6.1.

5. CARBON MANAGEMENT PLAN

5.1 Commitment

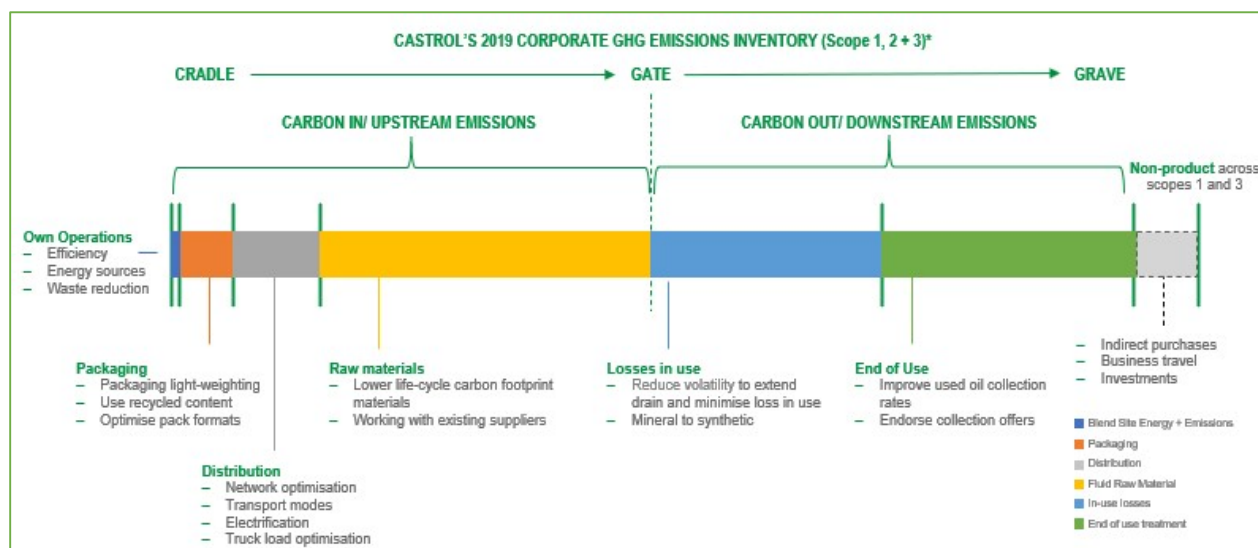
Castrol is committed to achieve carbon neutrality of the subject for the period of 1st January 2022 to 31st December 2022 in accordance with PAS 2060:2014. This commitment can be broken down as follows:

- Offset GHG emissions for the achievement period based on 2021 actuals sales data; completed in early 2022.
- Continue to implement its carbon reduction plan during the commitment period.
- Commit to an offset program for the remaining GHG emissions in line with PAS 2060:2014

5.2 Carbon Reduction Plan

Castrol's carbon reduction plan is a global approach encompassing activities across Scope 1, 2 and 3 emissions in support of its aim to halve the net carbon intensity of its products sold by 2030 or sooner, vs the 2019 baseline (measured in 2020). Castrol's carbon reduction activities are not limited to its carbon neutral portfolio, but the impact of its carbon reduction activities are assessed in relation to both the carbon neutral portfolio and the overall carbon footprint (Scope 1, 2 and 3 emissions). Castrol measured its corporate carbon footprint for the first time in 2020 and it has used the insights from that assessment to inform a key focus area of Castrol's PATH360 sustainability strategy: reducing carbon. In addition to assessing the scale and materiality of Scope 1, 2 and 3 emissions and the opportunities for reductions within them, Castrol has transformed its organisational structure by developing a sustainability squad made up of a series of workstreams focusing on the key categories across the lifecycle of Castrol's products. Leveraging agile ways of working, digital platforms and skills, and the collaboration of sustainability leaders across multiple sectors, Castrol continues to pursue activities that directly reduce and indirectly influence its carbon emissions as well as exploring options to accelerate its progress towards its aims.

Figure 5.1 – Castrol's Corporate GHG Emissions Inventory and Reduction Opportunities



Castrol is in action. After having set the baseline, strategy, ambition, ways of working and people, Castrol is building a roadmap by lifecycle category to measure the progress against its aims and identify interventions as appropriate.

To reduce carbon emissions within the raw materials Castrol purchases, the focus is on three different activities. Firstly, the Castrol Technology team looks for lower carbon footprint materials as a design-in approach to develop new products in select geographies. Secondly, within the current product portfolio, Castrol is working to optimize formulations by choosing

lower carbon options, without compromising their performance. Thirdly, Castrol is working in collaboration with its suppliers to understand their supplier-specific product carbon footprints, what they are doing to reduce their CO₂e emissions and to support them on their carbon reduction plans where possible. Castrol has also modified its RFQ process to include a sustainability questionnaire in an effort to benchmark its suppliers.

Castrol has already transitioned 9 sites to renewable energy across its owned assets through the use of renewable electricity contracts and 4 sites are utilizing solar-sourced electricity. In addition to furthering progress towards renewable energy, Castrol's roadmap also includes replacing fuel oil and diesel combustion with natural gas, reducing blending temperature and heating of raw materials where possible, and implementing smart energy management systems and equipment upgrades to improve efficiency and conserve energy.

Under the packaging category, Castrol has set a clear strategy to reduce, reuse and recycle plastic within its value chain, all in support of its aim to halve its plastic footprint per litre by 2030, vs the 2019 baseline (measured in 2020). Within the reduce plastic category, Castrol is focusing on light-weighting containers, looking for alternative materials and formats and increasing use of recycled resin. With Project Highlander, Castrol has reduced the amount of plastic per bottle in small packs on average by 20% resulting in an estimated carbon reduction of 7k tonnes per annum since 2019. Highlander has been implemented in 9 markets across Asia and Africa with a European implementation planned in 2023.

Under reuse, Castrol is exploring innovative solutions as refillable bottles (DIY), wash & refill solutions, foldable IBCs, and minibulk/dispense systems.

Managing plastic at end of use is a challenge for Castrol as the oil contaminates the packs, meaning it cannot be recycled in standard plastic waste streams. As well as being messy, contaminated plastic produces a recycled resin that has undesirable color and odor properties for consumer product use and can have variable quality. However, Castrol does participate in collection schemes where segregated recycling exists and, in the US, have joined the National Lubricant Container Recycling Coalition focused on establishing solutions for post-consumer recovery and recycling of plastic lubricant containers for use in industrial products.

Losses in use is one of the more challenging life cycle stages to reduce, particularly when it comes to the use profile or % system loss of lubricant during its functional life. By first understanding the % system loss for the different types and applications of products Castrol makes (oils, lubricants, fluids and greases across the automotive, industrial, marine and energy spaces), Castrol is now evaluating future trends and the impact this may have on product mix and the associated GHG emissions. Castrol products are also formulated to meet challenging industry and Original Equipment Manufacturer (OEM) specifications, ensuring continued research and development to improve volatility (i.e., the evaporation loss of lubricants in high-temperature service.) In addition, Castrol is exploring opportunities to reduce the fossil carbon content of the product, especially where % system loss is high.

At the end-of-life stage, Castrol is conducting market research in targeted geographies to understand industry assumptions and opportunities, as well as evaluating its participation and partnership strategy around end-of-life treatment and used oil collection rates. Since the majority of Castrol's sales are through distributors and workshops and therefore several steps removed from the end user, Castrol seeks to influence in order to drive change in this area. Castrol is starting by working with its OEM partners to re-direct collected oil to re-refining therefore keeping it in use for longer.

Castrol has leveraged its digital platforms and skills to be able to track the carbon intensity for its products, identify future areas for carbon reductions and allocate and action the required resources to mitigate any potential risk to meet the reduction plan. Castrol will assess its performance against its carbon management plan at a minimum of once per annum.

Castrol's carbon management plan is assessed monthly as part of its Sustainability Implementation Programme execution and progress against key activities are reviewed with leadership. These periodic assessments of performance against the plan provide opportunity to implement corrective action aiming at targets being achieved.

6. CARBON OFFSET PROGRAM

Since the inception of its carbon neutral programme in 2014, Castrol has been ordering its carbon credits from bp Target Neutral. The purchase of these credits supports and contributes to a portfolio of carbon reduction, avoidance and removal projects around the world. Some of these projects have additional benefits that support the UN Sustainable Development Goals, improving the lives of millions of people through better health, decent work, training and gender equality.

6.1 Offset program for the 2nd Application Period

In accordance with the guidelines of PAS 2060, Castrol is relying on 100% offsets to compensate for the CO₂e emissions in its baseline period. While carbon reduction activities are in action with some examples included in Section 5, the exact amount of the carbon reductions in 2021 will be confirmed when Castrol completes the carbon footprinting of its carbon neutral portfolio by the end of 2022. The methodology to assess these reductions will be consistent with the methodology used to determine the baseline product carbon footprints, and a comparison of results between the 2022 model (based on 2021 data) and the baseline model will be used to verify the tonnes and per litre impact of these initiatives.

Credits for the baseline period covering 1st Jan 2021 – 31st Dec 2021 were purchased and retired through bp Target Neutral (www.bptargetneutral.com) based on 2021 Actual tCO₂e of 1,335,314. These credits have been purchased from sources based on schemes with criteria for:

- The offsets purchased represent genuine, additional GHG emissions reductions; and

- The projects involved in delivering offsets meet the criteria of additionality, permanence, leakage, and double counting.

The purchase of offsets via these schemes also guarantees that the credits have been verified by an independent third party, only issued after the emission reductions had taken place, and were retired within 12 months from the date of the declaration of the achievement. These credits are supported by publicly available project documentation, with references provided and stored and retired in an independent and credible registry.

To determine the amount of offsets required for the 2021 period (calculated to be 1,335,314) Castrol uses a 5-step process to assign the average product carbon intensity (as assessed by ERM and based on 2020 sales data) for 2021 volumes sold. For step 1, where there is a direct match at the Country/Channel/SKU level (most granular level), this average product carbon intensity is multiplied by its respective sales volume. In 2021, there was a direct match for 77% of the sales volume at this level.

In the instances where a new Country/Channel/SKU has been introduced (i.e., sold) within an existing carbon neutral category but after the carbon footprinting period has closed, steps 2-5 have been applied to provide the most accurate estimate of product carbon intensity possible:

step 1: use the average product carbon intensity at the Country/Channel/SKU level, else
 step 2: use the Product Variant average carbon intensity for that Country and Channel, else
 step 3: use the SKU global average carbon intensity for that Product Variant, else
 step 4: use the Product Variant global average carbon intensity, and finally if still no matches
 step 5: use the global average product carbon intensity for that carbon neutral category

The new Country/Channel/SKU would then be included in the carbon foot printing process from the following application period.

