

REVIEW OF OPERATIONS

Supply

Caltex's Supply department buys crude oil for both refineries and is responsible for production planning at the refineries. It also buys products, schedules product movements to meet marketing sales and distributes products to a network of terminals around Australia.





Principal Chemist Fuels Technology
Laurie Palmer tests the storage stability of diesel blended with biodiesel in the laboratory at Caltex's Lytton refinery.

FAST FACT

In 2006, around 40% of the crude oil and feedstock used in Caltex refineries came from Australian oilfields, 40% from South East Asia (Vietnam, Malaysia, Indonesia and the Philippines), 15% from Papua New Guinea and the balance from the Middle East and Africa.

Key points for 2006

- Maintained reliable supply to customers through the extended transition to clean fuels production in first half of year
- Supported record refinery throughput in second half of year
- Progress in supply chain improvement program
- Facilitated biofuels expansion

The Supply department successfully met significant challenges in atypical circumstances in 2006.

In the first half of 2006, to maintain reliable fuel supply Caltex had to expand its imports of diesel and petrol to offset the delays in completing the clean fuels manufacturing facilities at Caltex refineries.

The Caltex Supply team sourced and imported 1.48 billion litres of transport fuels to guarantee supply of petrol and diesel that met 2006 fuel standards. It also exported 0.69 billion litres of non-compliant transport fuels, fuel oils and petrochemical feedstocks. The transitional phase was managed without disruption to customers.

In the second half of the year when all fuels produced by Caltex were fully compliant with 2006 standards, record throughput rates by Caltex refineries led to increased crude oil requirements in a highly competitive environment. The department was successful in obtaining additional supplies of crude oil and carrying out scheduling which supported the higher production rates achieved by the refineries.

The company faces growing competition in the crude oil market due to factors that include the fast growth in fuels demand in China and India. As part of a strategy to access alternative oil markets, 2006 saw the completion of dredging of the channel approaches to Caltex's Lytton refinery wharf on the Brisbane River to accommodate larger crude oil cargoes. This provides Caltex with access to supply from crude oil markets in West Africa where the minimum cargo size is larger than Caltex's previous capability.

In 2006, the launch of new crude scheduling technology and processes at the Kurnell refinery marked a major step in Caltex's fuel supply chain improvement program. The program, launched in 2005, involves a number of

projects related to achieving better blend optimisation, data management and reporting, refinery operations scheduling and product supply planning. When fully implemented in 2007, all projects combined are expected to deliver significant benefits from cost savings and improved refinery utilisation.

The Supply department is responsible for sourcing and ensuring standards are met for ethanol and biodiesel used in Caltex's petrol and diesel biofuels blends. Caltex's biofuels marketing program was significantly expanded in 2006 and the Supply department arranged supply contracts with two ethanol suppliers and two biodiesel suppliers.

Planning and negotiation for further growth in requirements was well progressed. A critical requirement for biodiesel is that quality specifications are met to ensure the blended product is fit for purpose.

LEFT: Refinery Scheduler Nathan Owens, at left, and Supply Chain Improvement Program Team Member Phillip Manson use Caltex's new refinery scheduling technology which has allowed better decisions on import needs and export sales of petroleum products. The ship at the Kurnell wharf on the left is loading an export while the one on the right is delivering imported product.