

Safety and Environment

Caltex strives for incident-free operations. We are relentless in our commitment to ensuring that our workforce goes home safe every day and that we protect the environment in which we operate.

SAFETY

Personal safety

Safety culture is fundamental to who we are at Caltex. Tragically, in 2017, a Caltex tanker driver was fatally injured by a third party vehicle during a routine delivery at one of our customer's sites. The memory of our colleague inspires our continued commitment to personal safety — to ensure that our people go home safe every day. We will continue to strive to make sure that our people prioritise safety in their day-to-day activities.

This tragic loss was against a backdrop of otherwise strong, continuous improvement in personal safety measures. In 2017, Caltex transitioned one of its key personal safety metrics from Total Treated Injury Frequency Rate (TTIFR) to Total Recordable Injury Frequency Rate (TRIFR) to align more closely with the reporting classification used by comparable companies and industries. The Caltex TRIFR for 2017 was 5.20, which represents an 8.6% improvement on the personal safety performance of 2016, where the TRIFR was 5.69, and a 9.4% improvement when compared with the TRIFR average for the previous three years. Similar improvements were also seen in Days Away From Work Injury Frequency Rate (DAFWIFR), where 2017 performance at 1.36 represents a 21% improvement on 2016 (1.73), and a 56% improvement when compared with the average DAFWIFR of the previous three years.

There were 46 recordable injuries during 2017. Of these, 12 resulted in days away from work, 21 required temporary work restrictions but no days away, and 12 required medical treatment but no days away. Thirty-three of the recordable injuries involved employees, and 13 involved our contractors.

Caltex undertakes a Drug and Alcohol Program that aims to mitigate occupational risks associated with certain lifestyle factors. In 2017, 2,416 drug and 2,916 alcohol tests were conducted on employees and contractors at safety critical sites across the business. This involved an extensive testing program



during specific potential high-risk activities, such as during the Caltex Lytton refinery alky maintenance shutdown and the Newport Horizons Terminal Expansion Project, both of which involved large contractor labour forces.

While maintaining focus on improving performance by the prevention and management of low severity injuries, Caltex has introduced a new measure in 2017 to elevate focus on the prevention of incidents that have the potential for high severity consequences (HiPo incidents). A high-potential incident is an incident or near-miss that could have, under other circumstances, caused a high consequence injury or a fatality. Awareness of high-potential incidents is a key factor in preventing them from occurring. There were six HiPo incidents in 2017 and the majority of these incidents did not result in high consequence injuries.

Process safety

Process safety focuses on the safe manufacture, distribution and transportation of products, and the safe operation of all Caltex facilities. In 2017, there was one Tier 1 and two Tier 2 process safety events, both at the Lytton refinery. Neither had any material impact on the environment.

Health and wellbeing

Caltex undertakes targeted health and wellbeing programs every year, including the provision of the Caltex Employee Assistance Program. This program assists employees and their immediate families to improve their wellbeing and morale.

In 2017, Caltex supported 210 employees to participate in the Global Corporate Challenge, a 16 week team-based program aimed at promoting and increasing physical activity levels.

Caltex has a strong commitment to mitigating the health risks associated with physical exposure to hazards within the workplace by controlling exposures at their source.

In 2017, we continued to strengthen occupational health and hygiene programs across the business. Work undertaken included a detailed review of how Caltex manages the risk of noise-induced hearing loss across Caltex Aviation facilities. The outcome of this review will be used to develop a comprehensive Hearing Conservation Program for Aviation in 2018. Significant work has also been undertaken in developing fit for purpose online awareness training packages for Caltex employees involved in the management of asbestos and chemical hazards.

Contractor safety

Contractors perform extensive work across our facilities. Ensuring that this work is undertaken safely is of utmost importance to Caltex.

In 2017, the contractor DAFWIFR, representing more serious injuries, was the best on record at 0.37 per million man hours worked. This was a notable achievement considering the number of large scale projects over the year such as the Lytton refinery Turnaround and Inspection, the Newport Terminal expansion, and the Kurnell

decommissioning and demolition. These projects carry a higher risk due to the nature of the work involved, and the engagement of a more itinerant contract workforce.

In addition to a robust contractor engagement, vetting and on-boarding process, Caltex undertook 189 safety reviews as part of its contractor safety management process.

Risk management

The Caltex Risk Management Framework provides a comprehensive high level view of the risks faced by Caltex, including strategic risks, business related risk and risks that are a threat to our employees or the environment. Workshops with senior staff regularly review the status of risks and determine further management needs. Quarterly governance reports are provided to the Caltex Board. At an operational level, a comprehensive suite of risk management tools are used to identify, assess and address facility and workplace risks.

ENVIRONMENT

Protecting the environment

Caltex is committed to protecting the environments in which we operate through full compliance with regulations and standards and robust operational management. We regularly conduct internal and external monitoring to ensure that our organisation meets these standards.

