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Sent: Monday, June 17, 2013 10:45 PM

To: CLIMA CC 2015 CONSULT

Subject: Consultation on the 2015 International Climate Change Agreement: Shaping international climate policy beyond 2020 - citizen

A key legally binding principle of environmental protection is the analysis of cost, benefits and consideration of alternatives. As a result we know the impacts of pollutants, such as that of fine airborne particulates on human health, as the EU and some national governments have assessed both the cost of those impacts and the costs of reducing the concentrations of those pollutants, such as by tighter emissions standards for power plants and new vehicles.

Yet when it comes to carbon dioxide there has been essentially a complete failure to properly fund and execute these vitally necessary, albeit complex, studies. We are in the dark about the external cost of carbon dioxide. To explain, the internal cost is what we pay directly, such as on our electricity bill, while the external costs does not appear as a direct charge to the consumer, but which has a cost to society as a whole, such as through environmental degradation. Obviously external costs are an absolutely key element of cost, benefit analysis and the resulting decision making.

Indeed the 'Polluter Pays Principle', which was formally adopted through the Maastricht Treaty in 1992, sets the aim that external costs should increasingly become internalised. Therefore, if mandatory targets related to renewable energy are to be implemented to reduce the external costs associated with the use of energy, what are the relevant external costs and additional internal costs incurred in avoiding them? Clearly the report below, which the EU Commission was required by European law to complete by the end of 2005^[1], was extremely important in this regard.

- "Consider the progress made in reflecting the external costs of electricity produced from non-renewable energy sources and the impact of public support granted to electricity production".

This report was never completed by the EU Commission, when replying to a written question on this from Struan Stevenson MEP in March 2012, the reply from the EU Energy Commissioner was simply astounding. Article 8 of Directive 2001/77/EC was completely clear; it placed the obligation on the Commission to complete the above report. However, Commissioner Oettinger stated that as the Member States did not

provide information on the externalities related to the generation of non-renewable energy, the Commission didn't produce a separate report to deal with the above. Note: It was the obligation of the Commission to produce this report, not the Member States to provide the data^[2]. While he didn't mention it at all, it clearly wasn't seen as important either to evaluate the impact of the considerable public support given to renewable generation.

The Commissioner's reply also stated that "the analysis of the attempts to internalise the external costs of energy has been the basis for several energy and climate change initiatives, including progress reports of the Commission, the 2008 Energy and Climate Package and the EU Emissions Trading Scheme itself". He then provided reference to a number of reports by the Commission. Yet none of these provide data on what is the external cost of greenhouse gas emissions. The closest one comes to this is COM (2006) 848, the Renewable Energy Road Map^[3], in which reference is made to in one of the figures to the "Extern-E study for the European Commission".

This research project^[4] on the external costs of energy did produce a final report in 2005 and while it did contain good analysis of the impact of air pollution, related to the work on the EU's Clean Air for Europe (CAFE) programme, which was being completed at the same time, the chapter on global warming is, as the authors admit, characterised by "uncertainties and incompleteness inherent in these estimates"^[5]. Instead it was decided that a 'shadow price' should be used based on "society's willingness to pay for early action against global warming". Note: The Extern-E analysis on climate change quoted extensively the work of Professor Richard Tol, a Dutch economist who was until recently employed in the Irish Economic and Social Research Institute (ESRI), who in a more recent 2009 publication on the "Economic Effects of Climate Change"^[6] stated:

- "Projections of future emissions and future climate change have become less severe over time - even though the public discourse has become shriller".
- "The quantity and intensity of the research effort on the economic effects of climate change seems incommensurate with the perceived size of the climate problem, the expected costs of the solution, and the size of the existing research gaps. Politicians are proposing to spend hundreds of billions of dollars on greenhouse gas emission reduction, and at present, economists cannot say with confidence whether this investment is too much or too little".

In a similar article by Prof Tol, "The Social Cost of Carbon: Trends, Outliers and Catastrophes"^[7], his conclusion on the external cost was about \$20 per ton of carbon, which equates to \$5.5 per tonne of CO₂. Yet all of this is based on the premise that the UN's Intergovernmental Panel on Climate Change (IPCC) has accurate estimates on future climate trends.

Unfortunately scientific fact has long gone as a basis of decision making in the EU Commission. If one accesses the EU Commission's webpage on Climate Action^[8], in relation to a roadmap to a low carbon economy by 2050, this states:

- "Science tells us that all developed countries would need to reduce emissions by 80-95% in order to have a fair chance of keeping global warming below 2°C".