If Castrol can demonstrate evidence where tonnes of CO₂e relative to this application period have been previously offset, it will include this in the calculation of required offsets. This would include Castrol's Scope 1 and 2 emissions which has its own carbon neutral commitment and application, as well as emissions from purchased raw materials made carbon neutral at the gate-to-gate or cradle-to-gate level.

6.2 Offset program for the 3rd Application Period

For the 3rd application period, 1st January 2022 – 31st December 2022, Castrol will repeat the same process as followed for the 2nd application period but using 2022 volumes sold and the average product intensities from the 2022 model (based on 2021 sales data). Castrol will notify bp Target Neutral of the volume of credits required once the emission calculations are complete for this period with retirements completing in 1Q 2023, prior to external assurance for this application period.

Table 6.1 Carbon Offsets to Account for Full Year 2021 Sales Volumes in the 1st Achievement Period

| Project Name | Account Name | Standard and registry type | Date of retirement | Actual carbon offset (credits/tCO ₂ e) | HYPERLINKS | Vintage |
|---|--------------------------|---|--------------------|---|---|---------|
| BIRUS Indonesia Biogas | BP International Limited | VCS / Markit Env Registry | 12/1/2019 | 21,882 | BIRUS Indonesia Biogas | 2018 |
| Distribution of ONIL stoves - Mexico | BP International Limited | VCS / Markit Env Registry | 12/1/2019 | 4,678 | Distribution of ONIL stoves - Mexico | 2018 |
| WIND power CGN Zhaoyuan | BP International Limited | VCS / Markit Env Registry | 12/1/2019 | 81,685 | WIND power CGN Zhaoyuan | 2018 |
| Lower Zambezi REDD+ Project | BP International Limited | VCS / Markit Env Registry | 12/1/2019 | 6,378 | Lower Zambezi REDD+ Project | 2018 |
| Orb Energy Solar Program in India | BP Gas Marketing Limited | Gold Standard / Verified Emission Reductions (VERs) | 8/5/2021 | 80,000 | Orb Energy Solar Program in India | 2019 |
| Titas Gas Distribution Network in Bangladesh | BP Gas Marketing Limited | UN registry for CDM projects | 9/22/2021 | 93,533 | Titas Gas Distribution Network in Bangladesh | 2018 |
| Zhaoyuan Zhangxing Wind Power Project - China | BP Gas Marketing Limited | UN registry for CDM projects | 9/22/2021 | 52,830 | Zhaoyuan Zhangxing Wind Power Project - China | 2020 |
| Korat Waste To Energy - Thailand | BP Gas Marketing Limited | UN registry for CDM projects | 9/22/2021 | 100,189 | Korat Waste To Energy - Thailand | 2013 |
| INOLASA - Costa Rica | BP Gas Marketing Limited | UN registry for CDM projects | 9/22/2021 | 3,754 | INOLASA - Costa Rica | 2014 |
| Fertinal Project - Mexico | BP Gas Marketing Limited | UN registry for CDM projects | 9/22/2021 | 32,401 | Fertinal Project - Mexico | 2011 |
| REDD project in Madre de Dios, Peru | BP International Limited | VCS / Markit Env Registry | 9/23/2021 | 55,920 | REDD project in Madre de Dios, Peru | 2016 |
| REDD project in Madre de Dios, Peru | BP International Limited | VCS / Markit Env Registry | 9/22/2021 | 309,344 | REDD project in Madre de Dios, Peru | 2016 |
| ONIL Stoves - Guatemala | BP International Limited | VCS / Markit Env Registry | 3/9/2022 | 120,039 | ONIL Stoves - Guatemala | 2017 |
| Landfill Gas Project BRAZIL | BP Gas Marketing Limited | UN registry for CDM projects | 3/9/2022 | 43,021 | Landfill Gas Project - Brazil | 2014 |
| San Pedro Wind Farm - CHILE | BP Gas Marketing Limited | UN registry for CDM projects | 3/9/2022 | 219,516 | San Pedro Wind Farm - Chile | 2019 |
| El Arrayan Wind Farm - CHILE | BP Gas Marketing Limited | UN registry for CDM projects | 3/9/2022 | 110,144 | El Arrayan Wind Farm - Chile | 2020 |
| TOTAL Full Year 2021 | | | | 1,335,314 | | |

The offsets highlighted in the first four rows of Table 6.1 are offsets that were purchased and retired as part of the Europe PCO commitment to carbon neutrality in 2019, but never used as volumes were well below forecast. Castrol has demonstrated the evidence of this with the

Independent 3P Assurer to ensure their acceptable use within this application. Scope 1&2 offsets have been removed from this table as they are included in a separate Castrol QES / application for Scope 1 & 2 carbon neutrality.

Annex A: Qualifying Explanatory Statement (QES) Checklist

Table A.1 Checklist for QES supporting declaration of commitment to carbon neutrality

The following table has been extracted from PAS 2060:2014. It provides a checklist of information that should be included in the commitment to carbon neutrality, as well as identification of where this information is located.

| # | Item Description | Status | Section in this QES |
|----|---|--------|---|
| 1 | Identify the individual responsible for the evaluation and provision of data necessary for the substantiation of the declaration including that of preparing, substantiating, communicating, and maintaining the declaration. | ✓ | Section 2.1, Table 2.1 |
| 2 | Identify the entity responsible for making the declaration. | ✓ | Section 2.1, Table 2.1 |
| 3 | Identify the subject of the declaration. | ✓ | Section 2.1, Table 2.1, Annex D, Table D.1, Table D.2, Table D.3 |
| 4 | Explain the rationale for the selection of the subject. <i>(The selection of the subject should ideally be based on a broader understanding of the entire carbon footprint of the entity so that the carbon footprint of the selected subject can be seen in context; entities need to be able to demonstrate that they are not intentionally excluding their most significant GHG emissions (or alternatively can explain why they have done so).)</i> | ✓ | Page 2, Section 2.1, Table 2.1, Section 2.3, Section 5.2, Figure 5.1, Annex D, Table D.1, Table D.2 |
| 5 | Define the boundaries of the subject. | ✓ | Section 2.3, Table 2.1, Figure 2.2 |
| 6 | Identify all characteristics (<i>purposes, objectives, or functionality</i>) inherent to that subject. | ✓ | Section 2.3, Table 2.1, Figure 2.2, Table D.2 |
| 7 | Identify and take into consideration all activities material to the fulfilment, achievement or delivery of the purposes, objectives, or functionality of the subject. | ✓ | Section 2.3 |
| 8 | Select which of the 3 options within PAS 2060 you intend to follow. | ✓ | Section 2.2, Table 2.1, Figure 2.1 |
| 9 | Identify the date by which the entity plans to achieve the status of 'carbon neutrality' of the subject and specify the period for which the entity intends to maintain that status. | ✓ | Section 2.2, Figure 2.1, Section 5.1 |
| 10 | Select an appropriate standard and methodology for defining the subject, the GHG emissions associated with that subject and the calculation of the carbon footprint for the defined subject. | ✓ | Section 2.3, Section 3.1 |

| | | | |
|----|--|---|--|
| 11 | Provide justification for the selection of the methodology chosen. <i>(The methodology employed shall minimize uncertainty and yield accurate, consistent, and reproducible results.)</i> | ✓ | Section 3.1 |
| 12 | Confirm that the selected methodology was applied in accordance with its provisions and the principles set out in PAS 2060. | ✓ | Section 3.1 |
| 13 | Describe the actual types of GHG emissions, classification of emissions (Scope 1, 2 or 3) and size of carbon footprint of the subject exclusive of any purchases of carbon offsets: | ✓ | Section 3.1, Section 3.2, Table 3.1, Annex C |
| | a) All greenhouse gases shall be included and converted to tCO ₂ e. | ✓ | Section 3.1, Section 3.2 |
| | b) 100% Scope 1 (direct) emissions relevant to the subject shall be included when determining the carbon footprint. | ✓ | Section 3.1, Table 3.1, Figure 3.1 |
| | c) 100% Scope 2 (indirect) emissions relevant to the subject shall be included with determining the carbon footprint. | ✓ | Section 3.1, Table 3.1, Figure 3.1 |
| | d) Where estimates of GHG emissions are used in the quantification of the subject carbon footprint (particularly when associated with Scope 3 emissions) these shall be determined in a manner that precludes underestimation. | ✓ | Section 3.1, Table 3.2 |
| | e) Scope 1, 2 or 3 emission sources estimated to be more than 1% of the total carbon footprint shall be taken into consideration unless evidence can be provided to demonstrate that such quantification would not be technically feasible or cost effective. (Emissions sources estimated to constitute less than 1% may be excluded on that basis alone.) | ✓ | Table 3.1, Table 3.2 |
| | f) The quantified carbon footprint shall cover at least 95% of the emissions from the subject. | ✓ | Figure 3.1, Table 3.2 |
| | g) Where a single source contributes more than 50% of the total emissions, the 95% threshold applies to the remaining sources of emissions. | ✓ | Figure 3.1, Table 3.2 |
| | h) Any exclusion and the reason for that exclusion shall be documented. | ✓ | Section 3.1, Table 3.2 |
| 14 | Where the subject is an organization/ company or part thereof, ensure that: | | |
| | a) Boundaries are a true and fair representation of the organization's GHG emissions (i.e., shall include GHG emissions relating to core operations including subsidiaries owned and operated by the organization). It will be important to ensure claims are credible – so if an entity chooses a very narrow subject and excludes its carbon intensive activities or it if outsources its carbon intensive activities, then this needs to be documented. | ✓ | Section 3.1, Table 3.2 |
| | b) Either the equity shares or control approach has been used to define which GHG emissions are included. Under the equity share approach, the entity accounts for GHG emissions from the subject according to its share of equity in the subject. Under the control approach, the entity shall account for 100% of the GHG emissions over which it has financial and/or operational control. | ✓ | Table 2.1, Section 4.3.5 |

