

Renovation Strategy of the Netherlands

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National Climate Agreement 28 June 2019

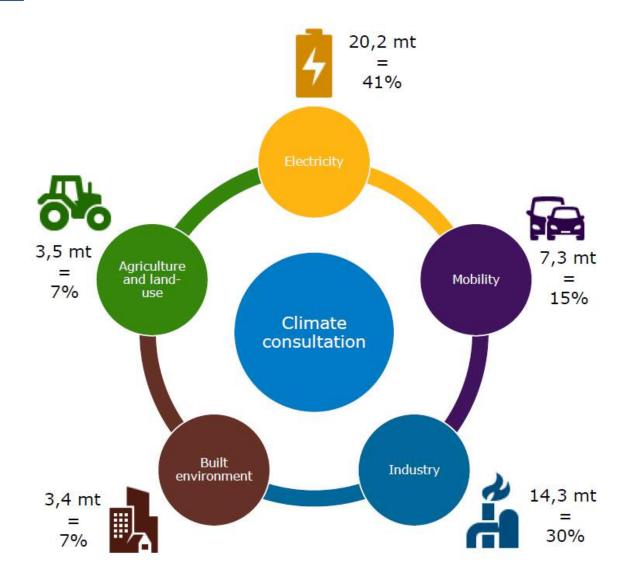
Target:

49% emissions reduction by 2030 in respect of 1990 levels

95% reduction by 2050

Five sector platforms, each with a sectorspecific target regarding the reduction in Mt (megatonnes) by 2030

More than 100 parties involved and committed: broadest possible base of societal support





Built environment

Target:

Reduction of 3.4 Mt of CO2 equivalent emissions in the built environment by 2030, compared to the reference scenario.

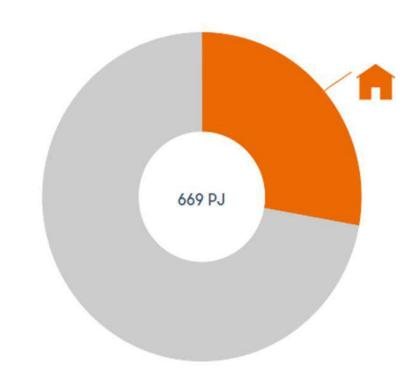
= maximum emissions of 15.3 million metric tons CO2 equivalent

Long term

2040: 8.4 million metric tons CO2 equivalent

2050: 1.5 million metric tons CO2 equivalent.

Energy consumption built environment 2018: 27.8% of total



Dutch building stock

- 7.9 million homes, 0.5 million non-residential buildings.
- Demand for 1 million new homes by 2030.

- Approximately 1.6 million buildings built before 1940
- 62.000 monuments
- 2.2 million social rental houses (29% of the total housing stock)

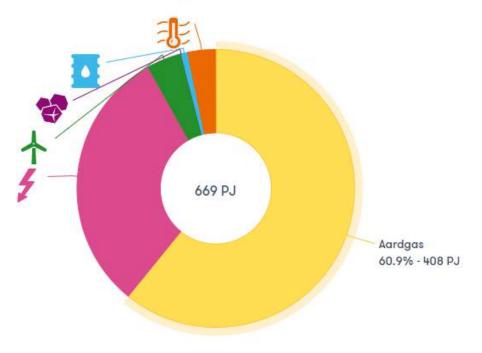




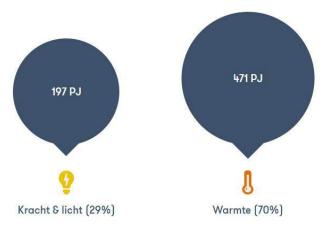
Dutch building stock -Energy use households

- Dependence on natural gas and boiler heating systems
 - 89.5% of households have individual heating system based on natural gas
 - 6% district heating
- Need for insulation, heat pumps, sustainable district heating and renewable energy (e.g. solar)

