

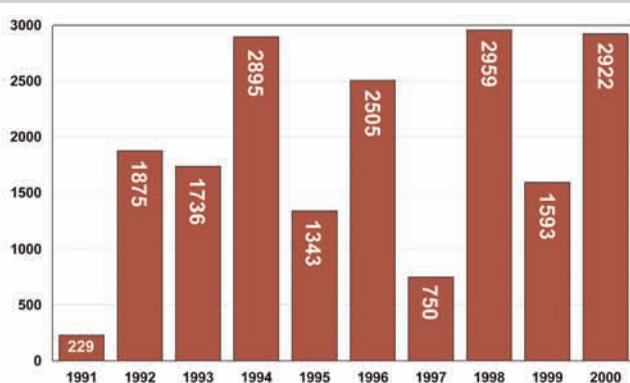
A Cuckoo in the Renewables Nest

IN 2000, THE ROYAL COMMISSION on Environmental Pollution published *Energy – the Changing Climate*, a report calling for a 60 per cent cut in UK emissions by 2050.

The government formalised its commitment to the Kyoto Protocol through the Utilities Act (2000).¹ It set a notional 10 per cent renewables generation target and began the Renewables Obligation consultation.

Within months, the Scottish Executive revised its Environmental Impact Assessment guidelines to make ‘more positive provision’ for renewable energy.²

NETA and the ‘Dash-for-Gas’



THE 1990s ‘DASH-FOR-GAS’ added 19,000 MW of CCGT (modern, gas-fired) capacity to the UK portfolio. Though the lowest emitter of any thermal source, CCGT does not ramp up or down quickly and so cannot back up wind – that needs (dirtier) conventional gas or coal plant. The ‘dash’ built the equivalent of eight Longannets in ten years.

NETA’s harsh discipline trashed prices during 2002 as over-capacity hit. Several stations were mothballed in the slump though some were revived later after winter shortage fears. As NETA also penalises failure to supply, generators raised backup levels using cheap-to-run but dirty coal-fired plant.

Just as a cash-starved industry was losing scope for investment, government forced it to install ‘renewable’ capacity on a timescale precluding R&D into firm technologies. Though heavy subsidies sweeten the pill, the resultant low-grade generation makes sustainable emissions cuts unlikely.

Coal closures and the gas frenzy did cut UK emissions pre-2000 but the causes were political – lacking roots in social change or innovative renewables technology, they were never going to be sustained.

VoS News is frequently asked for an outline of the political background to the wind energy crisis. The picture is certainly complex. There are policy statements on climate change, White Papers on energy, reports from OFGEM and consultations from the DTI on this or that.

There are Scottish equivalents, sometimes identical bar the tartan cover, sometimes not. Beneath-the-surface spats between Whitehall departments make some issues hard to interpret; an immature Holyrood polity coloured by a coalition makes for a Byzantine local picture.

And there is nothing like a failing policy to make paperwork obscure. Here is our attempt to make sense of the last half-decade in renewables.

However, March 2001 saw the introduction of the New Electricity Trading Arrangements (NETA) which aimed to curb generators abusing the then-current system to hike prices. The scheme achieved its aim but it also tended to undermine any structured renewables policy.

In June 2001, Ayrshire MP Brian Wilson was appointed UK Energy Minister and, within weeks, organised a now-infamous meeting at an exclusive Hebridean venue where:

‘ a high-powered group of people assembled . . . to focus on how renewable energy could be taken forward in the Western Isles and adjacent areas. My own recently-acquired position as energy minister had helped to get some of these people to Lewis ...’³

To link the projects, Wilson proposed the ‘Celtic Ring’, an interconnector from Lewis down the west coast joining the grid either at British Energy’s Ayrshire site or BNFL’s plant in Wales.

The idea, shelved on cost grounds, now seems hubristic fantasy but powering London’s Underground with windmills on Lewis and Sheffield’s trams with more on Shetland was seriously envisaged. Social, environmental or commercial costs were secondary. Nuclear giant British Energy announced the first of the quasi-colonial proposals and equally massive proposals for Lewis, Shetland and elsewhere quickly followed.

