

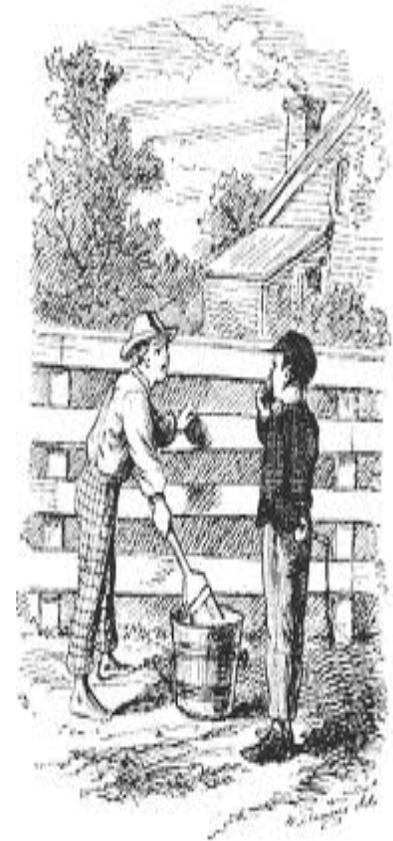
## Presentation on Aarhus Convention and Irish Renewable Energy Programme



- **Biography:** Pat Swords is a Fellow of the Institution of Chemical Engineers and a Chartered Environmentalist. Since graduation from University College Dublin in 1986, Pat has worked in developing the high technology manufacturing industry in Ireland.
- His work experience has also included projects in over a dozen other countries throughout Europe and North America. Since 1999 he has worked extensively on EU Technical Aid Projects in Central and Eastern Europe helping to implement EU Industrial Pollution Control and Control of Major Accident Hazards legislation.

# Mark Twain's Autobiography

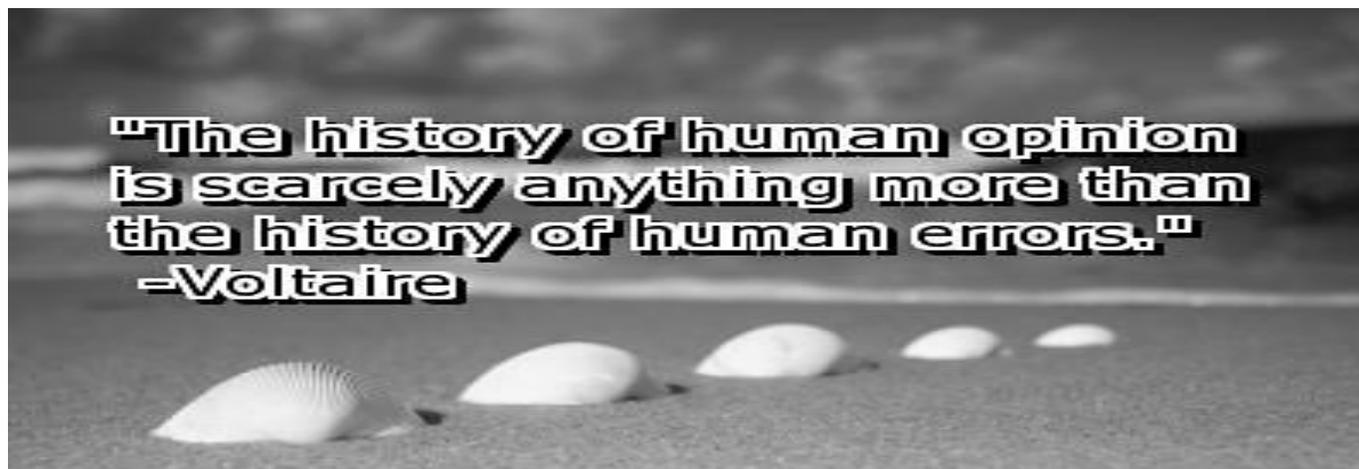
- “...people's beliefs and convictions are in almost every case gotten at second-hand, and without examination, from authorities who have not themselves examined the questions at issue but have taken them at second-hand from other non-examiners, whose opinions about them were not worth a brass farthing”.



**“We must always think about things, and we must think about things as they are, not as they are said to be.”**



- “The fact that an opinion has been widely held is no evidence whatever that it is not utterly absurd; indeed, in view of the silliness of the majority of mankind, a wide-spread belief is more likely to be foolish than sensible” (Bertrand Russell – England)
- “A public opinion poll is no substitute for thought” (Warren Buffett - USA).





## Romania EU Accession 2001-2008

- Ceausescu had, amongst others, successfully destroyed much of its beautiful landscape with heavy and polluting industrial sites.



# Ireland – Same style, dictatorial Government polices completed without Public Participation



- “The Government target is 40% renewables by 2020, although Minister Ryan has consistently said this will not be the limit of our ambitions”.



*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.*

# How do we ensure good evidence based Governance?



- “Dissent protects democracy – Secrecy promotes tyranny” (Belgrade spring 2012).
- But what is ‘Democracy’? Just the Ballot Box?
- Four Pillars of Democracy?
  - 1. Legislature (Politicians)
  - 2. Executive (Administration)
  - 3. Judiciary
  - 4. Media
- But what about ‘We the People’ → “Public Participation in Decision Making”.