| | | | |
|----|---|-----|--|
| 15 | Identify if the subject is part of an organization or a specific site or location and treat as a discrete operation with its own purpose, objectives, and functionality. | N/A | |
| 16 | Where the subject is a product of service, include all Scope 3 emissions (<i>as the life cycle of the product/ service needs to be taken into consideration</i>). | ✓ | Section 3.2 |
| 17 | Describe the actual methods used to quantify GHG emissions (<i>e.g., use of primary or secondary data</i>), the measurement unit(s) applied, the period of application and the size of the resulting carbon footprint. (<i>The carbon footprint shall be based as far as possible on primary activity data.</i>) Where quantification is based on calculations (<i>e.g., GHG activity data multiplied by greenhouse gas emission factors or the use of mass balance/ life cycle models</i>) then GHG emissions shall be calculated using emissions factors from national (<i>Government</i>) publications. Where such factors are not available, international or industry guidelines shall be used. In all cases the sources of such data shall be identified. | ✓ | Page 1, Page 2, Section 2.1, Table 2.1, Figure 2.1, Section 3.1, Section 3.2, Table 3.1, Figure 3.1, Section 4.1, Section 4.3.2, Section 6.1 |
| 18 | Provide details of, and explanation for, the exclusion of any Scope 3 emissions. | ✓ | Section 3.1, Table 3.2 |
| 19 | Document all assumptions and calculations made in quantifying GHG emissions and in the selection or development of greenhouse gas emissions factors. (<i>Emission factors used shall be appropriate to the activity concerned and current at the time of quantification.</i>) | ✓ | Section 3.1, Section 3.2, Section 4.1, Section 4.2, Section 4.3 |
| 20 | Document your assessments of uncertainty and variability associated with defining boundaries and quantifying GHG emissions including the positive tolerances adopted in association with emissions estimates. (<i>The statement could take the form of a qualitative description regarding the uncertainty of the results, or a quantitative assessment of uncertainty if available (e.g., carbon footprint based on 95% of likely greenhouse gas emissions; primary sources are subject to variation over time; footprint is best estimate based on reasonable costs of evaluation).</i>) | ✓ | Section 4.2, Section 4.3 |
| 21 | Document Carbon Footprint Management Plan: | | |
| | a) Make a statement of commitment to carbon neutrality for the defined subject. | ✓ | Section 5.1 |
| | b) Set timescales for achieving carbon neutrality for the defined subject. | ✓ | Section 5.1 |
| | c) Specify targets for GHG reduction for the defined subject appropriate to the timescale for achieving carbon neutrality including the baseline date, the first qualification date and the first application period. | ✓ | Section 5.2 |
| | d) Document the planned means of achieving and maintaining GHG emissions reductions including assumptions made and any justification of the techniques and measures to be employed to reduce GHG emissions. | ✓ | Section 5.2 |
| | e) Specify the offset strategy including an estimate of the quantity of GHG emissions to be offset, the nature of the offsets and the likely number and type of credits. | ✓ | Section 6.1, Table 6.1 |
| 22 | Implement a process for undertaking periodic assessments of performance against the Plan and for implementing | ✓ | Section 5.2 |

| | | | |
|----|---|-----|--|
| | corrective action to ensure targets are achieved. The frequency of assessing performance against the Plan should be commensurate with the timescale for achieving carbon neutrality. | | |
| 23 | Where the subject is a non-recurring event, such as weddings or a concert, identify ways of reducing GHG emissions to the maximum extent commensurate with enabling the event to meet its intended objectives before the event takes place and include 'post event review' to determine whether the expected minimization in emissions has been achieved. | N/A | |
| 24 | Any reductions in the GHG emissions from the defined subject delivered in the three years prior to the baseline date and not otherwise considered in any GHG emissions quantification have been made in accordance with this PAS. | N/A | |
| 25 | Record the number of times that the declaration of commitment has been renewed without declaration of achievement. | N/A | This is the first declaration of achievement with a commitment to maintain |
| 26 | Specify the type of conformity assessment: | | |
| | <i>a) independent third-party certification</i> | ✓ | Section 2.1, Table 2.1 |
| | <i>b) other party validation</i> | N/A | |
| | <i>c) self-validation</i> | N/A | |
| 27 | Include statements of validation where declarations of commitment to carbon neutrality are validated by a third-party certifier or second party organizations. | ✓ | Annex B |
| 28 | Date the QES and have signed by the senior representative of the entity concerned (e.g., CEO of a corporation; Divisional Director, where the subject is a division of a larger entity; the Chairman of a town council or the head of the household for a family group). | ✓ | Page 2 |
| 29 | Make the QES publicly available and provide a reference to any freely accessible information upon which substantiation depends (e.g., via websites). | ✓ | A redacted version of the QES will be made publicly available. |
| 30 | Update the QES to reflect changes and actions that could affect the validity of the declaration of commitment to carbon neutrality. | ✓ | A commitment has been made by the business to do this; reflected on Page 2 |

Table A.2 Checklist for QES supporting declaration of achievement of carbon neutrality

The following table has been extracted from PAS 2060:2014. It provides a checklist of information that should be included in the achievement of carbon neutrality, as well as identification of where this information is located.

| # | Item Description | Status | Section in this QES |
|----|--|--------|-----------------------------|
| 1 | Define standard and methodology to use to determine its GHG emissions reduction. | ✓ | Section 2.3, Section 3.1 |
| 2 | Confirm that the methodology used was applied in accordance with its provisions and the principles set out in PAS 2060 were met. | ✓ | Section 3.1 |
| 3 | Provide justification for the selection of the methodologies chosen to quantify reductions in the carbon footprint, including all assumptions and calculations made and any assessments of uncertainty. <i>(The methodology employed to quantify reductions shall be the same as that used to quantify the original carbon footprint. Should an alternative methodology be available that would reduce uncertainty and yield more accurate, consistent, and reproducible results, then this may be used provided the original carbon footprint is re-qualified to the same methodology, for comparison purposes. Recalculated carbon footprints shall use the most recently available emission factors, ensuring that for purposes of comparison with the original calculation, any change in the factors used is considered.)</i> | ✓ | Section 3.1 |
| 4 | Describe how reductions have been achieved and any applicable assumptions or justifications. | ✓ | Section 5.2 |
| 5 | Ensure that there has been no change to the definition of the subject. <i>(The entity shall ensure that the definition of the subject remains unchanged through each stage of the methodology. If material change to the subject occurs, the sequence shall be re-started based on a newly defined subject.)</i> | ✓ | Section 2.3 |
| 6 | Describe the actual reductions achieved in absolute and intensity terms and as a percentage of the original carbon footprint. <i>(Quantified GHG emissions reductions shall be expressed in absolute terms and shall relate to the application period selected and/or shall be expressed in emission intensity terms (e.g., per specified unit of product or instance of service).)</i> | N/A | |
| 7 | State the baseline/ qualification date. | ✓ | Section 2.2 |
| 8 | Record the percentage economic growth rate for the given application period used as a threshold for recognising reductions in intensity terms. | N/A | |
| 9 | Provide an explanation for circumstances where a GHG reduction in intensity terms is accompanied by an increase in absolute terms for the determined subject. | N/A | |
| 10 | Select and document the standard and methodology used to achieve carbon offset. | ✓ | Section 6.1 |
| 11 | Confirm that: | | |

| | | | |
|----|--|-----|--|
| | a) Offsets purchased or allowance credits surrendered represent genuine, additional GHG emission reductions elsewhere | ✓ | Section 6.1 |
| | b) Projects involved in delivering offsets meet the criteria of <i>additionality</i> , <i>permanence</i> , <i>leakage</i> , and <i>double counting</i> . (See WRI Greenhouse Gas Protocol for definitions of <i>additionality</i> , <i>permanence</i> , <i>leakage</i> , and <i>double counting</i> .) | ✓ | Section 6.1 |
| | c) Carbon offsets are verified by an independent third-party verifier | ✓ | Section 6.1 |
| | d) Credits from carbon offset projects are only issued after the emission reduction has taken place | ✓ | Section 6.1 |
| | e) Credits from carbon offset projects are retired within 12 months from the date of the declaration of achievement | ✓ | Section 6.1 |
| | f) Credits from carbon offset projects are supported by publicly available project documentation on a registry which shall provide information about the offset project, quantification methodology and validation and verification procedures | ✓ | Section 6.; Table 6.1 |
| | g) Credits from carbon offset projects are stored and retired in an independent and credible registry | ✓ | Section 6; Table 6.1 |
| 12 | Document the quantity of GHG emissions offset and the type and nature of offsets purchased including the number and type of credits used and the time over which credits were generated including: | ✓ | Section 6; Table 6.1 |
| | a) Which GHG emissions have been offset | ✓ | Section 6; Table 6.1 |
| | b) The actual amount of carbon offset | ✓ | Section 6; Table 6.1 |
| | c) The type of offset and projects involved | ✓ | Section 6; Table 6.1 |
| | d) The number and type of carbon offset credits used and the time over which the credits have been generated | ✓ | Section 6; Table 6.1 |
| | e) Information regarding the retirement/ cancellation of carbon offset credits to prevent their use by others including a link to the registry where the offset has been retired. | ✓ | Section 6.1 |
| 13 | Specify the type of conformity assessment: | | |
| | a) independent third-party certification | ✓ | Section 2, Table 2.1 |
| | b) other party validation | N/A | |
| | c) self-validation | N/A | |
| 14 | Include statements of validation where declarations of achievement of carbon neutrality are validated by a third-party certifier or second party organisations. | ✓ | Annex B |
| 15 | Date the QES and have it signed by the senior representative of the entity concerned (e.g., CEO of a corporation; Divisional Director, where the subject is a division of a larger entity; the Chairman of a town council or the head of the household for a family group). | ✓ | Section 1 |
| 16 | Make the QES publicly available and provide a reference to any freely accessible information upon which substantiation depends (e.g., via websites). | ✓ | Carbon Neutrality Declaration, page 2 |

