

LAA LTD JUNE 26 & 27 2008 SEMINARS Climate Change and Logistics

On June 26 in Melbourne and June 27 in Sydney, the LAA hosted two seminars on Climate Change: Logistics and Supply Chain Strategies. Following is a brief overview.

1. Freight transport and climate change – exposure and opportunities – (Melbourne and Sydney) Cameron Eren, Industry Partnership Program, Total Environment Centre.

For Australia, transport is the third largest source of emissions and second fastest growing category. Both personal travel and freight movements contribute.

To date, the rapid growth of freight emissions has been largely overlooked. While transport emissions grew by 27.4% between 1990 and 2006, freight emissions grew by over 98% over the same period. Freight emissions have already exceeded their Kyoto budget.

With climate change policy set to demand public and private sector emissions reductions, and the rising costs of transport fuel, electricity and water it is important that the transport industry understands its demand and compliance risks. It needs to understand its carbon intensity and legal obligations and to keep track of operating costs by maximising resource efficiency.

The market for low carbon freight transport will grow rapidly in a carbon constrained world. Now is the time for companies to position themselves to benefit from this growth.

2. What emissions trading means for logistics (Melbourne) Anna McCann, Senior Associate, Baker & McKenzie, Global Climate and Clean Energy Group (Sydney) Ilona Millar, Senior Associate, Baker & McKenzie.

The Australian Emissions Trading Scheme (AETS) is a national cap and trade scheme to help reduce Australia's greenhouse gas emissions. The target is 60% reduction from 2000 emissions by 2050. The scheme is underpinned by the National Greenhouse and Energy Reporting Scheme (NGERS).

NGERS requires "controlling corporations" to register and report if its corporate group or facilities emit greenhouse gases, produce energy or consume energy above certain thresholds.

What does this mean for transport?

Suppliers of fuel, at some point in the distribution chain, will be responsible for purchasing and surrendering emissions permits.

Fuel suppliers will be able to create or purchase carbon offsets from certain activities that reduce emissions below a business as usual scenario. Fuel prices may rise, as suppliers seek to pass on cost of compliance.

The extent of costs passed up or down the supply chain, or absorbed, will depend on a number of market factors. These include the competitiveness of up or downstream markets, whether low-cost offsets can be secured and the size of the emissions cap over time.

Other areas of logistics such as warehousing and IT functions are unlikely to be directly liable as they are not high direct emissions.

The legal obligation to acquire permits does not restrict contractual ability to pass costs of compliance up or down the chain.

Companies need to plan for business in a carbon constrained environment. Current projects and those in the pipeline should be reviewed to determine whether companies should be protecting their carbon rights under contract. Standard form contracts for trade in carbon should be developed.

3. GHG emissions reduction opportunities – Logistics and climate change

(Melbourne) Steve Manders Manager Logistics & Supply Chain Consulting, Sinclair Knight Merz and (Sydney) Matt Davies, Practice Leader, Air Quality & Greenhouse Gas Emissions, Sinclair Knight Merz.

Transport will need to play a significant role if Australia's goal to reduce GHG emissions by 60% of 2000 levels by 2050 is to be met.

Establishing a plan for energy management is the way to start. Ask questions such as: Where is energy wasted? What material flows and transformations occur at each stage in the transport chain? How much energy is actually used? Where are saving/ efficiency opportunities? Are savings in one part of the process lost somewhere else?

Avenues of attack to minimise the impact of logistics include: reducing the numbers of freight tonnes moved; reducing the average distance of each tonne moved; increasing freight efficiency and reducing socio-economic impacts.

It will be necessary to find ways to undertake the same freight transport task but with less environmental impact. This could include using less fuel or fuels with lower emissions, minimising the impact of external congestion, reducing empty running, and reducing nonproductive aspects such as packaging.

The main opportunities are long-term approaches but, for day to day, use sea and rail where practical; use the biggest vehicle fully loaded; minimise light vehicle usage, particularly in peak hours; try to source and sell locally. Actions start with what you control and can influence!

4. Peak oil, greenhouse gas emissions and biofuels – logistics and supply chain strategies *(Melbourne) Dr Tom Beer, Stream Leader, Transport Biofuels, CSIRO Transformed Flagship* *(Sydney) Dr Barrie May, Co-project leader, CSIRO Energy Transformed Flagship.*

Peak oil and associated rising costs demand alternative options. Sustainability considerations and the potential contribution of biofuels is becoming increasingly important.

Alternatives to conventional oil include: tar sands or oil shale; coal to liquids and gas to liquids; gas, electricity and hydrogen power and 1st and 2nd generation biofuels. In finding which of these is the most suitable we must look at economic cost, environmental cost and social acceptability.

Options for reducing emissions and fuel costs are to develop alternative transport fuels and reduce consumption. It is likely that 2nd generation biofuels will play a major role.

The world is facing a triple crisis of rising energy costs, rising food costs and climate change. We need to solve all three at once!



Tom Beer



Cameron Eren



Matt Davies



Barrie May



Anna McCann



Steve Manders