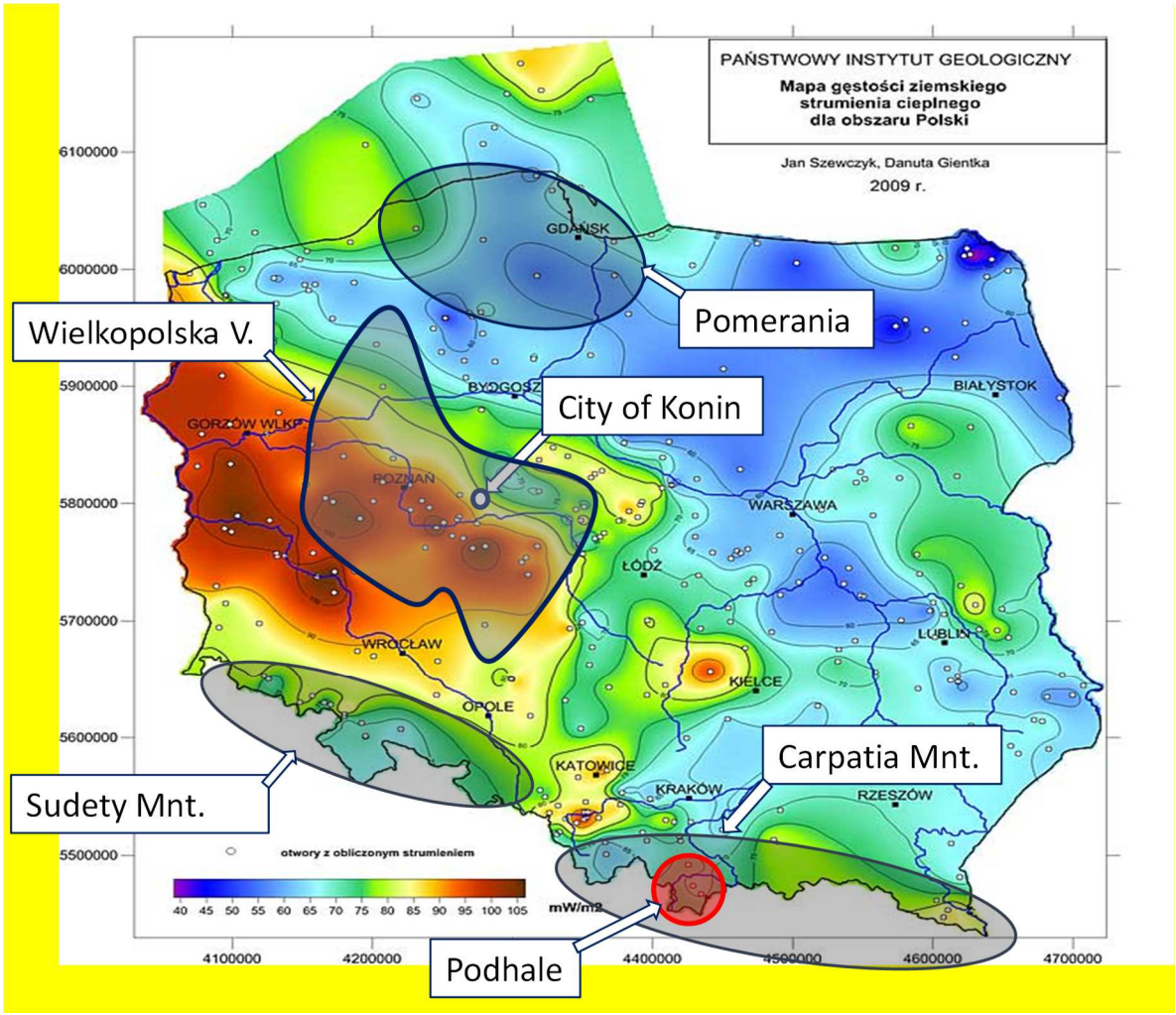

Fig. 1. The locateon of geologically confirmed geothermal energy resources in Poland [4]

