INTRODUCTION

ENVIRONMENT

2
Sustainable environment

Limiting our impacts on the environment and health and using scarce natural resources efficiently

Why environmental stewardship matters

For many years, Imperial has been conscious of its environmental impact; however, it is over the past two years that greater emphasis has been placed on ensuring that this consciousness is more deeply embedded across the group. Care for the environment is nested in our business strategy as part of the ESG pillar; it is directly referenced in our ESG approach to create value that supports the environment and in our ESG aspiration to strive for zero harm to the environment. These commitments ensure that we address the significant scope for improvement that exists in our environmental performance.

Our business activities – particularly the logistics business which stores and transports goods between manufacturing facilities, warehouses and depots, and client facilities – contribute to environmental threats such as air pollution, climate change and resource depletion. Our strategic investment in ESG practices is directed towards integrating sustainable environmental practices into our everyday operations and increasingly includes advanced digital technology to support sustainable consumption of resources and achieve improvements in our environmental impacts. Society increasingly expects organisations – including Imperial and our clients, principals and customers (collectively referred to as clients) – to participate in a circular economy that uses resources efficiently to minimise waste and in doing so limit environmental and climate change impacts.

In January 2021, Beira in central Mozambique was hit with a level three cyclone (Eloise), causing damage to the roof and walls of one of our properties, as well as the stock stored in the building. The total value of the damage and stock loss was MZN2.8 million (c. R640 000).

The massive impact of COVID-19 on economies and livelihoods has made it clear that addressing climate change in a manner that earnestly decouples economic growth from pollution is an immediate necessity. The world must re-engineer economies to fix the damage done to the environment. All organisations will be profoundly affected by the transition to a net zero economy. We are starting to investigate what it would mean for Imperial to be net carbon zero; what this would mean for our operating model and stakeholders in the value chain as well as the constraints we would face within our African operations. We proactively pilot new trucking technologies across various geographies, and are involved in technical work informing policy advances to define an optimal path to transition South Africa’s transport sector. During the year, we conducted a gap analysis of our reporting against the Task Force on Climate-related Financial Disclosures (TCFD) and improved our climate change disclosure to meet some of the framework’s requirements. As we progress our ESG strategy we expect to improve our TCFD reporting.

Climate change and strategy: page 30.

TCFD Index: page 128.
2021 highlights

5 800 000 litres
reduction in fuel consumed in Logistics Africa due to improved litres per 100 kilometres travelled. Estimated savings of ~15 000 tonnes of CO₂e emissions

1 359 559 kilowatt
hours
of renewable electricity generated

701 tonnes
of waste recycled (Logistics Africa)

24%
of water demand sourced from boreholes, rainwater harvesting and recycled water (Logistics Africa)

~R4 million
environmental harm avoided by various green initiatives (South Africa)

- Set environmental targets to reduce greenhouse gas (GHG) emissions.
- Implemented Project Blue Fleet, which through digitisation has begun to provide accurate and real-time fuel consumption data.
- Continued to test a number of alternative drive systems in partnership with original equipment manufacturers (OEMs), clients and other business partners.
- Started an in-depth review of our waste data in our South African operations to identify opportunities to increase our participation in the circular economy.
- Recorded a 6% improvement in fuel efficiency for Logistics Africa’s commercial fleet over the previous year.
- Concluded a successful 12-week pilot on a biological treatment process for effluent at a wash bay in South Africa. Concurrent initiatives reduced the site’s water consumption by almost half, saving over 3 million litres of water a month and reducing effluent discharge to the municipality by 80%.
- Partnered with a solar service provider to install a customised 250 kilowatt peak (kWP) solar photovoltaic (PV) system at the Imperial Wanderers Stadium in South Africa.

Link to material themes and issues
- Financial controls, strict capital and cost management.
- Investing in digital and IT.
- ESG integration.
- ESG performance, disclosure and reporting.

Our material issues: page 27.

In this pillar of our ESG strategy we are guided by the following global best practice frameworks:
- United Nations (UN) Global Compact.
- UN Sustainable Development Goals (SDGs).
- Task Force on Climate-related Financial Disclosures.
- Global Reporting Initiative.
- Responsible Care® Global Charter.

Related content
- Our ESG operating context, risks and opportunities: page 14.
- ESG performance rankings: page 23.
- Governance of environmental issues: page 103.
- Handling of hazardous substances: page 114.


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1 Estimated using GHG Protocol emission factors for Transport Fuel Use, analysing vehicles > 3 500 kilograms for seven targeted operating companies. At present, due to data limitations, the factors leading to the improvement cannot be fully distinguished, although our active focus on fuel efficiency and fleet replacement are believed to have beneficially contributed. A change in client and product mix remains a significant and unpredictable driver of changes in fuel efficiency.

2 For F2020 as estimated during the independent external socioeconomic impact assessment study of our South African operation.
Our approach

A key principle that guides our ESG strategy is to ensure we balance our impacts on people, planet and profit by integrating ESG practices into our daily business activities and decision-making processes. Our approach to environmental management and improvement is threefold:

1. **Adopt the highest environmental standards**
   Meeting and, where feasible, exceeding all relevant legislative requirements, ensuring that environmental priorities are considered in our investment decisions, setting meaningful and realistic targets to improve our performance and continuing to improve our external reporting.

2. **Embrace continuous improvement**
   Assessing the environmental impact of our organisational activities and implementing day-to-day improvements across the group to minimise our impact.