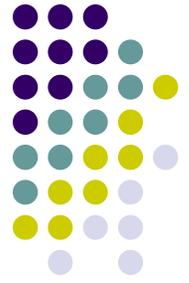


## Principle 10 of UN Rio Declaration of 1992



- *Environmental issues are best handled with participation of all concerned citizens, at the relevant level.*
- *At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes.*
- *States shall facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided.*

## Eastern Europe – Legacy of ‘Planned Economies’



- Old industrial sites, pollution, lack of profitability to run them correctly, etc. For example Copsa Mica in Romania was one of the most polluted places in Europe.



## UNECE – Aarhus Convention (~ 1998)

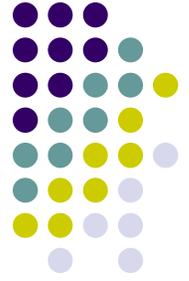


- The Aarhus Convention grants the public rights and imposes on Parties and public authorities obligations regarding **Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters.**
- The subject of the Convention goes to the heart of the relationship between people and governments. The Convention is not only an environmental agreement, it is also a Convention about government accountability, transparency and responsiveness.

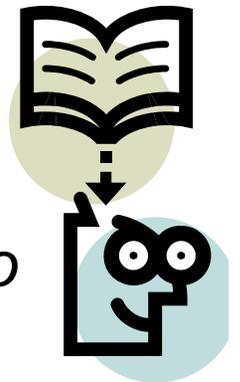
# UNECE – Aarhus Convention (by 2011)



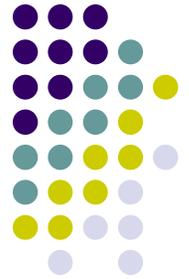
## Pillar I - Access to Information



- Regulates both Access to and Dissemination of Environmental Information:
  - Access to information on request – within 1 month
  - Public authorities must possess and update environmental information, which is relevant to their function.
  - Ensure it is transparent and effectively accessible:
    - Accurate, up to date and comparable
- Purpose: *To ensure the public are able to know and understand what is happening in the environment around them. It also ensures that the public is able to participate in an informed manner.*



## Pillar II – Public Participation in Decision-Making



- Key aspect: “Taking account of the public participation in the decision”.
- Members of the public do not have a veto right, but the authorities must, to an objectively high standard, show that public comments have been seriously considered, i.e. they should be able to show why a particular comment was rejected on substantive grounds.
- Indeed in appropriate circumstances a member of the public, whose comments were not duly taken into account, should be able to challenge the final decision in an administrative or judicial proceeding.



## Pillar III – Access to Justice

- Access to legal mechanisms to challenge acts and omissions;
  - - of a ‘substantive’ or a ‘procedural’ nature related to the national law on the environment.
- Procedures shall provide adequate and effective remedies, including injunctive relief as appropriate and be **fair, equitable, timely and not prohibitively expensive.**
- “Aarhus Convention: An Implementation Guide” provides more details:  
[http://www.unece.org/fileadmin/DAM/env/pp/ppdm/Aarhus\\_Implementation\\_Guide\\_second\\_edition\\_-\\_text\\_only.pdf](http://www.unece.org/fileadmin/DAM/env/pp/ppdm/Aarhus_Implementation_Guide_second_edition_-_text_only.pdf)



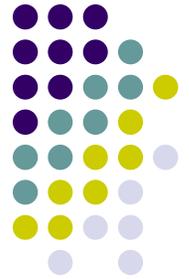
# Findings and Recommendations of Aarhus Convention Compliance Committee



- **ACCC/C/2010/54** 16<sup>th</sup> August 2012:
  - EU did not comply with the provisions of the Convention in connection with its 20% renewable energy by 2020 programme (Directive 2009/28/EC) and its implementation throughout the 27 Member States by the National Renewable Energy Action Plans (NREAPs).



## Findings in ACCC/C/2010/54 – Non-Compliances of the EU



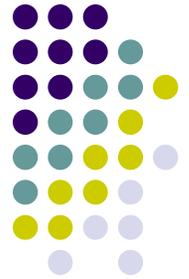
- By not having in place a proper regulatory framework and / or clear instructions to implement Article 7 of the Convention with respect to the adoption of NREAPs by Member States on the basis of Directive 2009/28/EC has failed to comply with Article 7 of the Convention;
- By not having properly monitored the implementation by Ireland of Article 7 of the Convention in the adoption of Ireland's NREAP also has failed to comply with Article 7 of the Convention;
- By not having in place a proper regulatory framework and / or clear instructions to implement and proper measures to enforce Article 7 of the Convention with respect to the adoption of NREAPs by Member States on the basis of Directive 2009/28/EC has failed to comply also with Article 3, paragraph 1, of the Convention.

# Recommendations of UNECE Aarhus Convention Compliance Committee



- EU is required to put in place the necessary measures, such that they ensure that the arrangements for public participation in a Member State are transparent and fair and that within those arrangements the necessary information is provided to the public.
- In addition, such a framework must ensure that the requirements of the Convention are met, in relation to reasonable time-frames, allowing for sufficient time for informing the public and for the public to prepare and participate effectively, allowing for early public participation when all options are open, and ensuring that due account is taken of the outcome of the public participation.

