**Geothermal: the Earth’s Energy**

**Renewable heat**

1. From the sun: About half of the solar energy that reaches the Earth’s surface is absorbed and stored by the land and the oceans.
2. From the Earth’s core: Heat is generated deep within the earth. Away from areas of volcanic or geothermal activity, this heat moves slowly and continually to the surface. The ground temperature increases by about 30°C for every 1000 metres depth.
3. From volcanic systems: Localised areas of higher heat flow occur with volcanic and geothermal activity, where tectonic plates move apart or collide, or in hot spots under mid ocean volcanic islands. Faults and fractures act as channels for heat to flow to the surface.

EARTH ENERGY: ACCESSIBLE, RELIABLE, RENEWABLE

FACT SHEET 1

**Geothermal energy** is heat energy stored in the earth. It is a renewable, earth-friendly resource that is accessible nationwide.
Māori legend says that geothermal fields in the North Island were created when Te Pupu and Te Hoata, goddesses of fire, emerged from the Earth’s core in search of Ngātoroirangi who had been stranded freezing on Mt Tongariro. Wherever they surfaced, they left geysers, hot springs and mud pools, leaving the path of geothermal activity that remains today.