

# **Should Wales go for new nuclear build? – the NFLA view: highlighting the nuclear myths**

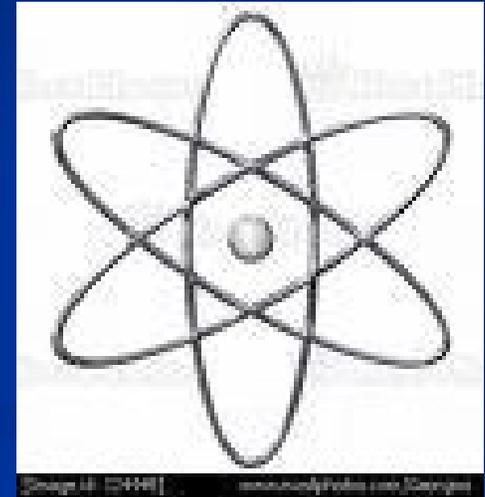
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**UK and Ireland Nuclear Free Local Authorities**



# What I'm going to look at:

- Nuclear issues : the nuclear 'myths' –
  - effects on climate change
  - energy security
  - nuclear costs / jobs
  - radioactive waste
  - nuclear safety
  - public health
  - nuclear proliferation / terrorism
- A local energy revolution
- A renewable future in Wales
- Conclusion - Nuclear free or nuclear new build?



# Nuclear 'myths' – climate change

- The myth – nuclear can provide 'green' energy for climate change mitigation

## NFLA view:

- We don't need nuclear – renewables are unlimited, free and much safer
- Nuclear needs a raw material – uranium extraction and long-term availability (same as peak oil)
- Can nuclear be part of the 30% 'green' energy to mitigate climate change? -
- Electricity is 18% of UK energy demand (most of the rest transport / heating)
- Nuclear power is 14.4% of electricity generation in UK
- With losses at the power station / transmission this is reduced to just **5.3% of total energy**
- So replacing nuclear saves just 5.3% CO2 emissions (Source: Hansard / D Adam / DUKES 2009)



# Myth 2 – Energy security

- The myth – new nuclear guarantees greater energy security

## NFLA notes:

- UK has a long-term secure energy deal for gas with Norway
- France went for nuclear in 1973, but is more oil dependent than the EU average
- MIT study shows that centralised systems eat up energy and increase fossil fuel usage
- PB Power study for London and Edinburgh showed decentralised renewable system saw gas consumption down by 15% over 20 years
- Crunch time for energy supplies is 2015 – new nuclear not built till at least 2017. Gas and energy efficiency the only options in the short-term
- Scotland / Ireland shows a better nuclear free alternative



# Myth 3 - Costs / jobs

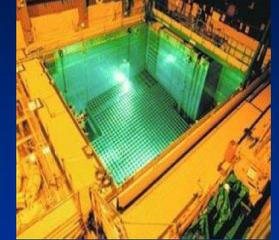
- The myth – Nuclear power is cheaper and provides more jobs

## NFLA notes:

- A new nuclear power station will cost between £12 - £20bn (10 £120bn - £200bn) Citibank – huge public subsidy required as too risky for private sector
- New UK Government has said NO public subsidy
- Finland – Olikuluto now £3.4bn over budget, 1000 safety flaws and 3 years behind schedule
- Radioactive waste legacy – NDA estimates this is £90bn and rising (new Minister says current £4bn black hole for legacy issues)
- Yes – some jobs, but will they be diverted from waste and decommissioning work?
- Governments have suggested there are thousands of new jobs in renewable energy
- Biggest international recession in history – can we spend on renewables, energy efficiency AND nuclear?



# Myth 4 – Radioactive waste



- Myth – radioactive waste strategy is resolved

## NFLA notes:

- After 50 years still no long-term solution for waste
- No guarantee of deep waste repository in Cumbria – even if, around 40 years from being built
- Low level waste repository almost full
- Councils unwilling to see waste dumped into landfill e.g Northants, Cumbria, Pembrokeshire
- New nuclear reactors host waste dumps for 160 years on site
- New build waste more radioactive as burnt at higher temperature
- New nuclear now means our great grandchildren and beyond will be sorting out OUR mess

