A gaiff ei adeiladu a phwy fydd yn talu amdano?

Will it be built and who pays for it?
Pam codi gorsaf niwclear newydd?
Why build a new nuclear station?

- Sicrhau cyflenwad ynni
- Creu gwaith
- Perthynas â'r diwydiant arfau

- To ensure energy supply
- Create employment
- Relationship with arms' industry
Who's pushing the agenda?

- Llywodraeth
  - canolog (D.U.)
  - cenedlaethol
  - lleol
- Diwydiant ynni
- Diwydiant arfau
- Buddsoddwyr
- Government
  - central (U.K.)
  - national
  - local
- Energy industry
- Arms industry
- Investors
“The UK is the most exciting place in the world for new nuclear build, the Tory party conference has been told. Pro-nuclear energy minister Charles Hendry said the Government was committed to making Britain a “serious nuclear nation” but re-iterated the coalition agreement the industry would receive no public subsidy. Mr Hendry told a packed conference hall in Manchester: “We are addressing the issues of planning, of approving the reactor designs and reforming our electricity market, so the UK is now the most exciting place in Europe, if not the world, for nuclear new build”.

4th Oct 2011
“An 80% target can be met through wind, wave and tidal power together with the use of carbon capture and storage technology. Ministers must stop the side-show of new nuclear power stations now. Nuclear is a tried, tested and failed technology and the Government must stop putting time, effort and subsidies into reviving this outdated industry. The nuclear industry’s key skill over the past half-century has not been generating electricity, but extracting lashings of taxpayers’ money”.

Chris Huhne : November 2007
“Huhne's shameless U-turn puts nuclear back on agenda as power plant plans are unveiled

U-turn: Chris Huhne is now backing new nuclear plants
Controversial plans for the next generation of nuclear power stations were unveiled by the Government yesterday with a pledge that taxpayers would not have to foot the bill.

In an astonishing U-turn, Lib Dem Energy Secretary Chris Huhne – a once vocal opponent of nuclear power – said the eight power plants were vital to fill Britain’s looming energy gap”.

Daily Mail : Hydref / October 2010
New Nukes
Sovereign wealth funds from the Middle East and other oil-rich areas are "queuing up" to invest in UK nuclear power, according to Charles Hendry, the energy minister. Experts have been worried that the UK will find it difficult to attract enough companies willing to fund an estimated £40bn for new nuclear plants. However, Mr Hendry is no longer concerned about this, since key government ministers have been courting cash-rich foreign funds. "It's going to be easier to find the funding than it is to find the capacity to build it," Mr Hendry said.
"Some of the sovereign wealth funds are keen to invest as a way to diversify. They are showing a very keen interest in British nuclear and queuing up to know more about the opportunities.
In the course of our travels we highlighted the opportunities to them."

Telegraph 5th Oct 2011
Would-be First Minister Carwyn Jones has backed nuclear power as part of Britain’s energy mix to combat climate change.

Mr Jones said: “It is now perfectly clear that because of climate change, the terms of the debate we previously had on nuclear energy have shifted.

“We are involved in an entirely different world and in energy terms we stand at a crossroads.

“Choices on which direction we travel in the future to meet our energy needs, and simultaneously to adhere to our international obligations to reverse global warming, have to be made soon.

“I believe nuclear power will form part of Wales’ low-carbon response to the serious challenges we face in the years to come.

Wales Online Hydref/October 2009
The Damascene conversion of Plaid Cymru’s Welsh Assembly leader and Deputy First Minister, Ieuan Wyn Jones, is already well known. Plaid Cymru is deeply anti-nuclear; its 2009 Euro manifesto confirmed its “total opposition to the construction of any new nuclear power stations in Wales” and its Assembly spokeswoman, Leanne Wood, declared in a plenary debate in September, 2007, that:

“Plaid Cymru, under all circumstances, will oppose any future proposal to locate a new nuclear power station at Wylfa”.

Mr Jones was accordingly very much out of step with his own party when, in January 2008, he enthusiastically welcomed the Government’s announcement of its commitment to a new generation of nuclear power stations as “good news”.

Blog David Jones A.S./M.P. Hydref/October 2009
Horizon Nuclear Power Ltd, a joint venture by energy firms RWE and E.on, plans to commission its first nuclear reactor at Wylfa as early as 2020, “given the right market conditions”.

Councillor Clive McGregor, leader of Anglesey county council, said: “We warmly welcome this announcement today, as it brings us closer to securing a new build power station at Wylfa.

“The extent of recent job losses on the island means we desperately need the boost to the regional economy. “Securing a new nuclear power station at the Wylfa site is part of a wider ‘Energy Island’ concept developed by the Isle of Anglesey county council to create jobs through both nuclear and renewable energy projects.”

A new plant could bring £8 billion into the local economy, the county council estimated.
• Ond, beth yw barn y bobl?

• But, what do the people think?
Which of the following would you like to see developed on Anglesey as a way of producing energy?

- Solar power 55%
- Wave machines 53%
- Wind farms 47%
- Nuclear power 43%
- Hydro-electric power 32%
- Other 4%
- Total answers 1171
If more energy jobs were available on Anglesey, where would you like to see these being created:

- Alternative/Renewable energy 74%
- Nuclear energy 35%
- Unsure 14%
- Total answers 617
• Beth yw barn y diwydiant ei hun?

