

ITER Forum Website – News Log. February 2009

Emissions trading scheme inquiry odd, says Coalition

February 13, 2009 11:28am. The Advertiser

<http://www.news.com.au/adelaidenow/story/0,,25048765-5005962,00.html>

NON-Government senators are querying why the Rudd Government has ordered a Parliamentary inquiry into its planned emissions trading scheme (ETS).

The surprise decision, announced yesterday, has prompted speculation the Federal Government may be backing away from its commitment to the scheme, due to begin from July 2010.

The Coalition has called the decision 'odd', while the Australian Greens say they are mystified.

This inquiry is not to seek information, they haven't listened to anything they got before, sonwhy would they listen to this one,' Greens senator Christine Milne said.

She called on Climate Change Minister Penny Wong to explain what the Government was planning.

Stop conning the Australian people.' Liberal frontbencher Nick Minchin said the Government knew its scheme was 'greatly flawed'.

It is extraordinary to contemplate imposing on Australians a massive new tax on industry and jobs when the country is heading into recession.'

Nationals Senate leader Barnaby Joyce said the Government had sneaked through the announcement while attention was focused on the economic stimulus package.

The ETS will send people out of work, out of their house, and on to the streets,' he said.

This has been a huge turnaround for Mr Rudd and I'm thankful he did it.'

Mr Swan's office has said the inquiry is standard practice, allowing a Parliamentary committee to reinforce the Government's approach to reinforce the Government's approach to reducing pollution.

Fifty Years of Magnetic Confinement Fusion - A Retrospective, February 2009

Werner Burkart Deputy Director General, Nuclear Sciences and Applications, International Atomic Energy Agency (IAEA)

"Celebrating fifty years of fusion... .. entering into the burning plasma era."

Energy in all its forms has always driven human development. New technologies in energy production, starting from the use of fire itself, have driven economic and social development. In the mid-1950s, nuclear energy created new hope for an abundant source of that energy for the world.

To promote this groundbreaking technology, and to host a neutral ground for substantive scientific debate, the United Nations in 1955 organized the first of a series of conferences in Geneva on the 'Peaceful Uses of Atomic Energy'. Providing an opportunity for scientists from all countries to showcase their research, these conferences came to be recognized as essential platforms for the further development of nuclear energy.

The main topic of the second UN Conference on Peaceful Uses of Atomic Energy, held in 1958 in Geneva, was nuclear fusion. Imbued with a sense of purpose and hope for the common good, in an atmosphere of innovation and exchange, scientists from different political backgrounds freely discussed their recently declassified results and outlined their expectations for the future. With Sigvard Eklund, the future Director General of the IAEA, serving as Secretary General of the conference, about 5000 delegates, observers and guests discussed over 2150 papers, 105 covering fusion topics. In addition, a number of exhibits highlighted the possibilities of harnessing fusion power. However, it was recognized that

technical issues related to the extremely high temperatures involved in fusion and to the neutron and gamma flux were so complex that the prediction by the American physicist Edward Teller that the exploitation of fusion energy would be possible before the end of the 20th century was not likely to come true.

The major breakthrough finally came many years later with the invention of the tokamak. Since then, a doubling of fusion quality, described by the fusion triple product, has been achieved every 1.8 years. New developments in science and engineering have led to an optimized magnetic prototype reactor, with corresponding cost savings. Inertial confinement experiments have achieved similar progress. The culmination of international collaborative efforts in fusion is the start of construction of the International Thermonuclear Experimental Reactor (ITER), the biggest scientific endeavour the world has ever seen involving States with more than half of the world's population.

The IAEA has been closely involved in the area of nuclear fusion, mainly through its biennial Fusion Energy Conferences. Fifty years of international cooperation in fusion research is being celebrated this year at the 22nd Fusion Energy Conference, held at the Palais des Nations in Geneva, the starting point of discussions back in 1958. This commemorative booklet contains a brief history of international fusion research activities as well as anecdotes by distinguished scientists.

Nuclear fusion continues to attract attention as a clean and reliable source of energy, holding promise as a global solution for tackling the problems of poverty, economic development and climate change. Fusion energy, as developed through ITER, has the potential to play an important role in humanity's intensified quest for adequate energy sources.

