



CASE
STUDY

Case Study

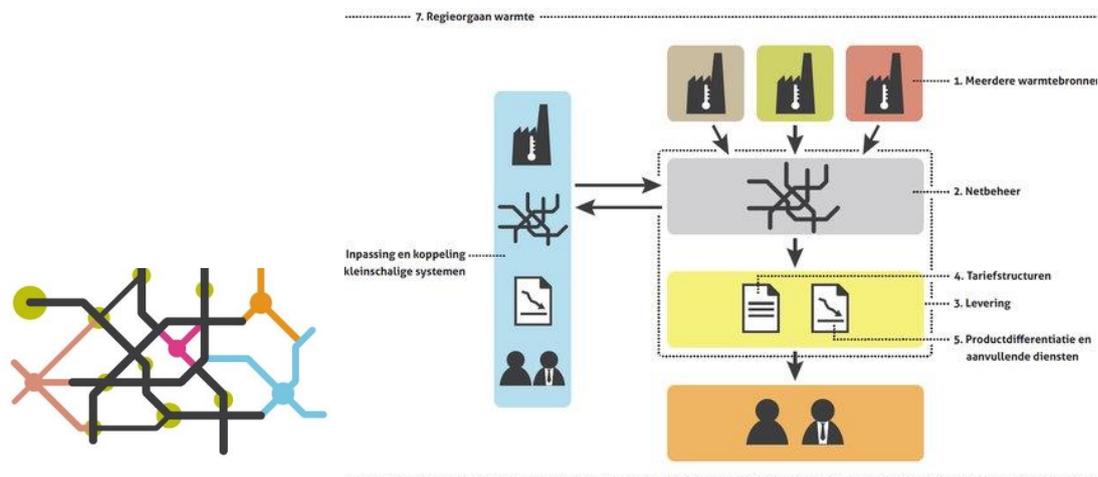


Clean Energy

Tilburg, the Netherlands - Multi-Sector Network

Tilburg has 206,000 citizens, situated in temperate oceanic climate similar to almost all of the Netherlands, receiving 1600 sunshine hours and rather high humidity. Average annual heating degree days are around 2700. Following industry's decline in the 1960s, the city and surrounding area succeeded in the development of a hugely varied local economy. City officials realized in 2006 that actions to protect the city should be handled in a thorough and structural manner. The city aims at being CO₂ neutral in 2045, and at the same time adapting to the impacts of climate change. In order to reach these goals a multi-sector network was formed involving all relevant parties, initiated by the City Council, with involvement of other organizations. Tilburg is since one of the frontrunners in municipal climate policy in the Netherlands. The city plans to transform the existing district heating network fed by a fossil fuel CHP plant, into a network supplied by distributed low-carbon sources and supported by heat and cold storage. The graph below is a schematic diagram of the long term plan, in which the existing CHP plant in the Northwest will have a balancing function and also switch to renewable fuel.

District Heating vision Tilburg, The Netherlands



Source: <http://www.except.nl/en/projects/255-district-heating-vision-tilburg>

As other salient features, the city uses heat and cold storage in the ground in several places, based on an agreement with social housing corporations which are steadily implementing energy efficient renovation, and also has a modern public lighting policy. Along with these energy reforms, Tilburg has implemented a new way of governance and creation of a regional network organization, organically growing with a Climate Board as central midpoint. The Climate Board consists of a multi-sector network where climate alliances and consortiums are established to initiate projects based on green deal agreements. An innovative approach for existing private owned houses is carried out through local private parties. The municipality takes part in the newly established consortium. Other energy saving achievements includes district heating, waste heat recovery, as well as bicycle lanes and routes throughout the city to encourage a reduction in car dependency. An important bottleneck is that big energy companies won't take the risk of investing in large scale sustainable energy. There's no "issue owner" for implementing energy infrastructure on city scale.

References

<http://www.except.nl/en/projects/255-district-heating-vision-tilburg>,

Detailed Concept description in Dutch.

http://media.except.nl/media/uploaded_files/asset_files/Visiebrochure_doorontwikkeling_WNT_v12_web.pdf

<http://www.except.nl/en/projects/255-district-heating-vision-tilburg>

Credentials

Authors: Paul Suding, and Florian Steinberg. Edited by: Florian Steinberg