



Helpu Cymru i leihau
ei Hôl Troed Carbon
Help Wales reduce
its Carbon Footprint



Llywodraeth Cynulliad Cymru
Welsh Assembly Government

www.cymru.gov.uk

A Low Carbon Revolution –
**The Welsh Assembly Government
Energy Policy Statement**

March 2010

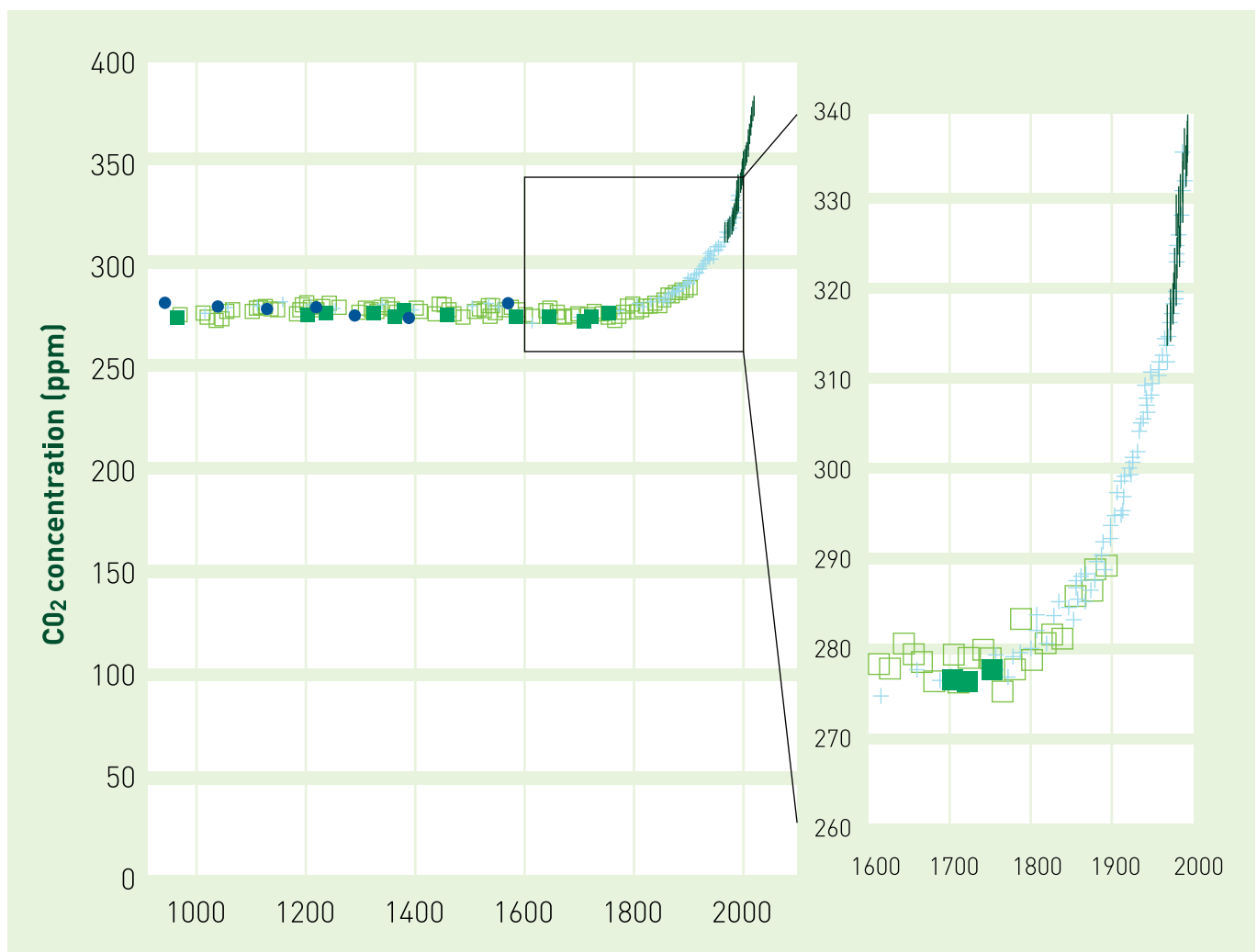


Based on Wales' natural advantages in areas such as wind and marine renewable resources, our **aim** will be to renewably generate up to twice as much electricity annually by 2025 as we use today and by 2050, at the latest, be in a position where almost all of our local energy needs, whether for heat, electrical power or vehicle transport, can be met by low carbon electricity production.

1.1 The challenge

Our Climate Change Strategy² has set out the huge challenges the planet faces in avoiding catastrophic climate change. Figure 1 provides a reminder of the scale of impact currently projected for greenhouse gases in the atmosphere.

