

# Speak Out!

## No to Nuclear, Yes to Wind

The Government urgently needs to find alternatives to oil, coal and gas to help stop global warming. The options are building more nuclear power stations or using renewable energy from the wind, waves and sun.

The decision should be easy. Renewable energy is affordable, safe and clean and the UK has some of the best renewable energy resources in Europe. Wind power at sea alone could meet our electricity needs three times over *and* bring thousands of jobs to the UK.

Nuclear power, on the other hand, is expensive, dangerous and produces deadly radioactive waste that poses a threat to our health and the environment for hundreds of thousands of years.

Yet, despite the risks of nuclear power and massive public opposition, the Government is seriously considering giving the go-ahead for building more nuclear power stations across the UK. If we want to be sure the Government makes the right choice, we need to speak out.



**GREENPEACE**

# What's wrong with nuclear power?

- **It's dirty.** Existing UK nuclear power stations will leave us a legacy of half a million tonnes of nuclear waste<sup>1</sup> which the Government has no idea how to dispose of safely. This waste will remain a threat to our health and the environment for hundreds of thousands of years. Allowing industry to build ten more nuclear power stations would nearly double the amount of the most dangerous radioactive wastes we have to deal with.<sup>2</sup>
- **It's expensive.** The clean-up costs for the existing UK nuclear industry have been estimated to be at least £55 billion pounds.<sup>3</sup> Nearly all of this will have to be paid by taxpayers. This amount could pay for 360 new general hospitals or more than 4500 new secondary schools.
- **It's no solution to global warming.** Replacing one environmentally destructive form of producing energy with another is no solution for the planet.
- **It's polluting.** Every day, nuclear power stations pump radioactive pollution into the sea and air. These emissions can travel hundreds of kilometres on the wind and in water, exposing fish, farm animals, wildlife and people to deadly radiation. The Irish Sea is now the most radioactively contaminated sea in the world because of discharges from the Sellafield nuclear plant.
- **It's bad for your health.** One particle of plutonium, smaller than a speck of dust, can cause fatal lung-cancer. Even minute doses of radiation, inhaled or eaten in contaminated food, can cause cancer and other serious health problems. For instance, the children of men exposed to radiation while working at the Sellafield nuclear plant have twice the risk of developing leukaemia.<sup>4</sup>
- **It's dangerous.** The nuclear industry transports thousands of tonnes of nuclear materials around the country by road, rail and sea every year. A serious accident or terrorist attack involving just one nuclear waste canister could force the evacuation of a large part of a city like London. Recently a nuclear train collided with a lorry near Dungeness nuclear power station – luckily the flasks were empty.
- **It's unpopular.** A recent MORI poll found that 41% of the public would be less likely to vote for a political party that supported nuclear power.<sup>5</sup>
- **It's fuel for the arms race.** Producing nuclear power creates plutonium, the key ingredient in nuclear weapons. The British nuclear industry has already created the largest mountain of 'civil' plutonium in the world.<sup>6</sup> The only way to end the nuclear threat is to stop producing plutonium.
- **It's a potential terrorist target.** Nuclear power stations are vulnerable to terrorist attack. US authorities have indicated that the fourth plane hijacked on September 11th was heading for the nuclear power plant at Three Mile Island. In the UK, MI5 has identified British nuclear power stations as likely targets for terrorist attacks.

**Why face this catalogue of threats when all of our energy needs could be met through safe, clean renewable sources of energy such as the wind, waves and sun?**