<http://www-naweb.iaea.org/napc/physics/2ndgenconf/sets/Home.html>

Capture carbon, The Times, 20 February 2009

We need a much greater effort to develop the technology of carbon capture and storage

Sir, The report on the increased use of coal in power stations (Feb 18) emphasises the need for much greater effort to develop the technology of carbon capture and storage (CCS), which would reduce dramatically the amount of carbon emitted from coal usage.

A stimulus to the development of this technology was meant to have been provided by the European system of carbon certificates, but the recession has brought the market price of these certificates right down, and they now offer no incentive.

The Government has taken a leisurely approach to CCS, setting up a competition for a plant using only one of the technologies available. The winner of the competition has not yet been announced, and it will take several years before the single plant comes into operation. Instead, the Government should have applied the same incentive to CCS as it applies to renewable energy. By now there could have been a number of CCS demonstration plants under construction, based on differing technologies. Without further delay, the Government should take this step if we are to get anywhere near achieving our carbon emission targets.

Lord Ezra

House of Lords

<http://www.timesonline.co.uk/tol/comment/letters/article5768229.ece>

No second thoughts on trading

The Australian, 20 February 2009 Lenore Taylor, Nicola Berkovic

The emissions trading scheme will not be watered down, abandoned, or delayed, the Rudd Government insists, despite mounting pressure from industry and the ravages of the global financial crisis.

In comments yesterday, and in a speech today, Climate Change Minister Penny Wong said despite the intensifying attacks and the impact of the economic crisis the Government remained 100per cent committed to its Carbon Pollution Reduction Scheme and the timetable for its introduction in the middle of next year.

And Wayne Swan last night abruptly cancelled a House of Representatives inquiry into the merits of emissions trading, which he called just last week and amended yesterday morning,

because it was being interpreted as an indication the Government was having second thoughts.

"I want to make this very clear, the Rudd Government is committed to the introduction of a Carbon Pollution Reduction Scheme and the Government remains committed to the timetable," Senator Wong said yesterday.

And in a speech to the Australian Business Economists forum today, she will argue that the economic crisis is a reason to press ahead, rather than a reason to delay or weaken, the scheme as industry has demanded. "We cannot allow the global financial crisis to weaken our determination to address the very real and long-term threat that climate change poses. Deferring action at this point would increase investment uncertainty at precisely the wrong time," she will say.

The Government's clear message that it is not for turning on emissions trading came after think tanks from both the Left and the Right of the debate started arguing that a carbon tax would be a better mechanism to drive greenhouse gas reductions; the Opposition appeared to embrace a similar view before recanting; and industry continued to press for change as it calculated the costs of the looming scheme and its reduced capacity to pay during the economic crisis.

Many industry lobbyists had hoped the House of Representatives inquiry called by the Treasurer last Friday was a signal the Government was weakening in its resolve to press ahead with the scheme.

The Opposition had ridiculed the Government for asking a committee to look at whether emissions trading was the best solution, with a reporting date after it was intending to legislate an emissions trading scheme.

Yesterday morning, the committee chairman, Labor backbencher Craig Thomson, announced the inquiry would bring down an interim report before the scheme was due to be debated in the Senate. But last night he released a statement saying the inquiry had been cancelled altogether because its "terms of reference became politicised and distorted".

"The Government does not want any ambiguity over the implementation of the CPRS or the timeframe it has announced for that implementation," Mr Thomson said.

The Government has this week informed trade-exposed industries of the detail of its proposed compensation arrangements, with some companies and industries dismayed to learn they would qualify for less assistance than they had been led to believe because the Government had defined the specific activities for which free permits would be paid.

<http://www.theaustralian.news.com.au/story/0,,25080760-11949,00.html>

Emissions scheme faces axe

The Advertiser, 20 February 2009. Mark Kenny, Laura Anderson, Canberra

PRIME Minister Kevin Rudd's electoral centrepiece, an emissions trading scheme, faces uncertainty and possible defeat in the Senate because of growing doubts in the Opposition.

In a significant departure from its previous stance, Opposition emissions trading spokesman Andrew Robb has refused to rule out backing a carbon tax instead of a carbon emissions trading scheme. He questions whether an emissions trading scheme is the best way to tackle climate change.

"The Government has got too far ahead of the world with their scheme" he said yesterday.

"It is deeply flawed. It will cost jobs, it will kill investment, and it won't do anything about CO2 reductions, so we need now, and I think the Government is already starting itself, to look for alternatives."