# Communication ACCC/C/2012/68 – Failures of EU / UK in relation to Scottish Renewable Energy Programme



- No verified emission savings. False claims made (1 MWh displaces 1 MWh of emission), such as in EU GP Wind Program.
- Breach of Article 6 on Projects: Wind farm approved on an opinion, “a valuable contribution towards achieving renewable energy targets which aim to combat the effects of climate change”.
- Breach of Article 7 on Plans and Programme: UK Renewable Energy Strategy / NREAP adopted without any environmental considerations, failure to take due account of public participation.



## Second success in Geneva – ACCC/C/2012/68 Oct 2013



- The UK NREAP for its national renewable energy programme did not comply with the public participation requirements of Article 7 of the Convention.
- <http://www.youtube.com/watch?v=FFIZbg5JNAA>
- <http://www.youtube.com/watch?v=2fiCFDa-xFs>



# Aarhus Convention – Compliance Mechanisms (1)



- Compliance Committee (legal tribunal) meet quarterly in Geneva – *pro bono* and independent.
- Address issues of compliance, raised by the public (Communications), which are deemed of ‘relevance’ to improved compliance with the Convention;
  - i.e. development of ‘case law’
- They are not a Court of Law for matters of redress, but an International Legal Tribunal.
- They choose on both Communications not to rule on the inaccuracies related to CO<sub>2</sub> savings – did not consider themselves technically qualified.



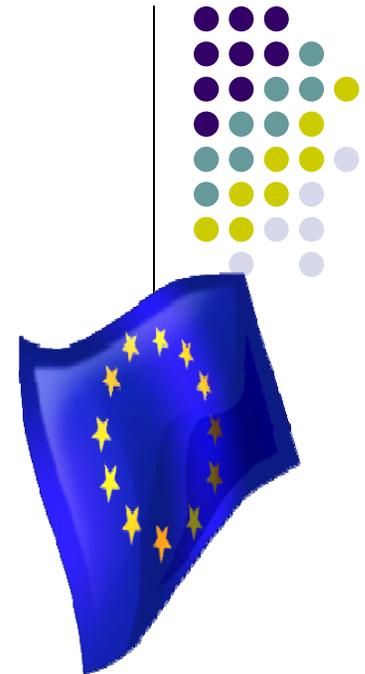
## Aarhus Convention – Compliance Mechanisms (2)



- Meeting of the Parties (MoP) approx. every 3 years – current preparations for June 2014.
- Findings and recommendations of Compliance Committee have to be endorsed by the MoP.
- Committee wrote to EU in July as to progress on recommendations on ACCC/C/2010/54.
- Draft Compliance Report Nov 2013: *Express its concern ... “a proper regulatory framework and/or clear instructions for implementing article 7 of the Convention with respect to the adoption of NREAPs” and that it remains unclear how the Party concerned will “adapt the manner in which it evaluates NREAPs” in accordance with the recommendations of the Committee.*

## Aarhus Convention and EU Law

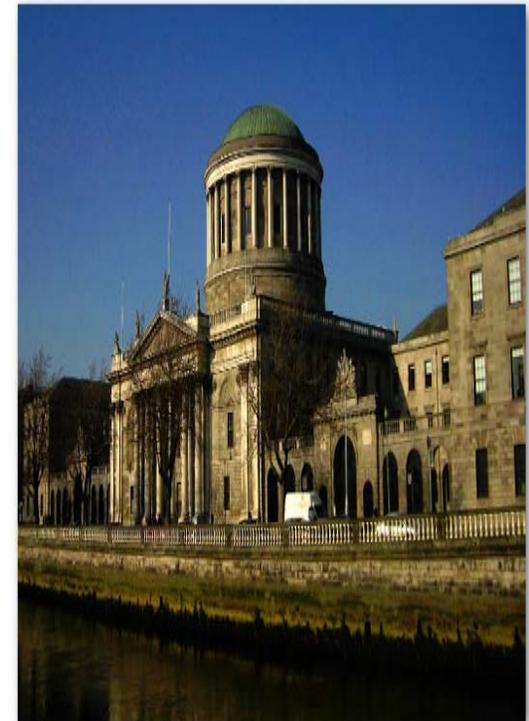
- The Convention is an integral part of Community legal order since 2005:
  - Some aspects are codified in specific Directives, others have to be implemented by Member States / their Courts.
- Under European Community law, an international agreement concluded by the Community is binding on the Community institutions and the Member States, and takes precedence over legal acts adopted by the Community.
- A failure to comply with an International Treaty, such as compliance with the Aarhus Convention, is a breach of EU law.





## Proceedings at the Irish High Court

- Irish State refused to comply with Aarhus Convention and associated EU law.
- Leave granted in Nov 2012 for Judicial Review of NREAP.
- Preliminary proceedings in April in front of President of High Court:
  - Convention applied since ratification by EU in 2005 and not Ireland in 2012.
  - Article 7 not time limited, therefore on-going Plenary Summons to place injunction on continuation of Irish renewable programme.



