

The EnergyNL2050 energy system analysis refined

Refinement and update of energy demand and renewable resources in 2050.

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Abstract

The EnergyNL2050 plan describes an energy system which is CO₂ neutral. The system generates more than 85% of the nationally needed energy from solar and wind sources and needs at most 15% import from abroad. The EnergyNL2050 system is a long-term outlook, focusing on 2050.

The results of detailed simulations using hourly weather data, renewable energy production and demand data for three consecutive years have been reported in 2020. Functional energy demands from 2015 were extrapolated to the energy demands expected in 2050. From this the required renewable energy could be analyzed and derived.

Feedback on the paper and presentations of the results showed that some assumptions for the energy demand and renewable energy resources in 2050 needed a refinement. The paper "The EnergyNL2050 energy system analysis refined" describes in more detail the estimate of demand and the options for renewable resources in 2050 based on new insights.