

# **“To Err is Human” particularly when you “Do Not Look Before You Leap”**

**Rethinking the Irish and EU Energy Policy**

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## **Ireland to become a Wind Turbine and Pylon Hedgehog**

- **40% of our electricity to be from wind – but why?**
- **Do we know the environmental and financial cost?**
- **What are the benefits?**



*The Irish Landscape on Completion of the Government Wind Energy Programme – three thousand of these wind turbines plus doubling the electricity grid by an extra 5,000 km.*

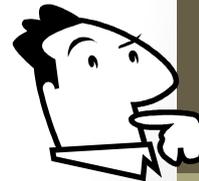
## Shouldn't we have a reason for this?

- **“There are two reasons for everything, the good reason and the real reason” – JP Morgan**
- The good reason – the planet needed to be saved and we are saving it. Are we sure?
- The real reason is always money. The €30 billion in required investments, politically distributed is a ‘pork barrel’.
- That’s our money, already a third of our domestic electricity rate goes to pay for wind energy – did we need it?
- **“It's time to turn off the pork barrel spigot and deliver for our children's future.” - Bill Clinton**



## Could we save the Planet – If it even needed saving?

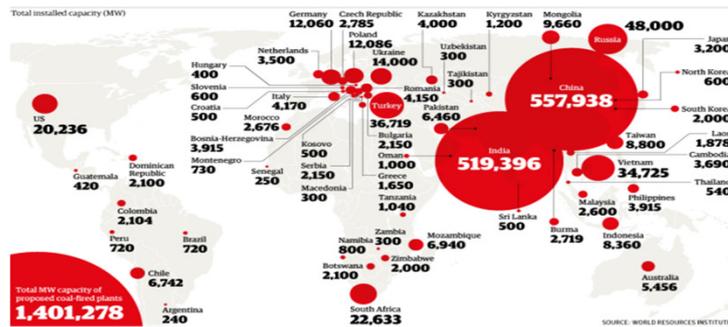
- **Global carbon emissions are 34,000 million tonnes per year**
- The Irish 40% wind energy electricity programme will save little more than 2 million tonnes per year – less than 0.01% of the global total.
- The EU’s renewable programme if it worked – only about 1%
- **It costs at least €160 to avoid a tonne of carbon emissions using wind energy.**
- **The culturally numeric Asian has already figured it out - €160 by 34 billion each year simply doesn’t compute.**



## It's Tokenism – Pure and Simple

- Ireland's largest power station, coal fired 900 MW Moneypoint in Co. Clare can supply 25% of Republic's electricity.
- Globally an equivalent of one thousand, five hundred and fifty seven Moneypoint sized coal plants under development

### Proposed coal-fired plants



## Never assume “They Think Like Us” – Even though you have been told they do

- **Chinese Academy of Sciences 2011** on “Global warming, human-induced carbon emissions, and their uncertainties”
- *climate warming occurs with great uncertainty in the magnitude of the temperature increase;*
- *both human activities and natural forces contribute to climate change, but their relative contributions are difficult to quantify;*
- *and the dominant role of the increase in the atmospheric concentration of greenhouse gases (including CO<sub>2</sub>) in the global warming claimed by the UN Intergovernmental Panel on Climate Change is questioned by the scientific communities because of large uncertainties in the mechanisms of natural factors and anthropogenic (man made) activities.*

## They Looked – While we dived in ‘Head First’

- UN 2011 Durban Climate Change Conference - China states open to a deal post 2020; but has five main preconditions:
  - **China insists that a review of climate science should be finished by 2015 – Why, because they are still looking and see greater benefits in adaption**
- **The EU didn’t look, it dived straight in – but since its renewable programme began in 1998 global temperatures have not increased.**
- As a society we have a choice now:
- **Believe the situation as it now is; Green, Renewables, etc**
- **Start looking at the things, which were meant to be addressed by law, but weren’t.**



## True or False? There is a lot of our Money at stake

- Fossil Fuels are running out and becoming more expensive?
- The Irish renewable energy programme is a ‘no brainer’ as it is saving us money?
- **“Irish renewable energy policy imposes no significant cost on consumers as we have abundant wind resources that generate power at an economic rate. When one puts the reduction in spending on imports of gas, oil and coal into the balance, our renewable energy policy is a no-brainer”.**
  - Minister Pat Rabbitte – Irish Times 17<sup>th</sup> Jan 2014