Caltex's businesses are subject to a range of environmental laws and regulations as well as project and site-specific environmental licences and approvals issued by both federal and state governments. The international operations of the businesses, including shipping activities, also work to comply with any additional international or applicable countries obligations.

Our Lytton refinery, six licensed terminals across Australia (Kurnell, Banksmeadow, Mackay, Cairns, Gladstone and Port Hedland) and the Lytton lubricants manufacturing facility are operated in accordance with an ISO-14001 compliant Environment Management System. These systems are subject to external surveillance audits to ensure continued compliance to the 14001 standard.

In 2017, companies in the Caltex Group held 21 environmental protection licences relating to the Lytton refinery, 11 terminals, six marketing facilities, one aviation refuelling facility, our lubricants manufacturing facility and a bulk shipping facility.

Any instances of non-compliance against these licences were reported to the environmental regulator. All significant spills and environmental incidents were recorded and reported as required to government authorities.

Caltex maintains emergency response plans to respond to and minimise the potential severity of environmental incidents. We conduct thorough investigations when an actual or potential significant environmental incident occurs to understand the cause and identify corrective actions to prevent similar events.

Regular internal audits are carried out to assess the efficacy of management systems to prevent environmental incidents, as well as to control other operational risks. Improvement actions determined through the audit process are reviewed by the Board's OHS & Environmental Risk Committee and senior management.

Caltex Soil Remediation Facility

The Caltex Soil Remediation Facility located at the Caltex Kurnell Terminal continues to operate and to date has negated approximately 20,000 tonnes of soil from going to landfill. This equates to over 1,000 truckloads of soil otherwise destined for Sydney landfill.

Once remediated, the contaminated soil is re-used within the Kurnell Terminal as part of the ongoing demolition and remediation project of the former refinery site. This reduces the volume of quarried material Caltex would otherwise have to import to the site for levelling works.

Climate change

At Caltex, climate related risk is overseen by the Board's OHS & Environmental Risk Committee.

Caltex engages with federal government departments and regulators directly and indirectly via industry groups on climate change policy and legislation, to ensure material risks to our business are both understood and can be effectively managed. Prioritisation is based on the anticipated material impact of the mitigated risk and likelihood rating derived from a cross functional review of the Caltex risk management framework.

Caltex has undertaken a review on the following climate related risks to our business:

- Risks driven by changes in physical climate parameters.
- Risks driven by changes in other climate-related developments.
- Risks driven by changes in regulation.

The opportunities that we have identified while undertaking our risk review include:

- Implementation of relevant Task Force on Climate-related Financial Disclosures recommendations.

- Continued focus on energy efficiency projects at our Lytton refinery.
- Evaluation of solar installations across our company operated WA service station network.

We also recognise that climate related risks are just one part of our broader corporate ESG governance framework and to this end we considered that our historical climate related risk reporting via the Carbon Disclosure project (CDP) can be effectively reported in the future via an integrated annual report.

Our participation in the CDP for over the past five years has provided a valuable framework to enhance our management and internal communication on climate change. Over this time our Scope 1 and 2 combined emissions have reduced from 2.1m tonnes to 0.9m tonnes per annum. A focus on energy efficiency continues at our Lytton Refinery, which is responsible for 97% of our total annual Scope 1 emissions.

A safeguard mechanism was implemented by the Clean Energy Regulator (CER) to ensure that emissions reductions purchased by the Government are not offset by significant increases in emissions above business-as-usual levels elsewhere in the economy.

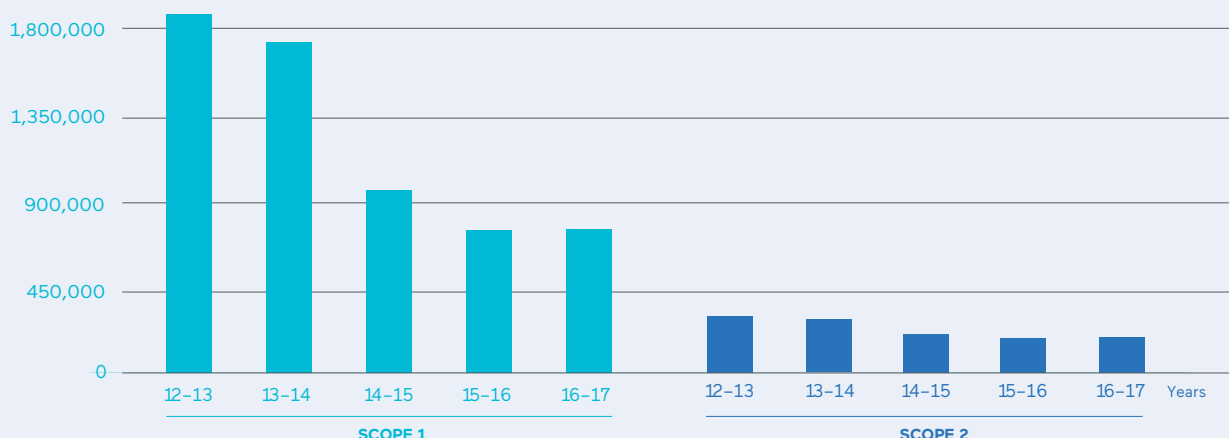
The safeguard mechanism commenced on July 2016 and in mid December 2017, the CER issued Caltex Australia Limited with a calculated emissions baseline determination for a baseline of 711,162 tonnes of CO₂. This determination has effect from July 2016 to June 2019.

