

Day 4: Bottom-up drivers of action, innovation and
empowerment

Keeping it local: Regional green electricity for Brandenburg & Berlin

14/07/2022 | IKEM ACADEMY
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Local Energy Transition?

By 2050 Paris has set the following targets:



Make Paris a **ZERO** local greenhouse gas emissions area



- 80%* of the Paris carbon footprint



Commit the actors of the Parisian territory to offset the residual emissions in order to reach

CARBON NEUTRALITY



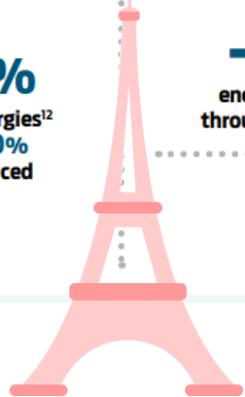
100% renewable energies¹² including 20% locally produced



- 50%* energy consumption throughout the territory

Ensure the climate resilience of Paris and carry out a socially fair transition.

* Compared to 2004



Sustainable energy use Steps towards fossil-fuel freedom by 2040

- The City makes sure Fortum Värme upholds its decision to phase out coal. The ambition is that by 2020 coal will no longer be used. A plan for phasing out coal in CHP 6 is to be presented by 2017 at the latest.
Tasked to: City Executive Board, Group board and Fortum Värme.
- The City collaborates with energy companies, hospitals, etc. to gradually replace fossil oils with renewable fuels to meet peak load demands. Progress to be reported in 2017.

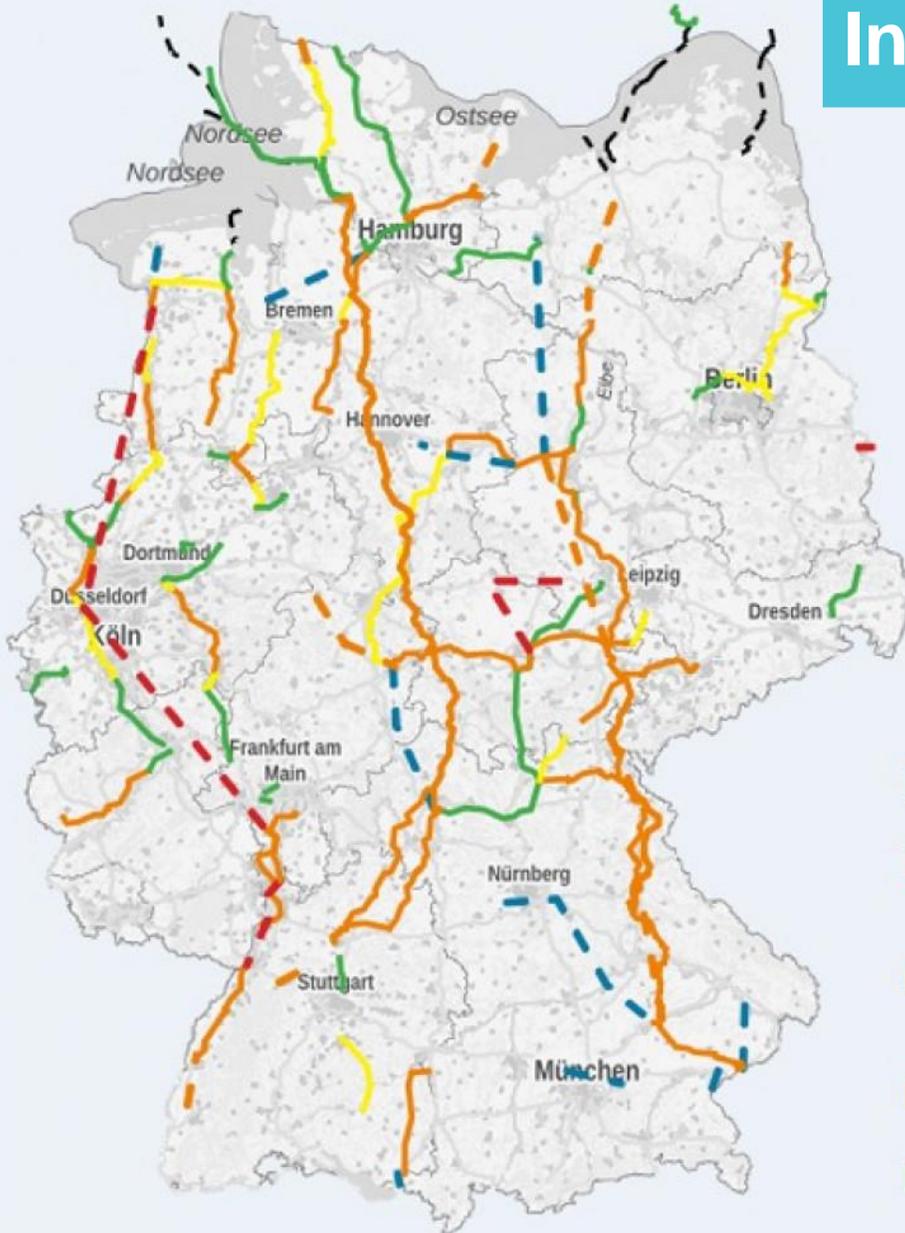


Sustainable energy use Measures to meet the 2020 milestone target

The milestone target of emissions of max. 2.3 tonnes of CO₂e by 2020 requires a reduction in energy use in buildings that corresponds to 285,000 tonnes. This will be achieved through the following measures, with results monitored each year within the framework for the Environment Programme.