Annex B: Carbon Neutrality Assurance Statement

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| <div><div><div><div></div><div></div><div></div></div><div>DNV</div></div><div>WHEN TRUST MATTERS</div><div>Independent Limited Assurance Report</div><div>to the Management of Lubricants UK Ltd</div><div><p>Lubricants UK Ltd ("Castrol") commissioned DNV Business Assurance Services UK Limited ("DNV", "us" or "we") to conduct a limited assurance engagement over the declaration of carbon neutrality in the PAS 2060 Qualifying Explanatory Statement (the "Report") for its PATH360 Carbon Neutral Products for the achievement period commencing 1st January 2021 to 31st December 2021 and the commitment period commencing 1st January 2022 to 31st December 2022.</p><div><div></div><div><p>Our Conclusion: Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that the Report is not fairly stated and has not been prepared, in all material respects, in accordance with the Criteria. This conclusion relates only to the Report, and is to be read in the context of this Independent Limited Assurance Report, in particular the inherent limitations explained below.</p></div></div><div><div>Scope of work</div><p>The scope and boundary of our work is restricted to assessing that Castrol's preparation of the declaration of carbon neutrality presented in the Report, is in accordance with the Publicly Available Specification (PAS) 2060:2014 Demonstration of Carbon Neutrality (the "Criteria").</p><p>The products included within the PATH360 Carbon Neutral Products are included in Annex D of the Report.</p><p>We have not performed any work, and do not express any conclusion, on any other information that may be published outside of the Report and/or on Castrol's websites for the achievement period, the commitment period or for previous periods. Our work also excluded assessing the reliability of the inputs of the carbon footprint model.</p><div><div>Basis of our conclusion</div><p>We are required to plan and perform our work in order to consider the risk of material misstatement of the Report; our work included, but was not restricted to:</p><ul style="list-style-type: none">• Conducting interviews with Castrol's management to obtain an understanding of the key processes, systems and controls in place to generate and produce the content of the Report;• Conducting interviews with Castrol's management and the team in charge of maintaining and updating the carbon footprint model, used in the production of the Report;• Assessing whether the standards and methodologies used in the carbon footprint model met the Criteria;• Performing limited substantive testing of the carbon footprint model to check that its data and underlying assumptions had been appropriately measured, recorded and reported; and• Reviewing that the evidence, calculations and the context provided in the Report is prepared in line with the Criteria.</div></div></div><div><div><div>Our competence, independence and quality control</div><div><p>DNV's policies and procedures are designed to ensure that DNV, its personnel and others where applicable, are subject to independence requirements (including personnel of other entities of DNV) and maintain independence where necessary by relevant ethical requirements. This engagement was carried out by an independent team of sustainability assurance professionals. DNV holds other contracts with Castrol, none of which conflict with the scope of this work. Our multi-disciplinary team consisted of professionals with a combination of environmental and sustainability assurance experience.</p></div></div><div><div>Inherent limitations</div><div><p>All assurance engagements are subject to inherent limitations as selective testing (sampling) may not detect errors, fraud or other irregularities. Non-financial data may be subject to greater inherent uncertainty than financial data, given the nature and methods used for calculating, estimating and determining such data. The selection of different, but acceptable, measurement techniques may result in different quantifications between different entities. Our assurance relies on the premise that the data and information provided to us by Castrol have been provided in good faith. DNV expressly disclaims any liability or co-responsibility for any decision a person or an entity may make based on this Independent Limited Assurance Report.</p></div></div></div></div> | |
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WHEN TRUST MATTERS

Standard and level of assurance

We performed a **limited** assurance engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000 revised – 'Assurance Engagements other than Audits and Reviews of Historical Financial Information' (revised), issued by the International Auditing and Assurance Standards Board. This standard requires that we comply with ethical requirements and plan and perform the assurance engagement to obtain limited assurance.

DNV applies its own management standards and compliance policies for quality control, in accordance with ISO/IEC 17021:2015 - Conformity Assessment Requirements for bodies providing audit and certification of management systems, and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement; and the level of assurance obtained is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed. We planned and performed our work to obtain the evidence we considered sufficient to provide a basis for our opinion, so that the risk of this conclusion being in error is reduced but not reduced to very low.

Responsibilities of Castrol's Management and DNV

The Management of Castrol have sole responsibility for:

- Preparing and presenting the Report in accordance with the Criteria;
- Designing, implementing and maintaining effective internal controls over the information and data, resulting in the preparation of the Report that is free from material misstatements;
- Measuring and reporting the Report's data based on the established Criteria; and
- Contents and statements contained within the Report.

Our responsibility is to plan and perform our work to obtain limited assurance about whether the Report has been prepared in accordance with the Criteria and to report to Castrol in the form of an Independent Limited Assurance Report, based on the work performed and the evidence obtained. We have not been responsible for the preparation of the Report.

DNV Business Assurance Services UK Limited

London, UK
7th October 2022



DNV Business Assurance

DNV Business Assurance Services UK Limited is part of DNV – Business Assurance, a global provider of certification, verification, assessment and training services; helping customers to build sustainable business performance.

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Annex C: Included GHG Emissions

Table C.1 Global warming potential (GWP) values relative to CO₂

The following table includes the 100-year time horizon global warming potentials (GWP) relative to CO₂, which have been used for the carbon footprint assessment of the subject. This table is adapted from the IPCC Fifth Assessment Report, 2014 (AR5)⁷ For more information, please see the IPCC website <http://www.ipcc.ch/>

| Industrial designation or common name | Chemical formula | GWP values for 100-year time horizon from IPCC Fifth Assessment Report (AR5) | |
|---|---|--|-------------------------------|
| Carbon dioxide | CO ₂ | 1 | kg CO ₂ -eq per kg |
| Methane | CH ₄ | 28 | kg CO ₂ -eq per kg |
| Nitrous oxide | N ₂ O | 265 | kg CO ₂ -eq per kg |
| Substances controlled by the Montreal Protocol | | | |
| CFC-11 | CCl ₃ F | 4,660 | kg CO ₂ -eq per kg |
| CFC-12 | CCl ₂ F ₂ | 10,200 | kg CO ₂ -eq per kg |
| CFC-13 | CClF ₃ | 13,900 | kg CO ₂ -eq per kg |
| CFC-113 | CCl ₂ FCClF ₂ | 5,820 | kg CO ₂ -eq per kg |
| CFC-114 | CClF ₂ CClF ₂ | 8,590 | kg CO ₂ -eq per kg |
| CFC-115 | CClF ₂ CF ₃ | 7,670 | kg CO ₂ -eq per kg |
| Halon-1301 | CBrF ₃ | 6,290 | kg CO ₂ -eq per kg |
| Halon-1211 | CBrClF ₂ | 1,750 | kg CO ₂ -eq per kg |
| Halon-2402 | CBrF ₂ CBrF ₂ | 1,470 | kg CO ₂ -eq per kg |
| Carbon tetrachloride | CCl ₄ | 1,730 | kg CO ₂ -eq per kg |
| Methyl bromide | CH ₃ Br | 2 | kg CO ₂ -eq per kg |
| Methyl chloroform | CH ₃ CCl ₃ | 160 | kg CO ₂ -eq per kg |
| HCFC-21 | CHCl ₂ F | 148 | kg CO ₂ -eq per kg |
| HCFC-22 | CHClF ₂ | 1,760 | kg CO ₂ -eq per kg |
| HCFC-123 | CHCl ₂ CF ₃ | 79 | kg CO ₂ -eq per kg |
| HCFC-124 | CHClFCF ₃ | 527 | kg CO ₂ -eq per kg |
| HCFC-141b | CH ₃ CCl ₂ F | 782 | kg CO ₂ -eq per kg |
| HCFC-142b | CH ₃ CClF ₂ | 1,980 | kg CO ₂ -eq per kg |
| HCFC-225ca | CHCl ₂ CF ₂ CF ₃ | 127 | kg CO ₂ -eq per kg |
| HCFC-225cb | CHClFCF ₂ CClF ₂ | 525 | kg CO ₂ -eq per kg |
| Hydrofluorocarbons (HFCs) | | | |
| HFC-23 | CHF ₃ | 12,400 | kg CO ₂ -eq per kg |
| HFC-32 | CH ₂ F ₂ | 677 | kg CO ₂ -eq per kg |
| HFC-41 | CH ₃ F ₂ | 116 | kg CO ₂ -eq per kg |
| HFC-125 | CHF ₂ CF ₃ | 3,170 | kg CO ₂ -eq per kg |
| HFC-134 | CHF ₂ CHF ₂ | 1,120 | kg CO ₂ -eq per kg |
| HFC-134a | CH ₂ FCF ₃ | 1,300 | kg CO ₂ -eq per kg |
| HFC-143 | CH ₂ FCHF ₂ | 328 | kg CO ₂ -eq per kg |
| HFC-143a | CH ₃ CF ₃ | 4,800 | kg CO ₂ -eq per kg |
| HFC-152 | CH ₂ FCH ₂ F | 16 | kg CO ₂ -eq per kg |
| HFC-152a | CH ₃ CHF ₂ | 138 | kg CO ₂ -eq per kg |
| HFC-161 | CH ₃ CH ₂ F | 4 | kg CO ₂ -eq per kg |
| HFC-227ea | CF ₃ CHFCF ₃ | 3,350 | kg CO ₂ -eq per kg |
| HFC-236cb | CH ₂ FCF ₂ CF ₃ | 1,210 | kg CO ₂ -eq per kg |

⁷Myhre, G., D. Shindell, F.-M. Bréon, W. Collins, J. Fuglestedt, J. Huang, D. Koch, J.-F. Lamarque, D. Lee, B. Mendoza, T. Nakajima, A. Robock, G. Stephens, T. Takemura and H. Zhang, 2013: Anthropogenic and Natural Radiative Forcing. In: Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Stocker, T.F., D. Qin, G.-K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.

