ELECTRICITY PRODUCTION CAPACITY INSTALLED IN POWER PLANTS
POWER INDUSTRY IN POLAND

ELECTRICITY GENERATION

- **CAPACITY INSTALLED IN POWER PLANTS**: 45 939 MW
- **CAPACITY OF THE BIGGEST THERMAL PP (LIGNITE)**: 5 420 MW
- **ELECTRICITY PRODUCTION**: 165 214 GWh
- **AVERAGE EFFICIENCY OF ELECTRICITY GENERATION**: ~38%
- **ELECTRICITY PRODUCTION IN COGENERATION**: approx 15%
- **ELECTRICITY CONSUMPTION PER CAPITA**: 4 470 kWh
- **CO2 EMISSION**: 327 MLN T/Y (0,89%)
## ELECTRICITY PRODUCTION AND CONSUMPTION - 2018

<table>
<thead>
<tr>
<th>Source of Production/Consumption</th>
<th>GWh</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL PRODUCTION</td>
<td>165 214</td>
<td></td>
</tr>
<tr>
<td>COAL FIRED P.P.*)</td>
<td>89 375</td>
<td>52,2</td>
</tr>
<tr>
<td>LIGNITE FIRED P.P.</td>
<td>49 072</td>
<td>28,7</td>
</tr>
<tr>
<td>GAZ FIRED P.P.</td>
<td>12 612</td>
<td>7,5</td>
</tr>
<tr>
<td>WIND, HYDRO and other RENEWABLE</td>
<td>14 155</td>
<td>8,3</td>
</tr>
<tr>
<td>IMPORT</td>
<td>5 718</td>
<td>3,3</td>
</tr>
<tr>
<td>TOTAL FINAL CONSUMPTION</td>
<td>170 932</td>
<td>100,00</td>
</tr>
</tbody>
</table>
CONSUMPTION OF THE COAL IN POLAND

<table>
<thead>
<tr>
<th>Description</th>
<th>Hard Coal</th>
<th>Lignite</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Consumption of (Steam) hard coal</td>
<td>58 - 64 MLN T (prod. ~ 50 MLN T)</td>
<td>60 - 64 MLN T</td>
</tr>
</tbody>
</table>

Equivalent of > 58 BLN m³ of natural gas

- **Professional (Public) Thermal Plants**
  - Electricity Generation and Heat Production
    - 34 - 36 MLN T - Hard Coal
    - 60-64 MLN T - Lignite

- **Industrial and Non-Professional HP Plants**
  - Heat and Hot Water Production
    - For Industry and Central Heating Sector
    - 12 - 14 MLN T - Hard Coal
    - 0,1 MLN T - Lignite

- **Households Sector and Small Consumers - Heat and H.Water (without CHS)**
  - 11,5 - 12,5 MLN T - Hard Coal
ENERGY POLICY FOR POLAND
up to
2040
(PEP 2040)

(project presented by Minister of Energy)
ELECTRICITY GENERATION
FORECAST OF INSTALLED CAPACITY IN POWER PLANTS TO 2040 [MW]
FORECAST OF ELECTRICITY PRODUCTION TO 2040 [GWh]
GOALS

ENERGETIC

SEFETY

COMPETITIVENESS
AND ENERGY
EFFICIENCY

REDUCTION OF THE
POWER INDUSTRY
IMPACT ON
ENVIRONNEMENT
INDICATORS

REDUCTION OF THE SHARE OF COAL IN ELECTRICITY PRODUCTION TO 60% IN 2030 (81%)

21% OF THE RENEWABLE IN FINAL ENERGY CONSUMPTION (8,3 %)

COMMISSIONING OF A NUCLEAR POWER PLANT IN 2033

30% REDUCTION of CO2 EMISSION, COMPARED TO 1990

23 % INCREASE IN ENERGY EFFICIENCY BY 2030
MAIN PILLARS

1. OPTIMAL USE OF OWN ENERGY RESOURCES
2. DEVELOPMENT OF ELECTRICITY GENERATION AND NETWORK INFRASTRUCTURE
3. DIVERSIFICATION OF GAS AND OIL SUPPLIES AND DEVELOPMENT OF NETWORK INFRASTRUCTURE
4. DEVELOPMENT OF ENERGY MARKETS
5. NUCLEAR ENERGY INTRODUSING AND DEVELOPMENT (1.5 – 9 GW to 2043)
6. DEVELOPMENT OF RENEWABLE ENERGY SOURCES
7. DEVELOPMENT OF DISTRICT HEATING AND COGENERATION
8. IMPROVING THE ENERGY EFFICIENCY OF THE ECONOMY
THANK YOU

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