Klimapakt Flensburg –
A city on its way to
CO$_2$-Neutrality

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Facts and figures about Flensburg

Regional metropolis in Schleswig-Holstein
~ 90,000 inhabitants
~ 50,000 households
~ 40,000 private & commercial motor vehicles

Commerce and trade, tourism, industry, public authorities

City of two cultures

City of Klimapakt Flensburg
Klimapakt Flensburg e.V.

- Association established 2008 by local key actors of business and public sector, civil society

20 active member companies/organisations

Sustaining membership: 23 companies/organisations, 16 citizens
Klimapakt Flensburg: activities and objectives

• Active member companies: Commitment to reach CO₂-neutrality in 2050 in the individual sphere of action (~ 70 % of local GHG emissions)

• Public awareness raising: Publicity and campaigns on climate protection

• Initiation and implementation of cooperative projects (e.g. Carsharing, E-mobility, mobility management)

• Transfer of best-practice in cross-sectional topics, joint internal campaigns
2010-2012: The elaboration of the mitigation strategy

- 16 Workshops with more than 200 experts and citizens
- Interactive elaboration of more than 100 measures & priorization
- Mailing of a strategy summary to 26,000 households & various presentations

→ Long-term strategic investments, setting of a suitable framework AND thousands of individual choices per day
Reduction of the energy demand by 50 %

**Building Sector**
- Increase energetic renovation efficiency
- Increase renovation rate
- Usage of efficient household appliances

**Industry & Commercial Sector**
- Investments in energy efficient equipment
- Operational energy management
- Switching of lighting
- Building refurbishment

**Mobility Sector**
- Higher share of low-CO₂ modes of transport
- Multi-modality through car-sharing and behavioral change
- Electrification of cars and public transport
Green District Heating & Electricity

- 98% of households connected to central district heating network
- Heat & electricity from local power plant (cogeneration)
- Utility is a 100% municipal subsidiary \(\rightarrow\) direct influence

\[\text{Need for change!}\]
The path to CO$_2$-neutrality

2013: **839.000 t CO$_2$eq**
(- 20% compared to 1990)
Individual measures by member companies

Energy management and efficiency

Modernization of street lighting (LED)

PV plant on roofs

Industry

City of Flensburg

University of Flensburg

Energetic optimization of buildings

Hybrid Busses & attractive public transport

Modern building technology (e.g. steam generation)

Housing Cooperatives

Bus service operators

Hospitals
Information and motivation to take action

Wir radeln zur Arbeit!

We are *still* cycling to work!

E-Mobility-Market 2014

Campaign and advice on saving energy in households

Cooperation with adult education centre and consumer advice centre

Incentive scheme for school projects

Flensburg's climate heroes
Thank you for your attention!
Green District Heating & Electricity

- Replacement of two old coal-fired boilers with modern gas and steam cogeneration boiler
  - 75 MW thermal and electrical each
  - Investment 140 Mio. €
  - 40% less CO₂ emissions

- New electrical boiler & heat storage
  - Using excess electricity („Power to Heat“)
  - 30 MW
  - Investment 2 Mio. €

- Modernizing of other boiler
- Substitution of fossil fuels by biogas, biomass (wood chips) & solar heat
- Decentralization as option?
A network for climate protection
Elaboration of the climate protection concept

- 16 workshops, various preliminary and follow-up meetings
- Involvement of 194 participants from 50 organizations and the public
- Integrated approach
Stadtwerke Flensburger: substitution of fossil fuels

Sectör information:
• Local energy utility in Flensborg
• High share of coal
• Combined heat and power

Main measures:
• New furnaces
• Substitution of fossil fuels
City of Flensburg: spheres of action

- Municipal buildings
- Employee mobility
- Climate-friendly procurement
- Municipal vehicle fleet
- Sewage and waste, street lighting
- Supply of electricity and district heating
- Public transport
- Planning of transport infrastructure
- Urban planning
- Concepts for the renovation of city-districts
- Education and awareness raising
- Cooperations and networking