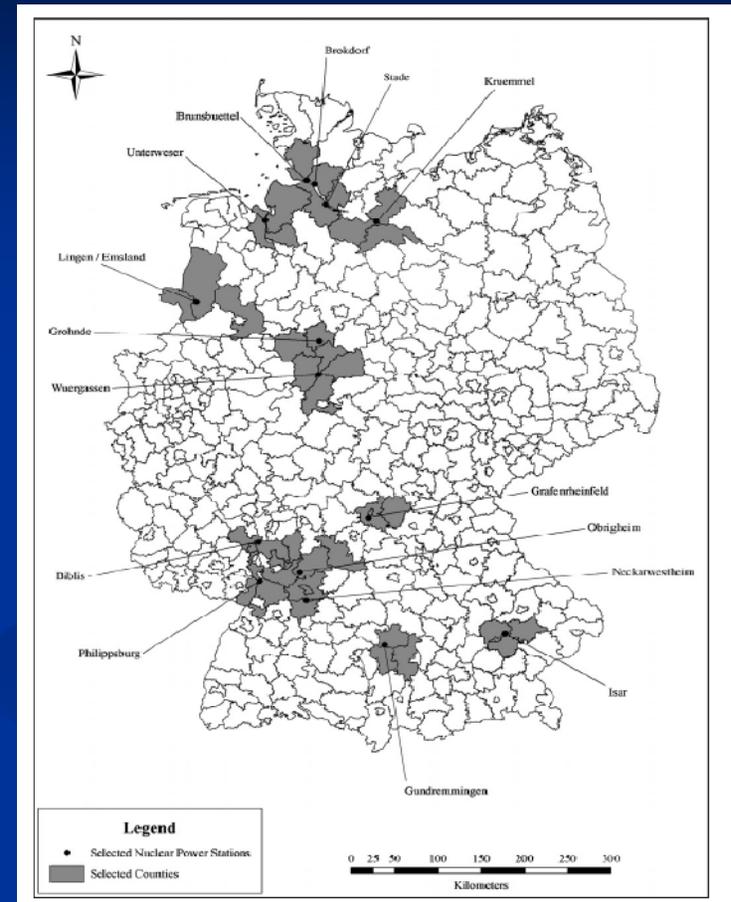


# Myth 5 – Public health

Myth: that nuclear power has no great effect on public health

NFLA notes:

- German government KIKK report to try and prove no health risks
- Yet 2.2 times increase in child leukaemias within 5kms of reactor
- 1.6 times increase in child solid cancers
- Strong link to living near reactors
- Accepted by German government
- UK COMARE considering it but not reporting until late June
- How can existing and new nuclear go ahead with such health risks?



# Myth 6 – Nuclear Safety

- Myth – Nuclear power is safe and secure

## NFLA notes:

- NII has raised concerns over Westinghouse design for resisting terrorist attack or natural disaster
- Leaked documents from EDF suggest it is susceptible to a Chernobyl type disaster – see NII response to NFLA letter
- NFLA have followed up significant leaks and incidents at Sellafield, Sizewell, Wylfa and Hunterston in past year
- Also major concerns of transport accidents – NFLA Briefings on emergency planning concerns for road and sea transport
- Recent Washington Conference has highlighted major concerns over nuclear terrorism – a dirty bomb in a Welsh city would be a nightmare scenario

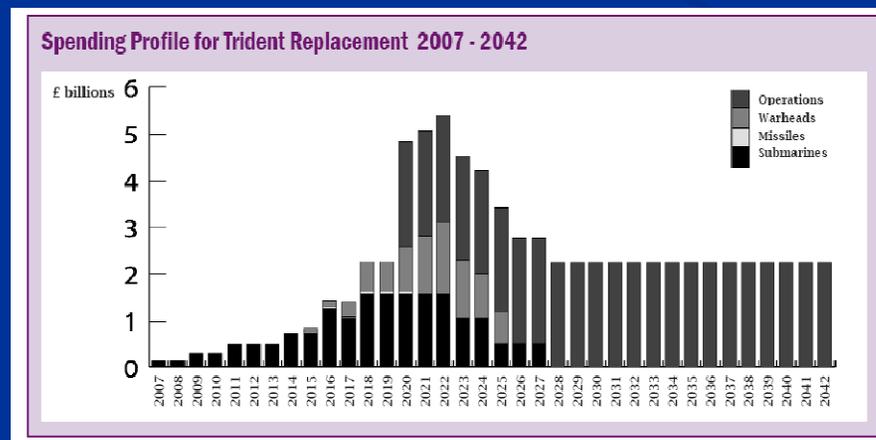


# Myth 7 – Nuclear proliferation

- Myth – nuclear power has no impact on nuclear weapons or terrorism

## NFLA notes:

- There are still enough bombs for 280,000 Hiroshimas
- Widespread promotion of nuclear power encourages nuclear proliferation
- Pakistan, India, North Korea, Iran – nuclear power led to nuclear weapons proliferation
- More opportunity for terrorists to get nuclear materials
- Trident replacement – a £97bn bill in a recession?!



# A local energy revolution

- £20m 3yr Kirklees Warm Zone initiative. UK's largest council-run trail-blazing home insulation scheme.
- More homes with renewables than anywhere else in UK.
- More insulation installed in one year than London.
- Councils are keen to lead an energy revolution but need resources to do it
- Fuel poverty – Councils key role to assist through energy efficiency
- Welsh Councils are doing good work here – it should be built on



# A renewable future

Price Waterhouse Coopers report suggest a 'super-smart' renewable grid is possible:

- Solar farms in Southern Europe / N Africa
- Wind farms in N Europe
- Hydro-electric in Scandinavia / Alps
- Biomass and marine tidal energy across Europe
- Technical components are mostly there
- It requires political will – e.g. Scotland could produce 178% of its energy needs on projected renewable projects
- Energy efficiency fills the s-term gap
- UK the perfect location for renewables – windy, long tidal coast



# Nuclear free or new nuclear?

- New Nuclear is too expensive and too risky
- It has under-performed and failed to live up to its promises over its 60 year history
- There ARE better alternatives - Scotland / Ireland show the way
- NFLA's energy mix policy is as follows:
  - A sustained push for renewable energy
  - Encourage localised micro-generation projects
  - Concerted effort on energy efficiency
  - Decommissioning and clean-up nuclear legacy
- A safe, sustainable future and a nuclear free jobs bonanza for Wales is possible
- <http://www.nuclearpolicy.info> for further details



**Thank you for listening.**

**Any questions?**