# What's right about renewable energy?

- **It's clean.** Renewable energy poses none of the environmental or health threats of nuclear power, produces no dangerous waste, and does not contribute to global warming.
- **It's cheap.** The first offshore wind turbines in the UK are producing power more cheaply than our newest nuclear power station. The Government's own figures show that wind – both on land and at sea – will be cheaper than nuclear power in 2020.<sup>7</sup>
- **It's abundant.** The UK can meet all its electricity needs by harnessing just three truly clean renewable resources: wind, solar and wave. Wind power at sea alone could meet all the UK's electricity needs three times over.<sup>8</sup>
- **It works.** Denmark already gets nearly 20% of its electricity from renewable sources. One farm of just 660 wind turbines at sea could produce as much power as the UK's largest nuclear power station.<sup>8</sup> Developers in Sweden are already planning for a wind farm over twice this size.
- **It's reliable.** With a full range of renewables like wind, wave, and solar, you can create a balanced, secure national energy system, without the need for dangerous nuclear power or dirty fossil fuels. Technology is also being developed to store renewable energy in fuel cells at power stations and in vehicles.
- **It creates jobs.** Renewable energy could bring thousands of new jobs to the UK, many of them using the offshore engineering skills used by the declining oil and gas industry. If offshore wind were developed to supply just 10% of Britain's electricity, 36,000 jobs could be created.<sup>10</sup>
- **It's safe.** Wind and wave farms or solar panels are unlikely terrorist targets.
- **It's popular.** A recent MORI poll showed 72% of people prefer renewable energy to nuclear power.<sup>11</sup>
- **It's the right direction for Britain.** The UK could be the world leader in renewable energy technology. Currently, the UK generates less energy from renewables than nearly every other country in Europe – 2.6% of our total energy use. Other countries are much more ambitious. As part of its policy to phase out nuclear power, the German Government has plans for an offshore wind programme that is 17 times bigger than the UK's offshore plans, despite having only a quarter of the UK's offshore wind resource.



**Unlike fossil fuels, wind, waves and sun will always be with us. Unlike nuclear power, they produce no waste and present no danger of meltdown or terrorist attack.**

*The Times, 24 April 2002*

# Speak Out!

No to Nuclear, Yes to Wind

Greenpeace is calling on the Government to choose clean energy now.

- **End nuclear power**  
Say no to building more nuclear power stations.
- **Shift to renewables**  
Set a target of meeting at least a third of our current electricity demand from renewable energy by 2020.
- **Promote energy efficiency**  
Undertake a massive energy efficiency programme to make our homes, offices and new products waste less energy.

Here's how you can help.

- **Write to Patricia Hewitt, the Secretary of State for Trade and Industry**  
Ask her to listen to public feeling on renewable energy and nuclear power. She can be contacted at:

**The Department of Trade and Industry**  
1 Victoria Street  
London SW1H 0ET  
Tel 020 7215 5621  
Fax 020 7215 5468  
[mpst.hewitt@dti.gsi.gov.uk](mailto:mpst.hewitt@dti.gsi.gov.uk)

- **Sign up to Juice**  
You can now get clean electricity supplied to your home from renewable energy, thanks to a unique partnership between npower and Greenpeace.  
Call 0800 316 2610 or visit [www.npower.com/juice](http://www.npower.com/juice)
- **Visit [www.greenpeace.org.uk](http://www.greenpeace.org.uk)**  
Find out more about how you can make a difference



Barely visible from the shore, wind farms in these locations alone could replace nuclear power in the UK – meeting 25% of current electricity demand. There is potential for many more wind farms off the coast of other areas.

<sup>1</sup> Financial Times (3 May 2002).

<sup>2</sup> British Energy letter to Greenpeace (1 July 2002) confirms that eight new nuclear reactors would produce 13000 tonnes of spent fuel uranium; this makes each as dirty as Sizewell B.

<sup>3</sup> cf. Secretary of State for Environment (18 October 2001). House of Commons [Q4672]. Final costing will depend on what waste management strategies the Government adopts.

<sup>4</sup> 'Leukaemia and non Hodgkin's lymphoma in children of male Sellafield radiation workers – Int. Journal Cancer 99, 427-444 (2002).

<sup>5</sup> MORI poll undertaken for Greenpeace (17-21 May 2002). Visit [www.mori.com](http://www.mori.com)

<sup>6</sup> David Albright, Frans Berkhout and William Walker (1997) *World Inventory of Plutonium and Highly Enriched Uranium*.

<sup>7</sup> *The Energy Review* (annex 6), The Performance and Innovation Unit (February 2002).

<sup>8</sup> *Figures* from Study of Offshore Wind in the EC, Matties, H.G., et al. (1995). JOUR 0072, Verlag Naturliche Energie.

<sup>9</sup> Assuming 660 x 3.6MW turbines, and load factor of 35%. Cf. Sizewell B –1200MW, 70% load factor.

<sup>10</sup> *Border Wind* (1998). *Offshore Wind Energy – Building a New Industry for Britain*, Border Wind 1998

<sup>11</sup> MORI poll undertaken for Greenpeace (17-21 May 2002). Visit [www.mori.com](http://www.mori.com)