

## ALTERNATIVE SOURCES OF ENERGY IN SOUTH BOHEMIA

### ❖ Water energy:

- Lipno power plant
  - put into operation in 1959
  - water area is 50 km<sup>2</sup>- the largest artificial lake in the CR
  - consists of two units
  - the output of one unit is 2x60 MW, the output of the second unit is 1x1,5 MW
  - Francis turbines are used
  - <https://www.cez.cz/cs/o-cez/vyrobni-zdroje/obnovitelne-zdroje/voda/vodni-elektrarny/ceska-republika/lipno-58166>
  - 48.63333185927241, 14.238517482156224
  
- Hněvkovice power plant
  - put into operation in 1992
  - the output is 2x4,8 MW
  - water area is 15 km<sup>2</sup>
  - reservoir of water for Temelín nuclear power plant
  - Kaplan turbines are used
  - <https://www.cez.cz/cs/o-cez/vyrobni-zdroje/obnovitelne-zdroje/voda/vodni-elektrarny/ceska-republika/hnevkovice-58154>
  - 49.18179673997047, 14.444816397526791
  
- Orlík power plant
  - the output is 4x91 MW
  - water area is 26 km<sup>2</sup>
  - completed in 1962
  - Kaplan turbines are used
  - <https://www.cez.cz/cs/o-cez/vyrobni-zdroje/obnovitelne-zdroje/voda/vodni-elektrarny/ceska-republika/orlik-58164>
  - 49.606393035221856, 14.1816928184559
  
- Kořensko power plant
  - put into operation in 1992
  - the output is 2x1,9 MW
  - Kaplan turbines are used
  - the main role of the power plant – keep the water level stable
  - <https://www.cez.cz/cs/o-cez/vyrobni-zdroje/obnovitelne-zdroje/voda/vodni-elektrarny/ceska-republika/korensko-58150>
  - 49.24007958427807, 14.379662768693082

❖ Biogas stations:

- BPS Žabovřesky
  - the output is 998 kW
  - agricultural biogas
  - <https://www.czba.cz/mapa-bioplynovych-stanic.html>
  - 49.00599493246178, 14.336618546895345
  
- Deštná biogas station
  - the output is 500 kW
  - put into operation in 2008
  - uses agricultural waste (manure, slurry, grass, maize etc.) to produce biogas
  - <https://www.agradestna.cz/portfolio-view/duis-arclu-odio-2/>
  - 49.27045848665496, 14.915088739858088
  
- Biogas station in Starý Pelhřimov
  - the output is 375 kW
  - agricultural biogas
  - <https://www.bgs-energy.cz/2011/09/26/bioplynova-stanice-stary-pelhrimov-370kw/>
  - 49.43970751330119, 15.188387655211404
  
- Energy centre in Jindřichův Hradec
  - the output is 5.6 MW
  - put into operation in 2008
  - uses biomass ( bales of hay and straw) to produce energy
  - <https://www.ecjh.cz/cze/index.html>
  - 49.143409963976325, 15.03492672450673

❖ Photovoltaic power plants

➤ Ševětín

- the output is 1x30MW
- put into operation in 2010
- the largest solar power plant in South Bohemia, the third largest in the CR
- <http://enviroskop.cz/?nejvetsi-solarni-elektrarna-v-jihoceskem-kraji-fve-sevetin>
- 49.09680908068114, 14.58017273985017

➤ Chýnov

- put into operation in 2009
- the output is 2MW
- <https://www.cez.cz/cs/o-cez/vyrobni-zdroje/obnovitelne-zdroje/slunce/provozovane-fotovoltaicke-elektrarny/fotovoltaicka-elektrarna-chynov-58091>
- 49.40703329879543, 14.811370754240864 (není v Google mapách, GPS Chýnova)