Photovoltaic boom in the Czech Republic

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Public support for electricity produced by PV plants

- In existence from 2002
- Based on the German system (EEG 2000)
- Form: Feed-in tariffs and Green certificates
Boom in photovoltaics in the Czech Rep.

![Graph showing the boom in photovoltaics in the Czech Republic from 2001 to 2010. The X-axis represents years from 2001 to 2010, and the Y-axis represents the installed capacity and number of installations. The graph indicates a significant increase in the installed capacity and number of installations in 2008 and 2009.](image-url)
Reasons for the boom

- Falling investment costs
- High regulated prices for feed-in tariffs and/or green certificates
Investment costs of photovoltaic plants
Regulated price vs. cost covering price for PV plants in the CR
Costs of photovoltaics

- Direct costs
- Forced investments on part of distribution and transmission network
- Additional ancillary services costs
- Additional regulatory electricity costs
Regulated price development for PV plants (CZK/kWh)
Prediction of PV inst. capacity (current state of affairs)
Costs of particular „years“ of PV plants
Shares of particular „years“ of PV plants in total costs
Solar radiation in Europe (kWh/m²)
Returns from PV plants in Europe (EUR/kWp)
Total costs – absolute numbers

- Direct costs (PV) – 556 bil. CZK
- Direct costs (WP) – 556 bil. CZK
- Ancillary services – 48 bil. CZK
- Forced investment – 18 bil. CZK
- Regulatory electricity – 80 bil. CZK
- Value of electricity produced – 47 bil. CZK
- TOTAL NET – 700 bil. CZK
Total costs – shares

- Přímé náklady výkupu elektriny z FVE
- Přímé náklady výkupu elektriny z VtE
- Náklady na zajištění dodatečných PpŠ
- Náklady vynucených investic
- Náklady na dodatečnou regulační energii
Reasons for the support

- CO2 abatement
- International obligations
- Energy „independence“
- Additional regulatory electricity costs
Costs of CO2 emission abatement for evaluated programs (CZK/t)
RES shares on gross electricity consumption – real data
RES shares on gross electricity consumption – prediction
Total costs of RES support in the Czech Rep. – real data

<table>
<thead>
<tr>
<th>Year</th>
<th>Direct costs ViE</th>
<th>Direct costs FVE</th>
<th>Total costs OZE, KVET and DZ</th>
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<td>2009</td>
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</tbody>
</table>
Total costs of RES support in the Czech Rep. – prediction
RES support fee in the Czech Rep. – real data (CZK/MWh)
RES support fee in the Czech Rep. – prediction (CZK/MWh)
Thank you