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| HFC-236ea | CHF ₂ CHF ₂ CF ₃ | 1,330 | kg CO ₂ -eq per kg |
| HFC-236fa | CF ₃ CH ₂ CF ₃ | 8,060 | kg CO ₂ -eq per kg |
| HFC-245ca | CH ₂ FCF ₂ CHF ₂ | 716 | kg CO ₂ -eq per kg |
| HFC-245fa | CHF ₂ CH ₂ CF ₃ | 858 | kg CO ₂ -eq per kg |
| HFC-365mfc | CH ₃ CF ₂ CH ₂ CF ₃ | 804 | kg CO ₂ -eq per kg |
| HFC-43-10mee | CF ₃ CHFCH ₂ CF ₂ CF ₃ | 1,650 | kg CO ₂ -eq per kg |
| Perfluorinated compounds | | | |
| Sulphur hexafluoride | SF ₆ | 23,500 | kg CO ₂ -eq per kg |
| Nitrogen trifluoride | NF ₃ | 16,100 | kg CO ₂ -eq per kg |
| PFC-14 | CF ₄ | 6,630 | kg CO ₂ -eq per kg |
| PFC-116 | C ₂ F ₆ | 11,100 | kg CO ₂ -eq per kg |
| PFC-218 | C ₃ F ₈ | 8,900 | kg CO ₂ -eq per kg |
| PFC-318 | c-C ₄ F ₈ | 9,540 | kg CO ₂ -eq per kg |
| PFC-31-10 | C ₄ F ₁₀ | 9,200 | kg CO ₂ -eq per kg |
| PFC-41-12 | C ₅ F ₁₂ | 8,550 | kg CO ₂ -eq per kg |
| PFC-51-14 | C ₆ F ₁₄ | 7,910 | kg CO ₂ -eq per kg |
| PCF-91-18 | C ₁₀ F ₁₈ | 7,190 | kg CO ₂ -eq per kg |
| Trifluoromethyl sulphur pentafluoride | SF ₅ CF ₃ | 17,400 | kg CO ₂ -eq per kg |
| Perfluorocyclopropane | c-C ₃ F ₆ | 9,200 | kg CO ₂ -eq per kg |
| Fluorinated ethers | | | |
| HFE-125 | CHF ₂ OCF ₃ | 12,400 | kg CO ₂ -eq per kg |
| HFE-134 | CHF ₂ OCHF ₂ | 5,560 | kg CO ₂ -eq per kg |
| HFE-143a | CH ₃ OCF ₃ | 523 | kg CO ₂ -eq per kg |
| HCFE-235da2 | CHF ₂ OCF ₂ CF ₃ | 491 | kg CO ₂ -eq per kg |
| HFE-245cb2 | CH ₃ OCF ₂ CF ₃ | 645 | kg CO ₂ -eq per kg |
| HFE-245fa2 | CHF ₂ OCH ₂ CF ₃ | 812 | kg CO ₂ -eq per kg |
| HFE-347mcc3 | CH ₃ OCF ₂ CF ₂ CF ₃ | 530 | kg CO ₂ -eq per kg |
| HFE-347pcf2 | CHF ₂ CF ₂ OCH ₂ CF ₃ | 889 | kg CO ₂ -eq per kg |
| HFE-356pcc3 | CH ₃ OCF ₂ CF ₂ CHF ₂ | 413 | kg CO ₂ -eq per kg |
| HFE-449sl (HFE-7100) | C ₄ F ₉ OCH ₃ | 421 | kg CO ₂ -eq per kg |
| HFE-569sf2 (HFE-7200) | C ₄ F ₉ OC ₂ H ₅ | 57 | kg CO ₂ -eq per kg |
| HFE-43-10pccc124 (H-Galden 1040x) | CHF ₂ OCF ₂ OC ₂ F ₄ OCHF ₂ | 2,820 | kg CO ₂ -eq per kg |
| HFE-234ca12 (HG-10) | CHF ₂ OCF ₂ OCHF ₂ | 5,350 | kg CO ₂ -eq per kg |
| HFE-338pcc13 (HG-01) | CHF ₂ OCF ₂ CF ₂ OCHF ₂ | 2,910 | kg CO ₂ -eq per kg |
| HFE-227ea | CF ₃ CHFOCF ₃ | 6,450 | kg CO ₂ -eq per kg |
| HFE-236ea2 | CHF ₂ OCHF ₂ CF ₃ | 1,790 | kg CO ₂ -eq per kg |
| HFE-236fa | CF ₃ CH ₂ OCF ₃ | 979 | kg CO ₂ -eq per kg |
| HFE-245fa1 | CHF ₂ CH ₂ OCF ₃ | 828 | kg CO ₂ -eq per kg |
| HFE-263fb2 | CF ₃ CH ₂ OCH ₃ | 1 | kg CO ₂ -eq per kg |
| HFE-329mcc2 | CHF ₂ CF ₂ OCF ₂ CF ₃ | 3,070 | kg CO ₂ -eq per kg |
| HFE-338mcf2 | CF ₃ CH ₂ OCF ₂ CF ₃ | 929 | kg CO ₂ -eq per kg |
| HFE-347mcf2 | CHF ₂ CH ₂ OCF ₂ CF ₃ | 854 | kg CO ₂ -eq per kg |
| HFE-356mec3 | CH ₃ OCF ₂ CHF ₂ CF ₃ | 387 | kg CO ₂ -eq per kg |
| HFE-356pcf2 | CHF ₂ CH ₂ OCF ₂ CHF ₂ | 719 | kg CO ₂ -eq per kg |
| HFE-356pcf3 | CHF ₂ OCH ₂ CF ₂ CHF ₂ | 446 | kg CO ₂ -eq per kg |
| HFE-365mcf3 | CF ₃ CF ₂ CH ₂ OCH ₃ | <1 | kg CO ₂ -eq per kg |
| HFE-374pc2 | CHF ₂ CF ₂ OCH ₂ CH ₃ | 627 | kg CO ₂ -eq per kg |
| Perfluoropolyethers | | | |
| PFPME | CF ₃ OCF(CF ₃)CF ₂ OCF ₂ OCF ₃ | 9,710 | kg CO ₂ -eq per kg |
| Hydrocarbons and other compounds – direct effects | | | |
| Chloroform | CHCl ₃ | 16 | kg CO ₂ -eq per kg |
| Methylene chloride | CH ₂ Cl ₂ | 9 | kg CO ₂ -eq per kg |
| Methyl chloride | CH ₃ Cl | 12 | kg CO ₂ -eq per kg |
| Halon-1201 | CHBrF ₂ | 376 | kg CO ₂ -eq per kg |

Annex D: Products in Scope

Table D.1 List of Carbon Neutral Categories and Reason for Inclusion (Classification)

| Carbon Neutral Category | Products in Scope | Carbon Neutral Classification |
|-------------------------|---|--|
| AUSTRALIA | All Products Sold | Lead CLT |
| NEW ZEALAND | All Products Sold | Lead CLT |
| VIETNAM | All Products Sold | Lead CLT |
| EDGE | All Products Sold | Lead Brand : Cars |
| POWER1 | All Products Sold | Lead Brand : Motorcycles |
| VECTON | All Products Sold | Lead Brand : Commercial Vehicles & Existing |
| OPTIGEAR | All Products Sold | Lead Brand : Industrial / Wind Turbines & Existing (2 variants) |
| BRAYCO & TRANSAQUA | All Energy-Owned BRAYCO & TRANSAQUA Products Sold | Lead Brands : Energy / Subsea |
| BIO RANGE | BIO TAC, BIO STAT and BIO BAR | Lead Brand : Marine / improved biodegradation, reduced bioaccumulation or toxicity |
| XBB & XBC | ALUSOL & HYSOL XBB; TECHNICLEAN XBC | Lead Brand : Industrial Coolants and Cleaners / reduce water use and waste |
| Castrol ON | All Products Sold | Lead Brand: e-Fluids |
| EUROPE & RUSSIA PCO | All Products Sold | Existing |
| JAPAN PCO | All Products | Existing |
| JAPAN TRANSMAX | All Products Sold | Existing |
| PROFESSIONAL | All Products Sold | Existing |
| EUROPE CRB | All Products Sold | Market Specific Request |
| US TRANSYND & AUTRAN | TRANSYND, TRANSYND RD and AUTRAN SYN 295 sold in the US | Market Specific Request |

Lead CLT: One of 3 countries making all the products they sell carbon neutral in year one of the PATH360 Carbon Neutral Program

Lead Brand: Brands of significance for each Product Owner (sales space) due to either scale of volume sold or PATH360 sustainability qualifying criteria

Existing: Introduced as a carbon neutral product prior to the PATH360 launch (2014-2020) and included in discrete previous carbon neutral applications (QES's).

EDGE: Excluding EDGE in the US which will be included from 2022

POWER1: Excluding POWER1 in China which will be included from 2022

Table D.2 List of Product Types by Category Sold

| Product Category | Product Type | Product Category | Product Type |
|----------------------------|--|-------------------|---------------------------------|
| Cars | Additives | Industrial | Additives |
| | Antifreeze/ Coolants (automotive) | | Chain Lubricants |
| | Automatic Transmission Fluid | | Circulating Oils |
| | Brake Fluid | | Compressor oils |
| | Engine oils: Passenger Car (and car derived van) | | Coolants (Industrial) |
| | Gear oils | | Corrosion preventives |
| | Greases | | Food grades |
| | Hydraulic fluids | | Forming oils |
| | Industrial Cleaners | | Gear oils |
| | Manual Transmission Fluids | | Greases |
| | Other | | Heat transfer oils |
| | Specialties | | Hydraulic fluids |
| Commercial Vehicles | Additives | | Industrial Cleaners |
| | Antifreeze/ Coolants (automotive) | | Other |
| | Automatic Transmission Fluid | | Process Oils |
| | Chain Lubricants | | Quenching Oils |
| | Coolants (Industrial) | | Refrigerator Compressor Oil |
| | Engine oils: Commercial Vehicle | | Slide Way Oils |
| | Engine oils: Marine | | Specialties |
| | Engine oils: Off Highway | | Specification grades |
| | Gear oils | | Steam Reciprocating Engine Oils |
| | Greases | Energy | Wire Rope Protectives |
| | Hydraulic fluids | | Compressor oils |
| | Industrial Cleaners | | Engine oils: Gas-Industrial |
| | Manual Transmission Fluids | | Heat transfer oils |
| | Multifunctional fluids | | Hydraulic fluids |
| | Other | | Specification grades |
| | Specialties | | Transformer Oils |
| Motorcycles | Chain Lubricants | | Turbine oils |
| | Engine oils: Motorcycle | Marine | Engine oils: Marine |
| | Greases | | Gear oils |
| | Motorcycle Ancillaries | | Greases |
| | Small Engine Oil | | Hydraulic fluids |
| | | | Other |
| | | | Refrigerator Compressor Oil |
| | | | Turbine oils |