Legislation for the Government's "Carbon Pollution Reduction Scheme" is due to be introduced in May and is required to pass both Houses by June in order to make its proposed start date of July 1, 2010.

But with the Greens hostile to the Government's modest 5 to 15 per cent carbon reduction targets, viewing the formula as woefully inadequate, the scheme's passage may turn on support from the Opposition.

"The Rudd Government's 5 per cent target and the billions of dollars it is planning to hand out to big polluters will hold Australia's economy back," Greens Leader Bob Brown said.

Until now that support was considered likely because the Opposition's policy has been to support an emissions trading scheme - albeit, preferably on a slower time frame of 2011 or 2012.

Opposition Leader Malcolm Turnbull said the policy had not changed but conceded the case for a carbon tax was worth considering.

"Both arguments have their merits," he said.

Meanwhile, the Government came under pressure yesterday over its proposed timeline for emissions trading. Treasurer Wayne Swan last week announced a second committee inquiry into the ETS, due to report late this year.

The inquiry chairman, Labor MP Craig Thomson, caused confusion when he said the laws necessary to set up the ETS would not be tabled in Parliament before the committee's final report. However Mr Thomson later released a statement saying the committee would produce an interim report in May.

Climate Change Minister Senator Penny Wong said the Government's position had not changed.

"The Government remains committed to the Carbon Pollution Reduction Scheme and we remain committed to the timetable for its introduction," she said.

<http://www.news.com.au/adelaidenow/story/0,,25080700-5006301,00.html>

EPA to act on carbon, finally

The Australian, 20 February 2009

WASHINGTON:

The US Environmental Protection Agency is expected to act for the first time to regulate carbon dioxide and other greenhouse gases that scientists blame for global warming. The New York Times said the EPA decision could accelerate the progress of energy and climate change laws in the US Congress and form a basis for the US position at UN climate talks in Copenhagen in December. The environmental agency is under order from the US Supreme Court to make a determination whether carbon dioxide is a pollutant that endangers public health and welfare - an order the Bush administration ignored.

The new EPA administrator, Lisa Jackson, told The New York Times she had asked her staff to review the latest scientific evidence and prepare the documentation for a so-called endangerment finding. If the agency determined carbon dioxide was a dangerous pollutant to be regulated under the Clean Air Act, it would set off one of the most extensive regulatory rule makings in history, the report said. "We here know how momentous that decision could be," Ms Jackson said. "We have to lay out a road map." As a first step, she told the newspaper that the agency would reconsider a Bush administration decision not to regulate carbon dioxide emissions from new coal-burning power plants. In announcing the reversal, Ms Jackson suggested the EPA was considering additional measures to regulate heat-trapping gases.

The White House signalled that it fully supported Ms Jackson's approach. The report said US President Barack Obama supported congressional action on climate change and was also committed to using the regulatory authority of the executive branch to reduce emissions that contribute to global warming. But even Democrats who favour an aggressive approach to climate change told the paper they were wary of the agency's asserting exclusive authority over carbon emissions. They said a broader approach that addressed all sectors of the economy and that was debated in Congress would be better than a regulatory approach that could drag through the courts for years, the report said.

The decision that would see the EPA regulate carbon would have a profound impact on transportation, manufacturing costs and how utilities generate power. Democrats from states dependent on coal-generated electricity and manufacturing jobs, where such regulation could significantly increase costs, are nervous. Michigan Democrat John Dingell, who has long championed the interests of the car industry, told the paper the regulation of carbon dioxide emissions by the EPA would set off a "glorious mess" that would resonate throughout the economy.

Ms Jackson said there was no timetable for issuing regulations governing carbon emissions and that her agency would not engage in rash decision making.

<http://www.theaustralian.news.com.au/story/0,,25079504-11949,00.html>

Australian Interest in ITER, from the ITER

Newsline, 16 February 2009. Krista Dulon

Hiroshi Matsumoto, Head of the ITER Director-General's Office, and Alan Costley, Head of the Diagnostics Division, travelled to Canberra, Australia from 1-3 February to explore, in conjunction with Australian scientists and representatives from Government, the ways in which it may be possible for Australia to contribute its scientific expertise to the ITER project

Australia has a long and very successful history in fusion research, and a significant fusion facility - the H-1NF - is located at the Australian National University (ANU) in Canberra. An area of particular expertise for the Australian researchers has been the development and implementation of Diagnostics systems, and this area took centre stage at the meetings in Canberra.

