How ambitious emission reduction goals work in a small country like the Netherlands

Netherlands Enterprise Agency

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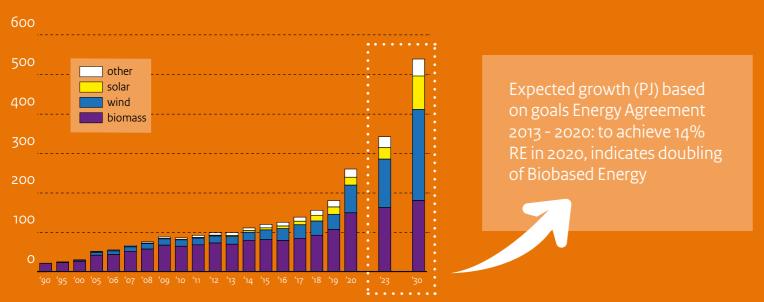
Netherlands: a small country

With only 17 million inhabitants!



Renewable Energy in 2019: 8,6 % of final energy consumption

59% of all renewable energy is biobased



All Bioenergy sectors contribute

Cofiring: total of max. 3,5 Mton sustainable wood pellets needed yearly from international market (8-10% of world market)

EfWaste
biogas
bioheat/CHP
cofiring
biofuel

Expected growth (PJ) based on goals Energy Agreement 2013 - 2020: to achieve 14% RE in 2020, indicates doubling of Biobased Energy

The Future:

Climate Agreement: -49% GHG in 2030



Climate Agreement by industry and NGO in 2019



More wind and solar energy



Hydrogen for storage of energy



Stop of coal fired power plants in 2030

Most strict sustainability system operational

- 70% Greenhouse gasses emission reduction
- No indirect land use change (ILUC)
- Carbon stock preservation
- Prevention of forest conversion
- High level of requirements for sustainable forestry
- Reliable chain of custody

(Partly) approved voluntary schemes to demonstrate compliance









ATFS GGL ISCC

Only biomass when:

- Other renewable cannot supply
- Sustainably sourced and clean conversion

Biomass: Mainly for Biorefineries, Biofuels and High Temperature Heat

Recognised conformity assessment bodies for certification and verificationDekra, Quality Services, Control Union, PwC, SCS, Bureau Veritas, NSF, Nepcon