Generating Technologies

Power Systems
Pelton Wheel (1)
Drawing of the rotor and blades of a wind turbine, courtesy of ESN
This tidal electricity generation works as the tide comes in and again when it goes out. The turbines are driven by the power of the sea in both directions.
Road
along the top allows traffic to cross the estuary

Tidal flow into the generator

Turbine
converts tidal flow into electricity

Tidal flow out of the generator
Geothermal energy is Thermal Energy generated and stored in the Earth. The Geothermal energy of the Earth's crust originates from the original formation of the planet (20%) and from Radioactive decay of minerals (80%).
OTEC

Hot Fluid = T2 - 3°C

HOT WATER IN = T2

Working fluid - Ammonia

WATER OUT

PUMP

Cold Fluid = T1 + 3°C

CONDENSER

Depth - 1000 Metre

COLD WATER IN = T1
Materials presently used for photovoltaic include **monocrystalline silicon**, **polycrystalline silicon**, **amorphous silicon**, **cadmium telluride**, and **copper indium gallium selenide/sulfide**.

Photovoltaic power capacity is measured as maximum power output under standardized test conditions (STC) in "Wp" (Watts peak).