The experience of biomass power plants in Hungary

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**Members:**
- AES Borsod Energetikai Kft.
- Bakonyi Erőmű Zrt.
- Bakony Bioenergia Kft.
- PANNONGREEN Kft.
- Pannon-Hő Kft.
- Veolia Energia Zrt.
- Vértesi Erőmű Zrt.

**Objectives of the Association:**
- increase the investment potential of the biomass power plants,
- create a long-term and predictable economic environment,
- support the production of ‘green heat’,
- develop a support system for energy plantations,
- develop and operate an information system for residents, form public opinion.

Aggregate biomass-based installed capacity: 185 MW$_e$
Amount and type of fuel consumed by the member companies of BEE
Technology of the bubbling fluidized bed boiler

**Technical data:**

- Bubbling fluidized bed (BFB) boiler technology
- $49.9 \text{ MW}_e$ capacity
- $65 \text{ MW}_\text{th}$ district heating capacity
- Fuel need: 400,000 t/year
- Fuel composition:
  - 33% forest wood,
  - 67% forest, wood industrial and agricultural by-products
Grate-fired boiler technology

- 100 bar
- 540 °C
- 137 t/h

- 35 MW_e
- 200 GWh_e

- 70 MW_th
- 1 040 TJ_th

- 200 000 t/year fuel
Impacts of biomass use
Carbon dioxide neutrality

Green energy is CO₂ neutral
Impacts of the use of biomass by BEE

- Provides employment to 2,000 people outside the power plants in the region (primarily in the field of fuel supply)
- Nearly 800,000 tons/year CO₂ emission savings
- Nearly 400 million m³ of import gas savings
- Roughly 20 billion HUF/year fuel purchase from the region (the majority of which goes to agriculture providing stable and predictable income for the producers)
- Contributes to Hungary’s commitments in its National Renewable Energy Action Plan for 2020 (14.65%)
- Ensures favourable producer heat prices
- Energy production is not exposed to geopolitical risks
Thank you for your attention