- ✓ The City effectuates a district heating system that reduces overall emissions by at least 240,000 tonnes of CO₂e by 2020.
Tasked to: Group board and Fortum Värme.

Intermittency, transport and storage



- Generation: wind power in the north
- Consumption: population and industry in the west and south
- Insufficient power lines capacity
- Long lead times, acceptance issues

- Not yet in the approval procedure
- In the regional planning or federal sectoral planning procedure
- In or before the planning approval or notification procedure
- Approved or under construction
- Completed

The Brandenburg/Berlin example

- Regional green power is on the political agenda in Brandenburg and Berlin as well as at the federal level
- ‘Traffic light’ federal coalition agreement (p. 56): strengthening **decentralised renewables expansion, changing the regulatory framework**
- Red-red-green coalition agreement Berlin (p. 44): expansion of renewables **in cooperation with the state of Brandenburg**
- H₂ strategy Brandenburg (p. 16): expansion of renewables for hydrogen production

Project: Regional Green Electricity in Brandenburg-Berlin

Goals:

- Promote the regional energy transition in companies and the economy at large through innovative approaches in Brandenburg and Berlin
- Integrate green energy as a local advantage more strongly into the regional value chains in Brandenburg and Berlin
- Help Brandenburg and Berlin achieve climate targets

Support from:

- Private companies in Brandenburg and Berlin
- The Brandenburg Ministry of Economic Affairs, Labour and Energy (MWAE)
- The Berlin Senate Department for Economic Affairs, Energy and Public Enterprises (SenWiEnBe)



Regional Green Electricity Brandenburg-Berlin

Approach:

- Identification of regional green power concepts
- Analysis of the legal framework
- Analysis of best practices and identification of lessons learnt
- Analysis of case studies
- Involving as many actors from the region as possible

Results:

- Study on barriers and potentials of regional green electricity in Brandenburg-Berlin
- Practice-oriented short papers with recommendations for action for regional companies
- Events with regional stakeholders

Legal considerations

✓ **Status quo:**

- ✓ Renewables financed from EEG levy, guarantees of origin, regional guarantees, Ordinance for the implementation of the Federal Immission Protection Act (BImSchV), RED II implementation

✓ **Goals:**

- ✓ Help create regional value chains
- ✓ Make it possible for the production of green local energy to be credited towards sector-specific CO2 reduction quotas
- ✓ Make it possible for the production of green local energy to be credited towards sector-specific renewable energy increase quotas
- ✓ Facilitate the financing of the expansion of renewable energy generation



Best Practices in Brandenburg and Berlin



BASF Schwarzheide
in Lusatia



GRAL - Green Areal
Lausitz



EUREF Campus
Berlin-
Schöneberg



neulich brewery
Berlin-Neukölln



HEAVENN – Hydrogen
Valley, Niederlande

Regional

International

BASF Schwarzheide



- / Chemical plant in Lusatia
- / BASF's goal: climate neutrality by 2050
- / **In-house gas and steam turbine power plant (GuD)** – greener than German power mix
- / Trial during renovation of GuD: regionally produced power from Regiogröön in combination with a virtual power plant by Nordgröön
- / **Power: 60% renewable, 30% remaining GuD, 10% grid**

Einsparung von
ca. 2.500 Tonnen CO₂

entspricht dem Jahresverbrauch von
2.200 Haushalten



Case studies of the regional energy transition



Drei Köche GmbH –
Brandenburg Park



GRAL - Green Areal
Lausitz



RIVA Stahl
GmbH -
Brandenburg



Tegel Projekt GmbH -
The Urban Tech
Republic – Berlin TXL



WFBB - Brandenburg

Interim conclusion and outlook

- Inventory shows existing **opportunities** and **barriers** within the regulatory environment
- Case studies in Berlin and Brandenburg show how diverse the **regional energy transition** really is
- Lessons learned** and **success factors** are identified
- Recommendations are formulated through accompanying scientific research



The RGB project promotes concrete energy concepts by regional operators in Brandenburg and Berlin

Lessons learnt



Technology and innovation



Networking



New marketing strategies



Comprehensive planning



Technical feasibility



Regulatory obstacles



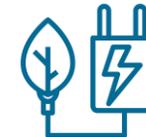
Making the most of local advantages



Sustainable business models



Socio-economic development of the region



Green power concepts with transferability potential

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Local green energy: Drivers and obstacles

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Marie Lange, *Solarblick*

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Moderated by Luca Liebe, *IKEM*

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Panel Discussion

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