# Aarhus Convention and European Court of Justice



- European Court of Justice has consistently upheld the rights under the Convention
- EU Commission and EU Parliament has consistently sought to weaken them as they applied to EU Institutions.
- Extremely difficult for Citizens to get access to European Court, but EPAW now has case accepted in relation to Commission's proposals to extend renewable programme post 2020 – failure to comply with public participation under Aarhus.
- <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2013:207:0036:0036:EN:PDF>



# Common Law and Civil Law (Napoleonic Code)



- Common law is adversarial, opposing legal teams present in front of Judge, who has done no prior investigation. It is largely based on precedent.
- Civil law is codified - the judge often brings the formal charges, investigates the matter, and decides on the case. He or she works within a framework established by a comprehensive, codified set of laws.
- Common law Judicial Review addresses substance **only** where :
  - A decision is irrational as it is *"so outrageous in its defiance of logic or of accepted moral standards that no sensible person who had applied his mind to the question could have arrived at it."*

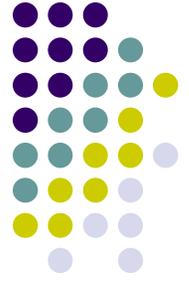


## Common Law Judicial Review

- In theory public authorities have to ensure that environmental information is ‘accurate, up to date and comparable’ – they don’t.
- You can only win on substantive issues against public officials if you can demonstrate that their position is ‘manifestly unreasonable’.
- Note: Judicial Review is not a ‘de novo’ assessment of substance, it is a review of lawfulness.
- The Aarhus Convention defines the procedural rights of the Citizen and the obligations of public authorities:
  - A judge will comfortably rule on a breach of procedures.

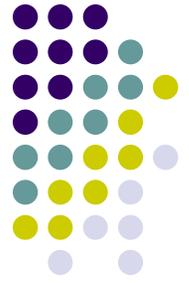


# Environmental Significance – Proportionality / Reasonableness (1)



- The Convention and EU law on environmental impact assessment define the procedures for ‘weighing up’ the significant environmental impacts.
- Compliance Committee: *As to what the public authority, after taking the public participation into account, should ultimately decide, the Convention is silent.*
- European Court; *that rule prescribes an assessment of the environmental impact of a public or private project, but does not lay down the substantive rules in relation to the balancing of the environmental effects with other factors or prohibit the completion of projects which are liable to have negative effects on the environment.*

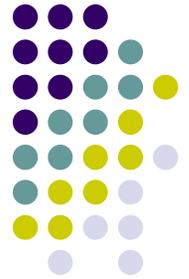
## Environmental Significance – Proportionality / Reasonableness (2)



- Key aspect of European law is proportionality:
  - The Principle of Proportionality requires each decision and measure to be based on a fair assessment and balancing of interests, as well as on a reasonable choice of means.
- Similarly, the concept of reasonableness and of the reasonable man has worked well in English law for many generations.
- Is the regulatory decision once weighed up through the process of public participation proportionate / reasonable, such as three thousand wind turbines in the Irish landscape at a cost of some €30 billion?



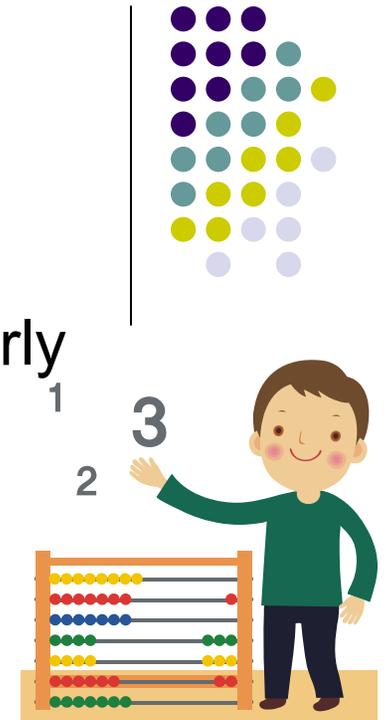
# Worked Example – the Irish Renewable Programme



- Substantive issues:
  - CO<sub>2</sub> savings claimed for neither being delivered nor verified.
  - Absence of environmental information on environmental impact of CO<sub>2</sub> emissions from fossil fuels
  - Noise regulations, the adequacy of which are disputed
- Procedural issues:
  - Lack of environmental assessment of the programme's objectives by EU and Member States
  - Failure to complete public participation
  - Failure to assess noise impacts, mitigation measures and monitor for unforeseen adverse effects

