Infrastructure Australia Submission

We have prepared a submission to Infrastructure Australia.

Download the full report: Peak Oil and Australia's National Infrastructure: Submission to Infrastructure Australia.

The Executive Summary is reprinted below.

Executive Summary

World oil production is at or near its historic peak and will most likely begin to decline within several years. Net exports of oil available on the world market have probably entered a decline that will continue more steeply than the declining rate of production. Compounded by the impact of geopolitical circumstances, extreme weather events and other economic trends, the decline in oil availability will see dramatically increasing and highly volatile oil and fuel prices, oil supply shocks and impacts on economic growth, employment, demographics and transport patterns.

Australia's economy, particularly its transport system, is highly dependent on growing supplies of affordable petroleum fuel, however domestic oil production peaked in 2000 and is now in decline. Almost one half of the oil consumed in Australia is imported and the petroleum trade deficit already exceeds $12 billion per annum. Based on official production and demand forecasts Australia will need to import approximately two thirds of its oil by 2015, in a setting of rapidly declining availability and increasing prices in international markets.

The nature of Australia's infrastructure is a key determinant of its oil vulnerability. Much infrastructure investment in recent years has exacerbated the country's oil dependence. Despite growing awareness of peak oil, infrastructure planners have either ignored the phenomenon altogether or explicitly rejected the likely impacts. Many projects are already at risk of failure as their planning assumptions become invalidated by the combined impact of peak oil, the world financial crisis and related economic factors. More appropriate investment facilitated by Infrastructure Australia will be crucial in mitigating the impact of peak oil. The need to reduce Australia's oil vulnerability should be included in Infrastructure Australia's goals and strategic priorities. Oil vulnerability assessment should be included in the feasibility studies for significant infrastructure projects.

The resilience of existing energy infrastructure needs to be improved, while a longer term transition to sustainable energy is facilitated. Australia needs to establish a strategic petroleum reserve equivalent to 90 days of oil imports. Direct investment needs to be made in renewable, distributed energy infrastructure to minimise the impact of systemic shocks and alleviate the socio-economic impact of peak oil.

Serious flaws in existing transport planning processes have resulted in a high dependence on cars and road freight, which are both highly vulnerable to the impact of peak oil. Infrastructure Australia should commission an independent study into the implications of peak oil for transport planning, in order to determine realistic planning assumptions. Urgent investment in sustainable transport systems is required, including world class public transport and freight rail. Investment in expanding urban motorways should be discontinued, as should airport expansions. The feasibility of high speed passenger rail should be investigated as a long term alternative to air travel.