3. **Prioritise opportunities to ‘go green’**
   Investing in advanced digital technologies and alternative drive systems with lower carbon emissions.

Imperial’s health, safety and environmental policy statement, together with our climate change and environmental sustainability framework, provide guidance to our businesses on how to address climate change and waste, water and biodiversity management.

Our ESG focus areas

- **01 Improve fuel efficiency and investigate alternative fuels**
  Page 31

- **02 Reduce GHG emissions**
  Page 36

- **03 Increase waste recycling**
  Page 41

How we measure performance

Over the past three years, there has been significant change to Imperial’s business activities and organisational structure, which has had some impact on the collection and in some cases the comprehensiveness and scope of performance data. As we identify the key performance indicators (KPIs) that will measure the delivery of our ESG strategy, we will establish where we need to set new baselines for some of our environmental metrics.

Our sustainability management system collates, processes, tracks and communicates data across all operations, covering owned, managed and leased sites. The system and ongoing improvements in data collection enable operating companies to track their environmental performance and set environmental targets against reliable baselines. It also enables the group to respond to changing environmental legislation such as carbon tax.

In South Africa, electricity meters measure consumption in real time and support the identification of energy-saving opportunities. Similarly, water meters provide accurate consumption data, highlight discrepancies in municipal bills, assist to identify water leaks and provide a platform for effective water management initiatives.

In Europe, the energy management system covers 90% of the operation, including sites in Germany, Luxembourg, Netherlands, Poland, Hungary, Sweden and the United Kingdom (UK).

Looking forward, we will improve the visibility of our data by compiling dashboards of key environmental indicators, which will be more regularly reported to the executive committee. Another advancement that will assist accurate reporting is our insights-driven Project Blue Fleet, a digitisation project that has begun to provide access to real-time fuel consumption data.
Audits and assurance
Group internal audit performs regular data integrity checks. Limited assurance by external independent service providers is undertaken annually on key environmental indicators. For F2021, road and non-road fuel consumption, purchased electricity, Scope 1, 2 and 3 emissions and municipal water consumption were assured.

Periodic risk assessments are conducted in South Africa and Europe on critical environmental compliance processes and controls. Where required, external assessments on compliance, practices and performance are also undertaken. When an environmental transgression is identified, it is reported in accordance with regulatory requirements. No material fines or penalties were incurred for environmental incidents in the reporting year.

Environmental standards
Across the group, certification against the International Organization for Standardization (ISO) is conducted primarily where client requirements demand it. Certifications include:
- 54 operations are ISO 14001 (environmental management system) certified.
- 86 operations are ISO 50001 (energy management system) certified.
- 20 operations are ISO 45001 (occupational health and safety management system) certified.
- 106 operations are ISO 9001 (quality management system) certified.

Additional ISO certifications (for example, ISO 22000) apply for selected sites, and ISO 27001 certification for certain areas of our business is underway. Logistics International has the highest number of certifications (30 certifications), followed by Contract Logistics (236 safety, health and environmental (SHE) related ISO certifications), the Logistics Africa (106 certifications), Logistics International (106 certifications) and Imperial (106 certifications).

Stakeholder engagement on environmental issues
We engage our stakeholders on environmental matters on an ongoing basis. Aspects that impact our achievement of our environmental objectives include changes in our client and product mix, client willingness to engage in and adopt innovative solutions, as well as infrastructure constraints and policy development across Africa.

We work with our clients to develop optimised fuel consumption strategies and share with them our research findings on new technologies tested to deliver resource efficiencies. For example, we encourage the rollout of supply chain control towers, which provide end-to-end visibility, process orchestration and deep analytical capability when managing complex logistics arrangements. This, in turn, delivers material financial and environmental benefits, enabling the identification of where significant efficiencies can be achieved, and reducing fleet usage hence improving client satisfaction. Where requested, we submit carbon footprint reports to clients based on the work we do for them and include sustainability as an agenda item at safety meetings.

We have constructive relationships with regulatory bodies such as the Department of Forestry, Fisheries and Environment (DFFE) in South Africa, particularly in terms of environmental authorisations and impact assessments related to hazardous goods. The Department of Employment and Labour’s occupational health and safety (OHS) inspectors and municipal fire department inspectors regularly inspect our facilities.

Targets and objectives

Logistics Africa
- From the F2021 baseline to the end of F2025, achieve year-on-year improvement in fuel emissions in grams of carbon dioxide equivalent per kilometre travelled (gCO₂e/km) for key operating companies in South Africa with fleets.
- Increase renewable electricity supply to achieve a minimum increase of 0,5% in demand met by renewables in South African operations in F2022.
- Explore opportunities to further improve recycling metrics.

Market Access
- Implement renewable energy systems in three sites by F2030.

Logistics International
- Ensure all newly built warehouses that we occupy have solar energy systems, where this does not conflict with safety requirements for the products stored.

High supply chain standards: page 112.

Our key stakeholders: page 19.

Driver training: page 54.
Climate change and strategy

The global transition to a carbon-free economy will pose significant risks for current business paradigms, and holds opportunities for those companies that proactively prepare for resilience under different climate change scenarios. To guide us in planning for this future, our process for identifying, assessing and managing climate-related risks is integrated into our overall risk management approach, which is covered in full on page 5 of the online corporate governance report. Our enterprise risk model identifies and assesses the risks facing the group at strategic, business and operational levels, and is based on ISO 31000:2009 (risk management principles and guidelines). We identify and assess both current and emerging risks to our direct operations, our suppliers and the rest of our value chain over the short, medium and long term.

