Penny Cocker Via Email

Hi John

I write in follow-up to the Community Hearing in Hobart on Tuesday 19 April 2011.

At the conclusion of my presentation you asked me why I thought Tasmania should aim to be self-sufficient in energy.

Partly because it seems so obvious to me, I don't think I gave a particularly satisfactory answer. The following information seeks to address that.

An aspect of Tasmania being self-sufficient in energy means not importing petrol for transport, which is why I referred to the need for Tasmania to change to electric vehicles as much as possible.

You may be interested in the following (due to some wonderfully serendipitous timing – it is one of my weekend pleasures to listen to Radio National's The Science Show. If you don't already share that pleasure, I recommend it to you.)

On Saturday 23 April 2011 The Science Show ran a story about Peak Oil and its alarming consequences, with one of the interviewees being Fatih Birol, the Chief Economist of the International Energy Agency.

This is the link:

http://www.abc.net.au/rn/scienceshow/stories/2011/3198227.htm and I am attaching a copy of the transcript as well.

The statements by the three interviewees can be easily used to support an argument for self-sufficiency.

For example: Fatih Birol, Chief Economist of the International Energy Agency:

'I think governments in general are not well prepared for the difficulties we are going to face in the oil markets, because the bulk of the growth is coming from the transportation sector, and if we have to find the solution to the oil problems, we have to find a way to change our mobility habits. The only way I see, and it is well documented in our book, is that to move from an oil-based to an electricity-based mobility system we should lower the oil demand growth and therefore comfort the oil markets. But it will be too optimistic to say that any of the governments, yours or mine, or many of the OECD governments are ready to face this challenge.'

And this is the link to the videos of some extended interviews with Birol and some other equally interesting people: http://www.abc.net.au/catalyst/oilcrunch/

Then there are these statements made by Nobuo Tanaka, the Executive Director of the International Energy Agency; see http://www.iea.org/index_info.asp?id=1928.

Nobuo Tanaka has warned that curbing rising fossil fuel prices will require significant investments and further development and deployment of renewable energy technologies, energy efficiency, and advanced vehicles. ... 'The age of cheap energy is over,' Mr Tanaka said, speaking at the <u>Bridge Forum Dialogue</u> in Luxembourg on 13 April 2011. 'The only question now is, will the extra rent from dearer energy go to an ever smaller circle of producers, or will it be directed back into the domestic economies of the consumers, with the added benefits of increased environmental sustainability?'

The IEA's term 'advanced vehicles' covers electric (which are battery powered), plug-in hybrid (which uses two sources of power – most commonly gasoline and electric) and fuel cell models (which convert hydrogen into electricity).

Cheers

Penny Cocker

Attachment below

ATTACHMENT:

Peak oil: just around the corner

Oil supplies are rapidly dwindling and demand is increasing leading analysts to warn of an impending oil crunch. The global oil supply has lost the equivalent of the volume of the North Sea oil reserve in 15 months. By 2014, supply is expected to fall short of demand. Other factors could bring that forward. Fatih Birol says the age of cheap oil is over and we all need to prepare ourselves for higher oil prices. Further he says no government is prepared for what lies ahead. Jeremy Leggett describes the oil crunch, when global supply fails to meet demand.

Transcript

Robyn Williams: On *Catalyst* next Thursday, if you can tear yourself away from the peak wedding, is a very important feature on peak oil. The news is astounding. Just listen to oil consultant Chris Skrebowski in London.

Chris Skrebowski: The decline is now pretty terrifying. To give you an idea, at the moment the global oil supply is losing the equivalent of losing the entire North Sea in about 15 months or the entire production of Iran, which is OPEC's second biggest producer, in about 11 months.

Jonica Newby: That's hard to even get your head around.

Chris Skrebowski: It's extremely hard to get your head around, and that shows the enormity of the challenge of even maintaining supply.

Jonica Newby: And with the deep sea oil, there will be delays obviously in drilling now. Are we going to intercept the decline?

Chris Skrebowski: At the moment the most probable date for the intersection is still 2014, but that depends on OPEC being prepared to use all the spare capacity it is sitting on and all that spare capacity working. If either of those conditions don't happen, then of course the date comes back towards you. And if countries elect not to supply, as the perception gets around that this is tight and valuable, it would be fully understandable if sovereign governments started saying, well, we will look after our folks first and we will export less, and

offsetting that with a higher price, then again, that brings it back towards you.

Jonica Newby: So you're saying that the oil crunch, depending on what OPEC does, could even be sooner than 2014?

Chris Skrebowski: Yes.

Jonica Newby: What does that mean for a place like Australia that doesn't produce most of its own oil?

Chris Skrebowski: Australia is a well-equipped in the sense that you have large coal exports and you have large gas exports. Both those energy forms are going to be in great demand and you're going to be getting a very good price for them, which means you as a country can go into the market and bid quite aggressively for the 40% of oil consumption that you don't produce yourself. So in that sense you won't be too badly hit, you will remain the lucky country.

Jonica Newby: Okay, but we will be paying a lot more. And what do you think of the IEA's latest projections?

