3 May 2010

Secretariat to the Task Group on Energy Efficiency
c/- Department of Climate Change and Energy Efficiency
GPO Box 854
Canberra ACT 2600
energyefficiency@climatechange.gov.au

Caltex welcomes the opportunity to provide its views on certain issues being considered by the Energy Efficiency Task Group.

Caltex is the leading refiner and marketer of petroleum products in Australia, with operations in all states and territories. Caltex accounts for around 35 per cent of Australia’s oil refining capacity. It owns and operates two of Australia’s seven operating oil refineries – at Kurnell in Sydney and Lytton in Brisbane. Between them, the Caltex refineries have the capacity to process 244,000 barrels (about 39 million litres) of crude oil per day. Caltex produces mostly high-value transport fuels which contribute to the growth of the economy and provide significant employment.

1. Industrial energy

1.1 Energy investment opportunities

Caltex places a high priority on increasing energy efficiency at its refineries, thereby reducing its energy costs. Energy is the largest operating cost at refineries, mostly in the form of internally generated fuel from crude oil processing, rather than purchased electricity and gas.

A number of projects identified under the Energy Efficiency Opportunities program are being implemented. However, we note that economic opportunities are small in relation to total energy usage and must also compete against other non-energy capital requirements; the opportunity cost of capital is the critical determinant, not its payback in isolation from other refinery investments. It follows that making EEO projects mandatory would decrease overall capital efficiency and corporate profitability and should not be a policy direction recommended by the Task Group.

1.2 Incentives for greater industrial energy efficiency

The task group has highlighted that the majority of Australian energy efficiency improvement over the last few decades has been achieved by elimination of manufacturing capability in favour of a more service based economy. Although economy wide “efficiency” improvement can be generated through reducing industrial output this narrowing of the national economy may not be in the interests of the nation and may pose future security threats. One of the contributory factors in the erosion of manufacturing capability is the use of price signals or penalties to increase the cost of energy in Australia as well as increasingly complex and costly regulation. Caltex believes that government should continue to focus on industrial energy efficiency but through more innovative and focussed programs that encourage improvement but not in a punitive manner that leads to manufacturing leaving and heading
overseas. Cost increases often force failure rather than lead to improvement. One of the key barriers to investment in industrial energy efficiency is the poor return on capital investment that does not meet the normal hurdle rates required for brownfields industrial facilities. Government support for industrial energy efficiency projects through favourable tax treatment or depreciation timetables could offer assistance in this area. It is important to note that many industrial energy efficiency projects that would not be viable under current company capital investment criteria could still generate very significant energy efficiency improvement relative to some government programs deployed in the residential or community sector. Caltex is of the view that government support for energy reduction should be evaluated on a cost benefit basis and funds allocated to those areas of the economy (including manufacturing) where benefit is greatest for least cost.

1.3 Impact of energy market regulation on industrial energy efficiency opportunities

Caltex believes that existing energy markets are not conducive to improving energy efficiency. The rigor and complexity of market rules inhibit smaller entrants with potentially more energy efficient technologies. There is an absence of focus on network efficiency by regulators who appear to have little incentive to match international best practice benchmarks. Current governance mechanisms are protective of status quo and market security so that innovative operation and network change (e.g. reducing transmission and distribution losses) is not encouraged.

Distributed generation (e.g. cogeneration) is an option for large industrial facilities such as Caltex’s refineries but is not supported due to the market advantages of the incumbent large generators and the risks in investing long term in Australian manufacturing facilities. Support for distributed generation through better market access rights and greater confidence in electricity pricing is critical for development of significant cogeneration capacity in Australia.

2. Transport energy

2.1 Holistic policy approach to transport fuels

Caltex’s comments in this brief submission are focussed on opportunities to reduce greenhouse gas emissions through increased energy efficiency in the transport sector (demand side measures) and increased usage of lower-carbon fuels (supply side measures). These opportunities if implemented would help move Australia to a low carbon economy.

Broadly speaking, the Task Group’s report is about reducing greenhouse emissions by reducing the energy required for a certain level of output; the CPRS is mostly about changing the carbon intensity of the energy that is used in that task through changes in the relative prices of various forms of energy. Carbon prices will encourage greater energy efficiency to some extent but other market and regulatory mechanisms may be far more effective than carbon prices.

Given the deferral of CPRS implementation until at least 2013, and potentially longer if there is a lack of adequate international progress on climate change, Caltex believes the terms of reference of the Task Group should be extended to cover supply side responses to climate change that are not adequately covered by existing policy. As such an extension of the terms of reference is unlikely to be forthcoming from government, the Task Group could recommend that further work be undertaken to integrate demand and supply side measures for the reduction of emissions from transport fuels.

