

ISLE OF ANGLESEY ENERGY SURVEY

This survey was commissioned by management consultants Mana-Cymru Ltd and carried out by Bangor University's School of Social Sciences.

Aim

The aim was to ask a sample of individuals from the Isle of Anglesey and adjoining areas in Gwynedd (Bangor, Bethesda, Felinheli)¹ about their knowledge of renewable energy, as well as ascertaining their opinion on the proposed development of Wylfa B.

Method

Using a formal questionnaire (see Appendix), 500 people were randomly asked for their opinions in July and August of 2010. Most of the interviews were carried out via a telephone survey (telephone numbers with the code 01407 and 01248). Individuals were also surveyed face to face in three locations – at the Anglesey Show, in Beaumaris and in Llangefni. The telephone directory was used to find the telephone numbers of possible respondents, choosing names at random (every 10th name on the page). If there was no reply the first time, an attempt was made to contact them on two further occasions, and then if there was no answer, the researcher moved on to the next name on the list.

Results

1. Composition of the Sample

1.1 Age

	Number	Percentage
Under 20 years of age	25	5%
21-35	102	20%
36-50	142	28%
51-65	119	24%
66+	112	22%

1.2 Sex

¹ With the area code 01248 only in Gwynedd.

235 men were surveyed (47%) and 265 women (53%).

1.3 Ability to speak Welsh

	Number	Percentage
Fluent Welsh Speaker	325	65%
Learning Welsh	30	6%
Not a Welsh speaker	145	29%

1.4 SocClass

	Number	Percentage
Professional	83	17%
White Collar/Administration	69	14%
Craft/Skilled	50	10%
Partially Skilled/Unskilled	81	16%
Unemployed	19	4%
Student	31	6%
House wife/husband	71	14%
Self-employed (farm)	20	4%
Self-employed (tourism)	14	3%
Self-employed (other)	19	4%
Retired/not given	43	9%

2. Questions on the Questionnaire

The total number of replies in the tables below is 500, unless otherwise noted

2.1 How long have you lived in Anglesey/Gwynedd?

	Number	Percentage
Always	325	65%
Over 20 years	100	20%
Between 10-19 years	45	9%

Less than 10 years	30	6%
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2.2 Have you heard of any of the following renewable energy sources?

In the following table, respondents could choose more than one answer:

	Number	Percentage of the entire sample
On-land wind farms	493	99%
Solar/photovoltaic power	481	96%
Wind farms at sea	471	94%
Hydro-electric power	437	87%
Wave machines	356	71%
Tide machines	343	69%
Biomass	335	67%
Total number of replies	2916	

2.3 How much information do you feel you have had about renewable energy sources generally?

	Number	Percentage
A lot	145	29%
A bit	210	42%
Not much	128	26%
None	17	3%

2.4 What is your opinion of renewable energy sources?

	Number	Percentage
Very good idea	177	35%
Good idea	279	56%
Bad idea	6	1%
Very bad idea	3	1%
No opinion	35	7%

2.5 In your opinion, could Wales produce enough energy from ‘green’ sources’ to meet its needs over the next few years?

	Number	Percentage
Yes, more than enough	57	11%
Probably, yes	180	36%
No	113	23%
Don’t know	150	30%

2.6 Which of the following would you like to see developed on Anglesey as a way of producing energy?

In the following table, respondents could choose more than one answer:

	Number	Percentage of the whole sample that agreed
Solar power	273	55%

Wave machines	267	53%
Wind farms	237	47%
Nuclear power	214	43%
Hydro-electric power	162	32%
Other	18	4%
<i>Total answers</i>	<i>1171</i>	

2.7 Have you heard of the possibility of building Wylfa B?

	Number	Percentage
Yes	487	97%
No	13	3%

2.8 If Wylfa B is built, what effect do you think 5,000 building workers will have on Anglesey?

	Number	Percentage
Good for Anglesey	359	72%
Bad for Anglesey	73	15%
No effect	7	1%
Don't know	61	12%

2.9 Did you know that there are about 500 decommissioning jobs available in Wylfa A when the present station comes to the end of its life?

	Number	Percentage
Yes	192	38%
No	308	62%

2.10 If more energy jobs were available on Anglesey, where would you like to see these being created:

In the following table, respondents could choose more than one answer:

	Number	Percentage of the whole sample that agreed
Alternative/Renewable energy	370	74%
Nuclear energy	175	35%
Unsure	72	14%
<i>Total answers</i>	<i>617</i>	

2.11 ‘Hot’ radioactive waste from Wylfa B will be stored on the surface of the site for 160 years – what do you think about this?