Chris Skrebowski: The IEA in its latest world energy outlook has really covered every base. What they seem to have done, because they used three scenarios, is they seemed to have ruled out the possibility of business as usual, they feel they can get it to add up with a scenario which involves governments delivering on all their assorted promises, which seems a pretty unlikely outcome. And then they have another scenario which is the one to keep global warming to a minimum which, again, they appear to be indicating is not a very probable outcome, that it just couldn't be done. So yes, the red lights may not be flashing but the orange lights are certainly flashing from the IEA. And from private information we know that they are saying rather more dramatic things behind closed doors to government than they are putting into the public print. So it's one of those reports you have to read with great care and a certain amount of understanding to see what they are really saying as opposed to what they appear to be saying.

Jonica Newby: What do you mean?

Chris Skrebowski: What I mean is you don't have to read too much between the lines to see that what they are saying is that future supply is likely to be difficult, and as they have been steadily revising their demand figures up, literally all year in their monthly reports...you see, already we are back to the point where the world is using more oil than it was even in the middle of 2008 last time we were booming crazily. We are producing more, but only a little bit more. So already we have caught that up. In oil demand terms the recession is behind us, and demand is powering up, driven by the Chinas and the Indias where their growth is being fuelled by oil.

Robyn Williams: Chris Skrebowski, formerly of BP and the Institute of Petroleum in London, now an oil consultant, with Jonica Newby of *Catalyst*, who managed to score an exclusive with the man himself in Paris. Fatih Birol is the chief economist of the International Energy Agency.

Fatih Birol: The news is not very bright. On the one hand we see that the global oil demand will increase substantially, mainly driven by the transportation sector, cars, and also by China as a country. Today in China 30 people out of 1,000 people owns a car, and in the United States 700 people out of 1,000 people owns a car. And the Chinese, with the increasing income levels, they are going to buy cars, which is justified, and therefore the demand for oil will increase substantially.

On the one hand we have this pressure on the demand side, but when we look at the production side the prospects are a little bleak. We think that the crude oil production has already peaked in 2006, but we expect oil to come from the natural gas liquids, the type of liquid we have through the production of gas, and also a bit from the oil sands. But in any case it will be very challenging to see an increase in the production to meet the growth in the demand, and as a result of that one of the major conclusions we have from our recent work in the energy outlook is that the age of cheap oil is over. We all have to prepare ourselves, as governments, as industry, or as a private car driver, for higher oil prices.

Jonica Newby: Do you think governments, including my own, have been in denial on this?

Fatih Birol: I think governments in general are not well prepared for the difficulties we are going to face in the oil markets, because the bulk of the growth is coming from the transportation sector, and if we have to find the solution to the oil problems, we have to find a way to change our mobility habits. The only way I see, and it is well documented in our book, is that to move from an oil-based to an electricity-based mobility system we should lower the oil demand growth and therefore comfort the oil markets. But it will

be too optimistic to say that any of the governments, yours or mine, or many of the OECD governments are ready to face this challenge.

Jonica Newby: How urgent is it?

Fatih Birol: I think the important thing here is the prices, prices may go up substantially...

Jonica Newby: How much?

Fatih Birol: Today we have about \$90, which is still a significant amount of money we are paying. For example, in Europe we are facing this financial crisis. The amount of increase in the oil import bill in Europe, it is only the increase in the oil import bill in Europe, is equal to the government budget deficit of Greece plus Portugal put together. So only the increase where we have \$90. If it increases further, which we believe it will, at least 20%, 30% higher than now in the next few years to come, and this would mean additional pressure on the financing of many governments who are the oil importers.

Jonica Newby: Again, how close is that? How soon might we get that..?

Fatih Birol: Increase in the prices?

Jonica Newby: Yes.

Fatih Birol: It will depend on the economic recovery. If the economic recovery starts to happen sooner rather than later we can see difficulties in markets in two, three years time, and this in turn may mean strangling the economic recovery efforts because higher oil prices means putting your pressure on the trade balance, and through the economic recovery efforts it can be well strangled. So this is a big challenge.

Jonica Newby: Just five years ago your organisation was saying no peak oil in sight, and we will get up to 120 million barrels of oil a day by 2030. You've revised those estimates down substantially. Has there been a real change of opinion here?

Fatih Birol: No, what we have done is in the year 2008 we had a look at 800 oil fields on a field by field basis. It is the most detailed study ever carried out in the world, and we have seen that the decline rate, the decline in the existing fields, are very, very deep. And since four or five years we are underlining one message, namely the existing fields are declining so sharply that in order to

stay where we are in terms of production levels, in the next 25 years we have to find and develop four new Saudi Arabias. It is a huge, huge challenge that we continue to underline. And on top of that, this would mean that the world's reliance in terms of oil supply would be on a very few number of countries in the Middle East. So you have both the financial aspect, you have the geological aspect, and you have the geopolitical aspect of the growing reliance on oil.

Jonica Newby: Dr Birol, are you personally worried?

Fatih Birol: I am personally worried because of the general picture. There are different levels of my worry. The first one is that I see that in the next years to come oil and geopolitics will be more and more interwoven...