Climate-related risks and opportunities have impacted our business strategy, our services, our investment in research and development, and our operations. Our focus is to:

- Embed training, awareness and oversight to influence behaviour change that supports the integration of climate change considerations into all key business decisions and on-the-ground activity.
- Continually improve data gathering and reporting systems to better inform decision making.
- Prioritise the development, piloting and commercialisation of low-carbon solutions to demonstrate leadership in the sector.
- Direct research and development investment to developing solutions that reduce our GHG emissions, as well as the GHG emissions of our clients (ie new fuels, new technologies, digitisation).
- Invest in businesses that have the ability to reduce our own and our clients’ GHG emissions.
- Engage in sectoral processes that inform sound climate change policy development.

In terms of climate-related risks impacting on our financial performance, carbon pricing such as the South African carbon tax has introduced and raised our operating costs, and we have had an experience of an extreme weather event that impacted our ability to move goods by barges, affecting revenue. From a capital budgeting perspective, capital must be allocated for various competing priorities, including to projects that increase fuel efficiency, energy efficiency and renewable energy generation.

It is our intention to play our part in keeping the increase in global average temperature to well below 2°C above pre-industrial levels, in line with the Paris Agreement. The 2°C scenario informs our business strategy, ensuring that we have the agility required to respond to a zero-carbon future across all areas of our business. At this stage, the 2°C scenario is considered qualitatively, but we intend to transition to more quantitative planning in the future.

Our strategy is designed to deliver sustainable growth and targeted returns, to deepen competitiveness and relevance, and retain market and industry legitimacy. We recognise that this could be impacted by rising energy, fuel and water costs, exposure to emissions taxes, increased occurrence and severity of extreme weather events and changing client preferences. If we do not effectively manage these risks, our ability to deliver on the strategy is compromised. Conversely, climate change presents opportunities to be the service provider of choice as we improve our fuel efficiency and move from conventional to low-carbon fuels. We consider these risks and opportunities in the development and delivery of our strategy.
Focus area: Improve fuel efficiency and investigate alternative fuels

What we are doing

Our transportation activities are the biggest contributor to our carbon footprint, with Logistics Africa being the business that contributes the most. As a significant consumer of fuel, driving sustainable consumption and implementing technologies that provide lower than average GHG emissions in these activities, means we save on our operating costs, and reduce our Scope 1 and our clients’ Scope 3 carbon footprints.

We are digitising our fleet as far as possible, leveraging existing and new vehicle management systems and technology to gain efficiencies, including better vehicle performance and more effective fuel and tyre management (see Project Blue Fleet on page 37).

Strict truck service and maintenance programmes in the logistics businesses ensure our trucks run optimally. In line with our vehicle replacement policy, our trucks in South Africa and Europe are not more than 10 years old, which means that most of our fleet is continually improved with newer, more fuel-efficient technologies. Fuel efficiency is a key criterion when procuring new vehicles. Euro 5 vehicles have a reduction in fuel consumption of between 3% and 8% depending on operation and payload. For Logistics Africa, on the same route and with the same payload, our data shows a Euro 5 truck emits around 3.4% less CO₂e compared to a Euro 3 truck. A bigger benefit is the reduction of up to 60% in nitrogen oxide (NOx) emissions measured in grams per kilowatt hours (g/kWh). Logistics International operates a modern truck fleet with Euro 6 engines, the highest Euro-rating.

We collaborate with OEMs on ways to make vehicles less emissions intensive and we test electric and natural gas trucks as an alternative to fuel trucks. While infrastructure constraints in Africa do not readily support natural gas trucks, we pilot these vehicles to understand how we can prepare for this future possibility. The testing of hydrogen-powered trucks is also under consideration. In addition, we gain knowledge from Logistics International, which is better positioned to transition to newer technologies. As an early mover in testing advancements in alternative fuels for our fleet, we drive competition and adoption of this technology within the industry.

We engage with our fuel suppliers on improving product ranges to support a modern fleet and to ensure a supply of alternative fuels so that we can successfully test trucks with newer technology.

Market Access is not transport intensive; however, the asset-light approach means that we use subcontractors for transportation services. It is our intention to improve our Scope 3 emissions reporting in future.

Our context and challenges

Kilometres travelled
Fuel is a major driver of logistics cost and our carbon footprint. In total, 361 million road kilometres were travelled in Africa and Europe in F2021 using a fleet of over 4,775 owned trucks, making Imperial a high consumer of fuel.

Vehicles
In South Africa, limitations in national infrastructure constrain the ability to import electric vans or hydrogen fuel cell electric trucks.

Regulations
In Europe, we must meet stringent European Union vehicle emissions regulations.

Forecasting
Assumptions on fuel consumption are dependent on client trading volumes and market dynamics, requiring targets that are set independently of activity level.
Focus area: Improve fuel efficiency and investigate alternative fuels continued

Over the past two years, we have successfully tested liquefied natural gas (LNG) trucks in both the UK and Germany. In our most recent project, we worked closely with BMW to introduce a new LNG fleet of 18 trucks to transport parts and components from suppliers on 15 different routes across the UK to MINI’s plant in Oxford. For BMW, this means that around 20% of all trucks travelling to MINI’s Oxford plant will be powered by LNG fuel, and for Imperial we have reduced our UK haulage operation’s environmental impact.