In December 2001, the Scottish Executive published *Scotland’s Renewable Resource 2001* (a no-holds-barred renewables prospectus written by wind-power consultants from Bristol) and a ScottishPower/SSE

British Energy fell victim to the 2002 slump – the claim that it was due to inherent nuclear costs is specious. Sidestepping public debate, Greenpeace legally challenged government loans, seeking to force BE's bankruptcy. The strategy failed – Greenpeace lost the case although BE lost plum assets, staff lost jobs and shareholders lost their money.

Re-nationalised in all but name, BE has since repaid the loans. The recent board-room coup was aimed at stiffening management ranks at nuclear's Lazarus in time for the technology's imminent 'top-down' rehab.

April 2005 saw Greenpeace Brent Spar eco-veteran Simon Reddy as a damp-squib wind apologist in Stornoway. But the group did object to BE/AMEC's proposal, leaving AMEC's man on Lewis 'upset'.

report on transmission issues. Soon after, it increased its 18%/2010 target to 30%/2020.

Canny observers noticed that UK and Scottish targets and 'aspirations' were diverging and that, at least in part, Westminster's policy was at odds with Holyrood's. The DTI wanted to implement New Labour orthodoxy with minimum political controversy. Attracted by Scotland's compliant regime and lax planning system, it looked for grid upgrades to allow gigawatts of Scottish renewable capacity to power the south – while discreetly commissioning research into new nuclear reactors.⁴

The Scottish Executive, on the other hand, saw a possible renewable energy boom and kudos for 'green' leadership. Constrained by a Westminster timetable that forced reliance on suspect technologies, it spurned anything other than token research and development. It was convinced that public money was better spent subsidising enterprises to make Scotland competitive in an already crowded, mid-tech market – tower manufacture and component assembly. What had failed in the marine sector would, it seems, work for wind power.

In February 2002, the Westminster Cabinet Office's Performance and Innovation Unit published its purportedly seminal *Energy Review*. Engineering academe was appalled at the low technical level of a paper which sought primarily to reassure (though not provide meaningful answers to) a Global Warming lobby already elevating climatology into a new Creationism.

Westminster launched its Renewables Obligations and Holyrood enacted an all-but identical Renewables Obligations (Scotland) in April 2002. Possibly to acknowledge hydro's existing contribution (the reason was never made completely clear), the Scottish Executive quickly raised local targets from ten to 18 per cent.

The Obligations were supply-side schemes which obliged the electricity industry to satisfy a growing proportion of demand from authorised 'renewable' sources. They created a market through regulatory intervention rather than natural demand and ignored demand-side initiatives such as energy efficiency.

The schemes, which are funded by levying users, offer lucrative prizes to those who achieve escalating targets, impose penalties on those who don't and seek to protect prices for generators. Suppliers can, and in some cases must, levy their consumers to the tune of what the DTI

forecasts will be £1 billion a year by 2010 – *whether or not targets are met*. Complex supervisory and trading mechanisms determine how the levies are distributed amongst suppliers.⁵

That May saw First Minister Jack McConnell open a nacelle assembly and tower manufacturing plant in a former naval yard at Campbeltown on the Mull of Kintyre. It was funded by £9.4 million of taxpayers' money and £3 million from Danish turbine maker Vestas.

Mr Millais changes trains

In June, Corin Millais quit as Greenpeace director to head the European Wind Energy Association. Within months, Greenpeace stiffened hitherto equivocal support for on-shore wind with aggressive if ill-informed promotions and selected interventions in planning applications. It was already marketing nPower Innogy's up-coming off-shore site.

In August, days before the Johannesburg Earth Summit, Ross Finnie published *Scotland's Renewable Energy Potential – Beyond 2010*. It outlined proposals to increase Scotland's renewables target to 40 per cent by 2020.

As Christmas 2002 approached, AMEC's Lewis project manager and BWEA chair David Still was seconded to the DTI as 'renewables advisor' for two-years. He is still there, advising his third Energy Minister.