# Objectives of EU and Member State Renewable Programme

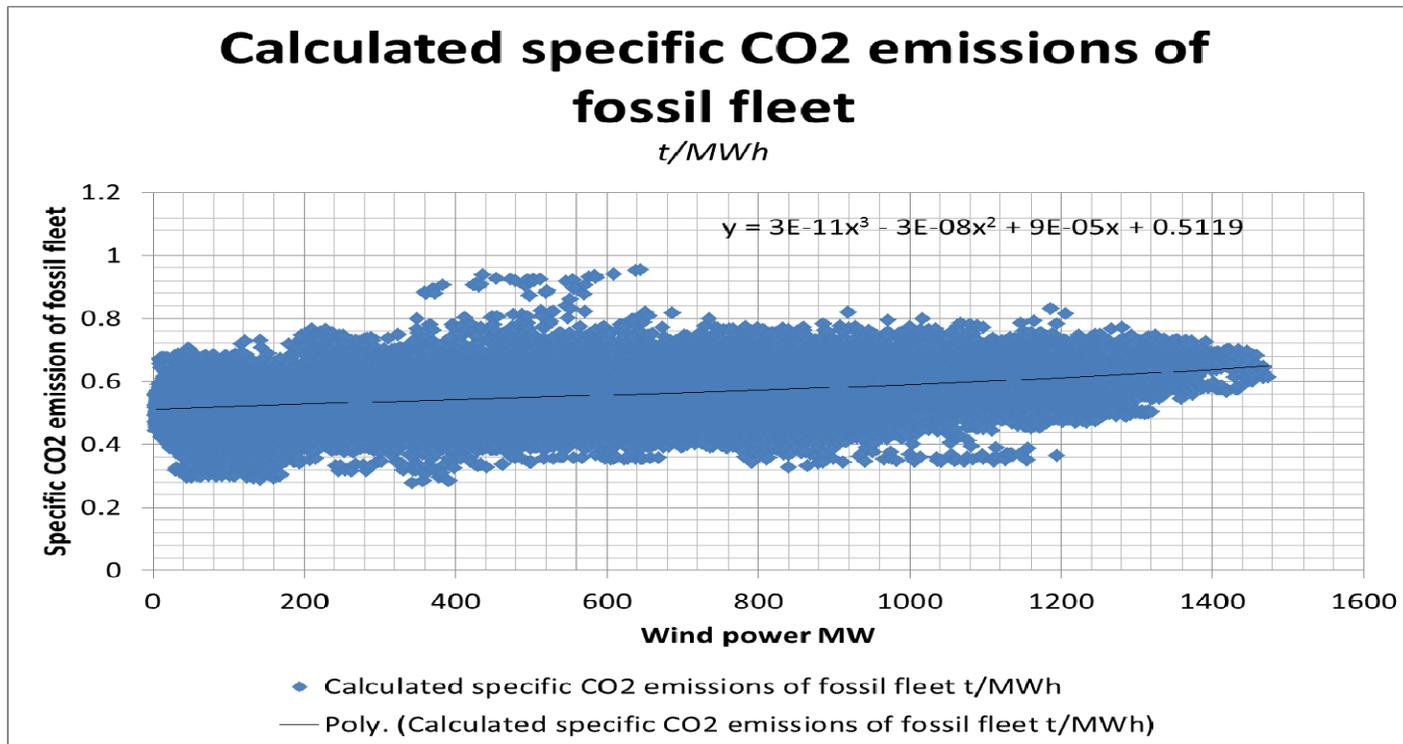
- 20% EU renewable target by 2020 never properly assessed by Commission with regard to:
  - What was to be built
  - Where it was to be built
  - What were the costs, benefits and impacts
- Overall 20% target assigned to individual Member States based on existing level of renewables and a 'fudge factor' based on GDP.
- Hence Ireland got a 16% renewable target for its overall energy sector.
- Claims made in official documentation for CO<sub>2</sub> savings ignore induced inefficiencies on the grid.



# Irish Data: Emissions of power plants rise with increasing wind input



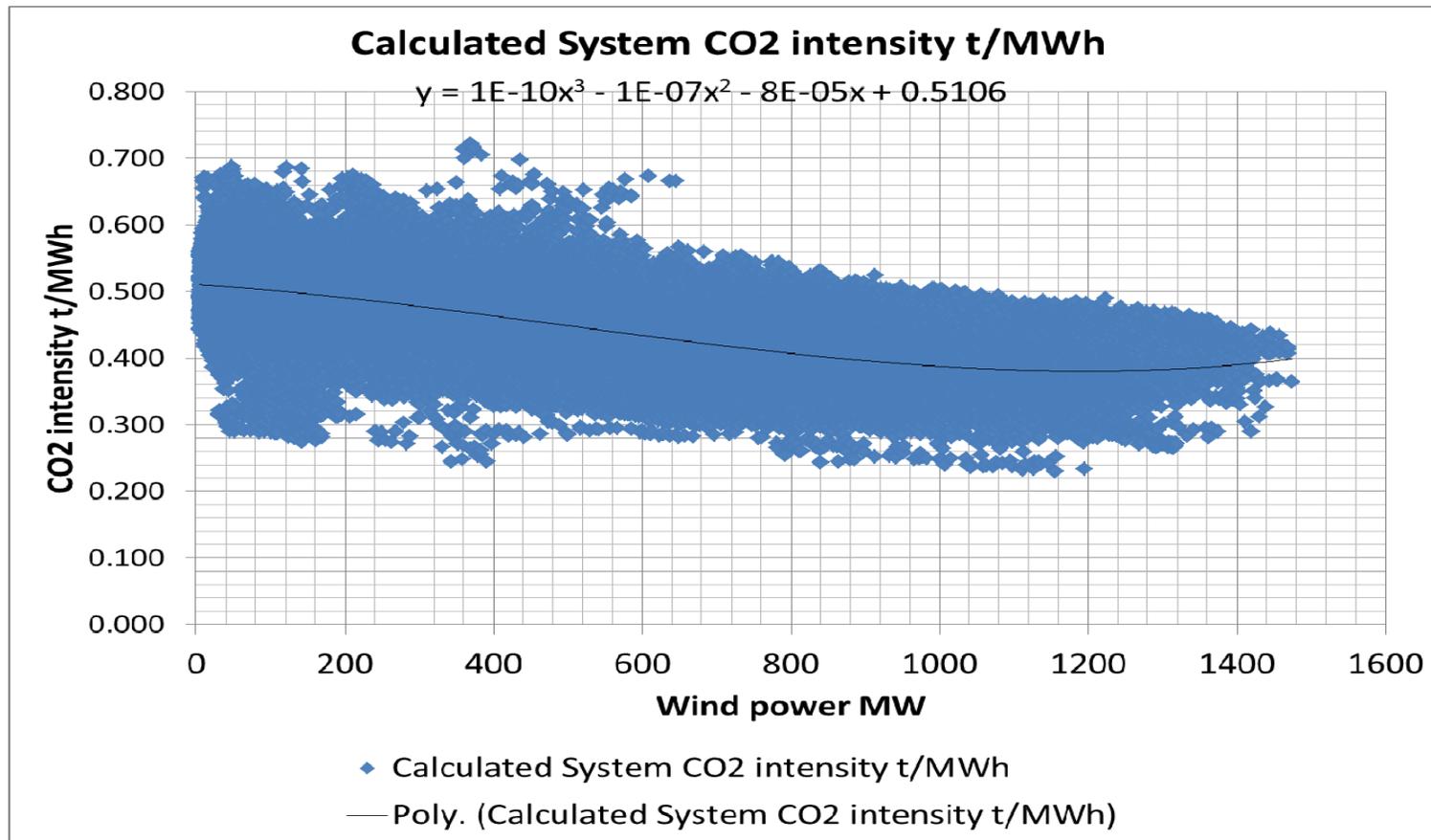
- If 1 MWh of wind energy replaced 1 MWh of fossil fuel plants → straight horizontal line.