LNG trucks are more expensive than their diesel equivalents. However, they provide environmental benefits through lower fuel consumption and fewer harmful emissions and are quieter on the roads. The new fleet has already delivered an approximate reduction of 20% in CO$_2$e and NOx emissions, compared to diesel alternatives. In the longer term, the switch to bio-LNG fuel is expected to achieve a total CO$_2$e reduction of up to 90% relative to diesel.

An Imperial-owned LNG fuelling facility has been established close to the plant so that vehicles travelling on routes with limited refuelling opportunities can leave Oxford with a full tank, minimising their dependence on other service stations.

This is an example of three companies partnering to achieve sustainable transport logistics. By introducing these trucks into our fleet we achieve operational efficiency and meet our ESG objectives, while at the same time helping the BMW Group achieve its supply chain target to reduce CO$_2$e per vehicle by 20% by 2030.

In Namibia, in partnership with an OEM, we are testing a Scania G410 that is fuelled solely by compressed natural gas (CNG) with a CO$_2$e reduction of approximately 20% compared to the diesel alternative. However, a CNG truck is between 15% and 20% more expensive than a diesel equivalent and comes with some limitations in terms of South African regulations, meaning that for now there is limited opportunity to use the vehicles in our domestic market. With a Volvo FH440 fitted with a dual fuel kit (both diesel and CNG), we have experienced a CO$_2$e reduction of up to 9%.
2021 performance review

- **Road transport fuel**
  - **Market Access**
    - Road fuel consumption (million litres)
    - Kilometres travelled
  - **Logistics Africa**
    - Road fuel consumption (million litres)
    - Kilometres travelled
  - **Logistics International**
    - Road fuel consumption (million litres)
    - Kilometres travelled
    - 2019: 75.7, 2020: 72.6, 2021: 64.0

- **Group**
  - Road fuel consumption (million litres)
  - Kilometres travelled

- **Total fuel consumption**
  - Group (million litres)
  - Market Access (road fuel)
  - Logistics Africa (road fuel)
  - Logistics International (road fuel)
  - Market Access (non-road fuel)
  - Logistics Africa (non-road fuel)
  - Logistics International (non-road fuel)
  - 2021: 76.4, 2020: 15.5, 2019: 0.2

1 Fuel consumption for road product transport only. Excludes fuel for shipping and stationary combustion.

**Group**
- Fuel consumption decreased year on year in all businesses given the fewer kilometres travelled due to merging of business units, divestments, reduced business activity across all businesses and fuel efficiency initiatives. Business activity for Logistics International was the most impacted, given the stringent COVID-19 measures in Europe, with only 30% of trucks on the road between July and December 2020. In Market Access, less fuel was used for generators as more electricity was purchased from municipalities, and in Logistics International less fuel is reflected due to the sale of the shipping business. This resulted in a Scope 1 GHG emissions reduction of 28% overall.

**Logistics Africa**
- Completed carbon tax licensing and registration with the DFFE and the South African Revenue Services. For the full 2020 calendar year, we paid over R100 000 in direct carbon tax for non-road or stationary fuel combustion. This is in addition to significant indirect carbon taxes, for example through the fuel levy.
- Total fleet fuel efficiency within Logistics Africa was 38.6 litres/100 km, for all vehicles excepting external rentals within Imperial Truck Rental. For vehicles heavier than 3 500 kilograms in seven targeted businesses, fuel efficiency was 41.0 litres/100 km, an improvement of 6% compared to F2020 (we place our strategic focus on the fuel and operational efficiency of key commercial fleets, as a subset of the total fleet). At present, due to data limitations, the factors leading to the improvement cannot be fully distinguished, although our active focus on fuel efficiency and fleet replacement are believed to have contributed beneficially to this outcome. Changes in customer and product mix remain a significant external factor influencing this outcome.
- Ordered 16 new Euro 5 trucks for an operating company in Namibia, with compatible fuel available.
**Focus area:**
*Improve fuel efficiency and investigate alternative fuels* continued

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<tr>
<th>Scope 1 emissions</th>
<th>Market Access (tonnes CO$_2$e)</th>
<th>Logistics Africa (tonnes CO$_2$e)</th>
<th>Logistics International (tonnes CO$_2$e)</th>
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<td>21 845</td>
<td>17 343</td>
<td>7 698</td>
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<td>Logistics Africa (road transport only) (tonnes CO$_2$e)</td>
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<td>2020</td>
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<td>302 715</td>
<td>289 672</td>
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<td>Scope 1 emissions</td>
<td>Logistics International (road transport only) (tonnes CO$_2$e)</td>
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<td>Scope 1 emissions</td>
<td>Group (tonnes CO$_2$e)</td>
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<td>Transportation greenhouse gas emissions intensity (gCO$_2$e/km)$^1$</td>
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<tr>
<td></td>
<td>2019</td>
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<td>564 985</td>
<td>521 885</td>
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<tr>
<td>Scope 1 emissions</td>
<td>Group (road transport only) (tonnes CO$_2$e)</td>
<td>348 203</td>
<td>(F2020: 378 183)</td>
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<td></td>
<td>2019</td>
<td>2020</td>
<td>2021</td>
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1 Calculated for all vehicles including passenger and other non-revenue vehicles.
2 Excluding Imperial Truck Rentals.