The DTI and DEFRA published a long-awaited energy White Paper, *Our energy future - creating a low carbon economy* in February 2003. Seen by most as a fudge, it repeated stock renewables and hydrogen homilies, dodged the dangers of imported gas and 'kept the nuclear option open'.⁶

By March, Ross Finnie's *Securing A Renewable Future* confirmed Scotland's renewables targets at (an 'aspirational') 40 per cent although it was never clear what was forty per cent of what. Whether sloppy or sleight-of-hand, this has bedevilled colleagues ever since.⁷

In August, Jim Wallace opened Cambrian Engineering's tower manufacturing plant in another former naval yard, Arnish by Stornoway, amidst wide publicity. The project enjoyed £8 million of public backing.

Early 2003 thus saw Energy Minister Brian Wilson at his zenith with the Scottish Executive dancing to his tune, wind power's top man setting policy at the DTI, Greenpeace and chums 'on message' and the press generally supportive. Things looked good.

Sunday Times – 16 November 2002

Scottish windmills to power London

THE government plans to turn Scotland into the renewable energy powerhouse of Britain, with dozens of new wind farms and hydroelectric dams supplying London and other English cities with electricity.

Jonathan Leake
Environment Editor

particularly in the Highlands and Islands to help the development of renewable energy," he said.

than 3% of power generated. Britain has 75 land-based wind farms, supplying enough power for 349,000 homes and saving an estimated 1.4m tons in carbon dioxide emissions every year. A raft of planning

Wilson quit as minister in June.

Spring 2003 to summer 2004 were certainly heady days for wind, a hurly-burly of papers and conferences, speeches and proposals. Turbine makers promising jobs by the bucket-load rubbed shoulders with landscape architects, hard-nosed businessmen found they had been 'green' all along as Green MSPs dropped yesterday's campaigns and rushed to flatter; rookie graduates became Environmental Assessors overnight while parvenu landlords phoned north asking if there were pylons on the estate; conservationists sang hymns of praises to a technology they knew nothing about, eco-bureaucrats pressed the flesh with nuclear nobs by then on the turbine trail, and usually sober scientists, forgetting data, opted for belief.

Developers for one 70 sq mile site hired consultants for its EIA only to find that SNH had hired the same company to evaluate it. The company kept both contracts. Some artist highlighted the absurdity of it all when he proposed that turbine blades play tunes.⁸

Brian Wilson acknowledged Scotland's limited ability to absorb wind power when he (correctly) ridiculed greener-than-thou SNP posturing. On the stump for Holyrood colleagues in 2003, he wrote: 'No country can carry such a high proportion of renewables because of their inherent unpredictability – as Denmark has found with wind ... A high Scottish output has to be dispersed throughout the far larger markets of the south'. His warning was ignored.

Anyone who raised doubts was a party-pooing Nimby who could safely be ignored. Everyone pushed the fad, a new orthodoxy was born. The very name wind-power became synonymous in the public eye with the 'clean' energy spectrum: the cuckoo in the renewables nest had turfed out the fledglings.

Holyrood environment minister and LibDem Ross Finnie blinked briefly in the renewables limelight before disappearing into a netfull of angry fishermen. Ineffective enterprise minister Lewis Macdonald was replaced in October 2004 by Brian Wilson associate Allan Wilson. Robust January 2005 press interest brought LibDem Deputy First Minister Jim Wallace (overall Enterprise boss, hitherto quiet on renewables) to the fore. The musical chairs may be down to policy spats given flat-earth LibDem claims that wind will replace nuclear – while London is reviving it.

In reality, things were already strained. Edinburgh's free market fetish was even stronger than London's although both confused free market discipline with a subsidised free-for-all. The 'targets', Scotland's in particular, mixed grandstanding and ideology but lacked technical or commercial judgement. In engineering terms, they were absurd and, in ecological terms, almost certainly ineffective.

