

University of Exeter PhD - Report – Public Acceptability of offshore wind and tidal energy in Guernsey

High level conclusions based on stats

- The population strongly agrees that Guernsey should make use of its natural resources to generate electricity locally (89% agree¹) and 77% believe that Gsy should be more self-sufficient for electricity.
- Tidal energy is the most popular technology (86% supported); with solar (81%) and wave energy (80%) also widely supported; offshore wind was supported by a majority (58%)
- Other important characteristics:
 - Ownership model – there was substantially stronger support if a project was owned locally rather than externally (63% favoured local ownership for tidal and smaller offshore wind)
 - Location – location is important with more supporting an offshore wind project to the north of the island (52% supported); this demonstrates that some offshore wind projects were more popular than some tidal developments (47% support for tidal East of Herm)
 - Export vs Gsy use – there was stronger support for projects where the power is used on Gsy rather than exporting (24% support a project where the power is primarily exported).

Summary of other key information and conclusions

Summary topic	Specific question from survey	Stats from survey	Sect/ Ques	Conclusion
General views	Guernsey should make use of its natural resources (e.g. wind, tide, sun, wave) to generate electricity locally.	89% agree.	S3Q4	Local macro renewable energy has, in principle, very strong support from the Gsy population.
	Gsy should be more self sufficient for electricity.	77% agree	S3Q7	Self-sufficient, local electricity production has very strong support from the Gsy population.
General tech support for Gsy project	Tidal energy	86% supported / 2% objected	S4Q2	Tidal energy has a very strong support in Gsy. Linking into study 1 it could be due to the tide being so familiar to Guernsey’s population and being intertwined with / having an obvious effect on Gsy life; so the interest is in the tide rather than tidal power (and its

¹ Please note that agree encompasses those who both agree and strongly agree and “disagree” encompasses those who both disagree and strongly disagree.

				challenges)
	Wind	58% supported / 23% objected	S4Q1	There is a majority of the Gsy populous who support offshore wind in general
	Wave Solar	80% supported 81% supported	S4Q3 S4Q4	Wave and solar were very strongly supported (more strongly than in the UK).
Specific to offshore wind projects:				
“smaller” 30MW/ Gsy use / closer to shore	General support	51% supported / 15% strongly objected	S5Q1	Majority support for a smaller near shore Gsy project. A small minority strongly objects.
	Location of project (Location A -West of Gsy; B – NW of Gsy; C – N of Gsy)	N of Gsy was acceptable for 55% NW of Gsy was acceptable for 37% W of Gsy was acceptable for 33%	S5Q2 S5Q4 S5Q6	The North of Gsy was the most acceptable location for a smaller wind project (out of areas proposed). This may be different however if specific projects are presented rather than general areas.
	Ownership	63% preferred that a project of this type should be owned by people living in Gsy / 6% thought a project should be owned by an outside investor	S5Q10 Q9	There was strong support for a project if it was owned locally. There was very small support if a project was owned by an outside party.
“larger” 100-300MW / Mostly export / further offshore	General support	33% supported / 21% strongly objected	S6Q1	Fewer people supported a larger / export project even though it was further (at least 7 miles) offshore.
	Export	60% did not support a project where most of the electricity is exported (only 24% would support such a project).	S6Q3	A majority did not support a project where most of the electricity is exported.
	Ownership	56% did not agree that such a project should be owned by an outside investor (17% in favour).	S6Q5	A project owned by an outside investor was not popular with most people.
	Cost	53% were against raising prices by 10-20% for such a project	S6 Q6	A project raising electricity prices by this much is not favoured by the majority.
Specific to tidal project:	General support	62% supported the development	S7Q1	A majority supported a local Gsy development (as presented), but this is a smaller majority than supported tidal power more generally – suggesting that greater information about tidal

				influences opinions; potentially with cost information have a significant affect. It is a consistent research finding that general support for an energy source is lower than support for a specific project (e.g. power lines, wind farms).
	Location of project (Location X – West of Pleinmont; Y – NE of Herm; Z- East of Herm)	West of Pleinmont was supported by 71% NE of Herm was supported by 62% E of Herm was supported by 47%	S7Q1 S7Q3 S7Q5	There was significant support for a project west of Guernsey and more support than for one E of Herm, and marginally more support for West of Gsy compared to NE of Herm. Location of a tidal project appears very important to the population even when “invisible”.
	Ownership	7% thought a tidal project should be owned externally. 63% preferred that a tidal project should be owned locally	S7Q7/8	A project which is owned locally is supported by significantly more people than one which is owned outside.
	Visibility	27% would support a development if it were visible, while 45% would not	S7 Q9	A tidal project which is visible appears to have less outright support than an offshore wind project
Price sensitivity	Tidal – general Offshore wind	74% were willing to pay more for electricity from a local tidal project (and 51% were prepared to pay more than £50 pa more)/ 17% were not prepared to pay more. 61% were willing to pay more for electricity from a local offshore wind project (and 39% were prepared to pay more than 50 pa more)/ 30% were not prepared to pay more.	S8Q1 S8Q2	The majority of people were willing to pay more for electricity from local offshore renewable power with more people willing to pay more for tidal power relative to offshore wind. These figures are statistically significant.

Note:

For full details of survey technique see full University of Exeter report. 479 responses from a representative sample (by age, gender, education, location of residence) of Gsy population in Q1 2015. All %s are stated as the % who answered the question.