Indeed the as regards the Department of the Environment's consultation^[9] on Climate Policy and Legislation held in March 2012 as part of a process leading to future climate change measures here, the above statement formed part of the supporting documentation, being a link to the above EU Commission webpage on Climate Action. However, the Department of the Environment is refusing to answer an Access to Information on the Environment request on this climate change consultation in relation to fulfilling public participation requirements, the availability of a cost benefit analysis and the transparency of the above statement justifying the proposed measures. The latter being related to quality of environmental information, in that Member States shall, so far as is within their power, ensure that any information that is compiled by them or on their behalf is up to date, accurate and comparable. This failure to respond to the request for access to environmental information has since gone to appeal to the Commissioner for Environmental Information (CEI/12/005).

However, due to the delays in the Commissioner processing this appeal, the same information was requested in March 2013 under the Aarhus Regulation 1367/2006 from the EU Commission. In their reply in relation to their obligation to ensure the transparency of the above claim on climate change they could only reply in April 2013^[10]:

- *I would like to reassure you that the European Commission bases its climate policies on the best available current science and on the scientific consensus of experts in the field of climate change. The scientific consensus view is presented in this subject area by the IPCC (Intergovernmental Panel on*

Climate Change), which involves thousands of climate change scientists from around the globe.

- *On the basis of the science collected and summarised by the IPCC, EU policies strive to limit the global temperature increases to less than 20°C within this century. Current research suggests that potential damages to human and natural systems beyond that threshold could be both dangerous and irreversible. This broad objective was endorsed in Copenhagen and Cancun by world leaders of countries representing more than 80% of global anthropogenic GHG emissions.*
- *On this basis, in February 2011 the European Council endorsed the 20°C objective and reconfirmed the EU's commitment to reduce greenhouse gas emissions by 80-95% by 2050 compared to 1990, in the context of necessary reductions according to the Intergovernmental Panel on Climate Change by developed countries as a group.*

So one has to rely on reassurances, consensus (which is politics and not science), broad objectives endorsed by political conventions in Copenhagen and Cancun, where consensus is rallied for a political cause, while suppressing all doubt, opposition and scepticism. In a similar fashion in an Irish context, one can examine the 'climate change' reports funded by the Environmental Protection Agency, which are fronted by a disclaimer in relation to their accuracy^[11].

One of the main reasons, why the aviation industry has such a good safety record, is that there is a chain of responsibility and negligence is prosecuted. Yet at the same time the EU and the Member States are pursuing policies with enormous impact on the economic and environmental welfare of Europe, without any adherence to the accuracies and responsibilities specified in the legislation^[12], as it is clear they cannot provide the slightest evidence of a chain of responsibility in the accuracy of this key information. "Extraordinary claims require extraordinary evidence" was a phrase made popular by Carl Sagan. It is the heart of the scientific method, and a model for critical thinking, rational thought and skepticism everywhere. It is simply astounding not just from a scientific perspective, but also from a legal perspective that there is no competency in the basis for this radical alteration of Europe's economic and natural landscape.

As Struan Stevenson MEP pointed out in the start of his letter to the EU Commissioner for Energy, there is a "current furore in relation to the EU's renewable energy and climate change targets". The scientific community does not support

statements such as the above in relation to 80 to 95% reduction in emissions, which are nothing short of the opinions of individuals, which are not supported by facts and time and time again bear the stamp of sensationalism. Of huge concern is the blind faith we are now expected to put in the skills of a limited number of mathematical experts and their computer models (General Circulation Models). Simply put, the contribution of carbon dioxide to the earth's natural greenhouse effect is completely swamped by the presence of simple water vapour. The threat of global warming is singularly based on the principle of a feed forward effect, i.e. that if the earth's temperature increases slightly, then more water vapour will enter the atmosphere and as a result we will enter into a never ending spiral of run-away temperatures.

Yet if this feed forward mechanism were not to occur, and there are no records from extensive data from the past that it does occur, or even from satellite data collected over the last two decades, then even the UN's Intergovernmental Panel on Climate Change (IPCC), a deeply politicised body, has to admit that a doubling of the global atmospheric carbon dioxide level would only lead to about a 1.2°C rise in temperature. Note: We are only about a third of a way to that doubling of the pre-industrial age concentration. Given that humans live in a temperature range of -50°C to +50°C, sometimes within the same year, one can only conclude; so what, after all the impacts would actually be more positive than negative!

Yet not only are these uncertainties glossed over in the official documentation, but the only certainty with the IPCC's climate models is that they are extremely uncertain. Indeed they completely ignore the solar variations, which are strongly related with the natural climate change cycles, which always occurred prior to the industrial age. Indeed, since the peak of the solar cycle in 1998 we have entered a period of weak solar activity, which as was recognised by the famous astronomer of 1800's, Sir William Hershel^[13], leads to colder conditions and an increase in the price of wheat, conditions which we can now see ourselves in the last few years.