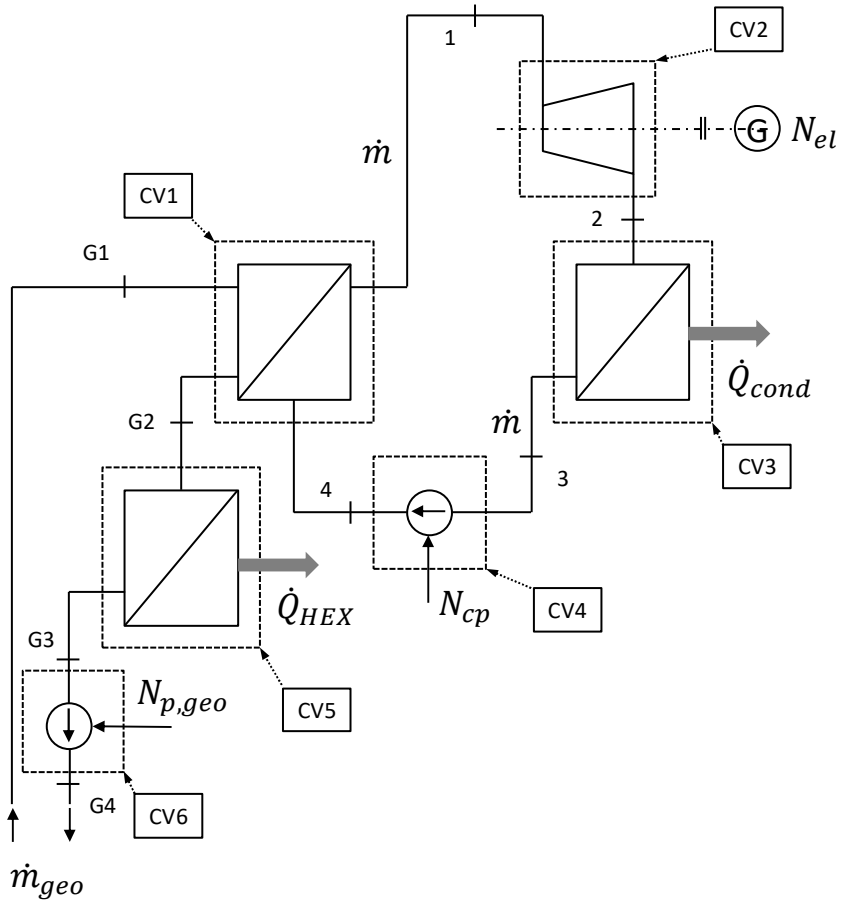

Fig. 2. The flow diagram of geothermal CHP plant based on ORC.

1 – working fluid high pressure vapor , 2- working fluid low pressure vapor, 3 – working fluid low pressure liquid, 4 – working fluid high pressure liquid

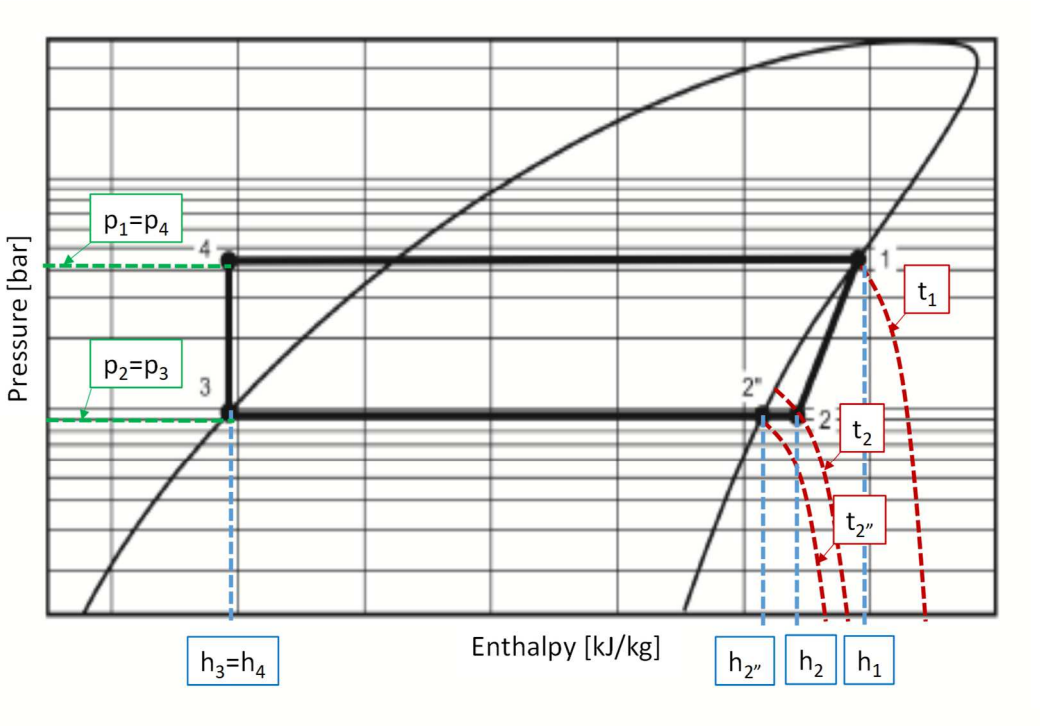

Fig. 3. Characteristic points of working fluid thermodynamic properties for ORC cycle

