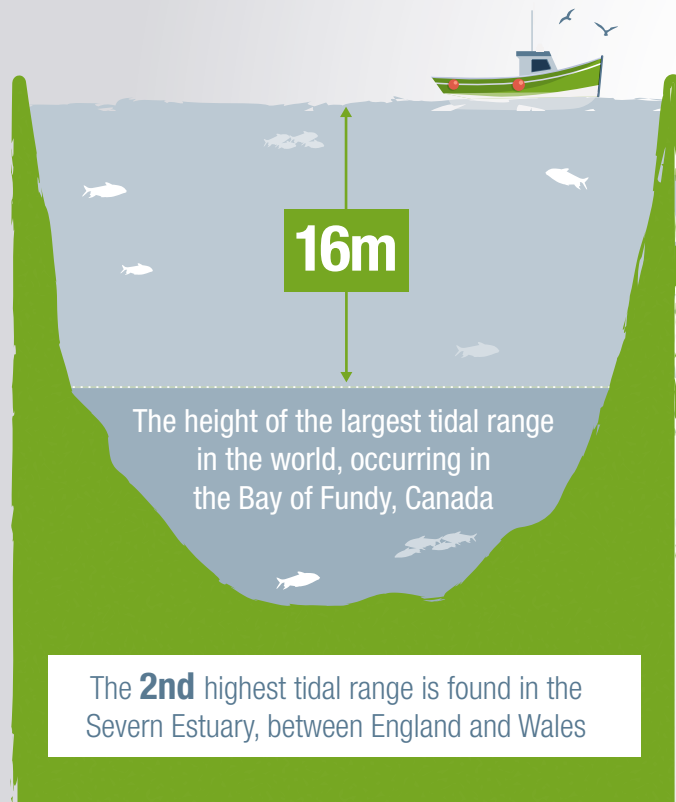


Steel and tidal energy

By 2030 the world must reduce its CO2 emissions by **12-14 gigatonnes** if it is to meet the target of keeping temperature rises below **2 degrees centigrade**. Renewable energy sources will play a key role in achieving this.

There is 1 terawatt or 1 million megawatts of technically harvestable tidal energy around the world



World's largest tidal power generators

1. **552.7 GWh (gigawatt hours)**

Annual electricity production of the Sihwa Lake tidal barrage in South Korea. With 10 water turbines it is the largest in the world

2. **540 GWh**

Annual electricity generation of La Rance Tidal Power Station in Brittany France

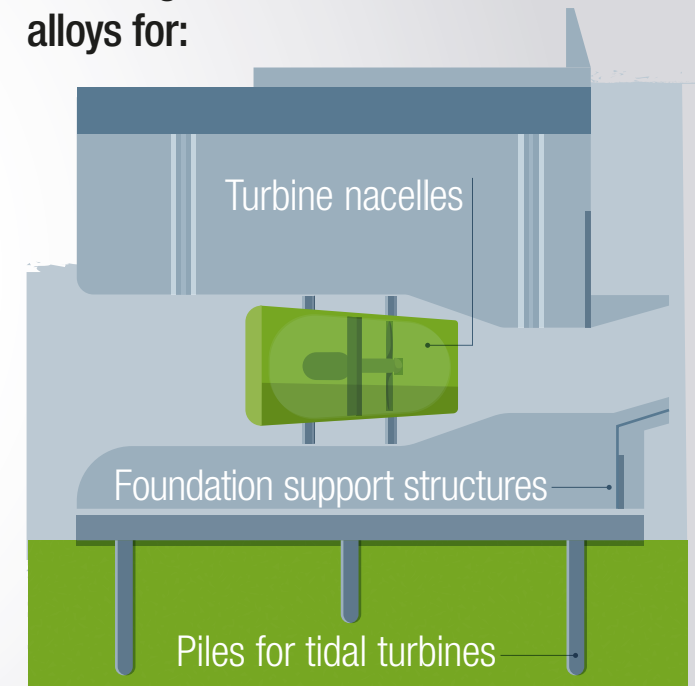
1966

First year of operation for La Rance, making it the world's oldest

3. **530 GWh**

Expected annual power output of the Swansea Bay Tidal Lagoon project, due to be constructed from 2018

Tidal power generators rely on steel, including stainless steel and steel alloys for:



Wind, solar, tidal, geothermal – steel will play a key role in the transition to a more sustainable future energy mix.