RET Strategy – Preparation for Long Term Renewable Development– 2016 Onwards

Vision: "Guernsey will generate ***local, affordable, renewable energy,*** *initially for local consumption, which is* ***low carbon*** *and will provide greater* ***energy security*** *and* ***independence while making a contribution to a lasting commercial, financial and environmental legacy."***

Mission: To prepare the groundwork for development of renewable energy in the near to longer term, RET will ensure that all the required **political, legislative** and **commercial processes (including leasing)** and **approvals** are in place by 2018, as well as a base line **environmental and resource** understanding of Guernsey waters, as well as continued public engagement to ensure local support and acceptance.

This is to enable at least the **initial deployment** of local macro **renewable energy generators** in the early 2020's if economically viable.

To deliver the vision, RET will require:

- **Public awareness and engagement** providing factual information in relation to renewables to ensure local support and acceptance.
- **Political direction and support** through the States of Guernsey Energy Policy, and will also look to lobby and direct the policy to advise on the status of the renewable technologies and viability for Guernsey.
- The **economics** of renewables to become **acceptable** and **affordable** for Guernsey.

Strategic goals:

RET 2016 Objectives (in order of priority) are as follows:

1. Effective public engagement and communication aligned to a developed communications strategy – look to ensure that the people of Guernsey are engaged and well informed of the local position with regards to renewables.
2. Undertake the next stage of feasibility work for a 30MW offshore wind array in Guernsey waters , in conjunction with Guernsey Electricity Ltd, so that an informed decision on how to progress can be made – by end 2016
3. Facilitate Guernsey obtaining control of the seabed and extension of territorial seas to 12 nautical miles - Policy Letter by end of 2016.

4. Continued development of a programme for solar projects at States' sites such that the electricity generation will generate a cost saving for the SoG
5. Lobby and direct overall States energy policy with specific regard to macro renewables (LT).
6. Work closely with Guernsey Electricity Ltd. to ensure strategic and objective alignment where appropriate (LT).
7. Develop the best mechanisms for Guernsey with regards to leasing of the seabed to a developer (which may include GEL) looking at potential returns, cost, risk and opportunities of supply of electricity to the island or for export – by end of 2016. Zone suitable areas for locating marine renewable devices to define what further data is likely to be required – looking to progress by end 2016.
8. Refine the understanding of the marine environment and renewable resources to a level of greater detail in order to accelerate generator deployment. (LT) Ensure that this information is useful to direct a developer and to provide realistic estimates of power output and generation profiles for Guernsey. (LT)
9. Understand the wider socio-economic value of renewables to Guernsey (LT)
10. Work with the other Channel Islands and wider international governments to progress renewables including work with the UK (through DECC) and French governments. (LT)
11. Explore the potential for a renewables research/development base – Long Term Aim. (LT)
12. Encourage and support other renewable projects both within and without the States of Guernsey (LT)

The following factors are outside RET's control but RET will:

13. Continually investigate access into other electricity markets and their subsidies to make near term marine renewables more viable ensuring that the overall needs of the island are not compromised/ if it is in the best long term interest of the island – continuous. (LT)
14. Follow closely the renewable technologies, the accompanying economics and energy storage such that Guernsey is fully up to date with the industries – continuous. (LT)
15. Understand and monitor the costs of generation of the different renewable generating options. (LT)

Note – there is a more comprehensive strategy document setting out the strategy in more detail.

Guernsey Renewable Energy Team

COMMERCE AND EMPLOYMENT
A STATES OF GUERNSEY GOVERNMENT DEPARTMENT

Appendix – Assumptions underlying the Strategy

1. That connection to France via Jersey will continue and that a second link, either direct to France or an additional cable through Jersey will be in place in the early 2020s.
2. Tidal devices have failed to reach maturity as expected (with developers generally now looking a smaller scale devices), and maturity is now expected to be some time in the future (potentially within the 2020s) – with no current arrays operational and no clear projection of when arrays beyond 20-30MW will be installed with meaningful OPEX data. The tidal resource in the Big Russel is of a size which could contribute to Guernsey domestic demand with negligible export.
3. Wave devices are only at prototype stage of development and as such large scale deployment is not expected until into the 2020s at the earliest.
4. There is no appetite for subsidising renewable electricity in Guernsey (although an acknowledgement that there may be some modest increase in the price of electricity to pay for additional security).
5. An agreement is in place until 2022 that Guernsey has access to certified low carbon electricity (Nuclear and Hydroelectric) through the cable link(s) to France, of which 30% is renewable.
6. Offshore wind will not achieve grid parity before at least the early years of the 2020's. Grid parity is where the cost of offshore wind is equal to the cost of other forms of generation, which in Guernsey consist of heavy fuel oil and imported French tariff electricity.
7. Onshore wind is price competitive; however Guernsey does not have the land mass to take advantage of this.
8. Local renewables could contribute to the security of supply and energy independence; but currently at a cost to electricity prices. The issue of security of supply (from a more independent generation source (rather than oil or nuclear generation)) is likely to be more of an issue for Guernsey after the latter part of this decade.
9. Guernsey is likely to have access to/ownership of the 12 mile limit and the seabed by the end of 2016.
10. Electricity represents approximately 30% of Guernsey's annual energy usage (calculated from Guernsey Facts and Figures 2015).
11. Oil prices will remain relatively static (with modest increases from late 2015 levels) and will be available without supply restrictions.
12. In order to deliver, RET will need the support of Commerce and Employment, and also other relevant ant departments such as Environment, Treasury and Resources and Public Services (or equivalent Committees from May 2016).
13. In order for renewables to provide above baseload electricity production large scale energy storage, or export agreements, will be needed. Neither are likely in the short term.
14. There will be no unforeseen large scale event that will alter peoples thinking on any of the above.
15. RET will require local support for renewable developments.