• What does the industry think?
“Germany`s energy strategy called for transforming the country`s energy system from conventional (nuclear, coal,gas) to almost entirely renewable....... The only way Germany can get from a conventional energy world to a renewable energy world is by making use of a bridge”........“We believe that the roughly 12-year lifetime extension for nuclear power stations provides such a bridge”.

On two further occasions, the CEO made it clear that new nuclear was subject to some considerable doubt. In his introductory remarks, for example - “There are no concrete proposals for new nuclear investment programmes” and in response to myself re investment in Wales “there are no specific proposals. A decision is pending........”

E-ON  C.E.O. Herr Teyssen
Mai / May 2011
Bye-bye, We Don’t Want To Any More

“For both companies, the investment would simply be too expensive, a manager familiar with the project told the Suedeeutsche Zeitung. Due to reduced income after the accelerated exit out of nuclear (in Germany) both firms want to reduce their debts by selling parts of their assets. Both companies state that giant investments which only pay off after many years, as would be the case for Horizon, are currently hard to justify towards shareholders.

According to the companies, the political climate in Germany also plays a role. In Germany, the construction of new power plants in Great Britain could be viewed as an act of provocation.”

SUEDDEUTSCHE ZEITUNG 5.7.2011
• Pwy sy`n talu?   NI

• Who pays?   WE DO
Pwy sy`n talu ? : Diwydiant â chymorthdal
Who pays ? : A subsidised industry

- 1-2% o gostau damwain*
- Labordy Niwclear Cenedlaethol
- Y Sefydliad Niwclear
- Yr Academi Niwclear
- Fforwm Cynghor ar Wastraff Niwclear
- Swyddfa Diogelwch Sifil Niwclear
- Cyfarwyddiaeth Niwclear yr Adran Iechyd a Diogelwch ac yyb............

- Indemnity for 1-2% of total cost*
- National Nuclear Laboratory
- Nuclear Institute
- Nuclear Academy
- Nuclear Legacy Advisory Forum
- Office for Civil Nuclear Security
- Nuclear Directorate of the HSE
- etc........
Y pris i`w dalu - The price to pay

- Diogelwch
- Amgylcheddol
- Iechyd
- Cymdeithasol
- Diwylliannol
- Safety
- Environmental
- Health
- Social
- Cultural
Pwy sy`n talu ? : Peryglon niwclear
Who pays ? : Nuclear dangers

• Mwyno a phrosesu → iechyd
• Cyflenwad iwraniwm
• Adeiladu a datgomisiynnu → CO2 +
• Effaith ar iechyd [KiKK]
• Gwastraff ymbelydrol poeth ar y safle am 150 o flynyddoedd
• Llifogydd
• Daeareg Ynys Môn

• Mining and processing → health impact
• Uranium supply
• Build and de-commissioning → CO2 +
• Health impact  [KiKK]
• High level radiation waste on site for 150 yrs
• Flooding
• The island`s seismology
Pwy sy`n talu ? Peryglon pellach
Who pays ? Further dangers

- Damweiniau dynol
- Damweiniau mecanyddol
- Terfysgaeth
- Damweinia` awyr
- Ymosodiad- cyber
- Permanent storage ?

- Human errors
- Mechanical errors
- Terrorism
- Air accidents
- Cyber-attacks
- Storfa parhaol ?
Who pays? : The nuclear impact

- Amaethyddiaeth
- Twristiaeth
- Amgylcheddol
  - S.A.C.
  - S.P.A.s x 3
  - S.S.S.I.s x 3
- Cymdeithasol a thai
- Ieithyddol
- Peilonau

- Agriculture
- Tourism
- Environment
  - S.A.C.
  - S.P.A.s x 3
  - S.S.S.I. X 3
- Social and housing
- Linguistic
- Pylons
Felly, pam fentro? Dewisiada`eraill
So, why go there? The alternatives

Ar gyfer ynni

• Arbed - hyd at 30%
• Ffoto-foltaic
• Solar
• Gwynt y Mor
• Llanw
• Cerrynt
• Biomas

For energy

• Conservation – up to 30%
• PV
• Solar
• Gwynt y Mor
• Tidal streams
• Wave power
• Biomass
Felly, pam fentro? Dewisiada`eraill
So, why go there? The alternatives

Cyflogaeth – nifer swyddi

- Arbed ynni – 95
- Gosod solar a PV – 100
- Biomas – 400
- Gwasanaethu ynni gwynt y mor – 200
- Ynni`r mor – 60
- Cynhyrchu offer – 150 +
- Datgomisiynnu Wylfa A – 607
- Eraill - 100

Employment – jobs created

- Energy conservation – 95
- Installation of solar/PV – 100
- Biomass – 400
- Servicing offshore wind – 200
- Tidal and current – 60
- Equipment production - 150 +
- Decommissioning Wylfa A – 607
- Other - 100
Pe bai......
Should the day come......

- Gwrthnysig

- Gwyro adnoddau wrth yr agenda cynaliadwy

- Gadael etifeddiaeth anghyfrifol

- Perverse

- Divert resources from the sustainable agenda

- An irresponsible legacy
Yr angen am weledigaeth
The need for a vision

- Diogel
- Cynaliadwy
- Adnoddau cynhenid

........yn gynyddol economaidd

- Safe
- Sustainable
- Indigenous resources

......increasingly cost-effective
“Lle na bo weledigaeth, methu wna`r bobl”

“Where there is no vision, the people shall perish”

Diarhebion 29 : Adnod 18
Proverbs 29 : Verse 18