Table D.3 Complete List of Product Variants by Carbon Neutral Category

| Australia & New Zealand | | | |
|---------------------------|--|------------------------------------|---|
| A747 | Axle Long Drain 80W-90 | Hyspin AWH 68 | Magnatec 5W-30 A5 |
| AC Spider Bearing Grease | Bartran 46 | Hyspin AWH 68 Superclean | Magnatec 5W-40 |
| Activ 2T | Bartran 68 | Hyspin AWH-M 100 | Magnatec Diesel 15W-40 |
| Activ 4T 15W-50 | Bio RD 100 | Hyspin AWH-M 15 | Magnatec Diesel DX 5W-40 |
| Adblue | Bio RDC | Hyspin AWH-M 32 | Magnatec Fuel Saver 5W-30 |
| Aero J5 | Brake Fluid DOT 3 | Hyspin AWH-M 46 | Magnatec Fuel Saver DX 5W-30 |
| Agri AS Trans Plus 20W-30 | Brake Fluid DOT 4 | Hyspin AWH-M 68 | Magnatec Stop-Start 0W-20 |
| Agri Grease Ultra | Braycote Inertox 2 | Hyspin AWS 10 | Magnatec Stop-Start 0W-30 D |
| Agri MP Plus 20W-40 | BTX Grease | Hyspin AWS 100 | Magnatec Stop-Start 10W-30 |
| Agri Trans Plus 80W | Bulldog Premium Coolant | Hyspin AWS 150 | Magnatec Stop-Start 5W-30 |
| Aircol 2294 | Calibration Oil 4113 | Hyspin AWS 22 Superclean | Magnatec Stop-Start 5W-30 A5 |
| Aircol AMS 68 | CareClean Lime | Hyspin AWS 220 | Magnatec Stop-Start 5W-30 C3 |
| Aircol CM 46 | Chain Spray O-R | Hyspin AWS 32 | Magnatec SUV 5W-30 C3 |
| Aircol CM 68 | Chainsaw Oil | Hyspin AWS 46 | Manual EP 80W |
| Aircol LPT 68 | CRB Mining 15W-40 CK-4 | Hyspin AWS 46 Superclean | Manual VMX 80W |
| Aircol MR 46 | CRB Rail 20W-40 | Hyspin AWS 68 | Manual VMX-M 75W-85 |
| Aircol MR 68 | Cutter Bar and Chain Lubricant | Hyspin AWS 68 Superclean | Mazda ATF BTM |
| Aircol NG 260 | Cyltech 70 | Hyspin Glow 46 | Mazda ATF FZ |
| Aircol PD 100 | Degreaser | Hyspin Glow 68 | Mazda Brake Fluid Super |
| Aircol PD 150 | Diesel Coolant HD 50 | Hyspin HDH 7000 | Mazda Coolant |
| Aircol PD 32 | Duratec A | Hyspin HVI 100 | Mazda Diesel Oil Extra DL-1 5W-30 |
| Aircol PD 46 | Duratec L | Hyspin HVI 15 | Mazda FL 22 Coolant |
| Aircol PD 68 | Duratec M | Hyspin HVI 32 | Mazda Premium Engine Oil |
| Aircol SN 100 | Duratec MX | Hyspin HVI 46 | Mazda Rotary Oil 5W-30 |
| Aircol SN 68 | Dynadrive 80W-90 | Hyspin HVI 46 Superclean | MHP 153 |
| Aircol SR 46 | Energear Axle 85W-140 | Hyspin HVI 68 | MHP 154 |
| Aircol SR 68 | Energear Axle LS 90 | Hyspin HVI 68 Superclean | Mine Grease |
| Aircol SW 68 | Energear Hypo XL 80W-90 | Hyspin Spindle Oil E 5 | Mine Multi 15W-40 |
| Almaredge BI | Energol LPT 68 | Hyspin VSH 3000 | Mineclean |
| Alpha SP 100 | Energol RC-R 100 | Hyspin ZZ 100 | Minegrease LM EP 680 |
| Alpha SP 150 | Energol RD-E 320 | Hyspin ZZ 150 | Mitsubishi Coolant Premix |
| Alpha SP 220 | Energol THN 77 | Hyspin ZZ 22 | Mitsubishi Diamond Spectrum ATF SP III |
| Alpha SP 320 | Energear LC 2 | Hyspin ZZ 32 Superclean | Mitsubishi Diamond Spectrum Diesel Eng Oil 15W-40 |
| Alpha SP 460 | Energear LC 2M | Hyspin ZZ 46 Superclean | Mitsubishi Diamond Spectrum Engine Oil 15W-50 |
| Alpha SP 68 | Energear LC 2-T | Hyspin ZZ 68 Superclean | Mitsubishi DPF Diesel Engine Oil 5W-30 |
| Alpha SP 680 | Energear LS-EP 2 | Hy Spray E 2010 | Mitsubishi DPF Diesel Engine Oil 5W-40 |
| Alpha TT 1200 | Engine Shampoo | Ilocut 154 | Mitsubishi Manual Transmission Fluid 75W-80 |
| Alpha VT 32 | Foam Air Filter Oil (Aerosol) | Ilocut 170 | Mitsubishi MSL 5W-30 |
| Alpha WT 220 | Ford Automatic Transmission Fluid 4 Speed R148 | Ilocut 482 | Mitsubishi MSL-II 5W-30 |
| Alpha WT 320 | Ford Brake Fluid R139 | Ilocut 534 | Mitsubishi Super Longlife Coolant Premix |
| Alpha WT 460 | Ford Formula E 5W-30 | Iloform PN 135 | Molub-Alloy 1000 HT |
| Alphasyn EP 150 | Ford Oil Super 5W-30 GF-4 | Iloform PN 223 | Molub-Alloy 6040/150 |
| Alphasyn EP 1500 | Ford Power Steering Fluid R1424 | Iloform PN 224 | Molub-Alloy 6040/460-1 1/2 |
| Alphasyn EP 220 | Ford Power Steering Fluid R1425 | Iloform PN 400 | Molub-Alloy 777-1 ES |
| Alphasyn EP 320 | Ford Turbo/LPG 15W-40 | Iloform TDN 81 | Molub-Alloy 777-2 ES |
| Alphasyn EP 460 | Fork Oil 10W | Iloquench 1 | Molub-Alloy 860/220-2 ES |
| Alphasyn EP 680 | Fork Oil 15W | KIA Brake Fluid DOT 4 | Molub-Alloy 860/460-2 ES |
| Alphasyn HG 220 | Fork Oil 5W | Komatsu Axle Oil AXO80 | Molub-Alloy 936 SF Heavy |
| Alphasyn HTX 1000 | Fuel Doctor | Komatsu EO15W40-DH | Molub-Alloy 950 85W-140 |
| Alphasyn HTX 320 | Garden 2T | Komatsu EO15W40-LA-CJ | Molub-Alloy BH 47/1600-1.5 |
| Alphasyn OG 3200 | Garden 4T 10W-30 | Komatsu Gear Oil 85W-140 | Molub-Alloy BRB 572 |
| Alphasyn PG 150 | Garden 4T 30 | Komatsu Hydraulic Oil 46 | Molub-Alloy CH 22 |
| Alphasyn PG 220 | GTX 15W-40 (AZ) | Komatsu Hyper Grease G2-TE | Molub-Alloy Foodproof 823-2 FM |
| Alphasyn PG 320 | GTX 20W-50 | Komatsu Lithium EP Grease G2-LI | Molub-Alloy GM 1200 |
| Alphasyn PG 460 | GTX 20W-50 (AZ) | Komatsu Powertrain Oil TO-10 | Molub-Alloy GM 1500 |
| Alphasyn T 150 | GTX Diesel 15W-40 | Komatsu Powertrain Oil TO-30 | Molub-Alloy GM 300s/1000 |
| Alphasyn T 220 | GTX Diesel 15W-40 (NZ) | Komatsu Supercoolant AF-NAC Premix | Molub-Alloy OG 8031/2200-00 |
| Alphasyn T 320 | GTX High Mileage 15W-50 | Longtime PD 1 | Molub-Alloy OG 8031/3000-00 |
| Alphasyn T 460 | GTX Modern Engine 10W-30 | Magna 460 | Molub-Alloy OG 8031/6000-00 |
| Alphasyn T 68 | GTX Modern Engine 15W-40 | Magna CH 150 EP | Molub-Alloy OG 9000 |
| Anvol AE 5/95 | GTX ULTRACLEAN 10W-30 | Magna CL 1000 | Molub-Alloy OG 9002 Heavy |
| Anvol PE 46 XC | GTX ULTRACLEAN 15W-40 | Magna CL 460 | Molub-Alloy OG 936 SF Heavy A |
| Anvol SWX 68 | Hair & Body Wash | Magna CS-ML 370 | Molub-Alloy OG 936 SF Super Heavy |
| Anvol WG 46 | High Temperature Grease | Magna CT 320 | Molub-Alloy WC 880 LF Heavy |
| ATF Dex III | Hino Diesel X Plus 15W-40 | Magna CT 370 | Molub-Alloy WC 880 SF Medium |
| ATF Heavy Duty | Hino Driveline X 90 | Magna CT 680 | Molub-Alloy WR 1000 |
| Autran FD 60 | Hino Shift X 80W-90 | Magna CTX 100 WT | Molub-Alloy WR 921 |
| Autran TO 410 | HLX 40 | Magna CTX 220 WT | Molub-Alloy WRL 119 |
| Autran TO 430 | Holden Limited Slip Diff Oil 75W-85 | Magna CTX 320 WT | MOP S |
| Autran TO 430F | HSA 460 | Magna CTX 460 WT | Motorcraft Dual Clutch Transmission Fluid 75W |
| Autran TO 450 | Hydraulic Oil 46 | Magna PR 3 | Motorcraft Manual Transmission Fluid FE 75W |
| Autran TO 450F | Hydraulic Oil 68 | Magna RD 100 | Motorcraft SAE 5W-30 Full Synthetic Engine Oil |
| Autran TO 460 | Hypogear 80W-90 | Magna RD 150 | Multiclean |
| Autran TO 460F | Hypogear 85W-140 | Magna RD 320 | Multipurpose Degreaser |
| Axle AP 85W-140 | Hysol MB 50 | Magna SW 32 | Olista Longtime 2 |
| Axle EPX 80W-90 | Hysol X | Magna SW D 220 | OM-33 |
| Axle EPX 85W-140 | Hyspin AWH 100 | Magna SW D 68 | Optileb GT 220 |
| Axle GO-J 90 | Hyspin AWH 15 | Magna ZN 100 | Optileb GT 460 |
| Axle Limited Slip 85W-140 | Hyspin AWH 32 | Magnatec 10W-40 | Optileb WOM 14 |
| Axle Limited Slip 90 | Hyspin AWH 46 | Magnatec 15W-40 | Optileb WOM 65 |