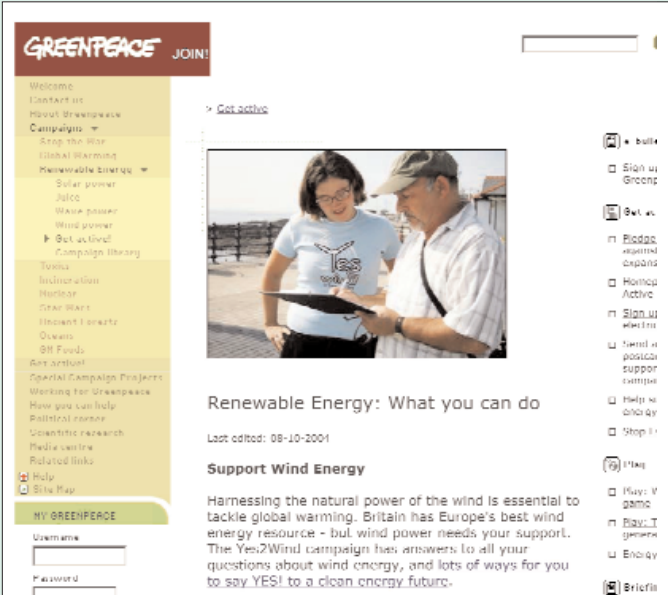
Many would-be investors lacked sector knowledge but, enticed by quick returns, rushed into an already hyperactive market. A forty-per cent target without strategic guidance or any key performance indication was open-ended and could only lead to 'irrational exuberance'.⁹

The first public reverse hit in February 2004: Cambrian Engineering, despite the public backing, collapsed after only seven months trading.¹⁰

April saw prominent economist Professor David Simpson report on his investigation into the economics of wind power to the David Hume Institute. His verdict was robust: the sums didn't add up, the RO schemes were a stealth tax underwriting a questionable technology.¹¹

In June, following a year-long inquiry, Holyrood's Enterprise and Culture Committee unanimously agreed *Renewable Energy in Scotland*, the first official Holyrood

Following its post-Millais Road-to-Damascus wind rethink and the cosy nPower Innogy deal, Greenpeace was caught short by European nuclear giant RWE's 2003 Innogy takeover. European colleagues had protested RWE's role in nuclear and lignite-coal generation with gusto: Greenpeace UK avoided awkward questions with traditional air-brushing and now sells RWE product. VoSNews suggests that if there were ever a symbol of wind-power's commercial unviability, it's the notion that you should be passing the hat round for nuclear-sector multi-nationals.



The screenshot shows the Greenpeace website interface. At the top left is the Greenpeace logo with a 'JOIN!' button. Below it is a navigation menu with categories like 'Campaigns', 'Global Warming', 'Renewable Energy', 'Solar power', 'Wind power', 'Water power', 'Biofuels', 'Energy', 'Transport', 'Climate Change', 'Pollution', 'Nuclear', 'Science', 'Media Centre', 'Help', and 'Site Map'. The main content area features a photo of two people looking at a document, with the heading 'Renewable Energy: What you can do' and a sub-heading 'Support Wind Energy'. Below this is a paragraph: 'Harnessing the natural power of the wind is essential to tackle global warming. Britain has Europe's best wind energy resource - but wind power needs your support. The Yes2Wind campaign has answers to all your questions about wind energy, and lots of ways for you to say YES! to a clean energy future.'

You can now buy clean, green electricity through a unique offering from npower and Greenpeace - JUICE. We are working together in partnership to ensure that a new way of generating truly climate friendly electricity really does happen. The project will pioneer wind power at sea in the UK and gives you the opportunity to buy your electricity generated from the natural power of the wind. This new product will help the development of a specific wind farm off the coast of North Wales.

You can now become involved in a real solution to the greatest environmental threat we currently face. It will also to send a clear message to government that there is mass support for clean and non-polluting offshore wind power so that they give this brilliant solution the support and finance it needs.

criticism of Executive energy policy. The report didn't satisfy trenchant critics but, in context, the indictment was damning particularly on the obsession with on-shore wind power. The Executive was dismissive.¹²

On July 6, Tony Blair, addressing a House of Commons committee, announced out of the blue that nuclear technology was back on the agenda, following 'lobbying from the US'. *The Scotsman* even named mooted sites.¹³

At least there was some light relief when London-based *Financial News's* CEO offered platform spots equally to pro- and anti-wind speakers at an Edinburgh press debate on July 23. The wind lobby's bigwig panel scarpereed at the last minute claiming audience vetting.¹⁴