## Devil is in the Detail – Part 1

- Ireland imports annually some €6.3 billion in fossil fuels, mostly expensive refined petroleum for transport
- **It only takes €1 billion per annum in coal, gas and peat to generate all our electricity** - We have a modern set of thermal power plants and don't need any additional investment in renewables.
- Irish Independent 2009: *"Ideology is driving our energy policy instead of economic reality. Last week the Irish Academy of Engineering (IAE) called for a halt on a proposed €30bn spend on the national energy infrastructure, so that a proper assessment of future energy needs, as well as the economic benefit of the massive investment in renewable power, could be addressed."*



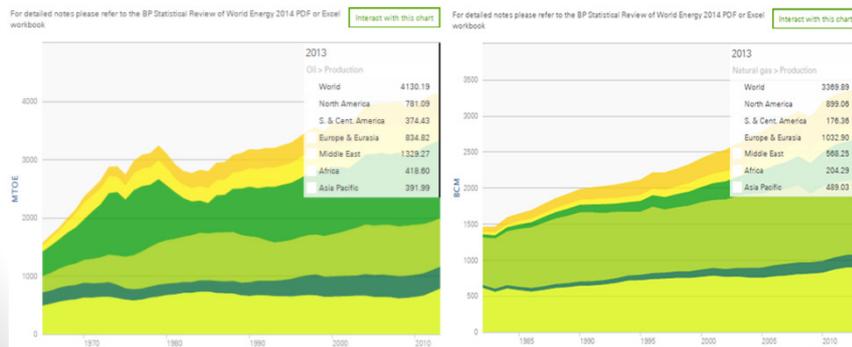
## Devil is in the Detail – Part 2

- With the huge inefficiencies induced on the grid with 40% wind power, we would be lucky to save €200 million per annum in fuel.
- **So it's a 150 year simple payback, the turbines will be shot with the stresses and strains in 15 years** and their electricity is:
  - Completely unreliable and has to be fully backed-up.
  - More expensive than a conventional plant – subsidies apply.
- **So it is a 'no brainer' alright and Pat is telling us 'porkies', unless we are about to seriously run out of fossil fuels in the next fifteen years.**



## We would have gone through many sets of wind turbines before fossils get scarce

- There are 250 years of known coal reserves in Europe. We have our Corrib gas field coming on-line in early 2015.
- Globally oil production is increasing and natural gas production soaring. Despite geo-political unrest in mid-2014 oil has dropped to less than \$100 per barrel.



## We are spending billions of € on 'Environmental Protection' or are we?

- Wind energy operators get preferential access and rates.
- The European Investment Bank, the EU Commission's Bank has given over a billion Euro in loans to Irish semi-states to fund renewables.
- We have to pay for all of this – so what figures on environmental protection justify it?
- **The EU leaped into a 20% renewable by 2020 programme.**
- **It never worked out what was to be built, where it was to be built, what was the cost, what were the benefits, what were the impacts.**
- The 20% target was shared among the Member States based on their existing percentage of renewables and their GDP.

## European Investment Bank – “We fund Renewables for Political Reasons”

- European Investment Bank renewables paper 2007
- *In general, when designing environmental policies in the presence of uncertainty about the costs of environmental damages, one cannot reason simply in terms of cost-benefit analyses or second-best optimal tax policies. Rather, it is more appropriate to conceive policies that achieve a targeted reduction in pollution in a cost-effective manner. **This is also true when it comes to designing policies in support of renewable electricity, mainly because of the enormous difficulty of reliably estimating the benefits of such policies, i.e., the economic value of emissions avoided and other benefits of using renewables for electricity generation.***

## European Investment Bank – When we fund based on Politics it can be a failure

- European Investment Bank – Funding Report 2010:
- *Environmental externalities are multiple – in terms of greenhouse gases, other forms of air pollution, water pollution and runoff, noise and land use and biodiversity.*
- *In theory, the “correct” solution is to price each and every externality. In practice, this is impractical and politically impossible. **The result is that decisions are based on politics and planning, and very much open to political and regulatory failures.***
- Ops – but this is billions of our Euros we have to pay back!!



