

Each cluster head has a lining with over 1,000 graphene strips. When a drop salt water is dragged across a strip, it produces 30mV. The electricity produced is transmitted through an electrical cable attached to the conductive substrate that travels all the way through the installation to a transformer hidden under the base. When sea water flows through the heads, placed in channels dug through the site, it will produce many small charges of electricity. The untouched salt water will pass through the channel to the next head. The now desalinated water left behind after an interaction with graphene, will follow a conduit that will divert into secondary fresh water channels.

With accumulation of 30mV charges being produced by hundreds of units throughout the site, the installation will be able to produce 500 MWh of electricity per year. That is enough to power 400 homes in Coopenhagen, or a large portions of businesses in Refshaleøen.