*Indicator report:* page 120.
A performance-based standards (PBS) approach (informed by Australia’s road train regulations) is the innovative and optimised design of heavy vehicles to enhance vehicle performance while complying with safety standards. With this outcomes-based safety mindset, PBS innovations achieve improved safety, higher productivity and cost savings, less road wear and substantial environmental improvements. The vehicle is classed as a ‘smart truck’, given its improvements in reduced vehicle trips, CO$_2$e emissions as well as the improvement on transport productivity. It also has its own onboard scale, with the ability to measure the payload on each axle and print its own weight slip, as these vehicles do not fit on a standard weighbridge layout.

Imperial operating company, Goldfields Logistics, has been RTMS accredited since 2013, which has resulted in a number of benefits, from yearly medical assessments and skills development for drivers, to improved efficiencies, productivity and safety standards, reporting and data capturing, and a decrease in the number of accidents and damages. Through this partnership, Goldfields Logistics was afforded an opportunity to commission PBS vehicles in South Africa.

In September 2016, Goldfields Logistics, with the approval of the KwaZulu-Natal department, commissioned a 25.8 metre PBS vehicle and assessed its performance against baseline vehicles travelling a dedicated route. The pilot proved successful, and a further two 25.8 metre PBS vehicles have been commissioned, replacing all baseline vehicles on this route. Goldfields Logistics have two concept approvals for PBS solutions, which have been commissioned in different environments covering four provinces. The business is planning to expand its PBS fleet into more client-specific solutions over the next year.

From September 2016 to April 2021, the PBS concept demonstrated impressive results when moving the same tonnage of product as a baseline vehicle. The PBS vehicle achieved a 36% reduction in trips equating to a 36% reduction in kilometres travelled, as a result of being able to move a 28% increase in average payload per truck. Fuel consumption and CO$_2$e both reduced 24%, with 999 tonnes of CO$_2$e avoided.

Looking forward

Priorities to achieve our targets and objectives:

- **Group**: improve our reporting against the TCFD framework and investigate the feasibility of expanding Scope 3 emissions reporting.
- **Logistics Africa**: continue to digitise to gain dynamic data-driven insights that will help us to improve fuel efficiency, fleet optimisation and driver management in support of our climate change target.
- **Logistics Africa**: continue to pilot alternative drive systems in support of our climate change target.
- **Logistics Africa**: expand our activity metrics to include transportation loads.
- **Logistics International**: ongoing work on alternative drive systems to support regulatory requirements, our climate change target and client objectives.
Focus area: Reduce GHG emissions

Warehouse space

We operate around 2.8 million square metres of storage space that requires electricity for refrigeration, lighting and HVAC\(^1\) systems. The cost to upgrade older facilities to more efficient resource use is high, sometimes necessitating a move to new warehousing sites.

Availability of electricity

Load shedding (power outages) continues in South Africa as national and municipal electricity infrastructure fails to supply enough power to meet demand. To mitigate interruption to business operations, we rely on generators, which not only increases our emissions but also increases operating costs (the cost of diesel and maintenance). This is also true for some other African countries.

Electricity cost

Electricity price hikes are frequent as public utilities grapple with maintaining poor national infrastructure. Our electricity bill for our African businesses exceeds R60 million a year.

Cost of renewable implementations

Budgeting for environmental sustainability projects is constrained by tough economic conditions and competing capital expenditure priorities, while we work to recover from the impact of COVID-19. The cost of these investments must be balanced against competitive pricing for clients.

What we are doing

While navigating unreliable power supply challenges, our journey towards greening our business will include rolling out more sustainable and greener solutions, such as solar PV systems, where practical. This will mitigate ever increasing electricity costs and lower our carbon footprint. In South Africa, solar PV installations have been successfully implemented at five sites. Smaller implementations are undertaken when upgrading offices and facilities and include energy efficient lighting systems, energy-saving light emitting diode (LED) bulbs, motion sensors and air-conditioning timers.

In our other African markets, our initiatives generally focus on energy efficient lighting and air-conditioning systems, light sensors and the increased use of natural daylight in warehouses. In this geography, we operate two energy efficient buildings. The Imperial Health Sciences’ warehouse in Kenya is insulated to assist with temperature control and uses solar power to heat water. Our new facility in Nigeria boasts modern and energy efficient equipment, lighting and air-conditioning, supports better workflows, maximises space utilisation, makes use of natural light and provides our employees with a healthier and safer working environment. As part of its upcoming initiatives, we will consider the feasibility of installing solar panels at this site to reduce its dependency on the local power grid during the day.

At present, Logistics International is prioritising energy efficient lighting systems and energy-saving enhancements to its IT infrastructure. Employees receive periodic communications on promoting the environmentally friendly use of energy and other environmental topics.

Go digital, go green

Digitisation and innovation are ongoing focus areas for Imperial and are essential to our competitiveness, client proposition and ability to transform into a future-fit business. Several programmes were initiated during the year to enhance efficiencies and, in turn, mitigate the impact of our operations on the environment and climate change. The value created by projects such as Project Blue Fleet is through harnessing insights from the visibility they provide, enabling us to implement more efficient practices and processes, and in turn, environmental improvements. While not immediate, financial gains and reduced environmental impact will be realised in the future. From an office waste perspective, the many digitisation projects being driven across the group are shifting management reporting towards a paperless environment.

