

Switching from steam based to water based heating systems powered by biomass

Energy | Eindhoven, NL



Photo source: VolkerWessels

Changing steam pipes to district heating based on water as energy transmitter. The power is supplied via a biomass power plant owned by the municipality. Pipes can be used with any other water based heat production system. The biomass power plant is fueled by the waste of public green spaces.



Measured Impacts

100%

CO2kg/month reduction

154832,53



project scale

District level



development type

Upgrading

Benefits

- Reducing use of fossils
- Reducing GHG emissions
- Increasing share of renewables
- Increased autonomy with regards to energy supply/self-sufficiency

Lessons learned

- An agreement between the private sector and municipality regarding sustainability goals and compensation is necessary
- The process of collecting and providing the garbage to the biomass power plant needs significant improvement
- The process of transforming the plant is highly complicated as there are only a few suppliers of the biomass plant existing in the market

Challenges

There are no challenges.

Supporting factors



infrastructural

Built on a site of a former CHP-plant that was replaced with this system, highly functioning waste collection system for pruned green



financial

Energy costs in the area, public subsidies for the biomass power plant



legal

Dutch Regulation: Energy labels EPC standard 0.3



geographical

City of Eindhoven – Strijp-S – Lot of biomass produced in the city



social

Good relationship with the energy company that built the plant



partners

VolkerWessels, City of Eindhoven

Contacts

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