July also saw *Renewable Energy: Practicalities*, a House of Lords committee report arguing that the Renewables Obligation scheme *guaranteed* that targets would not be met and deploring 'the minimal amounts that the Government have committed to renewable energy related R&D . . . If resources other than wind are to be exploited in the United Kingdom this has to change'.¹⁵

At the same time, technically-competent papers began to circulate reporting assimilation issues with wind power in Denmark, Germany and Ireland. Seemingly, not all was well in the wider wind scene – were the engineering Jeremiahs right after all?¹⁶

Cat quits bag

January 2005 saw publication of two separate papers reporting proposals for over 14,000MW of wind-power capacity already in Scotland's planning system – nearly double the capacity of its conventional power stations.¹⁷

Public concern was already mounting about wind-power's ability either to secure energy supply or cut CO₂ emissions. The Klondike was clearly out of control and the press, whose affair with the industry was waning, reported the story widely.

In public, trade group Scottish Renewables pushed a line that the 40%/2020 target could be met by a quarter hydro, a half wind and a quarter from yet-to-be-developed technologies. Talk of 250 sites was, they said, alarmism – planners will sort out good applications from bad.

In private, it was lobbying the Executive to 'cool current development aspirations' by imposing a ceiling on wind power, perhaps by introducing 'guidance' on cumulative impact to give grounds for refusal.

If Scottish Renewables claims have even a semblance of truth, where is the jobs bonanza?

The industry now concedes that grid security would be a 'significant issue' if wind were to meet more than a fifth of Scotland's demand. Many engineers fear the figure is much lower but even a fifth needs less than 4,000MW. Scotland could be covered in surplus turbines.

Despite local authority unrest, the Executive continues in denial. Jim Wallace issued a statement (oddly, from a lightweight trade liaison committee) saying that there is no problem – wind power will be developed only where 'stringent' planning procedures allow.

David Still chaired the British Wind Energy Association from 1998 to 2003. His DTI ministers include Brian Wilson (June 2001- June 2003), Stephen Timms (quit Sept 2004) and Mike O'Brien (still in post). Wilson later became Blair's sidekick touting Iraq and Afghanistan contracts for AMEC and others. (VoSNews Vol 2 No 1)

However, provided proposals meet fairly basic environmental criteria, there are few planning grounds for stopping them. In any case, the eighty-odd large applications that make up three quarters of the proposals went direct to the Executive. Not one has been rejected.

Although local authorities do nominally decide smaller applications, regulations exclude consideration of technical or commercial viability. In practice, except for private schemes, every rejection has been appealed and, to date, all but two over-turned.¹⁸ Local authorities and communities are being excluded from the process.

Despite the manifest failure of the planning system and mounting pressure from industry, local authorities, communities, environmentalists and now Westminster MPs, the Scottish Executive refuses to discuss a strategy for renewable energy. In despair, some local authorities are trying to evolve their own.

Early in February, the National Audit Office called for the Renewables Obligation scheme to be overhauled, saying it was 'over-subsidising' wind power.



An anemometry mast monitoring for a proposed North British Windpower site just by Fort William. Originally rejected by Highland Council, the Scottish Executive over-turned its decision.

In March, Westminster's Scottish Affairs Select Committee published *Meeting Scotland's Future Energy Needs*. Its members were as scathing as 'other place' colleagues. Unusually, they tried to examine jobs at risk from current energy policy rather than make pie-in-the-sky jobs claims. They even looked for lessons from overseas.

Three major Select Committees, two from Westminster and one from Holyrood, have now submitted powerful criticisms of New Labour's energy policy.

Meanwhile, nuclear's rehabilitation has been justified using climate-change arguments advanced by ardent opponents. Smart money is on new build by diktat after the party conference season.

The eco-bureaucracy's capitulation to the wind/nuclear industry has helped to achieve the one thing it did not want – nuclear's rehabilitation. The grim prospect is the imposition of new base-load nuclear build on an unwilling public, hundreds of useless turbines escalating energy costs but no new rapid-response thermal plant – without which wind-power does not even work. The credibility of viable renewables could be put at risk.