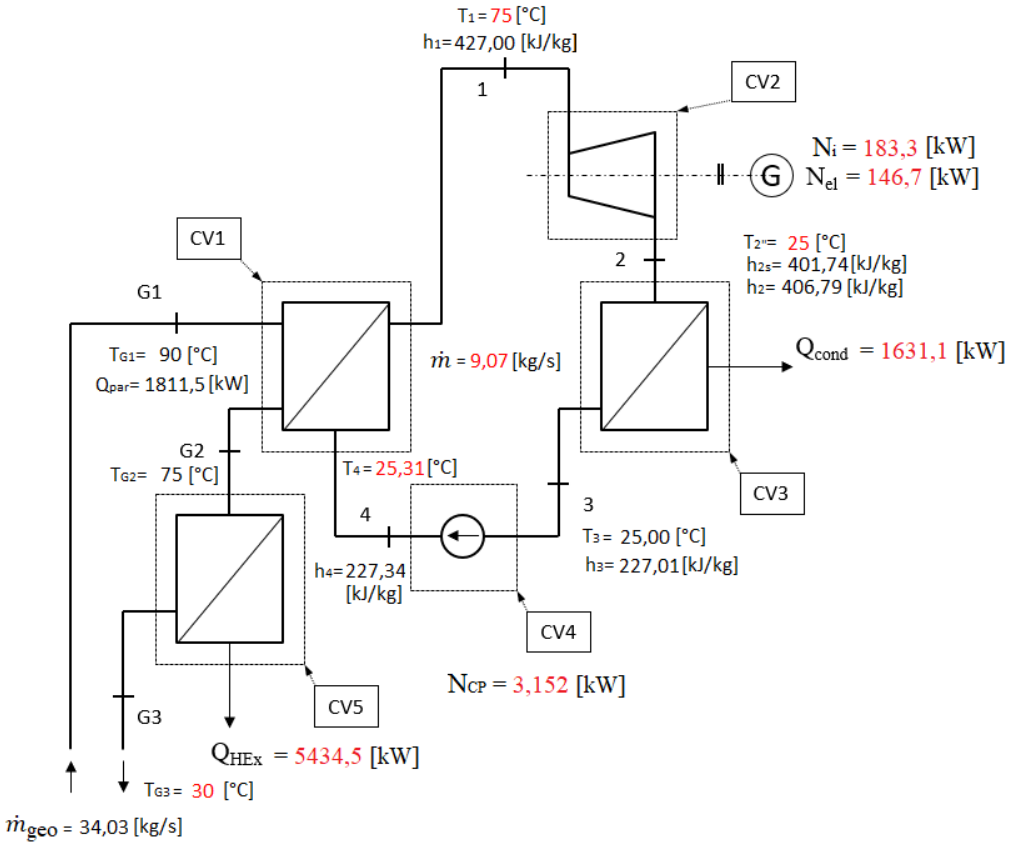

Fig. 4. Print screen of Excel calculation tool for working fluid R123 and thermal parameters: t_1=75°C, $t_{2''}$=25°C, t_{G3}=30°C .

