The Renewable Rape of Scotland

Scottish Tory MEP Struan Stevenson has lent his whole-heared support to a campaign by Communities Against Turbines (Scotland) against the scandal of industrial wind developments in Scotland. Speaking at Ballantrae Community Centre tonight (Tuesday 9th August 2011), Mr Stevenson delivered the following speech:

Chambers Dictionary defines the word RAPE as meaning violation, despoiling or abuse. I have chosen this evocative word as the title of my presentation this evening, not as an emotive gesture or a cheap gibe against the renewable energy sector, but as an accurate description of the scandal of industrial wind developments in our nation today. I intend to demonstrate this evening how industrial wind developments encompass all three of these descriptive words. Wind turbines violate the principle of fairness by transferring vast amounts of money from the poor to the rich. They despoil our unique landscape and environment; and through noise, the flicker-effect and vibration, they abuse the health and welfare of people and animals which have to live near them.

The Financial Scandal

Let me start with the financial scandal of industrial wind developments. There are currently around 3,500 turbines operating in the UK with a capacity to generate 5.5 gigawatts of energy. Another 1200 are under construction and around 2000 more have planning permission. A further 3,500 are in the planning pipeline. Britain will soon be bristling with these giant turbines. There will be few places left in our countryside from which you will not be able to see a massive turbine and its associated pylons and overhead lines. The installed cost of these 3,500 turbines that are already operating amounts to a staggering £7 billion and yet they can produce little more electricity than a medium sized gas or coal-fired power station. This is an escalating financial scandal which threatens to undermine the whole energy sector.

And rest assured, even once all 10,000 of these turbines are up and running, it will not be nearly enough to achieve the UK target of 15% renewable energy by 2020, or the even more ludicrous 100% target set by the Scottish government. To reach these targets we will need a six-fold increase in giant turbines, or 60,000 of them across the UK, many of them in Scotland. Many of them right here on our coastline. And they are going to get taller and taller. There are already 150 metre high turbines being installed in England and they will soon be commonplace here too.

So what has caused this sudden race for renewables? The answer is simple....money! Generous ROCs (Renewable Obligation Certificates) and feed-in tariffs mean that power companies and landowners are awash with subsidy as they scramble to meet the Government's targets. When Alex Salmond opened the latest extension to Europe's biggest windfarm at Whitelee, South of Glasgow, he exclaimed that we were successfully exploiting a 'free' resource. Far from being free, this trickle of electricity now being

produced by windfarms across the UK is twice as expensive as nuclear, gas or coal-fired plants which provide us with 90% of our needs.

Those who claim that off-shore wind developments will provide the answer, are also well off track. The Royal Academy of Engineering recently calculated that the cost of a kilowatt hour of electricity produced by an offshore wind turbine is 7.2p, compared to 2.2p from gas, 2.3p from nuclear and 2.5p from coal. The big power companies are no longer farming wind, they are farming subsidies and the poor consumers will have to foot the bill.

During the coldest parts of winter, when temperatures plummet and there is no wind for days on end, Scotland's wind turbines will be standing idle while we shiver in the cold. The load factor for the 14 months from November 2009 to December 2010 in Scotland for installed turbines was around 22%. In other words, our turbines produced electricity at only 22% of their capacity. In December 2010 when temperatures fell below minus 15 degrees Centigrade in parts of the UK, wholesale electricity prices surged.

Peak demand for the UK on 20th December last year was just over 60,000 megawatts. Yet, because there was virtually no wind, energy produced by all of our installed wind turbines contributed a pathetic 52 megawatts. Despite billions of pounds of investment and limitless subsidies, our wind turbine fleet was producing a feeble 2.43% of its own capacity - and little more than 0.2% of the nation's electricity needs.

That is why every single megawatt of generating capacity from our on-shore and offshore wind farms will need to be matched by a back-up supply from high CO2 emitting fossil-fuel gas or coal-fired plants, which nobody in the Scottish government is planning for. And since the SNP government has already ruled out any new nuclear plants in Scotland, we can be certain of one thing, we'll have to import nuclear-generated electricity from England, or the lights are going to go out.

The recent gigantic hike in electricity and gas bills are directly related to this renewable madness. ScottishPower unveiled a record 19% increase in their gas bills last month together with a 10% rise for electricity consumers. British Gas followed with an 18% increase. Scottish & Southern announced an 11% increase for electricity consumers and 18% for gas. Centrica beat them both with a whopping 18% gas bill increase and a staggering 16% increase for electricity consumers, despite posting half year profits of over £1.3 billion. Npower, EDF, E.On and Eneco, and all the others have followed suit. So much for UK Energy Secretary - Chris Huhne's prediction that our bills would only rise by a very manageable £160 on average, by 2030. Centrica's mammoth increase last month has added nearly £200 to average bills in one go!

So the big power companies are raking it in from the consumers and posting profits that have soared to billions every year. No surprise there! But why are British landowners so keen to have their farms and estates industrialised. Again, money is the driver. The feed-in-tariffs net millions annually for the big estates, that's why The Earl of Glasgow, the

Duke of Roxburghe, the Duke of Beaufort and our very own Lord Inchcape are all cashing in.

