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[By email]

Constable MK Jackson
Chairman
Environment, Housing and Infrastructure Scrutiny Panel

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Dear Constable

Government Plan Review – Request for written submission

Many thanks for your letter of 16 September requesting Jersey Electricity's views on Government's proposals on CSP 5: Protect our environment.

Tackling the 'climate emergency'

Firstly, Jersey Electricity welcomes the increased focus that this Government has on the environment and its stated ambition to deliver a carbon neutral Jersey by 2030.

We consider this outcome a strong fit with several of the Island's key industries and its international reputation. Whilst we believe it will be a significant challenge to achieve a carbon neutral Jersey – and this will require significant commitment and close working right across the community – we also believe Jersey is far better placed than many other jurisdictions, islands and cities to actually achieve this. A carbon neutral Jersey could be a real source of differentiation internationally and it very much plays to the strengths and assets that Jersey already has in place.

A Climate Emergency Fund

There is little doubt amongst experts that global warming and climate change are driven by an excess build-up of carbon in the atmosphere. Jersey must therefore focus on carbon levels – to discourage the consumption of hydrocarbon fuels and the emissions of carbon resulting from that consumption, whilst using any funding raised to support measures to reduce energy demand and promote low carbon energy sources.

We support the establishment of additional funding streams to support the Carbon Neutral Strategy. Given that the costs of environmental damage from carbon emissions¹ are not presently priced into fossil fuels when they are purchased, the most economically efficient way of creating the right policy outcomes is to impose a levy on carbon to reflect this cost that is not currently being paid. We note that the Government has chosen to introduce a higher level of duty on road fuel; this will similarly incentivise the community to consider other forms of less polluting transportation which will in turn help lower the Island's carbon emissions – especially given that one third of the Island's emissions emanates from road transport alone.

¹ In economic terms this is a so called "negative externality"



Carbon Neutral Strategy

Jersey Electricity has not yet had line of sight to any analysis from Government on the way in which it proposes to facilitate a carbon neutral future. We note however that the current documentation in the public domain does not fully consider the present, somewhat unique “starting position” of the energy system in Jersey and the significant advantages this offers in enabling a carbon neutral future.

The carbon intensity of Jersey’s electricity system (24g CO₂/KWh³) is less than one tenth of the UK’s system and Jersey Electricity already sources one third of its electricity supplies from certified renewable generation (with the remaining two thirds from low carbon nuclear).

Given that the electricity system in Jersey is already almost completely decarbonised (with *imported electricity* having a carbon intensity of around 5g CO₂/KWh), the only way in which the Island will further decarbonise *overall energy* is by switching from fossil fuels to electricity – by either importing electricity from low carbon sources or by generating it from local renewable sources. Given that local renewables are unlikely to displace fossil fuels⁴ in the short-term and that local renewables are not viable without subsidy⁵, the subsidies required to promote on-island renewables are likely to be costly and will have, at best, a minimal impact on the Island’s ambition to move towards a carbon neutral position⁶.

To enhance security of supply, Jersey Electricity has invested in and built a system of three submarine cables into France securely configured across two diverse routings connecting into different parts of the French grid. This has been supplemented with a long-term supply contract with our partners EDF to 2027 that allows Jersey to bulk purchase and hedge our requirements under a framework arrangement, leveraging best value from the European market. We have had a strong relationship with our French partners (EDF and RTE) for more than 35 years, during which we have never experienced a deliberate supply interruption. Imported power has led to a significantly more reliable electricity supply in Jersey than has been achieved from on-island generation and electricity supplies in Jersey now experience less than one tenth of the downtime when compared with the UK grid.

Leveraging the unique access that Jersey has to significant volumes of cost effective, “on-demand” low carbon electricity may be the least cost and most secure way of achieving the carbon neutral goal. Not taking advantage of this position may lead to significantly higher energy costs for consumers and/ or taxation to subsidise on-island renewables⁷ than might otherwise be the case.

³ 2017/18 data; 24g CO₂/KWh is a blended carbon intensity that includes the carbon content of imported electricity from nuclear and hydro-electric renewable sources as well as that produced on-island in Jersey (including the EFW plant). EFW production is c5% of total electricity supplied in Jersey but has a relatively high carbon intensity.

⁴ Renewables are intermittent and “non-dispatchable” forms of electricity generation

⁵ Local renewables are more costly than importing low carbon electricity

⁶ They may of course be desirable for other reasons such as diversity and energy independence

⁷ As case studies one might look at Germany and UK which, like many EU countries, have in the past paid significant Government subsidies to encourage investment in renewables in an attempt to decarbonise their electricity systems (to meet formal legal EU commitments). Power prices in Germany are around 40% higher than Jersey. In addition, the capped UK power price recently imposed by Ofgem on suppliers from January 2019 to contain price rises, is around 30% higher than power prices in Jersey

Sustainable Transport Plan

As noted above, one third of the Island's total carbon emissions is attributable to transportation. This represents a significant and largely untapped decarbonisation opportunity. Whilst the road fuel levy funding mechanism noted above may act as a disincentive (the "stick"), this effect is likely to be small and so in our view, it is paramount that proper incentives (the "carrot") are put in place to encourage a range of practical, low carbon transport options. We support the range of measures presently being contemplated but believe this should be extended to providing broader and deeper incentives for low carbon private vehicles (as was contemplated in the Energy Plan 2012).

Whilst in the longer term we believe that private car use will reduce as viable substitutes emerge, such as personal mobility products, car clubs, more extensive public transport, the private car will remain essential⁸ for many residents in Jersey over the 10 years to 2030 (even if they are used less frequently). Therefore the provision of incentive funding to encourage the use of ultra-low emission vehicles (ULEVs⁹) is in our opinion, necessary to facilitate a sufficiently fast decarbonisation of transport.

Finally, Jersey Electricity is very supportive of the carbon neutral future that the Island is striving to achieve and we believe the Company is well placed to help facilitate this. Imported electricity is already decarbonised, very reliable and considerably cheaper than many alternatives – and is available "on demand" 24/7 in large volumes when it is needed most (eg. cold dark winter evenings when renewables may not be available). Jersey Electricity is also however very supportive of local renewables. We have been exploring and testing renewable technologies for many years and will continue to do so with a focus on identifying opportunities to develop them in a way in which the whole community can benefit and in an economically viable way that does not necessitate subsidies. The electricity grid that is now in place is a "low carbon platform" that is entirely compatible with, and supportive of, on-island renewables as these emerge and become economically viable.

We welcome the opportunity to engage with policy makers on how best we can work together to achieve this.

Yours sincerely



Chris Ambler
Chief Executive

⁸ There will be many occasions when cars will be deemed essential by the travelling public – for example to transport children, collect shopping and travel in inclement weather

⁹ Including for example electric cars and commercial electric vans