

Energy Vision 2020/2050 Brussels Airport

The Energy vision 2020/2050 project for the Brussels Airport Company resulted in a roadmap which offers the airport operator a clear sight on the energy opportunities and advises on the needed energy infrastructure.

The Brussels Airport Company needed a strategic energy vision on energy opportunities and on the concordant energy infrastructure. In the Energy vision 2020/2050 project, Ingenium delivered a detailed roadmap containing the integration of the most promising building-related sustainable energy technologies. In addition the needed maintenance and expansion of the existing heat, gas and electricity grids is described.

Several renovation projects and new buildings will change the airport thoroughly. Each building project offers the opportunity to integrate re-newable, sustainable and/or geothermal energy.

The size, the organisation and the specific character of the airport offers particular opportunities and challenges. In the field of energy distribution e.g. it is not advisable nor allowed to provide gas distribution everywhere. On the other hand there is a possibility to upgrade and extend the heat grid, and to differentiate its temperature levels. For the electrical distribution, a transition was proposed and allowed from a public distribution system to a closed distribution system in accordance with the third energy package of the European Union.

On the matter of energy production Ingenium developed an integrated vision that correlates several decentralised sources to the forecast of the electricity consumption of Brussels Airport. The analysis learned that 8MW of cogeneration can be added to the existing central heat production, combined with 5 MWp photovoltaic panels.



Reference: 10055-001

Developer

The Brussels Airport Company

Location

Zaventem

Surface

1.200.000 m²

Period Study:

2011

Sectors

XL residential & mixed use

Services

Strategy & masterplan
Building services
engineering