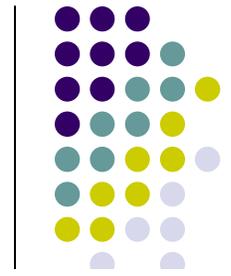


# Overall emissions intensity in relation to wind energy input to grid

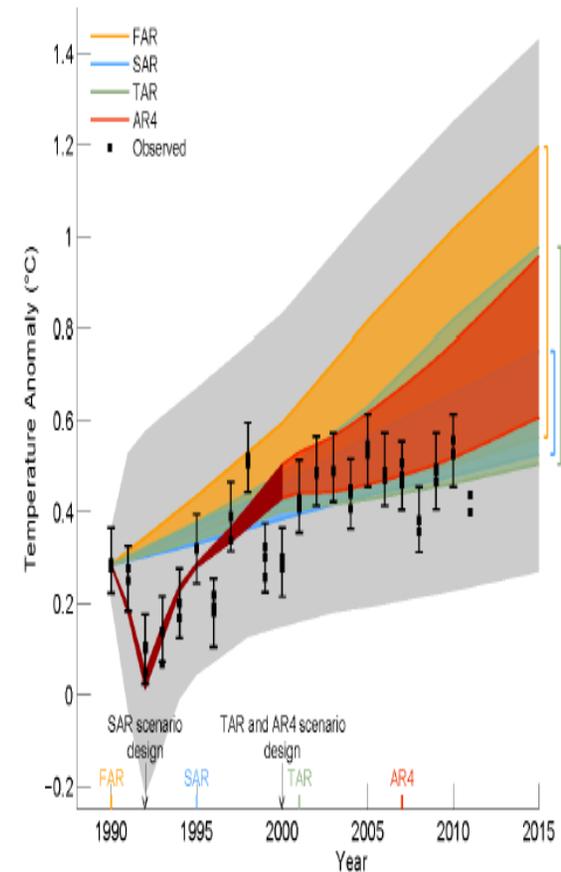
- 1,700 MW of installed capacity on Grid and 7,145 MW called for in NREAP



# The Planet Warms Up?



- Populism or Reason?
- Two approaches: Catastrophic Anthropogenic Global Warming (CAGW) and Natural Variations.
- UN IPCC has essentially ignored other climate change factors than CO<sub>2</sub>.
- Predictions of 0.2°C rise per decade have proven to be false.
- Temperature of last 17 years stable despite increasing CO<sub>2</sub>.
- Simply cannot model the complexity - “Only certainty is uncertainty”

