

Submission from Transition Towns Otaki, Transition Towns Waikanae, and Transition Towns Kapiti on the Kapiti Expressway proposals

5 October 2009

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1 Who we are

We formed in 2007 as part of an international network of local groups facing up to peak oil and climate change. Our national websites are

<http://www.transitontowns.org.nz>
<http://transitionaotearoa.org.nz/>

Our local websites are

<http://transitonotaki.ning.com>
<http://ttk.org.nz/>

As you can see there is considerable activity. Otaki group for instance now has 150 people on our email list and has had a busy programme of education, work towards food sustainability and local resilience. The Kapiti group has 336 people on their mailing list, runs regular educational films on peak oil. Together we have had a presence at many functions on the coast.

2 Summary

We completely oppose the construction of new expressways because we believe the price of oil is going to be on an upward trend from now on (probably with large spikes and falls due to factors like a deep global recession and increased speculation). We believe there should be an upgraded rail system. Money available for roading should be spent on improving existing state highways and local roads. We completely support the Kapiti Coast District Council in their preference for completing the Western Link Road as a two lane road.

3 Peak oil is real and very relevant to future highway construction

The price of oil has implications for the price of fuel, the price of bitumen for building roads and the future of traffic flows.

3.1 Oil is more expensive to extract now

Although as motorists we enjoy well designed highways, we realize that the time for highway construction is now over, given that the global production of oil has now reached the time where easy to get oil is declining. The oil in inhospitable places like 6 miles down in the Gulf of Mexico or in the Arctic is very risky and expensive. It is going to cost much more to extract oil from Canadian oil sands (and the environmental costs are catastrophic) than from a gusher in

Saudi Arabia. Authorities like Matt Simmons of Simmons and Company, Investment Bankers to the Energy Industry (in Texas) have claimed that global production of sweet light crude oil has peaked in 2005 and plateaued for the past three years.

3.2 The IEA predicts a future oil supply crunch

As a member of the OECD, New Zealand is also a member of the International Energy Agency (IEA). The IEA has usually taken an optimistic view of the future of world oil supplies, but its view has become considerably more pessimistic over the past two years. As reported in The Independent (UK) on 3 August 2009.

The IEA estimates that the decline in oil production in existing fields is now running at 6.7 per cent a year compared to the 3.7 per cent decline it had estimated in 2007, which it now acknowledges to be wrong.

“If we see a tightness of the markets, people in the street will see it in terms of higher prices, much higher than we see now. It will have an impact on the economy, definitely, especially if we see this tightness in the markets in the next few years,” [IEA Chief Economist Dr Fatih] Birol said. To illustrate the scale of the problem, Dr Birol said that 64 mb/d of gross capacity needs to be installed between 2007 and 2030 – six times the current capacity of Saudi Arabia – to meet demand growth & offset decline. He went on to say:

“Many governments now are more and more aware that at least the day of cheap and easy oil is over... [however] I’m not very optimistic about governments being aware of the difficulties we may face in the oil supply.”

Putting so many eggs in the state highway basket suggests that New Zealand is among the countries which are not aware of these difficulties. The IEA’s warnings are too urgent to be ignored any longer.

Acknowledgment: An Open Letter to the Minister of Transport from the Sustainable Energy Forum, 25 August, 2009

In his recent writings Dr Birol is reported as saying “We should leave oil before it leaves us.”