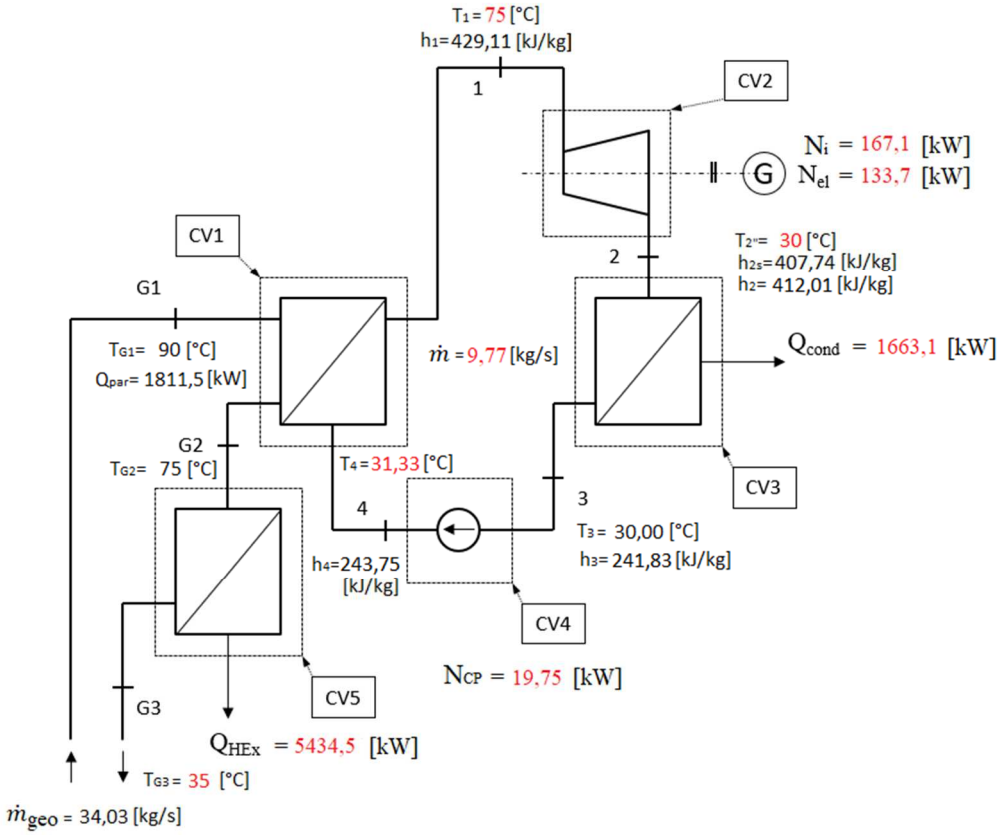

Fig. 5. Print screen of Excel calculation tool for working fluid R134a and thermal parameters: t_1=75°C, $t_{2'}$=30°C, t_{G3}=35°C .

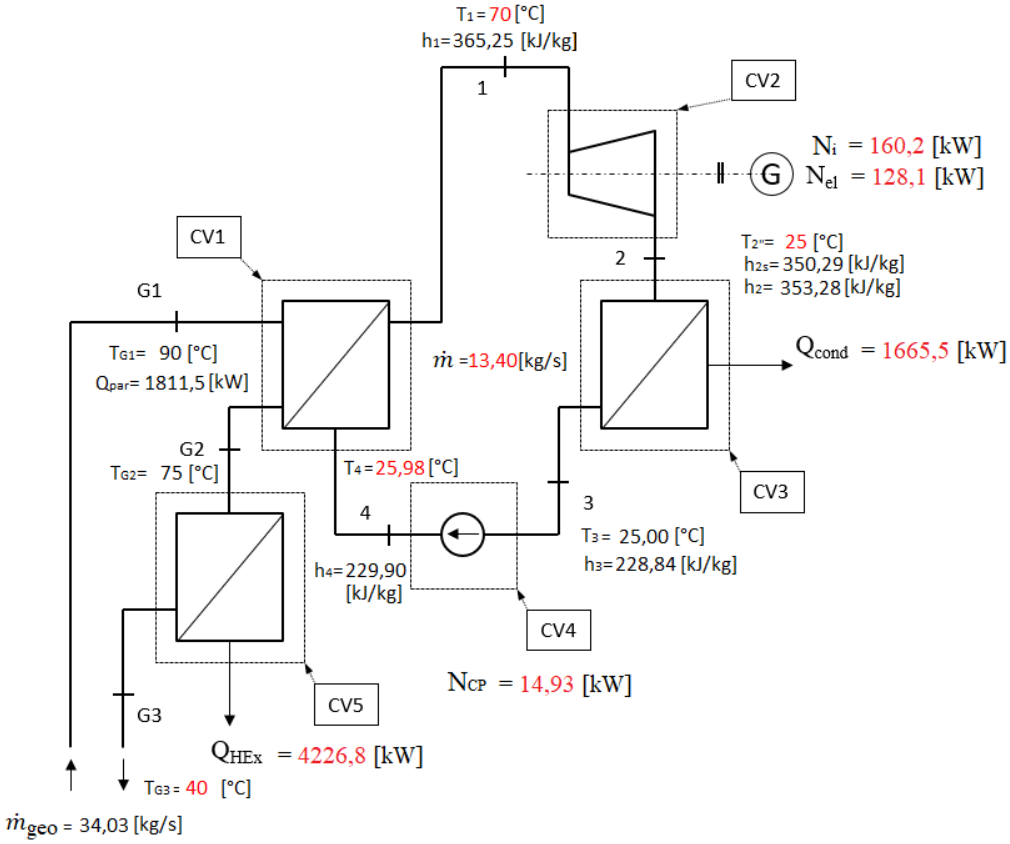

Fig. 6. Print screen of Excel calculation tool for working fluid R227 and thermal parameters: t_1=70°C, $t_{2''}$=25°C, t_{G3}=40°C .