| Australia & New Zealand (continued) | | |
|--|--------------------------------|----------------------------------|
| Optitemp LG 2 | Spheerol LMM | Vanellus DD 40 |
| Outboard 2T | Spheerol LYT 1 | Vanellus Multi-Fleet 15W-40 |
| Outboard 4T | Spheerol PH Grease | Vanellus Multi-Fleet ECO 15W-40 |
| Perfecto HT 12 | Spheerol RCG | Vanellus Multi-Fleet Plus 15W-40 |
| Perfecto HT 5 | Spheerol SBX 1 | Variocut B 46 TC |
| Perfecto T 100 | Spheerol SBX 2 | Variocut G 600 HC |
| Perfecto T 32 | Spheerol SX 2 | Viscogen KL 23 |
| Perfecto T 32 Superclean | Spheerol SY 1002 | Viscogen KL 23 Spray |
| Perfecto T 46 | Spheerol SY 1501 | Viscogen KL 300 Spray |
| Perfecto T 68 | Spheerol SY 2202 | Viscogen KLK 28 |
| Perfecto TR IN | Spheerol SY 4601 | Wonderclean |
| Perfecto X 32 | Spheerol Ultratak | |
| Perfecto X 32 Superclean | SRF Racing Brake Fluid | |
| Perfecto X 46 | Subaru Brake Fluid | |
| Perfecto X 46 Superclean | Subaru Coolant | |
| Perfecto X 68 | Subaru Long-Life coolant | |
| Perfecto XEP 32 Superclean | Super TOU 15W-40 | |
| Perfecto XEP 46 Superclean | Syntilo 1023 | |
| Performance Bio CH 32 | Syntilo 24 | |
| Performance Bio HE 32 TG | Syntilo 9902 | |
| PH Grease | Syntrans 75W-85 | |
| Power Steering Fluid | Syntrans AT 75W-90 | |
| Premium Cool Plus | Syntrans FE 75W | |
| Premium Cool Plus 50 | Syntrans Heavy Duty 75W-90 | |
| Premium Heavy Duty | Syntrans Z Long Life 75W-80 | |
| QB100 Degreaser | Syntrax 80W-140 | |
| Quickbreak Degreaser | Syntrax D 80W-140 | |
| Radicool | Syntrax E 80W-140 | |
| Radicool Heavy Duty Premix | Syntrax Limited Slip 75W-140 | |
| Radicool NF | Syntrax Long Life 75W-140 | |
| Radicool NF Premix | Syntrax Long Life 75W-90 | |
| Radicool Non-Glycol Premix | Syntrax Universal Plus 75W-90 | |
| Radicool PG Premix | Techniclean AS 62 | |
| Radicool Premix | Techniclean Galvpack PB | |
| Radicool SF | Techniclean SC 320 | |
| Radicool SF Premix | Techniclean SF | |
| Radicool SF-O | TFC 410 | |
| Radicool Si-OAT | TFC 430 | |
| Radicool Si-OAT Premix | TFC 450 | |
| React Performance DOT 4 | TFC 450 (Filtered) | |
| React SRF Racing | TFC 460 | |
| Red Rubber Grease | TGMO 0W-30 C2 | |
| Renault - Castrol GTX RN-SPEC 5W-30 RN 17 | TGMO 10W-30 SN/CF | |
| Renault - Castrol GTX RN-SPEC 5W-30 RN 720 | TLX Xtra 304 | |
| Renault - Castrol GTX RN-SPEC 5W-40 RN 710 | Tractran TF-10 | |
| Rock Drill 320 | Transmax CVT | |
| Rustilo 630 | Transmax DEXRON?-VI MERCON? LV | |
| Rustilo DWX 21 | Transmax DUAL | |
| Rustilo DWX 22 | Transmax FE Multivehicle | |
| Rustilo DWX 30 | Transmax Manual E Long Life 40 | |
| Rustilo DWX 32 | Transmax Mercon V | |
| RX Diesel 15W-40 | Transmax Multivehicle | |
| RX Diesel 15W-40 CI-4 Plus/E7 | Transmax Offroad 10W | |
| RX Diesel 15W-40 CI-4/E7 | Transmax Offroad 30 | |
| RX J-Max 15W-40 | Transmax Offroad 50 | |
| RX Max 15W-40 | Transmax Offroad 60 | |
| RX Mono 30 CF | Transmax TQ 95 | |
| RX Mono 40 CF | Transmax Type F | |
| RX Mono DD 40 | Transmax Z | |
| RX Mono DD 50 | TranSynd | |
| RX Plus 15W-40 | TranSynd RD | |
| RX Super 15W-40 | Tribol GR 100-0 PD | |
| RX Super 15W-40 CJ-4/E9 | Tribol GR 100-00 PD | |
| SBX Grease 1 | Tribol GR 100-1 PD | |
| SCI Grease 1 | Tribol GR 100-2 PD | |
| Seamax Super Plus 15W-40 | Tribol GR 1350-2.5 PD | |
| Spheerol AP 3 | Tribol GR 3020/1000-0 PD | |
| Spheerol BTX 2 | Tribol GR 3020/1000-000 PD | |
| Spheerol ELG | Tribol GR 3020/1000-1 PD | |
| Spheerol EPL 0 | Tribol GR 4020/220-1 PD | |
| Spheerol EPL 00 | Tribol GR 4020/220-2 PD | |
| Spheerol EPL 1 | Tribol GR 4747/220-2 HT | |
| Spheerol EPL 2 | Tribol GR HT 2 | |
| Spheerol EPLX 200-1 | Tribol GR XT 2 HT | |
| Spheerol EPLX 200-2 | Tribol HM 943/68 | |
| Spheerol EPLX-M 2 | Tribol WR 4600 | |
| Spheerol FPG | Ultratak | |
| Spheerol HTB | Universal 80W-90 | |
| Spheerol JBG | Valvemaster | |
| Spheerol LC 2M | Vanellus C3 Mono 10W | |

| BIO RANGE | EDGE | OPTIGEAR |
|---|---|------------------------------|
| BioBar 22 | EDGE 0W-20 C5 | Concentrate Optigear BM |
| BioBar 32 | EDGE 0W-20 E | Optigear 100 |
| BioBar 46 | EDGE 0W-20 LL IV | Optigear 1100/100 |
| BioBar 68 | EDGE 0W-20 U.S. | Optigear 1100/1000 |
| BioStat 100 | EDGE 0W-20 V | Optigear 1100/150 |
| BioStat 150 | EDGE 0W-30 | Optigear 1100/1500 |
| BioStat 220 | EDGE 0W-30 A3/B4 | Optigear 1100/220 |
| BioStat 68 | EDGE 0W-30 A5/B5 | Optigear 1100/320 |
| BioTac MP | EDGE 0W-30 C2 | Optigear 1100/460 |
| BioTac OG | EDGE 0W-40 | Optigear 1100/68 |
| Biotrans QB | EDGE 0W-40 (EU) | Optigear 1100/680 |
| BRAYCO | EDGE 0W-40 A3/B4 | Optigear 150 |
| Brayco HV 10 | EDGE 0W-40 F | Optigear 220 |
| Brayco Micronic 756 | EDGE 0W-40 RN 17 RSA | Optigear 320 |
| Brayco Micronic LV/3 | EDGE 0W-40 SP | Optigear BM 100 |
| Brayco Micronic SBF | EDGE 10W-30 | Optigear BM 1000 |
| Brayco Micronic SBF E | EDGE 10W-30 U.S. | Optigear BM 150 |
| Brayco Micronic SBF ES | EDGE 10W-40 | Optigear BM 1500 |
| Brayco Micronic SBF HT | EDGE 10W-60 | Optigear BM 220 |
| Brayco Micronic SV/3 | EDGE 10W-60 SN | Optigear BM 3000 |
| Brayco Micronic SV/B | EDGE 25W-50 | Optigear BM 320 |
| VECTON | EDGE 5W-20 | Optigear BM 460 |
| Ford - Castrol Vecton 10W-40 F-Trucks E4/E7 | EDGE 5W-20 U.S. | Optigear BM 68 |
| Vecton 10W-30 CH-4 | EDGE 5W-30 | Optigear BM 680 |
| Vecton 10W-30 DH-1 | EDGE 5W-30 A3/B4 | Optigear EP 100 |
| Vecton 10W-30 FA-4 | EDGE 5W-30 A5/B5 | Optigear EP 150 |
| Vecton 10W-40 | EDGE 5W-30 C1 | Optigear EP 220 |
| Vecton 10W-40 CK-4/E9 | EDGE 5W-30 C3 | Optigear EP 32 |
| Vecton 10W-40 E4/E7 | EDGE 5W-30 FE | Optigear EP 320 |
| Vecton 10W-40 F-Trucks E4/E7 | EDGE 5W-30 LL | Optigear EP 46 |
| Vecton 10W-40 LS | EDGE 5W-30 M | Optigear EP 460 |
| Vecton 15W-40 | EDGE 5W-30 SN | Optigear EP 68 |
| Vecton 15W-40 CH-4 | EDGE 5W-30 U.S. | Optigear MX 150 |
| Vecton 15W-40 CH-4 - ITWS CN | EDGE 5W-40 | Optigear MX 320 |
| Vecton 15W-40 CI-4 - ITWS CN | EDGE 5W-40 (EU) | Optigear MX 460 |
| Vecton 15W-40 CI-4 Plus | EDGE 5W-40 A3/B4 | Optigear OG 4 |
| Vecton 15W-40 CI-4 Plus/E7 | EDGE 5W-40 C3 | Optigear OG 4 EP |
| Vecton 15W-40 CI-4 Plus/SL | EDGE 5W-40 SN | Optigear RMO |
| Vecton 15W-40 CI-4 Plus/SL/E7 | EDGE 5W-40 U.S. | Optigear Synthetic 1300/220 |
| Vecton 15W-40 CI-4/E7 | EDGE 5W-50 | Optigear Synthetic 1300/460 |
| Vecton 15W-40 CI-4/E7 Foton | EDGE 5W-50 U.S. | Optigear Synthetic 1390/220 |
| Vecton 15W-40 CJ-4 | EDGE Bio-Synthetic 5W-30 | Optigear Synthetic 1510/320 |
| Vecton 15W-40 CJ-4/E9 | EDGE Extended Performance 0W-20 | Optigear Synthetic 1710/100 |
| Vecton 15W-40 CK-4 | EDGE Pick Up 5W-30 | Optigear Synthetic 1710/220 |
| Vecton 15W-40 CK-4/E9 | EDGE Supercar 0W-20 | Optigear Synthetic 1710/320 |
| Vecton 20W-50 CH-4 | EDGE Supercar 0W-30 A3/B4 | Optigear Synthetic 1710/460 |
| Vecton 20W-50 CH-4 - ITWS CN | EDGE Supercar 0W-40 A3/B4 | Optigear Synthetic 800/100 |
| Vecton 20W-50 CI-4 | EDGE Supercar 5W-50 | Optigear Synthetic 800/1000 |
| Vecton 20W-50 CI-4 - ITWS CN | EDGE SUPERCAR A 0W-20 | Optigear Synthetic 800/150 |
| Vecton 20W-50 CI-4 Foton | EDGE Supercar Race Oil 15W-40 | Optigear Synthetic 800/1500 |
| Vecton 5W-30 F-Trucks E6/E9 | EDGE Turbo Diesel 5W-40 | Optigear Synthetic 800/220 |
| Vecton Fuel Saver 10W-40 | Mixed Carton EDGE 5W-30 C3 and Engine Shampoo | Optigear Synthetic 800/2200 |
| Vecton Fuel Saver 5W-30 E6/E9 | Mixed Carton EDGE 5W-40 A3/B4 and Engine Shampoo | Optigear Synthetic 800/320 |
| Vecton Fuel Saver 5W-30 E7 | Mixed Carton EDGE Pick-Up 5W-30 and Engine Shampoo Diesel | Optigear Synthetic 800/460 |
| Vecton Long Drain 10W-30 CK-4 | XBB & XBC | Optigear Synthetic 800/680 |
| Vecton Long Drain 10W-30 E6/E9 | Alusol SL 51 XBB | Optigear Synthetic A 320 |
| Vecton Long Drain 10W-40 | Alusol SL 61 XBB | Optigear Synthetic ALR 150 |
| Vecton Long Drain 10W-40 E4/E7 | Alusol SL 78 XBB | Optigear Synthetic CT 320 |
| Vecton Long Drain 10W-40 E6/E9 | Hysol SL 30 XBB | Optigear Synthetic DS 100 |
| Vecton Long Drain 10W-40 E7 | Hysol SL 35 XBB | Optigear Synthetic PD 100 ES |
| Vecton Long Drain 10W-40 LS | Hysol SL 36 XBB | Optigear Synthetic PD 150 |
| Vecton Long Drain 10W-40 SLD3 | Hysol SL 37 XBB | Optigear Synthetic PD 150 ES |
| Vecton Long Drain 15W-40 | Hysol SL 45 XBB | Optigear Synthetic PD 220 |
| Vecton Long Drain 15W-40 CK-4/E9 | Hysol SL 50 XBB | Optigear Synthetic PD 220 ES |
| Vecton Long Drain 15W-40 NG | Techniclean 45 XBC | Optigear Synthetic PD 320 |
| Vecton Long Drain 5W-30 E6/E9 | Techniclean 80 XBC | Optigear Synthetic PD 320 ES |
| Vecton Long Drain 5W-30 FA-4/F8 | Techniclean 90 XBC | Optigear Synthetic PD 460 |
| Vecton NG 15W-40 | | Optigear Synthetic PD 460 ES |
| Vecton RX Fuel Saver 10W-40 | | Optigear Synthetic PD 68 ES |
| TRANSAQUA | | Optigear Synthetic PD 680 |
| Transaqua HC 10 | | Optigear Synthetic PD 680 ES |
| Transaqua HT | | Optigear Synthetic RO 150 |
| Transaqua HT2 | | Optigear Synthetic RO 220 |
| Transaqua HT2-N | | Optigear Synthetic X 150 |
| Transaqua SP | | Optigear Synthetic X 220 |
| US AUTRAN | | Optigear Synthetic X 320 |
| Autran Syn 295 | | Optigear Synthetic X 320 AD |
| US TRANSYND | | Optigear Synthetic X 320 WTO |
| TranSynd | | Optigear Synthetic X 460 |
| TranSynd RD | | |