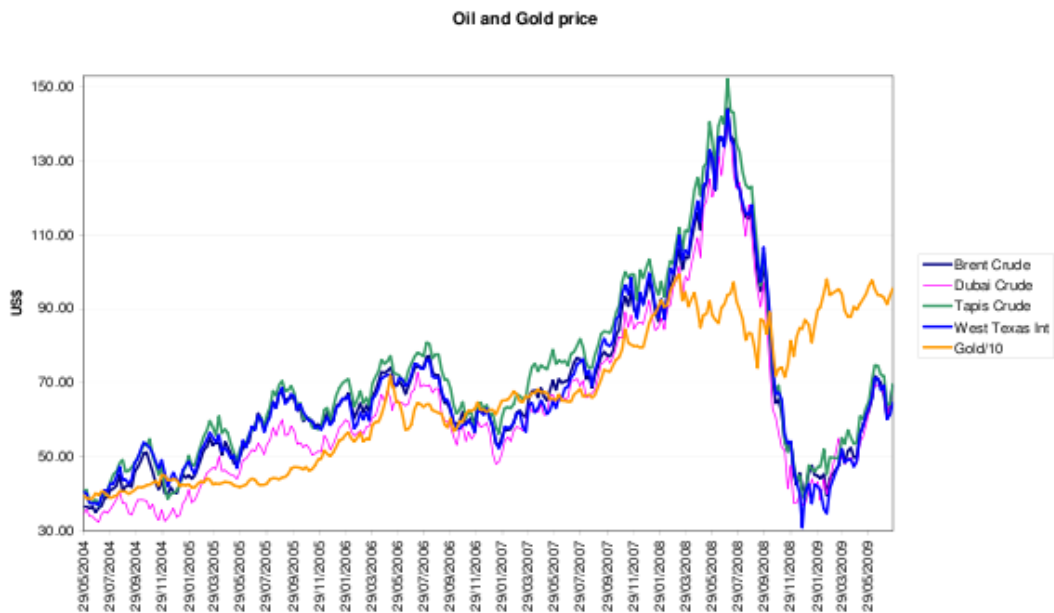
3.3 Speculation in oil futures is growing showing investors are aware of peak oil

A new policy paper by Rice University’s Baker Institute for Public Policy shows a clear increase in the size and influence of noncommercial traders, or “speculators,” in the oil futures market since regulations were eased by the Commodities Futures Modernization Act of 2000. Speculators now constitute about 50 percent of those holding outstanding positions in the U.S. Oil futures market, compared with only about 20 percent prior to 2002. The report also finds that the correlation between oil and the dollar has strengthened significantly over the past several years.

The coauthors of “Who is in the Oil Futures Market and How Has It Changed?”- Kenneth Medlock and Amy Myers Jaffe – advocate that the government should revise its policies to reverse these trends. Kenneth Medlock is an energy fellow at the Baker Institute and adjunct professor of economics. Amy Myers Jaffe is a fellow in energy studies at the Baker Institute and associate director of the Rice Energy Program.

Oil markets are now far more transparent and far more liquid given the fact that existing oil contracts allow investors to trade three to five times more oil than the world uses every day. This transparency will flood capital into oil markets, keeping the price low which, in turn, will encourage even greater demand.

Crude Oil Prices



The chart shows the prices of crude oil at weekly intervals from 29 May 2004 to 25 July 2009.

Prices are in US\$ per barrel, and are taken from the Business Section of the NZ Herald each Saturday.

The crude oil prices are for oil from four different areas.

Brent = North Sea
Dubai = Middle East
Tapis = Singapore
West Texas Int = USA

New Zealand's main supply is from Dubai and is usually at the cheaper end of the spread.

The price of gold in US\$ per fine ounce, divided by 10, is also shown.

3.4 The days of the big fields are over

(From Matt Simmons of Simmons Energy Investment Company 4 Sept 09)

“First, alarming data from the International Energy Agency and the U.S. Department of Energy shows that the flow of global crude oil peaked in 2005 and is now sliding steadily. The world will never “run out of oil,” but its flow is in decline. There may still be ample oil reserves left in the ground when oil flows fall to half of today’s use. But these remaining reserves are all either very low-quality heavy oil, which is difficult to process, or tainted with toxic elements that make

it hard to refine into usable petroleum products.

“It would be comforting if some vast new oil frontier existed that would recreate the 20th century’s oil miracle, but almost five decades have now elapsed since the last great super-giant oil fields were discovered and the last frontier basins were found.

“Second, while global oil demand is growing far beyond what can easily be supplied, countries like China and India are still in relative economic infancy and their per-capita oil use is tiny when compared to the prosperous OECD countries. Demand is insatiable, but oil use can only match oil supply – this is an irrefutable law of nature.

“It is true that a steadily increasing number of financial players now bet on the price of oil. These speculators created the highest volatility that oil prices have ever experienced. The Gang of Four seems to think this is good for oil markets, but as a seasoned investment banker to the energy industry, I believe this volatility is a cancer that will ultimately destroy it. It shouldn’t have been surprising that oil prices plummeted from \$121 a barrel on Sept. 22 to a low of \$31 a barrel on Dec. 22. It happened because hedge funds decided to short the oil contract. But the Gang saw this as normal price changes as folks realized the oil bubble had burst, although this doesn’t sufficiently explain the size of the price swing that occurred.