From a scientific perspective, given our current level of data and scientific understanding, it is pure and utter arrogance for any organisation to claim that they can model, not to mention predict, the complexity which is occurring within the earth's ecosystem. Not unsurprisingly, the evidence is increasingly mounting that these mathematical models are not an accurate reflection of the complex dynamics, which are occurring, and that their predictions do not reflect what is actually happening, see below. It is not unsurprising that China^[14], where technology is valued, is calling for a complete review of climate change science by 2015, as a precondition for entering any possible negotiated agreement post 2020.

Figure 1: Extract from recently released draft AR5 IPCC Climate Change Report. The four bright colours represent the predicted temperatures of the IPCC models, which are in stark contrast to the observed temperatures.

One can only therefore conclude that the \$5.5 per tonne of CO₂, derived by Prof Tol based on the state of knowledge in 2008, is if anything on the high side. In fact it is increasingly becoming clear that the benefits in terms of increased vegetative growth far outweigh any disadvantages associated with a mild increase in temperature.

In simple terms the climate change measures already progressed by the EU are not supported by the technical evidence and are a complete breach of the existing legal framework. In particular there has been an abject failure to comply with the Aarhus Convention, Article 191(3) TFEU and the transparency requirements associated with the Lisbon Treaty. Entering into further agreements in relation to this area without engaging in proper public participation, completing the necessary environmental assessments and providing this information to the public is simply unlawful.

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¹ Article 8 of Directive 2001/77/EC: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2001:283:0033:0033:EN:PDF>

² <http://www.epaw.org/documents/Attachment%204%20-%20Correspondence%20between%20Struan%20Stevenson%20MEP%20and%20Energy%20Commissioner.pdf>

³ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2006:0848:FIN:EN:PDF>

⁴ <http://www.externe.info/>

⁵ A derived damage of \$33 t/C was stated (ca. €9 t/CO₂) but this could range from \$7 t/C to \$33 t/C (in 1995 prices).

⁶ Journal of Economic Perspectives – Volume 23, Number 2, Spring 2009, Pages 29-51

⁷ <http://www.economics-ejournal.org/economics/journalarticles/2008-25>

⁸ http://ec.europa.eu/clima/policies/roadmap/index_en.htm

<http://www.environ.ie/en/Environment/Atmosphere/ClimateChange/ClimatePolicyDevelopmentConsultation/>

¹⁰ Ref. Ares(2013)710598 - 17/04/2013

¹¹ http://www.epa.ie/pubs/reports/research/climate/CCRP_16_web.pdf

¹² Article 5 of the Aarhus Convention, Article 8 of Directive 2003/4/EC and Article 5 of Regulation 1367/2006

¹³ <http://simostronomy.blogspot.ie/2013/01/sir-william-herschel-variable-stars.html>

¹⁴ <http://www.springerlink.com/content/w342k240350n4564/fulltext.pdf> and http://scienceandpublicpolicy.org/images/stories/papers/reprint/human_induced.pdf

[1] Article 8 of Directive 2001/77/EC: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2001:283:0033:0033:EN:PDF>

[2] <http://www.epaw.org/documents/Attachment%20-%20Correspondence%20between%20Struan%20Stevenson%20MEP%20and%20Energy%20Commissioner.pdf>

[3] <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2006:0848:FIN:EN:PDF>

[4] <http://www.externe.info/>

[5] A derived damage of \$33 t/C was stated (ca. €9 t/CO₂) but this could range from \$7 t/C to \$33 t/C (in 1995 prices).

[6] Journal of Economic Perspectives – Volume 23, Number 2, Spring 2009, Pages 29-51

[7] <http://www.economics-ejournal.org/economics/journalarticles/2008-25>

[8] http://ec.europa.eu/clima/policies/roadmap/index_en.htm

[9] <http://www.environ.ie/en/Environment/Atmosphere/ClimateChange/ClimatePolicyDevelopmentConsultation/>

[10] Ref. Ares(2013)710598 - 17/04/2013

[11] http://www.epa.ie/pubs/reports/research/climate/CCRP_16_web.pdf

[12] Article 5 of the Aarhus Convention, Article 8 of Directive 2003/4/EC and Article 5 of Regulation 1367/2006

[13] <http://simostronomy.blogspot.ie/2013/01/sir-william-herschel-variable-stars.html>

[14] <http://www.springerlink.com/content/w342k240350n4564/fulltext.pdf> and http://scienceandpublicpolicy.org/images/stories/papers/reprint/human_induced.pdf