## EU approves State Aid Funding for Environmental Protection

- In Jan 2011 the EU approves State Aid, subsidies and priority access, for an additional 4,000 MW of renewables in the Republic.
- **Approximately 2,000 additional turbines at a capital cost of €8 billion** – none required and none which will work properly until the wind speed is double the average;
  - Which doesn't happen very often
- **The justification on 'environmental protection' was a 'one pager' from the Irish Department: "we have 14.4% of our electricity from renewables and this will help us get to 40%".**
- **If you don't have a belief system it is:**



## We have a National Plan which is based on?

- **Since 2005 Regulatory Impact Assessment with detailed cost benefit analysis required**
- **Since 2004 detailed Strategic Environmental Assessments required – consideration of impacts and alternatives.**
- **Neither with their public participation requirements done.**
- **Member States in 2010 rushed to adopted National Renewable Energy Action Plans (NREAPs) and left below blank – didn't know!**

### 5.3. Assessment of the impacts (Optional)

Table 13: Estimated costs and benefits of the renewable energy policy support measures:

Measure	Expected renewable energy use (ktoe)	Expected cost (in EUR) – indicate time frame	Expected GHG reduction by gas (t/year)	Expected job creation

## Given 'negative impacts' of wind farms – What's the 'positive' justifying approval?

- An Bord Pleanála dismisses appeals and approves based on:
- PL16.241592 and PL16.241506: **Turbines 'will have a wider positive impact on climatic considerations'.**
- **Really given globally 34,000 million tonnes per annum of carbon emissions and no increase in temperature since 1998?**
- PL05E.242074: *even if the more sanguine estimates provided by the applicant are accepted, **the impact of this particular development on air quality and climate change will be marginal and insignificant.** Its benefits would only arise in cumulation with other similar developments, which is why the matter is **better addressed as a matter of general policy rather than in relation to an individual application for permission.***

## We have our National Plan – so 'Feck off' (1)

- **UN rules that EU National Renewable Energy Action Plans have failed to comply with Aarhus Convention on Environmental Democracy – necessary information not provided and lack of effective public participation.**
- **Aarhus Convention is part of International, EU and National Law.**
- An Bord Pleanála PL05E.242074: **If some illegality, unreasonableness or gross unfairness arises from a policy, then it can be challenged and set aside by a court.** If the appellant is of the opinion that a particular policy is wrong, then he can lobby elected representatives or the people who elect them to change that policy. The board may not change or set aside policy on wind energy. **It must apply the policy as best it can.**

## We have our National Plan – so ‘Feck off’ (2)

- Wind farms ‘rubber stamped’ based on National Plan and County Development Plan, considerations of effectiveness or alternatives not tolerated. No analysis of Plan ever occurred.
- Offaly Chief Executive August 2014 summarising input from public on the draft County Development Plan.
- *“Certain submissions have raised questions about important procedural aspects of EU and National level policy adoption including the absence of Strategic Environmental Assessment. The submissions indicate that if National and European legislation and guidance is deemed unsound then it is unwise to be consistent with this”.*
- *“I advise the Members (Councilors) that such doubts are not for their determination or are they a material consideration in this decision”.*

## It’s a belief system based on by-passing legal checks and balances

- Mark Twain’s autobiography
- *“...people’s beliefs and convictions are in almost every case gotten at second-hand, and without examination, from authorities who have not themselves examined the questions at issue but have taken them at second-hand from other non-examiners, whose opinions about them were not worth a brass farthing”.*
- But we do not live in a State based on beliefs and dogma – the rule of law with its checks and balances applies.



## So let's be sensible – Pull the plug on the 'Pork Barrel'

- 1945 in George Orwell's 'Animal Farm'; the pigs decide and the animals toil building windmills. It's 2014 now.
- **Go back and comply with the necessary legal provisions;** the UN Aarhus Convention on Environmental Democracy, the Strategic Environmental Assessment and the Regulatory Impact Assessment.
- **There is no energy crises** – ten other sources of renewables than wind, fossils with increased availability and decreasing costs, improving nuclear technology, etc.
- **The only impending environmental catastrophe is to be found in 'evidence from computer models'**, models built on an inadequate knowledge of natural cycles and diverging rapidly from Mother Nature; so let's 'cool the jets' and learn before leaping further into this expenditure.