Jonica Newby: You mean war?

Fatih Birol: It can be different types of that and I do not like it. I would like to see oil industries remain as a business, as a part of the economic structure, but I am afraid that there will be more and more intersection between oil and geopolitics. This is the first worry. The second worry is the sudden increase in the oil prices. This is not good news for anybody. I myself, I never bought a car, and I will never buy a car, but it is for different reasons because I thought if you want to give recommendations of a sustainable way of life, we should first do ourselves what we believe is the truth. I will not be affected that way directly but there will be other ways which will affect my personal life through perhaps some implications on economic growth, the way of life, and others. Yes, I am personally worried about those developments.

Robyn Williams: Now the remarkable thing about that interview is that senior officials never normally talk like that. Fatih Birol is the chief economist of the International Energy Agency in Paris. Finally, Dr Jeremy Leggett, author of *Half Gone* about peak oil, on their latest risk report done by UK Industries.

Jeremy Leggett: Three years ago a few companies got together in a sort of ad hoc way because we had concerns about the high oil price, and we decided to do a sort of business risk assessment of the peak oil issue. And going into that exercise the companies that were spread pretty much across British industry were not all of the view that there was definitely a problem, but the thinking was this is a very high consequence issue and is it a high probability issue as well. I thought it was and one or two of the others did as well.

But by the end of the exercise, a year of looking at the risk assessment, we were all of the view that this is a very high consequence and very high risk issue, and that we need to respond to it proactively; governments, companies, communities. And that was our message in our first report in 2008, reiterated in our second report in 2010. And we think that this problem is actually as bad, if not worse, than the credit crunch. We say this in the foreword, the chief executives and the chairman of the companies, to our second report because it's going to come down on a world economy that is oil dependent, nay, oil addicted, as a great surprise when oil supply begins to descend, maybe even collapse. This is a huge whistle that we are trying to blow.

Jonica Newby: And it's not just the usual suspects in this group, is it. What sort of members have you got?

Jeremy Leggett: No, this is a pan-industry task force. It is chaired by Virgin, the coordination is done by Arap, the big engineering company, Scottish and Southern, one of our big six energy companies are on it, Kingfisher, a massive retailer, Stagecoach, transport company, one or two others, my own company Solarcentury. So we spread across British industry. And the thing about this is that whereas in the run-up to the credit crunch the whistles were being blown by a handful of maverick economists and one or two farsighted journalists like Gillian Tett at the *Financial Times*, this time you've got a cadre of people in and around the oil industry itself, generally individuals, but also a number of companies who have looked in depth at the problem, and we are saying, Houston, this is a problem. We need to be doing something about this, we need to be acting ahead of the crunch to buy ourselves time and soften the landing. And I have to say we are not having very much success with getting anyone's attention.

Jonica Newby: Why not?

Jeremy Leggett: Well, it's a risk assessment exercise, so there is a view that there isn't a problem here. If you talk to BP and many of the other oil companies, that's the view that you will get, and the government has been told this. But also I think very definitely there is a sort of desperation to believe the comforting narrative if your choice is the uncomfortable narrative and the comforting one. And I personally find that everywhere, in government, in industry, people do not want to believe that there is a problem with the life blood of modern economies. They just don't.

Jonica Newby: It can't be true.

Jeremy Leggett: It can't be true, exactly so.

Jonica Newby: That syndrome. So what is the oil crunch?

Jeremy Leggett: The oil crunch is when global supply fails to meet demand and starts to drop, and arguably we fear starts to drop so fast that you would almost call it a collapse. What our economies are locked into is the inherent assumption that actually demand keeps growing, as it does, fed primarily these days by India, China and the Middle East, and it will just go right on growing, and somehow we will be able to keep the supply track growing with demand.

And this is what we are saying, we are saying that that narrative is no longer believable. There are so many problems with conventional oil and unconventional oil that on the massive balance of probabilities, by 2015 at the latest in the view of the industry task force, there will be a descent of global oil production. That will cause a crunch, it will cause the price to go through the roof, it will cause price volatility and all the downsides that come with a fabulously expensive and, in some cases, simply unavailable oil.

Robyn Williams: Dr Jeremy Leggett, who once worked in the oil industry as a geologist, now he is head of Solarcentury in Britain. And that report on peak oil by Jonica Newby, whose full *Catalyst* story is on Thursday 28th April ABC1 at 8pm.

Guests

Chris Skrebowski

Founding Director
Peak Oil Consulting
http://www.peakoilconsulting.com/

Fatih Birol

Chief Economist, International Energy Agency, Paris http://www.iea.org/journalists/photos/Birol/CV_Birol_F.pdf

Jeremy Leggett

Executive Chairman, Solarcentury, London UK http://www.solarcentury.com/

Jonica Newby

Presenter, Catalyst ABCTV

http://www.abc.net.au/profiles/content/s2162849.htm?site=catalyst

Further Information: International Energy Agency

PublicationsTitle: Half Gone

Author: Jeremy Leggett, Publisher: Penguin Books Australia

URL: http://www.jeremyleggett.net/half-gone/

Presenter

Robyn Williams

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David Fisher