



Hunterston Coal Fired Power Station Proposal

October 2010

Say no to new coal at Hunterston

The proposed powerstation at Hunterston would be a disaster for the climate, for biodiversity and for the health and prosperity of communities, both here in Scotland and abroad. The good news is that we don't need it. By investing in renewable grid infrastructure, we can keep the lights on, boost employment, and lead the world towards fossil free electricity generation.

Friends of the Earth Scotland urges the Scottish Government to say no to new coal at Hunterston - for the local area, for Scotland, and for global justice.

Bad for global justice

A coal-fired powerstation at Hunterston is incompatible with Scotland's carbon reduction targets and duties under the Climate Change Act. The proposed new powerstation at Hunterston will be pumping out *at least* 8 million tones per year for *at least* a decade¹ – i.e. the time period that matters most, when scientists concur that global emissions must begin to decline, if we want to leave a habitable planet for our children. By 2020 this will be equivalent to a quarter of Scotland's entire emissions budget. This would make a mockery of Scotland's climate change ambitions and have a very negative effect on individual motivation to reduce carbon emissions.

Supplying biomass on the scale proposed is likely to contribute to the destruction of tropical forests and cause hunger and food insecurity. Demand for biomass has already outstripped supply in the UK, so meeting this enormous new demand will require about 80,000 hectares worth of overseas forest every year. There's a real risk that this will come from low-cost, unsustainable operations in tropical forest regions, or from land which is needed for food crops. Europe's demand for biomass is causing hunger and food insecurity for communities across the world, particularly in Africa².

The environmental and social impacts of coal mining are unacceptable. Coal mining, particularly opencast mining, is one of the most environmentally destructive processes known. In several countries – including Colombia, which is one of the cheapest sources of coal on the global market, and is identified as a likely source for this development - the mining industry is associated with abuses of human rights and labour rights, and is responsible for causing major river pollution from toxic tailings, and widespread respiratory ill-health.

Bad for Scotland

A new powerstation at Hunterston could undermine more socially and economically valuable investments elsewhere in Scotland. There are advanced plans for a retrofit Carbon Capture and Storage trial at Longannet in Fife. Such a trial would have more value, both economically and environmentally, than the new-build CCS planned for Hunterston, because it is the commercial viability of *retrofit* CCS for existing power stations around the world that so urgently needs to be demonstrated, and which will deliver real carbon reductions. Given the Government's target of an 80% decarbonised energy supply by 2020, the new generation capacity at Hunterston would almost certainly displace the demand for capacity at Longannet³.

Furthermore, **Ayrshire Power will need significant government subsidies to proceed with the £2.5-£3billion construction project**, whilst delivering just 160 permanent jobs⁴. By contrast, research by Scottish Enterprise and Highlands & Islands Enterprise has found that if less than a tenth of that investment were put into improving the energy infrastructure for offshore green energy industry, it would support the creation of over 5000 jobs⁵. Indeed the evidence is widespread that renewables and energy conservation offer more employment (and greater local employment multipliers) than coal⁶.

The development would create significant, unnecessary, risks and liabilities for Scotland. If full scale CCS fails to prove commercially viable it is the Scottish Government and the consumer / taxpayer, who will face the tab for subsequent development. Contrary to guidelines for CCS developments, Ayrshire Power have identified just one potential storage site; if this proves unviable or insufficient – a very real risk given the uncertainties⁷ surrounding this technology – Scotland may have to bear the extra costs of transport of CO₂ to alternative storage locations.

New coal is not necessary to ensure energy security for Scotland. An independent analysis by leading energy consultancy Garrad Hassan⁸ reveals that additional thermal capacity is neither necessary to meet Scotland's energy needs, nor desirable on cost grounds. Instead their analysis confirms the findings of a Europe wide study for the European Climate Foundation⁹, that with improved interconnection, and no more than small additional investments in energy storage and deferrable demand, it is entirely possible to overcome the variability of renewable power, which Scotland has in such abundance. Such an approach would cost no more than thermal back-up with CCS, but crucially would enable Scotland to lead the way towards a zero-carbon electricity system, become a net exporter of clean energy, and deliver long term energy security.

Bad for the local economy

The proposed plant would destroy an area of scenic beauty, and introduce visual, noise, and air pollution to an area whose local economy is heavily reliant on tourism. Meanwhile, the construction phase employment could have long-term negative effects as has been recorded for previous major construction projects such as the Milford Haven Refinery or the Torness nuclear plant, where there was significant in-migration, and major local economic distortions.

Bad for biodiversity and wildlife

Building a new power station at Hunterston would destroy a substantial part of the Portencross Coast Site of Special Scientific Interest (SSSI), resulting in the loss of over 30 ha of rare intertidal habitats – important feeding grounds for a range of waterfowl and waders. The proposed powerstation would also raise local temperatures in the Clyde by as much as 14°C for prolonged periods of time, which could have unpredictable and damaging impacts on key species, for example through proliferation of invasive non-native species¹⁰. The 'once through direct cooling' technology proposed to mitigate against this threat of thermal pollution is not the legally required Best Available Technology; there are environmentally preferable techniques for cooling, already being deployed in the USA.¹¹

Friends of the Earth Scotland is just one member of a broad and growing coalition of community groups and NGOs that is determined to prevent the proposed powerstation at Hunterston from going ahead – including residents of Largs, Fairlie and West Kilbride, Oxfam, Christian Aid Scotland, the Church of Scotland, RSPB Scotland, WWF Scotland, the Scottish Wildlife Trust, and the World Development Movement Scotland. <http://www.foe-scotland.org.uk/hunterston>

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¹ See FoE Scotland's Formal Objection to Hunterston Power Station, <http://www.foe-scotland.org.uk/node/803>

² Friends of the Earth Europe (Aug 2010). 'Africa: Up For Grabs' www.foeeurope.org/agrofuels/FoEE_Africa_up_for_grabs_2010.pdf

³ Garrad Hassan (in press), The Power of Scotland Secured, shortly available at www.foe-scotland.org.uk

⁴ <http://www.ayrshirepower.co.uk/faqs>

⁵ <http://www.scottish-enterprise.presscentre.com/Press-releases/Renewables-plan-could-create-5-000-manufacturing-jobs-25f.aspx>;

⁶ Daniel Kammen, Kamal Kapadia, and Matthias Fripp, "Putting Renewables to Work: How Many Jobs Can the Clean Energy Industry Create?" UC Berkeley: Renewable and Appropriate Energy Laboratory (RAEL), April 2004 (updated January 2006), 12

⁷ See, for example, Christine Ehlig-Economides & Michael J. Economides, "Sequestering carbon dioxide in a closed underground volume", Journal of Petroleum Science and Engineering 70 (2010) 123–130. Their research suggested that capturing the CO₂ from a powerstation the size of Hunterston would require an underground reservoir the size of four US states. They state: "our very sobering conclusion is that underground carbon dioxide sequestration via bulk CO₂ injection is not feasible at any cost."

⁸ Garrad Hassan (in press), The Power of Scotland Secured, shortly available at www.foe-scotland.org.uk

⁹ <http://www.roadmap2050.eu/>

¹⁰ http://www.rspb.org.uk/Images/Hunterston_tcm9-255891.pdf

¹¹ Independent BAT assessment for Pembroke power station cooling water discharge, Cambrensis Ltd, 2008, CCW Contract Science Report No 846