PAS 2060 Qualifying Explanatory Statement: Carbon Neutral Products

| POWER 1 | VIETNAM (continued) | PROFESSIONAL |
|--|--|---|
| Bundle Pack POWER1 Scooter 10W-40 and Scooter Gear Oil 80W-90 | Alpha SMR Heavy X | EDGE Professional 0W-20 |
| Mixed Carton POWER1 Automatic 10W-40 and Scooter Gear Oil 80W-90 | Alpha SP 100 | EDGE Professional 505 01 5W-40 |
| Power 1 2T | Alpha SP 150 | EDGE Professional 5W-20 |
| Power 1 2T (MY) | Alpha SP 220 | EDGE Professional 5W-30 |
| Power 1 4T 10W-50 | Alpha SP 320 | EDGE Professional 5W-40 |
| Power 1 4T 15W-40 | Alpha SP 460 | EDGE Professional A1 5W-20 |
| Power 1 4T 5W-40 | Alpha SP 68 | EDGE Professional A3 0W-30 |
| Power 1 Grand Prix 4T 10W-40 | Alpha SP 680 | EDGE Professional A3 0W-30 (EU) |
| Power 1 Racing 2T | Alphasyn EP 220 | EDGE Professional A3 0W-40 |
| Power 1 Racing 4T 10W-40 | Alphasyn EP 320 | EDGE Professional A3 0W-40 (EU) |
| Power 1 Scooter 2T | Alphasyn EP 460 | EDGE Professional A3 5W-30 |
| Power 1 Scooter 4T 10W-30 | Alphasyn GS 220 | EDGE Professional A3 5W-40 |
| Power 1 Scooter 4T 10W-40 | Alphasyn GS 320 | EDGE Professional A5 0W-30 |
| Power 1 TTS Racing 2T | Alphasyn GS 460 | EDGE Professional A5 5W-30 |
| Power 1 V-Twin 4T 20W-50 | Alphasyn GS 680 | EDGE Professional C1 5W-30 |
| Power RS 2T | Anvol WG 46 | EDGE Professional C2 5W-30 |
| POWER RS 4T 10W-30 | BOT 130M | EDGE Professional C3 0W-30 |
| POWER RS 4T 10W-40 | BOT 352 B1 | EDGE Professional C4 5W-30 |
| POWER RS 4T 15W-50 | BOT 979 0W-30 | EDGE Professional C5 0W-20 |
| POWER RS 4T 20W-50 | Brake Fluid DOT 3 | EDGE Professional CHN 5W-30 |
| POWER RS Racing 4T 10W-50 | Brake Fluid DOT 4 | EDGE Professional Diesel 5W-30 |
| POWER RS Racing 4T 10W-60 | CRB 15W-40 CF-4 | EDGE Professional DX 5W-30 |
| POWER RS Racing 4T 5W-40 | CRB 20W-50 CF-4 | EDGE Professional E 0W-20 |
| Power RS Scooter 2T | CRB Multi 15W-40 CH-4 | EDGE Professional E 0W-30 |
| Power RS Scooter 4T 5W-40 | CRB Multi 20W-50 CH-4 | EDGE Professional E C5 0W-20 |
| Power RS TTS 2T | CRB Turbomax 15W-40 CH-4 | EDGE Professional EC 0W-20 |
| POWER1 4T 10W-30 | CRB Turbomax 15W-40 CI-4 | EDGE Professional Fuel Saver 0W-20 |
| POWER1 4T 10W-30 (AS) | CRB Turbomax 15W-40 CI-4/E7 | EDGE Professional H 0W-20 |
| POWER1 4T 10W-40 | CRB Turbomax 20W-50 CH-4 | EDGE Professional H 5W-30 |
| POWER1 4T 15W-40 | CRB Turbomax 20W-50 CI-4 | EDGE Professional H C2 0W-30 |
| POWER1 4T 15W-50 | Engine Shampoo | EDGE Professional LL IV FE 0W-20 |
| POWER1 4T 20W-50 | Engine Shampoo - Two Wheelers | EDGE Professional LL01 0W-30 |
| POWER1 A747 | Fork Oil 32 | EDGE Professional LL01 5W-30 |
| POWER1 Automatic 10W-40 | GTX 15W-40 | EDGE Professional LL03 5W-30 |
| POWER1 Cruise 4T 15W-50 | GTX 20W-50 | EDGE Professional LL04 5W-30 |
| POWER1 CRUISE 4T 20W-50 | High Temperature Grease | EDGE Professional LL14 FE+ 0W-20 |
| POWER1 Matic 10W-40 | HLX 40 | EDGE Professional LongLife III 0W-30 |
| POWER1 Matic 5W-40 | Honilo 981 | EDGE Professional LongLife III 5W-30 |
| POWER1 R 40 | Hyspin AWH-M 32 | EDGE Professional M 5W-30 |
| POWER1 Racing 4T 10W-30 | Hyspin AWH-M 46 | EDGE Professional OE 0W-20 |
| POWER1 Racing 4T 10W-40 | Hyspin AWH-M 68 | EDGE Professional OE 5W-20 |
| POWER1 Racing 4T 10W-50 | Hyspin AWS 10 | EDGE Professional OE 5W-30 |
| POWER1 Racing 4T 10W-50 (AS) | Hyspin AWS 100 | EDGE Professional OE 5W-40 |
| POWER1 Racing 4T 10W-60 | Hyspin AWS 22 | EDGE Professional OE-X 5W-30 |
| POWER1 Racing 4T 5W-30 | Hyspin AWS 32 | EDGE Professional TWS 10W-60 |
| POWER1 Racing 4T 5W-40 | Hyspin AWS 46 | EDGE Professional V 0W-20 |
| POWER1 Scooter 4T 0W-30 | Hyspin AWS 68 | Ford - Castrol Magnatec Professional A5 5W-30 |
| POWER1 Scooter 4T 10W-40 | Hyspin HLP-Z 32 | Ford - Castrol Magnatec Professional D 0W-30 |
| POWER1 Scooter 4T 5W-40 | Hyspin HLP-Z 46 | Ford - Castrol Magnatec Professional Diesel 0W-20 |
| POWER1 Ultimate 10W-30 4T | Hyspin HLP-Z 68 | Ford - Castrol Magnatec Professional E 5W-20 |
| POWER1 Ultimate 10W-40 4T | Hyspin HVI 32 | Ford - Castrol Magnatec Professional OE 5W-40 |
| POWER1 Ultimate 10W-50 4T | Hyspin HVI 46 | GTX Professional 10W-30 |
| POWER1 Ultimate Scooter 10W-30 | Hyspin HVI 68 | GTX Professional 10W-40 |
| POWER1 Ultimate Scooter 5W-40 | Hyspin VG 100 | GTX Professional 10W-40 (BYD SL) |
| POWER1 Ultimate Sports Bike 15W-50 | Ilocut 480 A | GTX Professional 10W-40 (BYD SM) |
| POWER1 Ultimate Sports bike 20W-50 | Ilocut 603 | GTX Professional 15W-40 |
| POWER1 XR 77 | Ilocut EDM 180 | GTX Professional 15W-40 (NZ) |
| | LEXUS Genuine Motor Oil 5W-30 | GTX Professional 20W-50 |
| Activ 2T | Magna CTX 220 | GTX Professional 25W-60 |
| Activ 4T 20W-40 | Magna CTX 88 | GTX Professional 5W-30 |
| Activ 4T 20W-50 | Magna RD 100 | GTX Professional 5W-40 |
| Activ Scooter 10W-40 4-AT | Magna SW 68 | GTX Professional 5W-40 C3 |
| Activ Vistra 20W-50 | Magnatec 10W-40 | GTX Professional A1 5W-30 |
| Aircol 299 | Magnatec MZ 0W-20 | GTX Professional A3 10W-40 |
| Aircol AMS 68 | Magnatec Stop-Start 5W-30 | GTX Professional A3 15W-40 |
| Aircol CM 100 | Magnatec SUV 5W-30 | GTX Professional A3 5W-30 |
| Aircol CM 150 | Molub-Alloy 777-2 ES | GTX Professional A3 5W-40 |
| Aircol CM 32 | Molub-Alloy 860/460-2 ES | GTX Professional C4 5W-30 |
| Aircol CM 46 | Molub-Alloy OG 8031/6000-00 | GTX Professional CI-4+ 15W-40 |
| Aircol CM 68 | Moly Grease | GTX Professional COMPACT 15W-40 |
| Aircol LPT 46 | Motorcraft 15W-40 | GTX Professional Diesel 10W-30 |
| Aircol MR 32 | Motorcraft SAE 5W-30 Full Synthetic Engine Oil | GTX Professional Diesel 15W-40 |
| Aircol MR 46 | Perfecto HT 5 | GTX Professional Diesel 5W-30 |
| Aircol MR 68 | Perfecto T 32 | GTX Professional Diesel MGDO 5W-30 |
| Aircol PD 100 | Perfecto T 46 | GTX Professional SN 0W-20 |
| Aircol PD 150 | Perfecto T 68 | GTX Professional SN 5W-30 |
| Aircol SR 32 | Perfecto X 32 | Magnatec Professional 0W-16 |
| Aircol SR 46 | Perfecto X 46 | Magnatec Professional 0W-20 |
| Aircol SR 68 | | Magnatec Professional 10W-30 |
| Almaredge BI | | Magnatec Professional 10W-40 |
| | | Magnatec Professional 15W-40 |