Figure 1: Carbon dioxide (CO₂) concentrations (in parts per million) for the last 1000 years³



In addition to the threat posed by climate change, we also face increasing uncertainty about the future availability of fossil fuels as more countries compete for them and when a number of the remaining reserves face significant geopolitical issues. The United Nations Framework Convention on Climate Change Fifteenth Conference of Parties took place in Copenhagen from 7 to 18 December 2009. Although the final declaration did not produce the fair, ambitious and legally binding deal that the world needs, we must regard it as a starting point and focus positively on the next steps towards

² http://wales.gov.uk/topics/environmentcountryside/climate_change/tacklingchange/strategy/walesstrategy/?lang=en

³ David J.C. Mackay. *Sustainable Energy – without the hot air*. UIT Cambridge, 2008. ISBN 978-0-9544529-3-3. Available free online from www.withouthotair.com. p.6.



Figure 5 provides a table of current consent bodies for energy projects in Wales, and the proposed consenting bodies from 1 April 2010 on the establishment of the Infrastructure Planning Commission. Further information on consenting powers for energy installations in Wales is presented in the technical annexes which are available online at:

<http://wales.gov.uk/topics/environmentcountryside/energy/>

Figure 5: Current and proposed consent bodies for electricity installations

Installation size	Current consent body	Future consent body
>50 MW onshore	Secretary of State for Energy & Climate Change	Infrastructure Planning Commission
<50 MW onshore	Local authorities	Local authorities
>1 MW offshore	Secretary of State for Energy & Climate Change	Infrastructure Planning Commission
	Welsh Assembly Government (Under Transport & Works Act)	Marine Management Organisation & Welsh Assembly Government
<1 MW offshore	Welsh Assembly Government	Marine Management Organisation & Welsh Assembly Government

While we continue to believe it is anomalous that consents for large power stations are executively devolved to Scotland and not to Wales, we will work positively with the future Infrastructure Planning Commission and others to facilitate appropriate energy development in Wales in accordance with this statement. In particular we will support projects that meet sound sustainable development criteria (ref: Technical Annex 5) – recognising that for some technologies, such as nuclear power and large tidal range projects such as those under consideration for the Severn Estuary, what constitutes sustainable development is matter of considerable debate

This statement draws on the results of consultation on our Renewable Energy Route Map, our Bioenergy Action Plan and our Ministerial Marine Energy Policy Statement and reflects the latest UK Government policy position, the Economy and Transport Ministerial Advisory Group Report and UK Climate Change Committee and Wales Climate Change Commission deliberations.

These policies will be implemented through a rolling programme of sector actions and through strong public communication initiatives as part of our climate change programme. Further information about the devolved legal powers of the Welsh Assembly Government can be found in Technical Annex 3.

- liaising closely with DECC, BIS, UKTI and the UK Technology Strategy Board in international technology work, participating in the UK Energy Research Partnership⁹ and building on our links abroad;
- using Assembly Government sites and premises as exemplars for a low carbon future;
- further supporting the growth of renewable companies located in Wales – with companies such as Infinigy, Windpower Wales, Quiet Revolution, Dulas and ECO2 already showing the way;
- promoting Wales' position as a low carbon nation with greater resilience against fuel supply interruptions or price increases;
- working with local authorities to deliver the low carbon agenda in the exercise of their responsibilities;
- linking investments to community renewal and regeneration allowing individuals and communities to be more self-supporting;
- tackling fuel poverty at its roots through our major investment programmes;
- underpinning all this through the Wales Spatial Plan low carbon regions project.

The potential economic benefits of being at the forefront of transition to low carbon has already been flagged in the Wales Green Jobs Strategy consultation¹⁰, the new Whitehall Low Carbon Industrial Strategy¹¹ and in the WAG Ministerial Advisory Group on Economy and Transport's recent energy and transport sector development reports.

⁹ <http://www.energyresearchpartnership.org.uk/>

¹⁰ <http://wales.gov.uk/topics/businessandconomy/publications/greenjobs>

¹¹ <http://interactive.bis.gov.uk/lowcarbon/2009/07/low-carbon-industrial-strategy>



Appendix 1: Wales' 'sustainable' renewable energy potential to 2020/2025

Technology	Capacity either operational or consented (GW)*	Total capacity (GW)	Load factor (%)	Annual energy output (TWhr)	Deliverable in main by	kWh/d/p in Wales
Onshore wind	0.7	2	30	5	2015/17	4.5
Offshore wind	0.9	6	40	21 (Of which 20% is shared with England)	2015/16	15.5
Biomass (electricity)	0.5	1	75	7	2020	3 imports and 3 indigenous
Tidal range	0	8.5	25	18 (Of which 50% is shared with England)	2022	8
Tidal stream/ Wave	0	4	25	9	2025	8
Local electricity generation (mainly PV/ wind/hydro)	Data currently not available	1	10	1	2020	1
Electricity subtotals in Wales	2 GW	22.5GW	-	48		43

NB. Wales' current annual electricity consumption is around 23 TWhr

* Capacity either operational or consented as of 1 October 2009