Sir Reginald Sheffield, the Prime Minister's father-in-law, will net an estimated £3.5 million a year for the 8 turbines built on his 3,000 acre estate in Lincolnshire. Crown Estates, one of the richest bodies in the country, will net billions from leasing large tracts of seabed for offshore wind developments.

In April it was reported that six windfarms in Scotland were paid £900,000 to switch off their turbines for one night, to avoid overloading the grid! The money just pours in, whether the turbines are operating or not.

So where is all this money coming from? If farmers and landowners are to be paid all this money every year for the feed-in-tariffs who is footing the bill?

Well is should come as no surprise to learn that it is you and me, the consumers who have to cough up. International experience to date has demonstrated that industrial windpower is unviable without heavy government subsidies and inflated feed-in-tariffs. In every country where wind turbines have been installed they have failed to demonstrate economic feasibility, they have failed to demonstrate viability as a solution to global-warming, they have failed to achieve significant CO2 reduction, and they have failed to provide efficient electricity production or protection of the environment.

Indeed in countries where industrial wind power has been added to the grid in any volume, consumer costs have skyrocketed. The two countries with the highest numbers of installed commercial wind turbines, Germany and Denmark, now have the highest electricity bills in Europe. And yet in Germany, Der Spiegel reported in a recent article that despite 20,000 installed turbines, CO2 emissions have not been reduced by even a single gram, because additional coal-burning plants have had to be built to support wind power.

In the UK, the introduction of de-stabilising wind energy to the grid has meant extensive resort to gas burning facilities and greatly increased consumption of gas.

This is what is dramatically driving up the price of gas here. In Spain, a recent study by Juan Carlos University has laid the blame for the country's worsening economic crisis on the wind industry. The report states that the surging price of electricity has driven most of Spain's large energy consumers out of the country.

What we are witnessing is a dramatic transfer of money from the poor to the rich; from the beleaguered consumers to the wealthy estate owners and power companies. In July, the Department of Energy in Whitehall revealed that rising bills have pushed 5.5 million households into fuel poverty – one fifth of British homes. With even colder weather in Scotland, the situation is likely to be even worse here. The most vulnerable people in society will be forced to make the choice between food or fuel. This is a scandal of unparalleled proportions and that is why it is necessary to speak out now.

While I can sympathise with farmers who have suffered years of economic hardship and are attracted by lurid adverts like the one on the back of the NFU's 'Scottish Farming Leader' magazine, which promises a return of up to £390,000 per annum for every turbine installed, I would caution those farmers to take a close look at what has happened to these seemingly endless windfalls in some other EU Member States.

Italy's government has just passed a decree that will end subsidies for wind turbines and could spell an abrupt end to its renewable energy boom. This comes hot on the heels of a number of other countries cutting back on solar and wind subsidies throughout Europe — mainly due to their high costs to consumers and technical problems integrating these sources into the existing infrastructure.

So don't believe the slick salesmen who guarantee you tens of thousands of pounds per year for the next twenty years. The next economic blip could see the ROCs cut and the feed-in-tariffs abandoned and you will have a giant steel turbine on your farm which rots quietly away without earning you a penny.

Landscape Vandalism

Now let me turn my focus on the landscape, one of our greatest Scottish assets and one on which our burgeoning tourist industry depends.

It seems that nowhere in our pristine landscape is safe from the avaricious attention of the industrial wind developers. From Shetland to Lewis, from Dava Moor on the edge of the Cairngorms National Park to the shores of Loch Ness, from the beautiful Scottish Borders to our own unspoiled Ayrshire coast, nothing is sacred. The government has given approval to the controversial Beauly-Denny overhead line, necessary to carry wind generated energy to the national grid, despite the fact that it will scar some of Scotland's loveliest scenery and run right past the iconic Stirling Castle.

Only two weeks ago, plans were unveiled for a monstrous windfarm development overlooking Urquhart Castle on the shores of Loch Ness. A series of planning approvals will lead to more than 150 giant turbines sprouting across the moors around Loch Ness, Scotland's most famous loch, renowned worldwide and a major source of tourist revenue. And if this wasn't bad enough, the developers hack down forests and dig up peat bogs to facilitate their industrial developments.

The Forestry Commission's Annual Report had an interesting statistic hidden away in the small print this year which revealed that in the past decade, they have cut down between 12,000 and 25,000 acres of trees in Scotland to make way for windfarms. That equates to around 25 million trees and this at a time when Government targets are calling for 25% of our land area in Scotland to be covered by trees, necessitating the planting of 25,000 acres of trees every year. While we argue about costly new technologies to capture and store carbon in depleted undersea oil and gas wells, we crazily fell vast swathes of forest every year, destroying nature's own carbon capture and storage system.