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1 Heating, ventilation and air-conditioning.
Project Blue Fleet is a key strategic initiative to digitise Logistics Africa’s road freight and contract logistics fleets. Digitisation will improve our vehicle tracking and monitoring capabilities and give us access to telematics data that provide deeper insight on how to tackle sub-optimal processes and practices to achieve efficiency and cost savings. For example, by having detailed visibility of truck stops and driving time, as well as understanding the fuel consumption of a particular truck when carrying certain loads along a certain route, we can establish a performance baseline for fuel and rest times. By measuring actual performance against the baselines, we are able to identify opportunities for improvement at truck, driver and trip level. Our goal is to continually improve the baselines, enhancing our overall performance and operational discipline as well as client experience, while also addressing our road safety and environmental risks.

In a strategic partnership with a service provider of connected fleet management solutions, we will implement telemetry across Logistics Africa’s fleet. The mobile application manages route planning and digitises our health and safety protocols for pre-trip, during-trip and post-trip checks. The application is also used for tracking and electronic proof of delivery.

Project Blue Fleet has the following four pillars.

01 **Operations enablement** using a variety of technologies, including:
• Control towers for optimised scheduling, including optimal loads to minimise unused space during collections and deliveries, reducing the environmental footprint.
• Hand-held devices to track driver health and wellbeing, communicate key operational and vehicle information, and provide supervisors with real-time visibility of driver behaviour.
• Onboard cameras used for fatigue management, training purposes and accident investigations.
• A fuel management system, already rolled out to all medium and large sites across South Africa. The system captures all fuel transactions and generates fuel consumption analytics.

02 **Strategic sourcing** of trucks and trailers with the most advanced safety and vehicle management technology and the best Euro ratings allowed by local operations. A multi-functional evaluation committee drives the strategic sourcing of vehicles and fuel.

03 **Digital fleet management** to allow for extensive daily reporting enabled through data lakes and rich analytics, covering driver behaviour (safety and fuel consumption performance), accurate real-time alerts, fuel consumption and fleet utilisation. Real-time monitoring will reduce Imperial’s operational and ESG risk exposure, enabling more informed decision making on route planning and thereby reducing air pollutant (eg NOx) and GHG emissions.

04 **Operations excellence** focusing on human elements to identify best practices and standardising these across the group, improving efficiencies and internal benchmarking. Operations excellence focuses on drivers and their controllers, including ensuring that medical and vehicle checks are performed. Appropriate controls are in place to protect driver telematics data. The pillar also includes trip briefings and debriefings, driver management, driver training, toolbox talks, safety meetings and a workshop management system.

Other benefits to be gained from Project Blue Fleet include minimal duplication of tasks and improved clarity on where additional training or proactive interventions are needed. Workforce motivation is expected to increase by introducing stimulating gamification techniques and improved working conditions. Beyond Imperial, the project contributes to a wider stakeholder network, including the sustainability of our subcontractors who will benefit from a share in the operational efficiencies and technology advancements, and society which will benefit from lower carbon emissions and fewer road accidents.

Project Blue Fleet is being rolled out in South Africa with rollout across our African operations to follow in time. In total, we expect to achieve more than R100 million in savings on an annual basis. In terms of our environmental impact, Project Blue Fleet will help us address our fleet’s sub-optimal fuel use or ‘wastage’. One litre of diesel saved avoids around 2.7 kilograms of CO₂e. Therefore, for every saving of 1 million litres of fuel, 2 700 tonnes of CO₂e are avoided.
Focus area: Reduce GHG emissions continued

The Imperial carbon compensation programme is helping to mitigate the destruction of the rainforests in Kenya and Madagascar.

The Imperial carbon compensation programme offsets the carbon emissions from our company car fleet in Germany, and is a key tool in our international environmental sustainability strategy. To offset these emissions, we provide funding to a project that provides environmentally friendly cookers to mitigate against the destruction of the rainforest in Kakamega, Kenya. Around 65,000 cookers have been installed in the Kenyan project to date. In F2020, we compensated 1,722 tonnes of CO$_2$e, and the proceeds from the sale of these carbon offsets allowed the project to fund a further 500 households with clean cookstoves.

The testing of alternative vehicle technologies that emit less emissions takes time and requires a considerable investment. This offset programme has allowed us to take an immediate positive action while we continue our research.

Part of our ESG strategy is to guide and motivate our service partners and clients to also adopt initiatives that protect the environment. In Germany, we manage over 5,000 vehicles for our clients with fleets and offer them similar offsetting schemes, many of whom have taken up the opportunity. One of our clients, Oxea GmbH, funds the manufacture and distribution of affordable, climate friendly solar and conventional cookers in Madagascar.

The schemes also provide other positive spillovers, including environmental awareness education and production facilities set up to manufacture the cookers.

2021 performance review

Electrical energy purchased

<table>
<thead>
<tr>
<th>Market Access</th>
<th>Logistics Africa</th>
<th>Logistics International</th>
</tr>
</thead>
<tbody>
<tr>
<td>6,649,859</td>
<td>6,362,403</td>
<td>5,592,972</td>
</tr>
<tr>
<td>2019</td>
<td>2020</td>
<td>2021</td>
</tr>
</tbody>
</table>

Electricity purchased

<table>
<thead>
<tr>
<th>Logistics Africa</th>
<th>Logistics International</th>
</tr>
</thead>
<tbody>
<tr>
<td>64,613,178</td>
<td>35,615,290</td>
</tr>
<tr>
<td>2019</td>
<td>2020</td>
</tr>
</tbody>
</table>

Total Scope 1 and 2 emissions avoided

<table>
<thead>
<tr>
<th>Logistics Africa</th>
</tr>
</thead>
<tbody>
<tr>
<td>11,000</td>
</tr>
</tbody>
</table>

Scope 1: avoided fuel consumption
Scope 2: renewable energy

This equates to 5% of the Scope 1 and 2 emissions generated by the activities of Logistics Africa, where the majority of emissions savings were recorded (reasonable estimate).