Mr Costley outlined the current status of the ITER project and emphasized the new diagnostics systems that have been introduced following the ITER design review. These include systems for measuring divertor and first-wall erosion, dust, and retained tritium - all areas which could benefit from Australian know-how. Mr. Matsumoto explained that Australia, as a non-ITER party, could potentially contribute to ITER by concluding a Cooperation Agreement with the ITER Organization, subject to unanimous approval by the ITER Council.

Representatives from the Australian fusion science community reiterated their goal of aligning future R&D efforts with work going on at ITER. Negotiations will continue in Australia to secure financing for a possible contribution. Mr. Matsumoto expressed support for the Australian initiatives, noting that the ITER project has become a magnet for pooling the world's excellence in fusion research.

<http://www.iter.org/newsline/issues/current/ITERnewsline.htm>

Nuclear lies are keeping you afraid

The Sunday Times, 15 February 2009 James Lovelock

The father of the Gaia theory, says far from being uniquely dangerous, only nuclear power can solve the food and energy crises ahead.

Normally the media can smell a rat better than a hungry terrier, and I was slightly surprised that they did not wonder more about the murder of the Russian dissident Alexander Litvinenko in 2006 in London.

He was cruelly poisoned by a few hundred nanograms of the radioactive isotope polonium210. When swallowed it soon finds its way to every cell of the body, where it emits helium atoms that plough through the vital structures. An evil way to kill someone: a slow, unstoppable, tortured death.

There is ample evidence that the agents of the murder were Russian, and the container of the radioactive element was leaky enough to leave a trail from the airliner that brought the assassin to London to the hotel where the poison was added to a cup of the victim's tea.

What an opportunity was missed by some imaginative journalist or thriller writer, to have set a scene somewhere in Moscow with a cast of professionals from security agencies or energy corporations.

Someone says: "You realise, do you, that a poisonous dose of polonium210 will cost about \$10m' Why not use ricin - we know that that's a reliable poison and a lot less visible to the media' Moreover, it will cost less than \$1."

Another bureaucrat adds: "Yes, and to make the polonium we have to seek time on a reactor which is already fully occupied with other important tasks."

At which a senior manager intervenes. "Gentlemen," he says, "the purpose of this action is not merely to punish a traitor - and that alone needs visibility and media amplification - but more importantly to keep the West frightened of all things nuclear. Our future as a world power depends on our ability to make them wholly dependent on us for their supply of oil and

gas; their use of nuclear energy would free them of this dependency and we could lose our ability to make the world go the way we wish. Ten million dollars is nothing in that cause."

This scene is no more than a figment of my imagination, but it grows more credible as we move further into the 21st century, when political power and business opportunity will more and more be linked to energy supply. It would be naive to expect energy companies to stand aside and see their profits cut by inexpensive nuclear energy, and the same must be true for the thwarting of national aspirations.

Our greatest future need in the UK will be a secure supply of food and energy. Soon the growing appetite of the world for both, and the worsening climate, will make the supply from abroad increasingly more expensive, and we will be driven more and more to produce food and generate electricity from our own resources.

We in Britain are no longer a major manufacturing nation and may have to leave the engineering development of our energy supply to those nations better equipped to do so. The worst of all possibilities would be for us to become the test-bed for unproven technology, and this is what is happening now with wind turbines.

We should regard nuclear energy as something that could be available from new power stations in five years and could see us through the troubled times ahead when the climate changes and there are shortages of food and fuel and major demographic changes.

Those in Britain should think of the troubled years of the 1970s and early 1980s, when industrial conflict over coal threatened electricity supplies. It was the availability of nearly 30% of the electricity we used from nuclear energy that sustained the nation and stopped the quarrel turning into a civil war. The only thing that stops an immediate build of new nuclear electricity is legislation put in place by previous governments and unreasoning fear.

There are now more than 440 nuclear power stations in the world, producing 17% of all the electricity used, about the same percentage as hydro-electricity. Other sources of renewable energy - biofuels, wind, etc - produce only 2%. The safety record, their cost and the local acceptability of these fission-powered stations make them the most desirable of all sources. So why in the

First World do we still persist in the falsehood that they are uniquely dangerous?

I think we fail to welcome nuclear energy as the one good and reliable power source because we have been grievously misled by a concatenation of lies. Falsehood has built on falsehood and is mindlessly repeated by the media until belief in the essential evil of all things nuclear is part of an instinctive response.

