

Son y chield cheayrt ta ymmyd er ve jeant jeh pooar yn tidey dy yannoo lectraghys son ymmyd ayns thieyn sleih. She yn *Shetland Tidal Array*, va troggit liorish sheshaght-ghellal veih Doon Eidjyn, yn chield ghreie ta giennaghtyn lectraghys veih pooar yn tidey t'er ve kianlt rish grid marçhantagh, as eh jannoo pooar da ny dussanyn dy hieyn ayns ny hellanyn. Ta shoh er chur taitnys mooar da leeideilee yn jeidjys pooar aa-noaoil, son dy vod ny smoo dy varrant y ve currit er y tidey na er geillyn pooar aa-noaoil elley. Foddee bodjallyn coodagh yn ghrian as ta laghyn tra nagh vel monney geay ayn, agh bee pooar yn tidey ayn dy reiltagh choud's as ta'n eayst goll mygeayrt yn chruinney.

Nish dy vel eh er ve soilshit dy vod greieyn pooar yn tidey gobbragh, foddee Nalbin leeideil yn seihll ayns croo greieyn dy ghoaill vondeish er pooar ny marrey. Oddagh yn phooar aa-noaoil shoh ve feeu wheesh as £120 billion as foddee Nalbin geddyn greim er cooid nagh nee beggan jeh'n vargey shen.

Ta ny smoo dy phooar tidey ry gheddyn 'sy cheayn mygeayrt Nalbin na ayns boayl erbee elley 'syn Oarpey. Ta *tidal array* elley goll er troggal nish hene ayns Pentland Firth, clagh-veeilley elley gys Nalbin çheet dy ve ashoon slane aa-noaoil. Foddee shoh leodaghey yn mooadys dy charbon ta currit magh as croo obbyr 'ghlass' er fud yn çheer. Va ny blodyn cour ny turbineyn ayns yn *Shetland Tidal Array* jeant ayns ny hellanyn hene, agh ta sheshaght ghellal Velgagh cooney neesht. Ta sheshaghtyn-dellal elley veih er feiy ny cruinney çheet gys Orkney dy phrowal ny greieghyn oc.

T'eh smooinit dy voddagh pooar ny marrey giennaghtyn 20 gys 80,000 oor Terawatt (TWh) dy lectraghys veih tidaghyn, strooghyn as tonnyn chammah as caghlaaghyn ayns çhiass yn ushtey as cre wheesh dy hollan t'ayn. Son co-soylaghey, ta yeearee yn chruinney son lectraghys ec y traa t'ayn mysh 17,500 TWh.

For the first time the power of the tides has been used to make electricity for use in people's homes. The Shetland Tidal Array, which was built by a firm from Edinburgh, is the first tidal energy generating plant to be connected to a commercial grid, providing power for dozens of homes in the islands. This is hugely encouraging to the leaders of the renewable energy industry, because the tides are more reliable than other renewable energy sources. The sun may sometimes be covered by clouds and there are days when it is not windy, but tidal power is constant as long as the moon goes round the earth.

Now that tidal power has been proven to work, Scotland is in a position to lead the world in creating technologies to exploit marine energy. This renewable power source could be worth as much as £120 billion and Scotland is set to capture a significant portion of this market.

More tidal power is available in the seas around Scotland than anywhere else in Europe. Another tidal array is currently being installed in Pentland Firth, another milestone towards Scotland becoming a completely renewable nation. This can reduce carbon emissions and create green jobs across the country. The blades for the turbines in the Shetland Tidal Array were fabricated in the islands themselves, but a Belgian company is heavily involved in the project as well. Other companies from around the world come to Orkney to test their technologies.

It is believed that marine power could generate 20 to 80,000 Terawatt hours (TWh) of electricity from tides, currents and waves as well as changes in water temperature and salt content. For comparison, the current global demand for electricity is about 17,500 TWh.