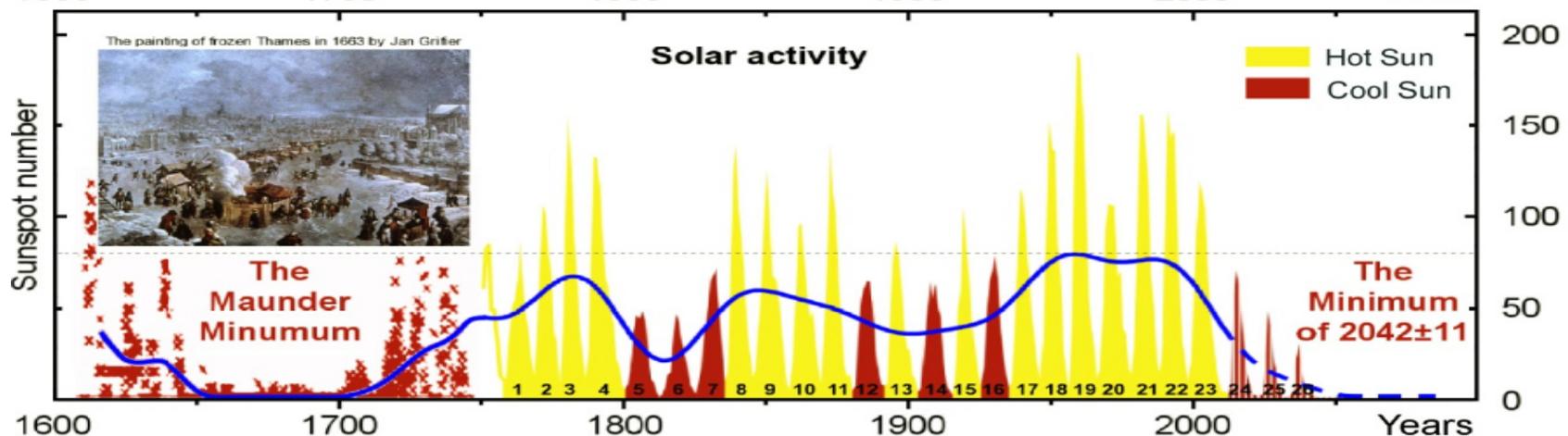


# Solar Cycles

## 'Hot Sun', 'Cold Sun'



- William Herschel in 1801 – Sun spots go down, wheat prices go up and vis a versa.
- 11 year cycle (sun spots), 60 year cycle (oceans), 1,000 year cycle (sun), plus orbital changes.
- 1998 was peak of 1,000 year cycle, also peak of ocean cycle. Sun now rapidly going into 'cold phase', about 16 year lag due to oceans – Mother Nature will tell us shortly?



# Suppression of Democracy by a Cult?



- Is democratic governance based on populism / cults or reason?
- Irish Climate Change Policy – refers to EU Documentation: “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”.
- Refusal to answer Access to Information on the Environment Request on transparency: ‘accurate, up to date and comparable’.



## *How much does it cost and why are we doing it (1)?*



- Failure of EU to complete report required under Directive 2001/77/EC – original renewable Directive:
  - “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”.
- Don’t know the ‘external’ (environmental degradation) cost of CO<sub>2</sub>.
- Figure of €20 per tonne chosen (political consensus) to justify cost / benefit for EU 20% renewable energy target.
- Actual estimate of external ‘social’ cost of CO<sub>2</sub> - \$5 per tonne (Tol 2008) . However, based on computer models of warming temperatures!!!

## *How much does it cost and why are we doing it? (2)*



- What were the NREAPs of each Member State to deliver?
- Section 5.3 of NREAP template left blank by 19 of the 27 Member States, others provided little or no information.
- EU Energy Commissioner – “to avoid an excessive administrative burden on the Member States”

### 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

## *How much does it cost and why are we doing it? (3)*



- Financial Cost:
- 7,145 MW at €2 million per MW onshore and €4 million per MW offshore. Grid25 at €4 billion. Interconnectors at €600 million each. Fast response power stations, smart meters at ?.
- Say total €30 billion. Turbine economic life  $\approx$  15 years.
- CO<sub>2</sub> savings:
- By 2011 if 1 MWh of renewables displaces 1 MWh of fossil fuel the programme should have delivered  $\approx$  3 million t/a of CO<sub>2</sub> savings. Reality  $\approx$  1.1 million (Wheatley 2012)
- Inefficiencies on grid are such that limited potential for further savings – this was actually demonstrated in an engineering report (Eirgrid) back in 2004, but ignored.

## *How much does it cost and why are we doing it? (4)*



- Environmental benefit 40% renewable electricity target  $\approx$  €5 million per annum if temperature actually rises:
  - i.e. roughly 2 million tonnes of CO<sub>2</sub> savings at \$5 per tonne of avoided environmental degradation.
- Cost to Irish consumer - €30 billion and turbines last 15 years
- Alternatives? Plenty of CO<sub>2</sub> projects at €3 per tonne
- Irish Academy of Engineering 2010 'Energy Policy':

Cost per tonne CO <sub>2</sub> avoided (€/t)	
Ocean energy	578
Offshore wind	348
Onshore wind	114

# Irish Renewable Energy Programme Proportionate / Reasonable?



- The only reason why we have got so far with it is that buzz words have sufficed and legal assessments by-passed.
- Once assessed it is nothing but completely disproportionate and an act of wanton vandalism.
- UNECE Compliance Committee in Geneva Dec 2012  
– Position of Jean-Francois Brakeland of the EU:
- *“If we were to take instead of a 110 m high wind turbine a 110 m high metal statue of Mickey Mouse, you would not be expected to do a detailed carbon assessment on that, so why do you expect a detailed carbon assessment for the wind turbine?”*