In particular, while consideration is being given by government through COAG to measures to improve the fuel efficiency of motor vehicles, there is no up-to-date, consistent and integrated policy approach to the fuels used in these vehicles, particularly biofuels. For example, while setting fuel efficiency (litres per 100 km) or carbon efficiency (grams of carbon dioxide emitted per kilometre) targets for cars and light commercial vehicles could reduce energy use and greenhouse gas emissions, substantial further emission reductions could be achieved through use of ethanol and biodiesel blends in those vehicles.
Considering energy efficiency measures without also considering the carbon content of that energy is tackling only half the problem and could result in distorted Task Group policy recommendations. For example, achieving a certain reduction in g/km of carbon dioxide emissions through changes to vehicle technology could be more expensive than achieving the same change through use of biofuels. 

2.2 Reduction of emissions from transport fuels

Caltex believes alternatives to conventional refined petroleum products will be increasingly important to reduce greenhouse gas emissions. While conventional fossil fuels including refined products will remain dominant over the next few decades, alternatives will make a relatively small but significant contribution to reducing greenhouse gas emissions.

While recognising the government's intention to introduce the CPRS in the future there are effective actions which can be undertaken now to improve energy efficiency and reduce emissions by targeting transport fuels. The Task Force Group on Energy Efficiency has an opportunity to consider measures which will influence demand for transport fuels and promote the uptake of alternative low-carbon fuels.

In general, carbon prices would do little to change motorists' consumption behaviour because they would form only a small percentage of fuel prices, which are dominated by the price of oil and taxes. For example, a carbon price of $26/tonne of carbon dioxide would increase the price of petrol by only 7 cents per litre or about 5 per cent. The impact of the CPRS would be negligible as the increase in carbon tax is permanently offset by a reduction in excise.

The necessary changes to reduce greenhouse gas emissions will come mainly from new vehicle technologies, with carbon prices having little impact on this technological change; the major driver is EU and US vehicle efficiency targets, backed with penalties for non-compliance, although many manufacturers see the inevitability of major change to achieve long-term national emission reduction targets and are planning ahead. Once new vehicle technology becomes economic as a result of fiscal and/or regulatory measures, drivers will switch from fossil fuels to electric vehicles and vehicles using other renewable non-fossil fuels, including biofuels.

Modelling for the CSIRO Future Fuels Forum projected that a greater shift toward public transport, rail and sea freight and lighter vehicles could, by 2050, reduce kilometres travelled by 30 per cent and greenhouse gas emissions by 17 per cent.

Caltex believes that changes in vehicle technology will be the key to reducing emissions, together with greater reliance on alternative fuels. These were discussed in The Star #49 and Caltex Talkingpoint, both dated September-October 2009, which are available at caltex.com.au.

Caltex proposes that policy settings be established to:

- Set voluntary targets for the carbon efficiency of new cars and light commercial vehicles, in grams of carbon dioxide emitted per kilometre, that are comparable with those of other countries.
- Give incentives to consumers to buy more fuel efficient vehicles through a “feebate” scheme like those already in place overseas. This would provide “cashbacks” for new low-emission vehicles, funded by fees on those vehicles with higher emissions.
- Provide grants to manufacturers for research, development and demonstration of low-emission vehicles, helping to maintain Australian investment and jobs as the world changes.
- Increase the use of low-carbon-emission fuels like biofuels (such as ethanol and biodiesel), liquefied petroleum gas and compressed or liquefied natural gas. Inform consumers about choice of fuels.

- Build more sustainable cities. Urban communities should be developed in a way that allows people access to transport and to work closer to home. Develop better public transport.

2.3 Biofuels policies to reduce emissions from transport

Caltex’s views about the contribution that biofuels can play, and the need for a coherent policy framework to support the development of the biofuels industry was outlined in the December 2009-January 2010 issue of The Star and Caltex Talkingpoint. In summary the following are proposed as important elements of a biofuels policy framework.

- Implementation of the excise rates proposed in the 2004 energy white paper (5 year phase-in to 50% discount on energy-adjusted excise rates starting July 2011).

- In relation to the above, avoid effective removal of tax concessions for biodiesel blends above 5% as a result of making a biodiesel blend standard for these blends.

- A level playing field for domestic and imported biofuels from July 2011 consistent with the above policy, so that future development of the Australian industry must be internationally competitive.

- Limited, targeted transitional financial assistance to Australian biofuels producers directed at the development of a long-term sustainable biofuels industry including use of “second generation” feedstocks.

- Financial assistance if required for development of the biofuels supply chain including biofuels distributors, wholesalers, retailers, and for development of end-use technology including vehicles.

- Optimisation of crops and conversion processes for biofuels production in Australia.

- Establishment of comprehensive fuel quality standards for biofuels including cold filter plugging point, filter blocking tendency and any other standards reasonably required by suppliers, customers and equipment manufacturers, and maintenance of Reid Vapour Pressure allowances (at the state level).

- Manufacture of all vehicles and provision of warranties to ensure suitability for at least E10 and B5 blends, with a vision by all manufacturers to transition to higher blends over time.

- Sustainability criteria taking into account life-cycle greenhouse gas emission reductions and direct and indirect ecological impacts, which would be linked to the provision of financial assistance.

- Consumer education and product promotion.

I would be pleased to discuss this submission with the Task Force.

Yours sincerely

Frank Topham
Manager Government Affairs & Media