“When oil prices sunk to \$31 a barrel, the oil industry was no longer financially viable, despite the fact that major oil-company CEOs considered this price “fair” only a year or two earlier.

3.5 Your consultants have assumed the price of oil to be constant

According to an email received from one of your senior planners who consulted Opus to answer our question.

We submit that consultants of the calibre of Opus should have advised you of the difficulty of predicting a future price for expressway construction. When the price of oil is so volatile, and the price of bitumen and the density of traffic all depend on this, we submit it is professionally negligent to assume it is constant.

Here is Jo Draper's email.

Hello Deirdre,

I've asked Opus for some more information on this point and this is what they told me:

The trip distribution and traffic assignment within the SATURN model (used for determining traffic flows in future scenarios) assumes a constant value for the price of oil.

Oil prices would affect Vehicle Operating Costs (VOC) used in the economic efficiency calculations. We use VOC that are published by NZTA in the Economic Evaluation Manual - Volume 1, Appendix A5.

The latest iteration of this is effective 1 September 2008.

Cost estimates are based on 2009 prices. Future costs are calculated in accordance with the discount rate specified in the EEM.

I hope that answers your question,

Jo Draper

Senior Transport Planner

4 Your own consultants have warned against road construction in the face of peak oil

From NZ Transport Agency Think Piece written by international consultant MWH July 2006 (NZTA website)

“Environmental Sustainability

8.1 Peak Oil

It seems counter-productive to be expanding our road network at a time when fuel prices are increasing at a much faster rate than either inflation or traffic volumes, and this trend seems set to continue well into the future.

In addition to the increases in fuel costs, fuel supply itself appears to be no longer guaranteed, as India and China now consume fuel at growth rates around 10% per annum, while global fuel production is expected to peak shortly under the phenomenon known as “peak oil”. New Zealand will be even less able to ensure continuous access to motor vehicle fuel than most other countries, as the world squabbles over a resource in short supply.

To plan for New Zealand’s continued social and economic prosperity would suggest a need to plan for a much reduced reliance on fossil fuels. So building more roads over the next ten years may be exactly the wrong way to go. These resources could be much more wisely spent on building alternatives to private motor vehicle travel, including public transport, walking and cycling. More efforts on travel reduction (with both pricing and non-pricing methods) should also be part of the solution.”

P19 July 2006 Andrew Macbeth project manager. Think Piece on NZTA website

5 Triple digit oil prices bring reduced traffic flows

We have had a dummy run during 2008 when the price of oil was so volatile, peaking at \$147 a barrel in July. Your own website shows a reduction in traffic volumes in 2008 for the first time. Traffic Volumes Monthly Report August 2009 shows this clearly. When we look at the month by month figures in 2008 for the various regions it is clear that both heavy vehicles and other vehicles are declining. It only picked up during 2009. For instance we see the heavy vehicle decline in August 2008 over its comparable month in August 2007 was 7.9%.

6 The price of road construction is dependent on the price of oil, and will rise

The price of oil and the price of bitumen are closely related. A graph I have obtained from Bernie Cuttance of NZTA shows that clearly. It showed that bitumen prices rose 60% between 2005 and 2007, then dropped. So when the price rises again, road construction contractors will find it hard, especially if they have quoted on out of date oil figures. It is extremely difficult for them to put in a competitive tender when prices of oil are so volatile. They are at the mercy of declining oil fields and oil speculators and the inevitable interdependence of the global economy with oil prices.

7 Final statements and a question

Triple digit oil prices are not a strange aberration. They are the future. There is every reason to assume that once these prices are again reached, traffic volumes will decline.

What then? Are we to be left with half finished roads and seriously disrupted communities?

That is what we fear if the issue of peak oil is not faced up to.

While some of us would dearly love to be driving on smooth new highways at high speeds, we now believe that investing in new highway construction is investing in the past and must be completely reversed. Somehow this must happen.

It is time to invest in the future and face it with courage. We need rail for our major distribution networks.

What action do we need to take to have this project reassessed?

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