## Noise Impacts – Existing Regulations

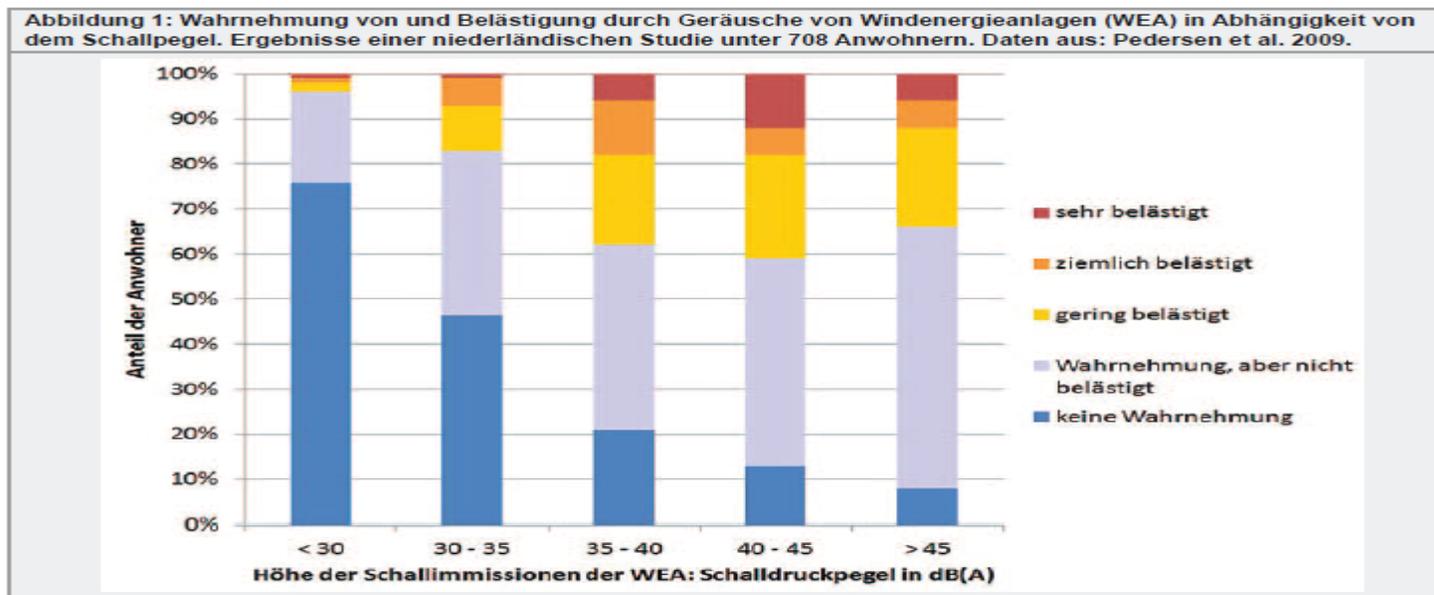
- 45 dB(A) night limit and 500 m separation considered adequate.
- Ireland has a very scattered rural community – difficult to maintain separation.
- Central Europe has defined communities, with open infill areas for turbines,
- German Noise Regulations TA Lärm of 1998
- [http://www.umweltbundesamt.de/sites/default/files/medien/pdfs/talaerm\\_en.pdf](http://www.umweltbundesamt.de/sites/default/files/medien/pdfs/talaerm_en.pdf)
  - Night limit of 35 dB(A) for pure residential areas.
  - Tonal correction applied
  - Low frequency analysis to DIN 45680: 1997 if  $L_{Ceq} - L_{eq} > 20$  dB





## Current Developments in Germany

- Recognise that low frequency limits need to be revised downwards, research project started in 2011.
- Low frequency analysis if  $L_{Ceq} - L_{eq} > 15$  dB?
- New draft of DIN 45680 - the thresholds of perceptibility now defined that 90% of the population no longer perceive the infrasound.





## Irish Situation

- Irish planning authorities refuse to recognise analysis done to existing German regulations, instead that 45 dB(A) suffices; for ten 2.5 MW turbines → 500 m.
- Under current German regulations – 1,600 m required.

Leistungsklasse der WEA in kW	Anzahl der Anlagen	für die Berechnung als typisch angesetzte Parameter der WEA				Mindestabstände für die Richtwerteinholung zu		
		Nabenhöhe in m	Rotor-durchmesser in m	Abstand zwischen den Anlagen in m	Schallleistungspegel in dB(A)	reinem Wohngebiet WR in m	allg. Wohngebiet WA in m	Misch-/Dorfgebiet M/MD in m
500	3	43,5	40	300	101,0	700	500	500
	6	43,5	40	300	101,0	850	500	500
	10	43,5	40	300	101,0	950	550	500
800	3	76	48	385	102,5	840	520	500
	6	76	48	385	102,5	1000	680	500
	10	76	48	385	102,5	1080	700	500
1500	3	100	77	615	103,5	960	600	500
	6	100	77	615	103,5	1150	700	500
	10	100	77	615	103,5	1400	750	500
2000	3	100	82	655	105,0	1050	680	500
	6	100	82	655	105,0	1350	950	500
	10	100	82	655	105,0	1600	1200	520
2500 und größer	3	100	90	720	106,0	1150	750	500
	6	100	90	720	106,0	1450	1050	500
	10	100	90	720	106,0	1600	1300	550

## Noise – A Substantive Issue?

- Almost impossible to challenge in Court that German assessment more valid than that from adopted Irish guidelines, but....
- Legally required Strategic Environmental Assessment and public participation on programme never completed (Article 7 Aarhus).
  - No assessment on impacts on population and human health
  - No development of appropriate mitigation measures
  - No monitoring of unforeseen adverse environmental impact
- → Major procedural legal failings.



## *Quis ipsos custodes custodiet?*



- Who watches the watchman?
  - You may not like it, but you do as the concerned citizen!
- As the last living patient of Sigmund Freud reported in the *Süddeutsche Zeitung* on 27th March 2009, Sigmund said to her:
- *“Do not forget – to be an adult, one must dare to ask, why and how so and also express one’s own opinion or opposition. If you do not do that, you will always remain a child and it will always be the others that decide over you!”*