



Pat Swords &lt;pat.swords.chemeng@gmail.com&gt;

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## Danish CO2 emission and the Danish energy sector

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Pat Swords &lt;pat.swords.chemeng@gmail.com&gt;

Sun, Sep 13, 2009 at 1:50 PM

To: Jesper Fristrup Skovmøller &lt;jessko@um.dk&gt;

Jesper

The figures in the Irish Times article of last Friday need to be clarified, others are also interested in receiving this clarification. I have clearly stated that the article was lying and in doing so providing unethical support to the Danish Wind Energy Suppliers under false pretences. I highlighted in particular two bullet points relating to the article. In support of my statement that the Irish Consumer was being lied to I referenced the:

- Technical content in my Submission to Joint Oireachtas Committee on Climate Change and Energy Security, entitled "Ireland's Choice: EU Environmental Policy or Green Economy".
- The weblink to the work done by the Renewable Energy Foundation in the UK in relation to spot prices of electricity in the region surrounding Denmark and the actual suitability and performance of the Danish wind energy model vis a vis potential replication in the UK.
- The work done by the Irish Academy of Engineering who are clearly calling for the present Irish Energy policy that is based on Wind Energy and driven by Ideology to be stopped and subject to a proper technical and economic review.

It is very clear to date that the Kingdom of Denmark has no objection to the article as published in the Irish Times and indeed has not provided any facts and figures as to why the technical content referenced above in the three bullet points is false. If such additional facts do exist then under the Aarhus Convention the Kingdom of Denmark should provide them. If they do not exist then it would be expected that the Kingdom of Denmark take the necessary steps to ensure that the Irish Public and all those to whom Danish Wind Energy products are sold are fully informed of the true costs, benefits and alternatives available for generation of electricity and reduction of carbon emissions when these systems are integrated into a National Grid, i.e. their grid to which it is being sold to and for which they must compulsory purchase the turbine output. I would like to point out a number of additional parameters with regard to this last statement.

Firstly, your reply to me that "*If you measure only in g. CO2 per kWh produced electricity without paying attention to how the energy sector is composed, France may seem greener than Denmark. However, you must pay attention to how your electricity is produced because for example nuclear power plants have other potential costs to the environment than emission of greenhouse gasses*" As you can see from my Submission I have absolutely no idea what so ever what 'Green' actually is! I am a specialist in industrial development and the implementation of the Environmental Acquis. There is no legislation relating to 'Green'. There is legislation relating to the use of nuclear power, it is the Euratom Treaty, which all Member States have signed. There is also the ExternE programme for assessing the environmental impacts and costs of different types of power generation, finally there is the EU Sustainable Nuclear Energy Programme. Stick to the legislation and established EU assessment criteria, the other comments are relevant only in that they show the attitude of the Kingdom of Denmark to the legislation in force.

Secondly I do not care much for populist ideologies. Denmark is not the only Member State with a energy policy. In fact one of the reasons why I was so insensed last Friday when I read the article in the Irish Times was that I had spent that week on an EU Technical Aid programme in Finland with a study tour of inspectors from Croatia. That afternoon in particular we had had an indept session in the Finnish Technology Research Institute VTT. Already about €3 billion has simply been 'wasted' in Ireland on a wind energy programme, with much equipment sourced from Denmark. This programme has had little or no impact on our carbon dioxide emissions and has resulted in significantly higher electricity prices. Denmark is not the only EU Member State out there with a model that can be applied.

Finally, under the Charter of Fundamental Rights in the Lisbon Treaty I am entitled to a proper adminstration, that applies to the Kingdom of Denmark with regard to how it supports and markets wind

energy products sourced from its administration.

I expect a reply to these important issues and others are waiting as well.

----- Forwarded message -----

From: **Pat Swords** <[pat.swords.chemeng@gmail.com](mailto:pat.swords.chemeng@gmail.com)>

Date: 2009/9/10

Subject: Re: Danish CO2 emission and the Danish energy sector

To: Jesper Frstrup Skovmøller <[jessko@um.dk](mailto:jessko@um.dk)>

Cc: John Constable <[research@ref.org.uk](mailto:research@ref.org.uk)>, [iae@dit.ie](mailto:iae@dit.ie), mstalker <[Mstalker@icheme.org](mailto:Mstalker@icheme.org)>, COMM-IE-INFO-REQUEST@ec.europa.eu, [peternewman53@ntlworld.com](mailto:peternewman53@ntlworld.com), Lisa Linowes <[lisa@linowes.com](mailto:lisa@linowes.com)>, EPAW - Dominique Mette <[dmette@epaw.org](mailto:dmette@epaw.org)>, [eric@kirbymountain.com](mailto:eric@kirbymountain.com)

You and your administration are as I have already documented in the extensive information I already sent to you, some of which is again attached, are behaving in a completely unethical fashion with regard to selling ineffective technologies into Ireland under false pretences.