Worse still, we are digging up peat bogs all across Scotland to construct industrial wind developments. Peatland is Europe's equivalent of rainforest and it constitutes a vital component of the world's natural air conditioning system. Peatland and wetland ecosystems accumulate plant material and rotting trees under saturated conditions to form layers of peat soil up to 20 metres thick – storing on average 10 times more carbon per hectare than other ecosystems. But vast areas of carbon-capturing peat bogs in Scotland are being torn up to make way for so-called 'green' energy projects like windfarms, rendering the whole process carbon-negative.

Taken together with the construction of the mammoth steel towers, huge blades, vast concrete foundations under every turbine, quarries, borrow pits, drains, 'floating' roads, overhead power-lines and pylons, the carbon footprint from every windfarm built on deep peat far exceeds any environmental savings it may aspire to. Each turbine requires 60 lorries of concrete and 28 tonnes of steel for its foundation alone. The 'floating roads' which are made to sound as if they can defy gravity by floating over the surface of peat bogs, actually require tens of thousands of tonnes of rock foundation, which cuts off the water flow to the bog and causes the peat to dry out, releasing millions of years of stored CO2 into the atmosphere.

Much of the Whitelee windfarm on the Eaglesham Moor was built over deep peat. Whitelee was developed and is operated by ScottishPower Renewables, which is part of the Spanish company Iberdrola. Over 1,500 acres of forestry was cut down to facilitate the project. This type of landscape vandalism, which releases vast quantities of CO2 into the atmosphere, has now become commonplace in Scotland. It has to stop. We have to protect the ecosystem services provided by our forests and peat bogs and stop their wanton destruction by greedy power companies and landowners.

And the environmental destruction associated with windfarms doesn't stop there. Wind turbines require powerful magnets as a key component in their generators.

These magnets are made from neodymium, which is extracted from rare earth metals in an industrial process that creates huge toxic wastelands in parts of China, poisoning land, crops, animals and people. So much for the so-called 'green' credentials of renewable wind developments.

Human and Animal Abuse

The construction of wind developments also has a direct impact on wildlife habitats, protected species of birds and ecologically fragile water courses. With the global race on to build mega wind turbines with a 275 metre wingspan, the time has come to pull the plug on this madness. Those of you who regularly travel past the single turbine built at Bridgemill in Girvan will not have failed to see the constant supply of dead seagulls that litter the roadside. And remember this is a turbine that has to be switched off at night to stop it killing bats, because they are a protected species.

Turbines chop up rare birds, including white-tailed eagles in Norway and Golden Eagles in California. Their constant low frequency noise and vibrations are intolerable to livestock and wildlife. There are innumerable reports of the long-term, irreversible and destructive impact that industrial turbines have on wildlife leading to abandoned habitats, as well as the negative impact on livestock performance and production.

And of course, if animals suffer such consequences, it is easy to understand why humans are driven to despair when giant turbines are built near to their homes. Low frequency sounds that travel easily and vary according to the wind constitute a permanent risk to people exposed to them. The effects of such broad-spectrum low-intensity noise, especially at night, combined with shadow flicker and vibration, which can affect individuals indoors as well as outdoors, have caused people to abandon their homes in distress and ill health. The profits being made by the landowners and power companies is at the expense of people's lives.

What is the Answer?

I don't want to end on a negative note with people accusing me of attacking renewable wind energy without offering any viable alternative. I believe that we can save 75% of the energy we currently use by being more efficient. It is shocking that we still allow homes to be built in Scotland with single-glazed windows and no loft insulation. Triple glazing and proper insulation would cut our energy bills dramatically.

I also believe that we should be investing much more into developing the new sunrise technologies such as the hydrogen economy. So far, no-one has invented an efficient way to store electricity. But hydrogen, which is the lightest and most abundant chemical element in the Universe, can be readily stored and can provide an effective energy source. In Germany they are building hydrogen powered cars, trains and ferries. Hydrogen powered homes are under construction. We need to cut our dependency on fossil fuels and look to the future.

But until we do, it is sheer madness to turn our backs on nuclear power. With our remaining nuclear power stations at Hunterston B and Torness nearing the end of their working lives and a large and skilled workforce only too ready and willing to develop a new generation of nuclear plant, it is perverse to slam the door in their faces. Don't listen to the siren wails of the Greens who cite Fukushima as a reason to abandon nuclear technology in Europe. The EU does not suffer from 9.2 Richter-scale earthquakes and tsunamis. What we do suffer from is the constant garbage pedaled by the Greens who are the ones behind the current renewable wind blitzkrieg invading our country with industrial structures of concrete and steel, all for a small, intermittent trickle of electricity at vast cost to the consumer.

Ladies and Gentlemen, Communities Against Turbines (Scotland) has drawn together more than 10,000 people in a common cause to halt this madness before our landscape, economy and health are ruined. I offer them my unconditional support and hope that all of you here tonight will sign up to the cause.

STRUAN STEVENSON, MEP

Struan Stevenson is a Conservative Euro MP for Scotland. He is Chairman of the Climate Change, Biodiversity & Sustainable Development Intergroup in the European Parliament.