	Number	Percentage
It worries me a great deal	163	33%
It worries me a bit	165	33%
Doesn't worry me	138	28%
Don't know	34	7%

2.12 In your opinion, what would be the advantages of building Wylfa B?

In the following table, respondents could choose more than one answer:

	Number	Percentage of the whole sample that agreed
Work for people on Anglesey	439	88%
More money in the local economy	237	47%
Essential way of producing energy	163	33%
Other	7	1%
<i>Total answers</i>	<i>846</i>	

2.13 In your opinion, what would be the disadvantages of building Wylfa B?

In the following table, respondents could choose more than one answer:

	Number	Percentage of the whole sample that agreed
Pollute the environment	240	48%
Harmful effects on people's health	232	46%
Harmful effects on children's health	186	37%
Badly affect affect the Welsh language	100	20%
Danger to safety	71	14%
Badly affect affect farming	57	11%
Badly affect affect tourism	54	11%
<i>Total answers</i>	<i>940</i>	

Appendix

HOLIADUR AROLWG YNNI YNYS MÔN

ANGLESEY ENERGY QUESTIONNAIRE

[Gwnewch yn siŵr bod yr atebydd yn byw yn Ynys Môn/Gwynedd]

Rhan gyntaf i'w lenwi gan yr holwr

Oed: o dan 20 21 – 35 36 – 50 51 – 65 dros 66

Rhyw: Gwryw Benyw

Gallu'r Gymraeg:

Rhugl

Dysgwr

Dim

1. Beth yw/oedd eich gwaith?

What is/was your work?

[Holwr i lenwi'r isod yn ddiweddarach:]

Proffesiynol
 Coler Wen/Gweinyddu
 Coler las: Crefft/sgil
 Coler las: Hanner sgil/disgil
 Di-waith
 Gwraig/gŵr tŷ
 Myfyriwr/aig
 Hunangyflogedig (fferm)
 Hunangyflogedig (twristiaeth)
 Hunangyflogedig (arall)

2. Ers faint yr ydych chi wedi byw yn Ynys Môn/Gwynedd?

How long have you lived in Anglesey/Gwynedd?

Erioed	<i>Always</i>
Dros 20 mlynedd	<i>Over 20 years</i>
Rhwng 10 – 19 mlynedd	<i>Between 10-19 yrs</i>
Llai na 10 mlynedd	<i>Less than 10 yrs</i>

3. Gai ofyn i chi os ydych chi wedi clywed am unrhyw un o'r ffynonellau ynni adnewyddol canlynol?
(Ticiwch yr holl flychau priodol)

Can I ask you if you have heard about any of the following renewable energy sources?

Ffermydd gwynt ar y tir *Land wind farms*
 Ffermydd gwynt yn y môr *Sea wind farms*
 Biomass (llosgi pren neu gnydau) *Biomass (Burning wood or crops)*
 Pŵer hydro-electrig *Hydro Electric power*
 Peiriant tonnau *Wave machine*
 Peiriant llanw *Tidal machine*
 Pŵer solar/ffotofoltaidd *Solar/PV power*

4. Faint o wybodaeth ydych chi'n teimlo eich bod wedi ei gael am ffynonellau ynni adnewyddol yn gyffredinol?

How much information do you feel you have had about renewable energy sources generally?

Llawer	<i>A lot</i>
Ychydig	<i>Some</i>
Ychydig iawn	<i>Very little</i>
Dim	<i>None</i>

5. Beth yw eich barn chi ynglŷn â ffynonellau ynni adnewyddol?

What is your opinion of renewable energy sources?

Syniad da iawn	<i>Very good idea</i>
Syniad da	<i>Good idea</i>
Syniad drwg	<i>Bad idea</i>
Syniad drwg iawn	<i>Very bad idea</i>
Dim barn	<i>No opinion</i>

6. Yn eich barn chi, a fyddai Cymru'n medru cynhyrchu digon o ynni o ffynonellau 'gwyrdd' fel hyn i gwrdd â'i anghenion dros y blynyddoedd nesaf?

In your opinion, could Wales produce enough energy from 'green' sources to meet its needs over the next few years?

