

Question number	Answer	Notes	Marks
5 (a) (i)	geothermal / geothermic;	allow nuclear	1
(ii)	any suitable resource or method; e.g. <ul style="list-style-type: none"> <li>• wind (turbine)</li> <li>• hydro-electric</li> <li>• waves</li> <li>• tidal</li> <li>• solar (panels)</li> <li>• biofuels/biomass</li> </ul>	ignore nuclear  ignore unqualified 'water'  allow photovoltaic cells, (sun)light allow wood	1
(b)	any four from:  MP1. thermal energy is transferred from hot rock to cold water OR water heats up; MP2. water molecules gain KE (as they are heated); MP3. steam gains KE as it is heated by the rock; MP4. GPE of steam increases as it gains height; MP5. turbine gains KE from hot water/steam; MP6. generator (coils) transfer KE (from turbine) into electrical energy; MP7. electrical energy is transferred from pump into GPE/KE of water;	allow 'mechanical energy' for KE throughout  allow 'heat' for thermal energy  allow water turned into steam   allow turbine transfers KE to electrical energy   total marks = 6	4