It is often said that nuclear waste is uniquely deadly and will persist for millions of years and poison the global environment. All pollution by chemical elements persists. Lead pollution from a mine, smelter or factory where it is made into things lasts for ever; the same is true of mercury, arsenic, cadmium and thallium: these toxic elements are permanently with us. What is remarkable about nuclear waste is that it fades away. In 600 years the high-level waste from a nuclear power station is no more radioactive or dangerous than the uranium ore from which it originated. More importantly, there is hardly any nuclear waste to worry about. The yearly output of waste from a 1,000MW power station would fit in a London taxi.

Even government committees such as the Committee on Radioactive Waste Management propagate nuclear falsehood: one of its representatives said there is enough nuclear waste in Britain to fill the Albert Hall five times over. In fact, after 40 years of generating nuclear energy, there is barely enough to fill one Albert Hall. Compare this with the mile-high mountain, 12 miles in base circumference, of solidified carbon dioxide that the world makes every year. The nuclear waste is a minor burial problem, but the carbon dioxide waste will kill us all if we go on emitting it.

In addition to the negative propaganda directed at nuclear energy, there are almost as many untruths propagated about the favourable qualities of wind energy. Were these wind farms truly efficient and capable of resolving our power needs, I might be persuaded to grit my teeth and endure their ugly intrusion, but in fact they are almost useless as a source of energy.

It would take a vast area of countryside to provide enough land for a one-gigawatt wind-energy source. The wind blows only 25% of the time at the right speed to generate a useful quantity of electricity; therefore this monster would need the back-up of a near-full-size fossil-fuel power station to supply electricity whenever the wind blew too much or too little.

Take, for example, the British intention to build the world's largest wind farm in the Thames estuary, which would have 341 turbines occupying an area of 90 square miles. It is claimed to be a one-gigawatt project and therefore equal in output to a typical nuclear power plant. In the hype attending it is the claim that it will provide enough electricity for one-third of London's homes and save the emission of 1.9m tons of carbon dioxide. It sounds good until you realise that a full-size, presumably coal-burning, power station, emitting copious amounts of carbon dioxide, will have to be built to back it up when the wind does not blow.

Its real averaged output would be only 400MW of electricity. If it were steady, which it would not be, it would be enough for 830,000 homes each consuming 4,200kWh yearly. I am glad the oil company Shell had the wisdom, despite subsidies, to pull out of this flawed project.

To survive on these islands with a future population perhaps as large as 100m requires a constant and reliable source of electricity from indigenous fuel. It would be madness to attempt it without nuclear energy. It is sad that so many of the green movement and their intellectual followers still oppose nuclear on grounds as insubstantial as a fear of hellfire and Satan.

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Extracted from *The Vanishing Face of Gaia* by James Lovelock, to be published on February 26 by Allen Lane at £20. Copies can be ordered for £18, including postage, from The Sunday Times Books First on 0845 271 2135

<http://www.timesonline.co.uk/tol/news/environment/article5733427.ece>

Australia represented on the International Fusion Research Council

Weekly Bulletin of the Research School of Physics & Engineering Australian National University, Volume 35 (4) 6-12 February 2009

Dr Matthew Hole has been appointed by the Director General of the IAEA, Dr Mohamed Elbaradei, to the International Fusion Research Council (IFRC). The function of the IFRC, a continuing Council within the framework of the IAEA, is to advise the IAEA on its controlled nuclear fusion research program, and promote international cooperation in this field. The IFRC also proposes the Scientific Programme Committee of the biannual IAEA Fusion Energy Conference, the leading international fusion conference on the programmatic development of fusion power. The Council, consisting of 10 to 15 expert members, comprises one member from each IAEA member state or international organisation having a substantial research effort in controlled nuclear fusion. Appointment of an Australian to the IFRC, which occurred after consultation with the Australian government, is a recognition of Australia's research effort in this field, while selection of Dr Hole consolidates ANU's national research leadership in this field. The last Australian appointed to the IFRC was Professor Max Brennan AO FAA, who served as Chairman of the IFRC from 1987 to 1995. New developments in fusion research, support for international physics activities, and close collaboration with ITER and the OECD's Fusion Power Coordinating Committee, which supports ITER activities in OECD countries, will be among the future challenges for the IFRC.