It's a mess.

Notes.

(Where a topic has been discussed in *VoS News* or other VoS publication, the reference is given.)

- 1 The 1997 Kyoto Protocol called for greenhouse gas (GHG) cuts to 5.2% below 1990 levels. It needed ratifying by the nations which produced at least 55% of the world's emissions, many of which were sceptical of what they saw as arbitrary targets and suspect science. After only 40% voted 'Yes', it had to be renegotiated. The new Kyoto Protocol



Turbine towers await shipment at Vestas' Kintyre plant, now laying off staff. Top: blades imported from Europe arrive at Leith. Scotland's only blade plant shut in 2004.

(NKP) of July 2001 cut the the target to 1.8% with most signatories, including the fastest-growing polluters such as China, India and Brazil, with no reductions commitments. NKP came into force on April 1 2005 with GHG emissions currently 15% above 1990 levels. (After Gurdgiev.)

- 2 Planning Advice Note *PAN45* was revised in January 2002.
- 3 Brian Wilson, *West Highland Free Press*, 25 July 2003. *VoS News* Vol 2 No 2, p10.
- 4 The National Grid's response to the *Energy Review* reported that the DTI commissioned studies 'on the potential developments and investment requirements on the transmission system to meet an additional 2,000MW, 4,000MW and 6,000MW of wind-generation located in Scotland'. National Grid Group plc, *Submission on Energy Policy – Key Issues for Consultation*, See *Scotland's Landscape – England's Windfarm*, S4.
- 5 Privatisation divided the industry into generators, who generate electricity and sell it to suppliers, and suppliers who sell to end users. *VoS Brief* No 2, *The ROC Scam*, (new edition in preparation).
- 6 Hydrogen is not an energy source but an energy *carrier*. Even optimists place the technology at prototype stage.
- 7 *VoS News* Vol 2 No 2, p2.
- 8 Despite publicity from ScottishPower, the proposal faded when a German rival claimed the idea. We may never get to see an eagle cut in half to the sound of *A Lark Ascending*.
- 9 The phrase is Alan Greenspan's. There are no proposals to measure whether Renewables Obligation levies do cut emissions. The evidence suggests they might well not..
- 10 The yard re-opened in February 2005 as CamCal Ltd with a dozen employees but we have no reports of orders. Vestas' Campbeltown plant recently laid off staff, other wind startups either collapsed or never materialised. *VoS News* Vol 2 No 2, Vol 2 No 3.
- 11 David Simpson, *Tilting at Windmills, the economics of wind power*, David Hume Institute, April 2004.
- 12 Enterprise & Culture Committee, Scottish Parliament, *Renewable Energy in Scotland*, June 2004. One committee member labelled the Executive's response 'anodyne and self-congratulatory'. *VoS News* Vol 2 No 1.
- 13 Blair reportedly changed the line within 45 minutes.
- 14 Wind sceptics included (*Changing Climate* contributor and former DoE scientist) Sir Martin Holdgate and energy specialist Professor Ian Fells. The quitters included FoE's Duncan McLaren, Airtricity's Eddie O'Connor and Andrew Garrad of wind-power consultants Garrad Hassan who had signed off *Scotland's Renewable Resources 2001*. The DTI soon hired PR gurus to plead wind's case. *VoS News* Vol 2 No 1.
- 15 House of Lords Science and Technology Committee, *Renewable Energy: Practicalities*, July 2004. Lengthy but mandatory reading.
- 16 ESB National Grid, *The Impact of Wind Power Generation in Ireland on the Operation of Conventional Plant and the Economic Implications*, 2004; E.On Netz, *Wind Report 2004*, D White, *Reduction in Carbon Dioxide emissions*, Renewable Energy Foundation, 2004.
- 17 Scottish Natural Heritage, *Renewables Trends in Scotland: Statistics and Analysis*, December 2004; Scottish Wind Assessment Project, *A Gazetteer of wind power in Scotland*, January 2005.
- 18 The Executive recently turned down a three-turbine scheme on designated land on Orkney. It's a start.