Scope 2 emissions

<table>
<thead>
<tr>
<th>Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>44,621 (F2020: 50,782)</td>
</tr>
</tbody>
</table>

Scope 3 emissions

<table>
<thead>
<tr>
<th>Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>642 (F2020: 2,254)</td>
</tr>
</tbody>
</table>
Focus area: Reduce GHG emissions continued

- **Electricity purchased**
  - **Group**
  - **(kWh)**
  - 2019: 106,878,327
  - 2020: 70,892,845
  - 2021: 62,290,338

- **Renewable energy generated**
  - **Group**
  - **(kWh)**
  - 2020: 763,006
  - 2021: 1,359,559

**Renewable energy**
For every kWh not purchased from the grid there is an estimated saving of 1,070 grams of CO$_2$e for South African operations. 3.1% of our demand for electricity in Logistics Africa was met by renewable sources in F2021 (F2020: 2.0%).

**Group**
- Electricity consumption decreased by 11% year on year due to reduced demand in all businesses, the closure of some sites as business units were merged, divestments, business activity impacted by COVID-19, as well as the sale of the Logistics International shipping business. Across the group, Scope 2 emissions reduced by 12% overall.
- Scope 3 emissions reflect business travel, which has reduced over the past few years as we have optimised video conferencing and implemented stricter requirements for business travel and site visits. Today, meetings are primarily held via video conferencing. Scope 3 emissions were 72% lower as a result of these measures.

**South Africa**
- In South Africa, our investment in solar power generated 988,051 kWh (F2020: 763,006 kWh) of energy, saving over 1,040 tonnes of CO$_2$e.
- Completed a baseline feasibility study on solar PV systems for certain operations.

**Looking forward**
Priorities to achieve our targets and objectives:
- **Logistics Africa**: engage with operating companies to identify opportunities to roll out solar PV systems.
- **Market Access**: roll out solar PV systems at three sites by F2030 (subject to facility ownership or agreement with landlords and cost-benefit analysis).
Focus area: Increase waste recycling

Our context and challenges

Waste management

Our business requires the disposal of a range of hazardous and non-hazardous waste materials from waste oil, grease and oil rags from our vehicle and equipment servicing to pharmaceutical and food waste on behalf of our clients.

Disposal and destruction requirements

Most waste is treated in line with strict client disposal and destruction requirements, often to meet compliance and safety obligations. In South Africa, this equates to between 60% to 70% of the volume of waste we handle in our operations, with the remainder being recycled or recovered. As part of our integrated manufacturing logistics activities, we handle waste before, during and after the production process.

What we are doing

Our waste in South Africa can be classified into four categories - general waste, safe disposal (the bulk by volume), pharmaceutical waste (negligible volumes) and hazardous waste. Client waste is disposed of in accordance with the requirements of our client contracts and the relevant local and national waste management legislation across our countries of operation. In South Africa, the management of our hazardous and general waste is outsourced to accredited waste management service providers, and traceability, disposal and destruction certificates are issued where required.

Our direct waste typically comprises used oil, grease, rags, tyres and office waste. Used tyres are typically returned to OEMs who provide a safe disposal certificate. An ISO 14001 certified third party collects used lubricant oil, waste oil, used oil filters and SANS 10228 classified dangerous goods and delivers these to their storage facilities as well as approved re-processors and users, all ISO 14001 certified.

Through our ongoing service provider discussions and contractual arrangements, we discuss the waste hierarchy approach and encourage increased recycling and recovery to drive responsible circular economy and sustainable consumption solutions, where possible. This is most applicable to valuable and safe waste streams including general waste and high calorific value streams.

As a focus area in our ESG strategy, we are reviewing our waste management approach and recycling policies and practices to assess opportunities to collaborate with our clients on where we can meaningfully introduce recycling into current product and packaging disposal practices. Our current recycling rate is 68% of general waste, and we hope to progressively increase this going forward.

Certain warehouses in the Market Access division recycle paper and plastics; however, this is not a formalised approach and metrics are not yet tracked.

Logistics International and Logistics Africa’s South African operations track waste per site, collaborate with recycling service providers, educate employees on recycling and are working towards embedding effective recycling processes and decreasing disposal costs. For the first half of F2021, office waste significantly reduced as office workers mostly worked from home due to COVID-19.
**Focus area:**