As for your figures below they are completely at variance with pages 117 and 118 and other sections in my Submission to our Oireachtas Committee entitled: "Ireland's Choice: EU Environmental Policy or Green Economy". This must mean that the figures in my book derived from EU data are wrong and that you are right. Furthermore it means that the Renewable Energy Foundation and the Irish Academy of Engineering in the links referenced in the attached document have also got it totally wrong.

The Irish public has already been 'tricked' into capital expenditure of over €3 billion on wind energy, much of it derived under false claims from Danish suppliers, and expenditure relating to €30 billion on this technology sector has already been approved by the Irish Government. Therefore it is only fair and ethical given the waste of enormous sums of money that you go through all the figures in my documentation relating to the cost and environmental effectiveness of wind energy technology and that of the Irish Academy of Engineering and the Renewable Energy Foundation that have been sent to you and specify why they are wrong. Given that the data you sent me below is completely at variance with what is published on EU databases the discrepancies need to be explained in full with reference to published sources that are verifiable and do not discount taxes and other hidden subsidies.

As a colleague in the UK who works with me on EU Technical assistance projects wrote recently:

*I have recently watched a lot of Euro news on the TV and kept seeing the lady Minister for the Environment in Denmark. She said that Denmark had a 30 year history of dealing with renewables. This had become very popular in the country because it created jobs. No mention whatsoever was made that all this effort over 30 years had reduced the CO2 emitted by x%!*

Money does not go on trees, it has to be spent wisely. There is only so much available for environmental protection and the public has a right to know for each technology choice: €x in capital and operating cost over a projected lifespan of z years = y tonnes of greenhouse gas reductions. In Ireland the public is not being told this, indeed in the article last week in the Irish Times on the Danish wind industry the public were told complete and utter lies.

2009/9/9 Jesper Frstrup Skovmøller <[jessko@um.dk](mailto:jessko@um.dk)>

Dear Pat Swords

Thank you for your email dated 7<sup>th</sup> September 2009.

In your mail, you write the following about Denmark:

*"The reality of the situation in Denmark is that not only have the domestic electricity rates reached such stupidity that it is more cost effective for a consumer to install his own little generator in the garage, but even more distressing is that a unit of electricity produced in Denmark has more than 10 times the Greenhouse Gas component than a unit generated in France at less than half the cost to Joe Consumer"*

I have from your writing identified two separate arguments, which I will comment on in the following.

1. Electricity prices in Denmark are so high that it is more effective for a consumer to install a generator in his own home.

First of all, this calculation would be very difficult to make because so many things would have to be included. Let me start with price pr. kWh in Denmark which is 0,1203 euro. In Ireland the price is 0,1559 euro per kWh and the average for the whole EU is 0,1186 Euro. That means correctly that the electricity price in Denmark is above average in the EU. However, to state that it is cheaper to install your own generator as a electricity source in Denmark would not be correct. The generator would need gasoline to function and since the gasoline prices in Denmark are among the highest in the EU (1,36 Euro pr. Litre), it would certainly be questionable whether installing a generator in the backyard would be worth its while. Add to here the price for a generator, maintenance expenses etc.

2. A unit of electricity produced in Denmark has more than 10 times the greenhouse gas component than a unit produced in France.

It is correct that the emission of Greenhouse gas in France per produced kWh is smaller than in Denmark. If we measure in g. CO<sub>2</sub> per kWh the exact amount for Denmark in 2006 was 341,339 and for France 84,953. This means the Danish emission is about 4 times higher than the French emission of CO<sub>2</sub> per produced kWh.

Most of this difference is of course due to the fact that France has several nuclear power plants. In Denmark the energy sector is different. In 2007, 29 % of the electricity used in Denmark was produced through renewable energy, mostly wind turbines, while it was only 13,3 % in France.

The point is that it is very difficult to compare the energy sectors in the two countries. If you measure only in g. CO<sub>2</sub> per kWh produced electricity without paying attention to how the energy sector is composed, France may seem greener than Denmark. However, you must pay attention to how your electricity is produced because for example nuclear power plants have other potential costs to the environment than emission of greenhouse gasses.

Kind regards,

Jesper Skovmøller

*Sources used for writing this e-mail:*

*Statistics from the European Commission (<http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home/>)*

*Statistics specially provided by request by the Danish Energy Agency (<http://www.ens.dk/en-us/Sider/forside.aspx>)*

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**2 attachments**



**Correspondence forwarded to Danish Embassy 5-9-09.pdf**  
54K



**Danish CO2 Emissions and Institute of Chemical Engineers 11-9-09.pdf**  
68K

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