- | | | |
|----------------------|--------------------------|-----------------------------|
| Byddai, mwy na digon | <input type="checkbox"/> | <i>Yes more than enough</i> |
| Byddai mae'n debyg | <input type="checkbox"/> | <i>Yes probably</i> |
| Na fyddai | <input type="checkbox"/> | <i>No</i> |
| Ddim yn gwybod | <input type="checkbox"/> | <i>Don't know</i> |

7. Pa rai o'r canlynol fydddech yn hoffi ei weld yn cael ei ddatblygu yn Ynys Môn fel modd o greu ynni? (ticiwch bob un sy'n berthnasol)

Which of the following would you like to see developed in Anglesey as a way of producing energy?

- | | | |
|---------------------|--------------------------|-----------------------------|
| Ffermydd gwynt | <input type="checkbox"/> | <i>Wind farms</i> |
| Peiriant tonnau | <input type="checkbox"/> | <i>Wave machine</i> |
| Pŵer solar | <input type="checkbox"/> | <i>Solar power</i> |
| Pŵer hydro-electrig | <input type="checkbox"/> | <i>Hydro electric power</i> |
| Pŵer niwclear | <input type="checkbox"/> | <i>Nuclear power</i> |
| Arall | <input type="checkbox"/> | <i>Other</i> |

8. A ydych wedi clywed am y posibilrwydd o adeiladu Wylfa B?

Have you heard about the possibility of building Wylfa B?

- | | | |
|-------|--------------------------|-----|
| Do | <input type="checkbox"/> | Yes |
| Naddo | <input type="checkbox"/> | No |

9. Os bydd Wylfa B yn cael ei adeiladu, sut effaith ydych chi'n meddwl y bydd tua 5,000 o weithwyr adeiladu yn ei gael ar Ynys Môn?

If Wylfa B is built, what effect do you think 5000 building workers will have on Anglesey?

- | | | |
|------------------------|--------------------------|-------------------------------------|
| Bydd yn dda i Ynys Môn | <input type="checkbox"/> | <i>It will be good for Anglesey</i> |
|------------------------|--------------------------|-------------------------------------|

- Bydd yn ddrwg i Ynys Môn *It will be bad for Anglesey*
 Dim effaith *No effect*
 Dim yn gwybod *Don't know*

10. A oeddech chi'n gwybod fod tua 500 o swyddi datgomisiynu Wylfa A ar gael ar ôl i'r gwaith presennol ddod i ben?

Did you know that there are about 500 decommissioning jobs available in Wylfa A when the present station comes to the end of its life?

- Oeddwn *Yes*
 Nac oeddwn *No*

11. Pe bai mwy o swyddi ynni ar gael yn Ynys Môn, lle fydddech chi'n hoffi gweld y rhain yn cael eu creu:

If more energy jobs were available in Anglesey, where would you like to see these being created:

- Ynni niwclear *Nuclear power*
 Ynni amgen/adnewyddol (solar/PV; gwynt ayb.) *Alternative/renewable energy*
 Dim yn siŵr *Unsure*

12. Byddai gwastraff ymbelydrol poeth o Wylfa B yn cael ei gadw ar wyneb y safle am 160 o flynyddoedd – beth yw eich barn am hyn?

'Hot' reactive waste from Wylfa B will be stored on the surface of the site for 160 years – what do you think about this?

- Yn fy mhoeni'n fawr *It worries me a great deal*
 Yn fy mhoeni rywfaint *It worries me a bit*
 Ddim yn fy mhoeni *Doesn't worry me*
 Ddim yn gwybod *Don't know*

13. Beth fyddai manteision adeiladu Wylfa B yn eich barn chi?

In your opinion, what would be the advantages of building Wylfa B?

- Rhoi gwaith i bobl Môn *Work for people of Anglesey*
 Mwy o arian yn yr economi lleol *More money in the local economy*
 Ffordd angenrheidiol o gynhyrchu ynni *Essential way of producing energy*
 Arall (nodwch) Other (note)

14. Beth fyddai anfanteision adeiladu Wylfa B yn eich barn chi?
In your opinion, what would be the disadvantages of building Wylfa B?

- Effaith ddrwg ar dwristiaeth *Badly affect tourism*
- Effaith ddrwg ar amaethyddiaeth *Badly affect farming*
- Effaith ddrwg ar y Gymraeg *Badly affect the Welsh language*
- Llygru'r amgylchedd *Pollute the environment*
- Effaith andwyol ar iechyd pobl (ee.canser) *Harmful effects on people's health*
- Effaith andwyol ar iechyd plant (ee.canser) *Harmful effects on children's health*
- Peryglon diogelwch (ee agos at RAF Valley) *Security risks (eg closeness to RAF Valley)*

15. A oes gennych chi unrhyw sylwadau ychwanegol?
Do you have any other comments?

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Diolch am eich amser.
Thank you for your time.