**Increase waste recycling** continued

2021 performance review

<table>
<thead>
<tr>
<th>Waste generated</th>
<th>Waste recycled</th>
<th>Logistics Africa</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>South Africa</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 703 tonnes</td>
<td>701 tonnes</td>
<td>• 55% of waste generated in South Africa was safe disposal materials (expired or damaged food stuff), 28% was general waste (rubble) taken to landfill and 17% was hazardous material (generated predominantly from workshop facilities). The hazardous waste and safe disposal materials are unlikely to be recycled because the impact of reusing the materials has not been fully researched.</td>
</tr>
<tr>
<td>total waste generated</td>
<td>68% of general waste recycled</td>
<td>• Contract Logistics is a relatively waste intensive business. During the year, it reviewed its waste management strategy across four key facilities. To sort waste at source, waste receptacles were labelled and strategically placed in facilities. The changes are being monitored to ensure their effectiveness. Recycled tyre rubber can be used for an assortment of purposes such as footwear, mats and other products. As part of its strategy, Contract Logistics is working with a tyre service provider to recycle used tyres against clearly set protocols. The road freight business in South Africa has also started exploring tyre recycling options.</td>
</tr>
<tr>
<td>(F2020: 5 820 tonnes)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

By recycling one additional tonne of general waste, we estimate that more than four tonnes of CO₂e are saved across the material lifecycle. From this, over 3 000 tonnes of Scope 3 emissions were avoided by recycling in F2021.

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**Indicator report:** page 121.

**Looking forward**

Priorities to achieve our targets and objectives:

- **Group:** review the waste management approach, ensure it is aligned with best practice, and identify meaningful additional recycling opportunities.
Conserve water

**Africa**

**282 136 kilolitres**
of water purchased from municipalities in Africa, of which 93% is attributable to South Africa
(F2020: 345 416 kilolitres)

**22%**
of water withdrawal in South Africa was sourced from alternative sources, mostly boreholes, with lesser contributions from third parties and harvested rainwater
(F2020: 18%)

**9%**
of water used in the balance of our African markets was sourced from alternative sources, mostly boreholes
(F2020: 49%)

**10.3 million litres**
of recycled water used
(F2020: 14.7 million litres)

**Looking forward**

Priorities to achieve our targets and objectives:

- **Market Access:** subject to agreement with landlords and cost benefit analysis, install three rainwater harvesting systems by F2030.
In April 2021, we partnered with a specialist vendor to implement a biological treatment process in the effluent plant of a wash bay at a Tanker Services Food & Chemicals site near Johannesburg. To test the solution, a 12-week trial was undertaken where two new dosing agents were applied to the plant and all other chemical agents removed. A microbe blend breaks down oily compounds and a liquid probiotic and bacterial concentrate is used in the grease traps, drain and drain line maintenance to improve septic and waste degradation, cleaning and odour control.

In the prior manual treatment process, dosing with flocculants, coagulant, caustic soda and sulphuric acid was needed to meet the effluent limits for the quality of water that can be discharged to municipality. This resulted in significant sludge formation and free-floating oils in the sumps and ongoing operational costs to manage these.

The results of the test are pleasing and samples reveal that all municipal effluent specifications are met. There has been a notable improvement in chemical oxygen demand and pH stabilisation at the midrange of the allowed tolerance. Other notable benefits of the solution are sludge reduction over a longer period of time within the sumps and less free-floating oils, reducing the need for skimming and annual sludge disposal. We intend to implement this as a permanent solution, delivering cost and operational savings, as well as avoiding the use of harsh chemicals.

In parallel, leaks were repaired on the property and a programmable logic controller installed on the water storage tank, resulting in a decrease in flow, which together reduced water consumption by almost half and saving over 3 million litres of water a month. Discharge to the municipality has reduced by a favourable 80%.

Other solutions being explored by the plant include water re-use with a potable standard of water through processes such as charcoal filtration, microfiltration, ultrafiltration, reverse osmosis and ultraviolet light.

On the back of this success, we hope to transition another wash bay in KwaZulu-Natal (trial is in progress).
Biodiversity

Our five primary biodiversity impacts are addressed through our focus on road safety and broader climate change and environmental sustainability framework. Our approach to each of these impacts is explained below.

### Acquisition of new businesses

Our due diligence process considers the minimum legal stipulations and requirements, all regulatory requirements and the compliance performance of a potential acquisition, including its site permits and environmental authorisations. Warehouses are assessed for their suitability in storing intended products | Page 114.

### Waste and effluent management

Waste and effluent management at our warehouses meet regulatory requirements and licence conditions, where these apply. Certain sites meet ISO standards and stringent SHE policies and procedures govern our operating sites. SHE risk assessments are conducted periodically at all sites to ensure high standards are upheld | Pages 53 and 114.

Effluent monitoring is conducted to ensure adherence to water discharge limits as prescribed in our licences. Further to this, waste is disposed of responsibly and in line with necessary regulations and standards, and our focus on increasing our recyclable waste aims to divert the waste within our control away from landfills | Pages 41 and 43.

### Building new warehouses

New warehouses are mostly established in developed areas and all new building developments adhere to regulatory requirements with environmental impact assessments carefully considering the products to be stored. None of our warehouses are located in an environmentally sensitive area.

### Contamination due to loss of product during road incidents

Unfortunately road accidents do occur; however, contamination of the environment as a result is infrequent given our robust road safety initiatives, enhanced truck specifications and technology and driver training. Where a road incident involves the accidental killing of animals, these are included in our safety metrics as road incidents, all of which are investigated to identify preventative controls and avoid recurrences. When accidents occur that result in loss of product, our emergency response provides for product salvage and clean-up processes | Page 114.

### Truck exhaust emissions

Our initiatives relating to fuel efficiency and alternative fuels also contribute to reduced GHG emissions and air pollutants such as sulphur dioxide, NOx and particulate matter that have an impact on biodiversity. Project Blue Fleet will drive further improvements in our fleet efficiency in the near term | Page 36.