

ENERGY TRANSITION IN BELGIUM

COST AND CHOICES

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**Febeliec represents
the industrial consumers
of electricity and natural gas
in Belgium**

- Purpose
- Basis – model & assumptions
- Base Case Results
- Scenarios
- Conclusions
- In a nutshell

- Febeliec defends the interests of the industry in terms of competitive and secure power supply.
- Within this framework the energy norm requires combining competitive power generation cost with competitive overall system cost for industry.
- Febeliec intends to contribute with this initiative by measuring the generation cost impact of different policy options.

- Provide a credible estimate of the generation cost of energy transition scenarios for electrical power supply in Belgium in the 2020 – 2030 timeframe based on today's policy options.
- Formulate scenarios to public authorities to limit the cost impact.

- A competence centre selection process in Belgium led to awarding the study to a combination of the K.U. Leuven and VITO within the framework of EnergyVille.
- Febeliec awarded the mandate to this structure based on the scientific competencies, skills and independency of the participating research parties.

- Even in the lowest cost mix of technologies that leads to achieving all included policy targets (base case), the energy transition power generation cost increase is very high (an additional 3,4 bln € in 2030 compared to 2020).
- In a situation where industrial consumers already are confronted with non competitive power prices, this transition mandates more than ever the introduction of the energy norm.

- Efforts need to continue to strengthen the liberalized electricity market (including market actors' balancing responsibility) and to stimulate R&D in all energy fields.
- Febeliec advocates a “no regret” energy policy on generation cost in combination with security of supply.
- From that perspective a life time extension of nuclear plants has a significant positive impact on power system cost and on lower CO₂ emissions.
- Natural gas based power generation is needed in all scenarios to secure power supply, though sensitive to fossil fuel prices and leading to higher CO₂ emissions.

- Sufficient interconnection capacity is quintessential in view of market integration and security of supply.
- None of the scenarios leads to the deployment of structural storage in Belgium by 2030.
- There is no case for significant off-shore wind extension beyond the actual plans.

- Energy transition has a cost: power generation cost could more than double between 2020 and 2030.
- Sufficient interconnection capacity is vital.
- Nuclear life time extension reduces overall transition cost and CO₂ emissions.
- Gas based generation remains needed in all scenarios.
- No significant additional off-shore wind investments.
- No strong deployment of structural power storage.
- Effective and improved market functioning is crucial for security of supply and to trigger investments.
- Energy norm key for industry competitiveness.

More info ?

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