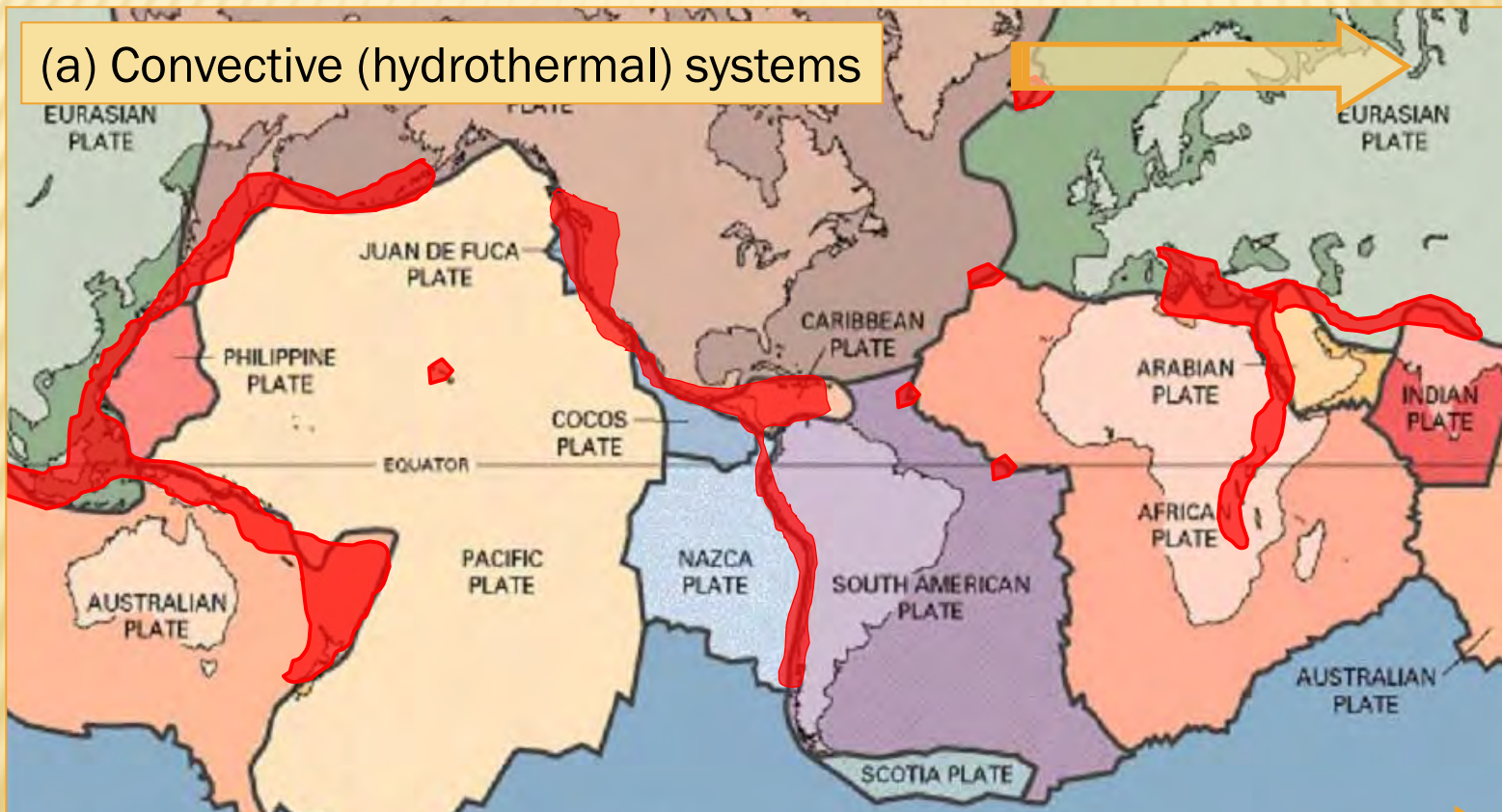




GEOTHERMAL ELECTRICITY AND FEED-IN TARIFFS

- Thermal energy stored within the earth in rock and trapped steam or liquid water.
- In general, geothermal resources for electricity generation can be grouped into:

(a) Convective (hydrothermal) systems

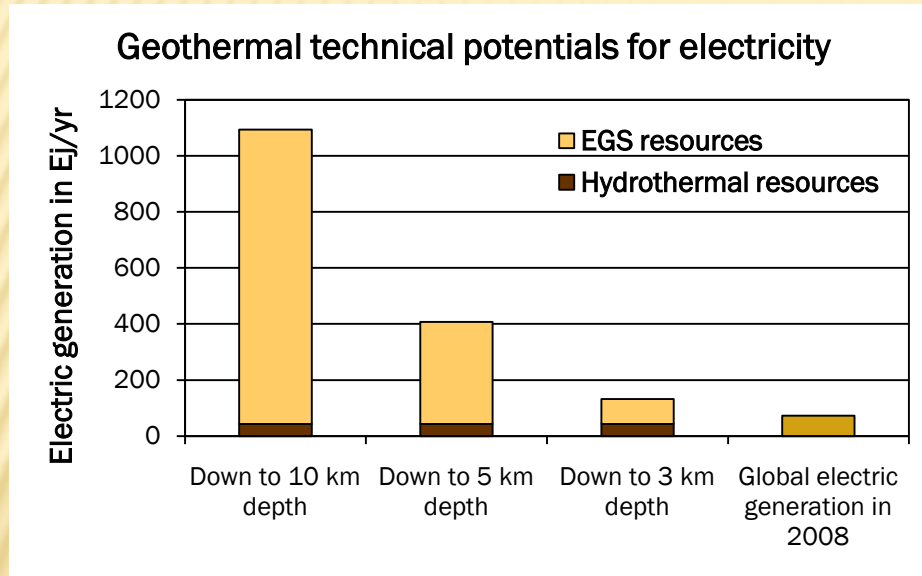


- Currently used in 24 countries.
- ~11 GW
- ~67 TWh/year
- Base-load electricity
- Worldwide CF of 71%.
- Prototypes
- High potential

(b) Conductive (mainly EGS: Enhanced Geothermal Systems)

- 11 out of those 24 nations are developing countries, and in 4 of them geothermal supplies $\geq 10\%$ of their total electric demand.
- In all of them, private and/or public companies produce and sell electricity at commercial-market tariffs, and usually through PPA contracts.

Geothermal-electric potentials are estimated to be as follows:



To achieve high levels of deployment, financial support, economic incentives and risk mitigation mechanisms are necessary in both type of geothermal-electric resources, because of:

- High upfront investment cost of new projects due to the need to drill wells, in addition to the construction and installation of power plants.

- High risk in the initial stage in new projects in hydrothermal systems (the success rate of the first exploration wells ranges 20-60%).
- High risk in the current technical performance of EGS projects.

Therefore, FiT schemes as the proposed Global Energy Transfer FiT program, Feed-in Tariff Support Mechanism and Global Feed-in Tariff Fund, are welcomed by the geothermal industry and can be readily used, particularly in developing countries.