Caltex continues to support greenhouse gas reduction policies which maintain the international competitiveness of Australian industries such as petroleum refining.

Total Scope 1 and Scope 2 emissions

	FY12 13	FY13 14	FY14 15	FY15 16	FY16 17
Scope 1, metric tonnes of CO ₂ - equivalent	1,849,610	1,704,466	938,680	733,537	737,663
Scope 2, metric tonnes of CO ₂ - equivalent	288,640	269,848	197,970	178,273	183,784

Metric tonnes of CO₂ equivalent



Case Study

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<http://microsites.caltex.com.au/Annualreports/2017/>

Caltex continues to look at ways to further improve its portfolio-wide energy efficiency and is reviewing ways to use smart metering, smart switchboards, demand management and whole-of-life asset efficiency assessments. The review will include continued LED upgrades and solar evaluations at our highest electricity consuming sites.



An energy review last winter at two sites in Western Australia compared a new site designed with our broader convenience offering in mind with a well-established service station focused on fuel sales. The comparison of the different sites helped Caltex understand the major areas of energy use and identify opportunities to improve energy efficiency and reduce costs. Refrigeration, air conditioning and lighting are major users of energy at both new and old sites which can be improved with insulation, new technology and LED lighting, alongside training for the employees in our stores.

Both reviews also identified that we could achieve more than 25% reduction in our electricity use by embracing solar energy while future-proofing sites for batteries. This would also give the potential to support the charging of electric vehicles from renewable sources in the future.

As a result of these findings, Caltex embarked on a solar photovoltaic (PV) panel pilot trial at the two sites in July 2017. This trial found that using solar PV panels improved energy efficiency by over 30%, reduced peak demand and delivered a greenhouse gas emissions reduction of over 20%. The initial pilot success resulted in broader trials which have now commenced at additional sites with a view to scale up, initially in Western Australia in 2018, and to explore further rollout potential on the eastern seaboard and in South Australia.

Energy efficiency and greenhouse gas emissions

During the year Caltex continued to implement greenhouse gas emissions related reduction activities to improve energy efficiency within our operations. This included the ongoing installation of lower energy usage light fittings in new service station canopy designs. These activities have reduced energy usage as well as operational and maintenance costs at current service station locations.

Furthermore, energy audits conducted at service station sites in 2017 have identified efficiency opportunities which will be tested in 2018, including smart switchboards and demand response/smart metering solutions.

In 2017, Lytton refinery's site Energy Intensity Index (EII) was 98.8, a slight increase on 2016 as a result of unit outages throughout the year.

Reporting under the National Greenhouse and Energy Reporting Scheme continued in 2017. Scope 1 emissions are from energy sources owned and controlled by Caltex, and Scope 2 emissions are purchased energy from electricity, heat or steam. Caltex's Scope 1 and Scope 2 emissions increased slightly from the previous year given Lytton refinery's increased throughput (Scope 1) and as a result of an increase in the Caltex operated service station network (Scope 2).

Infrastructure, integrity and product stewardship

Reliable, quality supply and a strong infrastructure

network are keystones of Caltex's ability to meet Australia's transport fuel needs. Product quality specialists at Caltex oversee the integrity of fuel through our supply chain, including shipping, manufacturing, storage and delivery systems, to ensure that our customers receive high quality products, our legal and regulatory obligations are met and performance is consistently high. Our quality specialists work with customers to improve performance and efficiency and develop new products to meet their needs.

Underground tank replacement and monitoring

Caltex reduces potential environmental risks by actively monitoring our Underground Petroleum Storage Systems (UPSS), which are used at both service stations and depots. The 2017 program prioritised the replacement of UPSS at 12 sites. Since the program's inception in 2007, underground tanks at 146 sites have been replaced.

Waste management

The Australian Packaging Covenant (APC) is a sustainable packaging initiative which aims to change the culture of business to design more sustainable packaging, increase recycling rates and reduce packaging litter. As a signatory to the APC, Caltex is pleased to report 100% compliance among our product suppliers for our Star Mart brand. With the introduction of our fresh food offer branded under The Foodary, we are actively working with our suppliers on packaging design, and incorporating recycled content into primary private label packaging.