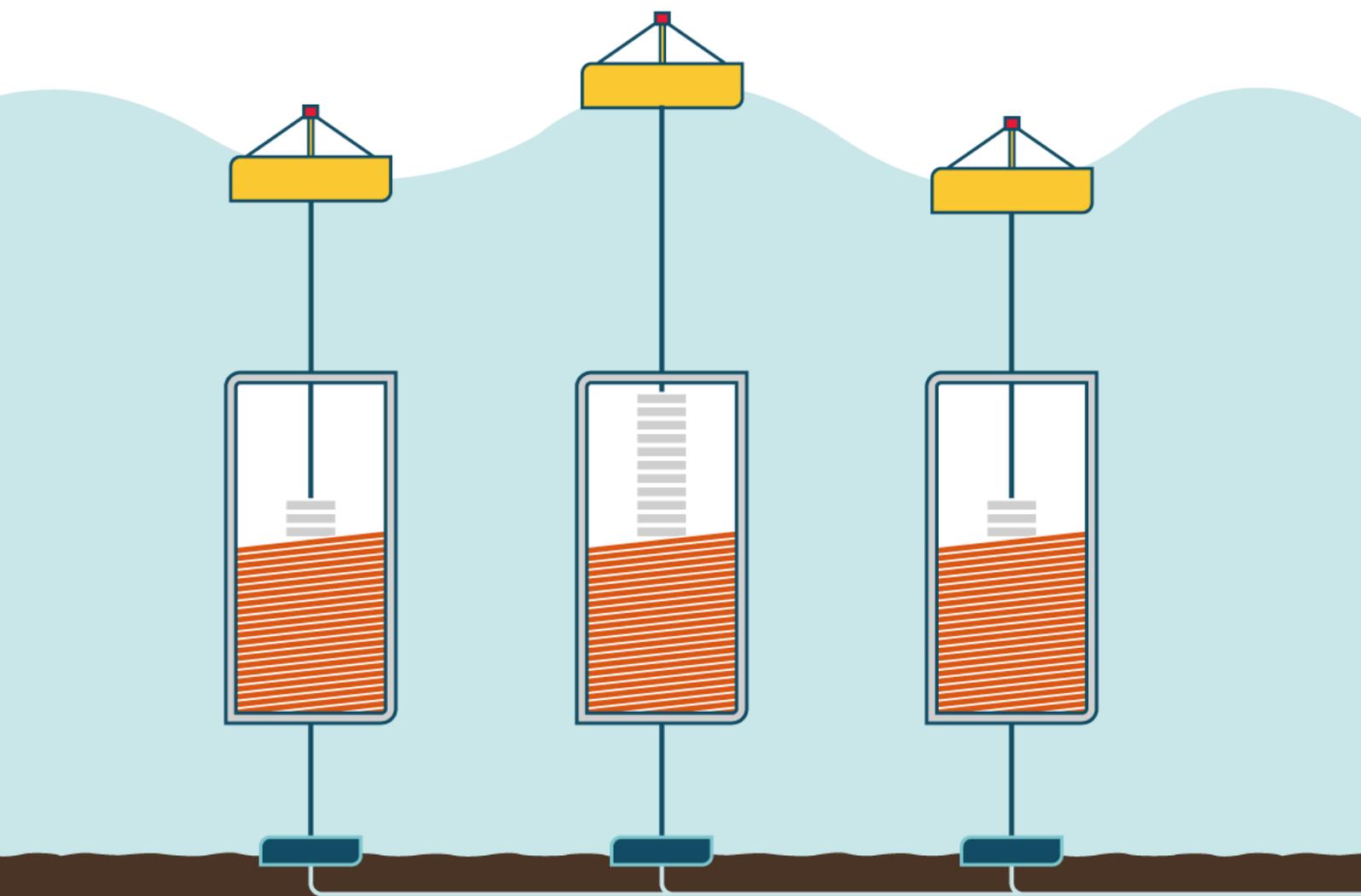


Investigating Renewable Energy

How do we generate electricity from waves?

The diagram below shows an example of technology that allows us to generate electricity from waves. Use the description labels and arrows on the next page to show what happens at the different parts of the system.



Waves

Waves are created by the wind which is in turn caused by the sun. This makes wave energy a renewable resource.

Electricity is induced in the coils of wire as the magnets move up and down.

Float

Magnets

The wave energy machine is anchored to the seabed.

The column of magnets moves up and down with the waves inside the generator coils.

Light

Cables

Electricity from the machine is carried through cables to the shore.

As the surface of the water moves up and down, the float moves with the waves whilst pulling on a cable below.

Foundation

Generator Coils

A flashing beacon on the top of the device alerts passing ships.