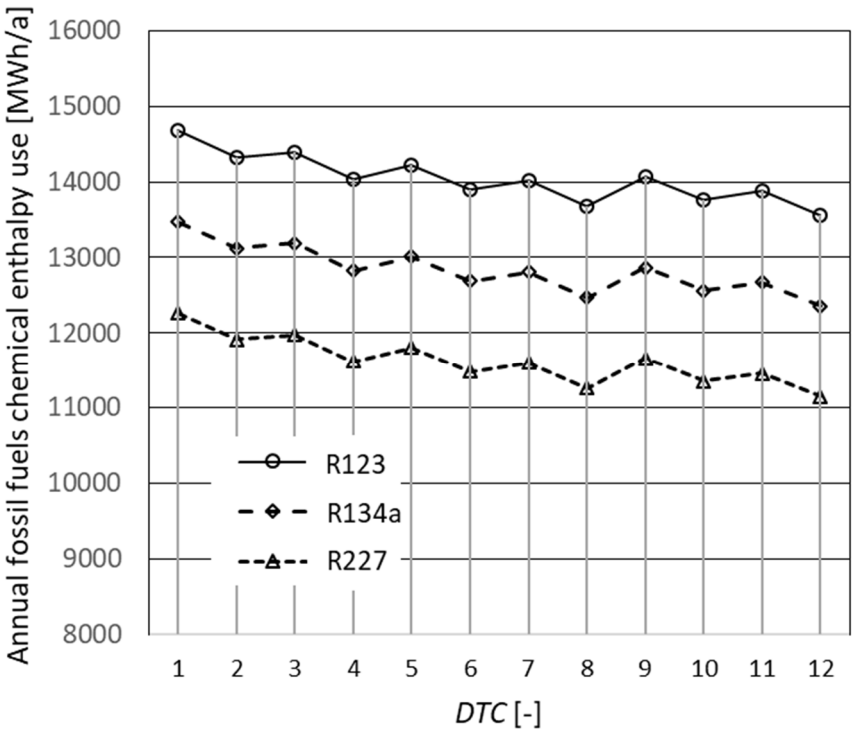

Fig. 7. Total annual use of fossil fuels for reference energy system

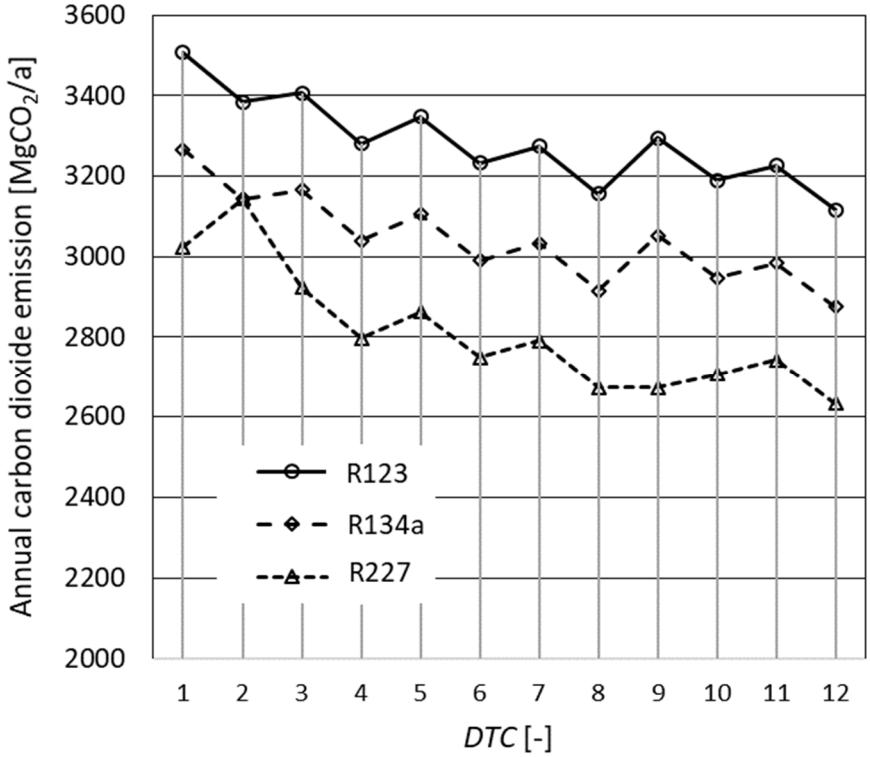

Fig. 8. Total annual emission of carbon dioxide for reference energy system