

The truth unveiled: Geothermal has the lowest public support, but best load factor and the lowest full costs.

EGEC reacts to EU study on energy costs and subsidies and calls for concrete support

The European Commission presented today an [interim report](#) unveiling for the first time data on costs and subsidies across the various generation technologies in the electricity sector and covering all EU Member States.

The study clearly shows that geothermal power technologies present the highest load factor - even higher than nuclear- with competitive costs (per KWh, estimated external costs included). The report shows that the level of support given to geothermal is insignificant compared to other mature or less mature technologies, even though the sector is ready to deploy new innovative technologies,.

In 2012, geothermal received only €70 million, 20 of which came from the European level. In comparison, solar PV received €14.7bn, coal and onshore wind €10.1bn, nuclear €7 bn, and natural gas € 5.2 bn. The study estimates the order of magnitude of historical interventions, which are considerable for coal and nuclear, and the external costs across power generation technologies. It was estimated that the external costs of the EU's energy mix in 2012 amounted to between €150 and 310 bn, which is comparable to entire level of direct subsidies.

Total interventions, external costs and costs by power technology are illustrated below.

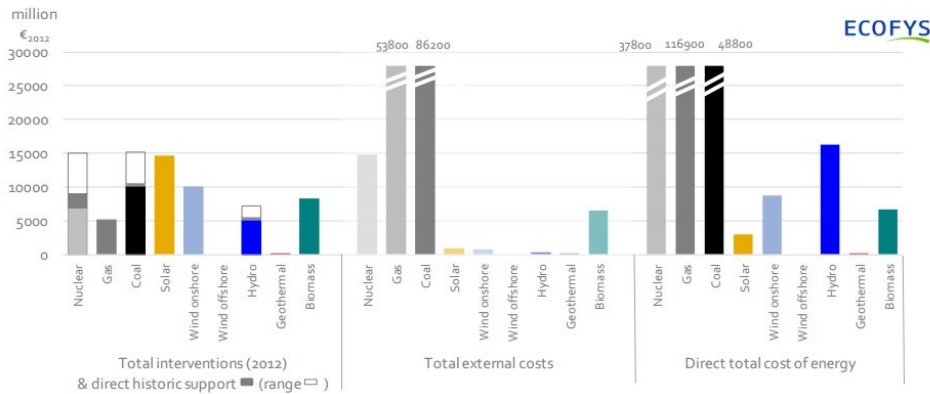


Figure 4-2: Total interventions, external costs and costs of energy split by technology 2012 (in million €2012)

Note: In this figure, total interventions exclude those not allocated to technologies i.e. infrastructure, energy demand, energy saving and free allocation of EU ETS allowances. Direct historic support is shown as ranges at the top of the interventions bar (marked by a gap in the bar). External costs have a higher level of uncertainty than the other components.

Source: Subsidies and costs of EU energy: An interim report, p. 51.

Geothermal is a predictable, reliable and flexible source of energy, with the highest load factor of all technologies, and can balance the electrical grid. Its development is not distorting the market.

Exemptions for geothermal from the new stricter state aid rules should be put in place in order to ensure effective support, of which other technologies have widely benefited.

Geothermal electricity can now be developed anywhere. In 2030 it has the potential to provide some 34 TWh of power annually in the EU thanks to economies of scale, innovative drilling concepts, and substantial cost reduction.

Geothermal power generation is dispatchable and can therefore provide valuable flexibility and support grid stability.