

BELLA CALEDONIA

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It's Scotland's Waves

By [bellacaledonia](#) on [December 13, 2014](#) • ([48](#))



Philip Johnston *on the potentials and restrictions of the Smith Commission on unleashing our energy potential.*

Friday the 21st of November was a bad day for the employees of Pelamis Wave Power and for Scotland's renewable industry. It was announced that the company was to go into administration due to an inability to secure sufficient funding. This would seem a simple case of a company unable to meet the technological demands of its industry and paying the consequences but as is often the case the truth is more complicated than that.

That the technology developed by Pelamis works is not in doubt, not only that but it was the world's first commercial exporter of electricity generated by offshore wave power. The system works by using the mechanical motion of waves to bend its snake-like body driving hydraulic fluid which becomes pressurised and in turn generates electricity. The company achieved many firsts in the industry such as supplying and commissioning the world's first multiple machine wave farm and gaining the UK's first commercial orders for wave energy converters from utility customers.

Why then has Pelamis struggled to find funding? The truth is that wave power is having a difficult birth it's constantly seen as a technology with great potential but is missing that solid

backing to allow it to develop and mature. Losses of £4.2 million were recorded in 2013 and £6.2 million in 2012 this coupled with the loss of key partner E.ON (which sought to focus on 'more mature renewable technologies') left the company in a financially perilous position.

According to a study by the Crown Estate Energy and Infrastructure Portfolio Scotland has the potential to generate 35040 GWh of power from wave power to put that into some perspective Scotland consumes 38000 GWh of electricity annually. Even taking into account the fact that studies of this nature are often overly optimistic wave energy clearly has a pivotal role to play in our future energy mix. The reluctance of companies to invest in Pelamis and other wave energy firms is due to the perceived risk and long-term nature of the investment which is often at odds with the demands of shareholders looking for more short-term profits.

To mitigate some of the effects of Pelamis going into administration Fergus Ewing announced the creation of Wave Energy Scotland a technology development centre that will utilise the expertise of the Pelamis staff. While this is well-intentioned it doesn't go far enough, indeed bringing Pelamis into public ownership is the only realistic way that the company will be given the necessary time, support and funds to fulfill its potential.

Amid the headlong rush into developing a renewable industry that will eventually meet 100% of our energy needs (a feat to be proud of) we must step back and ask ourselves our if we are going to let private corporations define the nature of the industry . This of course would mean that 100% of our energy generation capacity would be owned by private companies putting us at the mercy of the whims of shareholders, we would be reliant on them to make the required investments in technologies and infrastructure. Whilst it would be disingenuous to claim that companies such as SSE and Scottish Power haven't invested in renewable projects it's also clear that they are only willing to do so when they receive significant subsidies from the Government. SSE stalled development of the Seagreen Wind farm at the planning stage due to the fact the project wasn't offered UK Government subsidies.

Now is the time to create state-owned energy companies for wind, wave and tidal as they are relatively new industries (less so wind) . Future generations may well turn round and ask how after watching it happen with oil we then sat back and did nothing as our natural resources were again used not for the benefit of the people but to improve the share price of large corporations. Of course private companies have a part to play in the energy industry but surely they shouldn't dominate it to the extent that they must be showered with subsidies and ministers must cosy up to them to ensure the required investment takes place ?

Scotland is a net exporter of electricity with net exports of between 14% and 24% between 2000 and 2010 reaching more than a quarter in 2012. As more renewable energy comes online from all sources more electricity will be exported, profits generated could be reinvested in the industry, used to lower bills or spent elsewhere for the common good. Although the initial expenditure of creating a publicly owned renewable energy industry would be high this would be offset by the stable and long term income from generating electricity and selling it. The Smith Commissions recommendation of 'increased borrowing powers' is intentionally vague so as to leave wiggle room for whoever occupies 10 Downing Street come May. It's vital that these borrowing powers are increased so as to enable the creation of a successful state owned renewables industry that will utilise Scotland's abundant natural resources for as long as there is wind and waves.

By recommending the transfer of powers over the Crown Estates assets (which includes seabed responsibilities) the Smith Commission although flawed has made some progress on energy. If the proposals are realised then the Scottish Government will have the ability to lease out areas for renewable energy projects offshore. Whilst this is helpful the recommendations fall a long way short of what is required as the Scottish Government will only be offered a consultative role in designing renewable incentives. Of course if electricity was generated by publicly owned companies then there would be no need to for the incentive scheme.

If recent opinion polls are to be believed there will be a strong SNP contingent at Westminster. If this is the case it's imperative that they use any leverage to secure the powers necessary to create a renewable energy industry that will provide a clean environment, job creation and a constant source of income long after oil has run out.