Energy sources



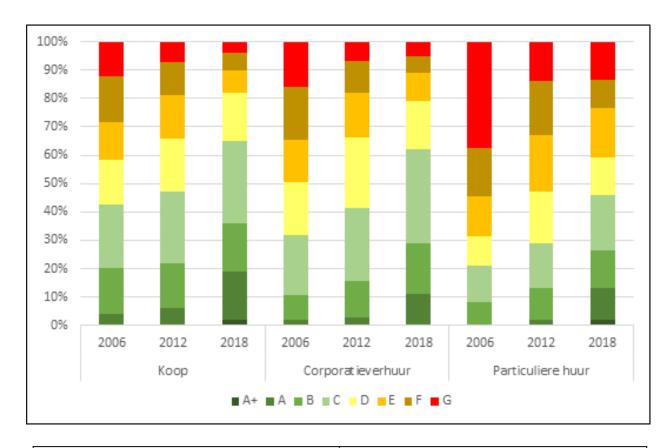
Energy use



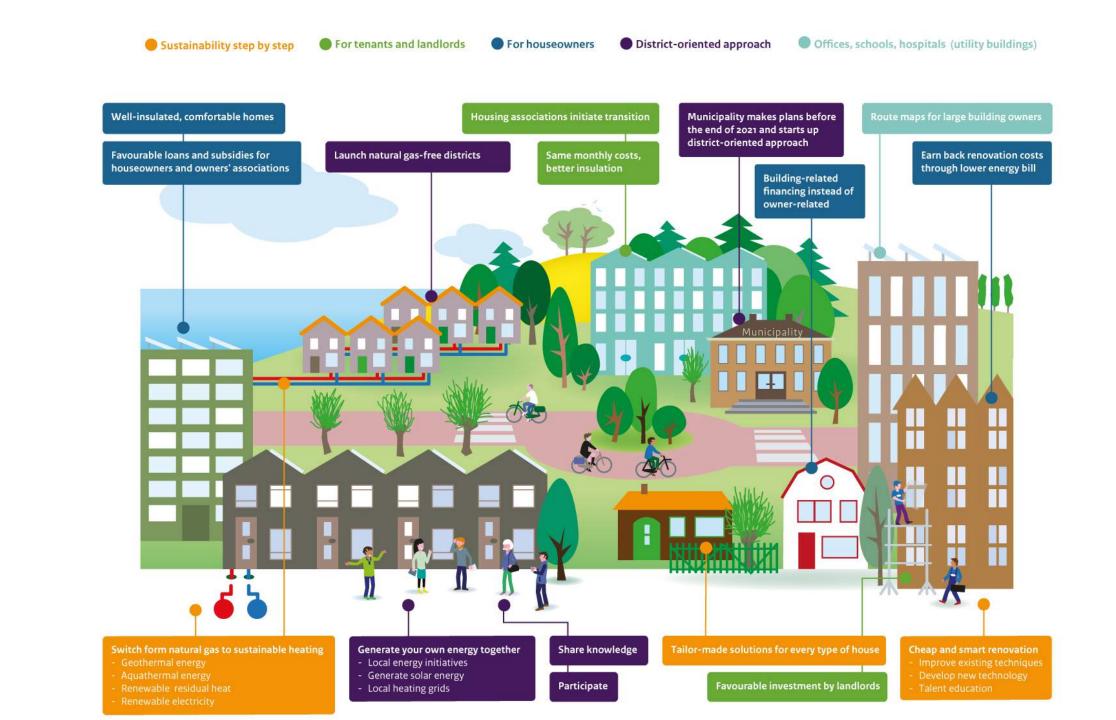


Dutch building stock – Energy Performance Certificats (EPCs)

- Approximately 4 million residential buildings have an EPC (2020)
 - 23,3% are label A
- Number of non-residential buildings with an EPC is still limited, but increasing every year



Коор	Owner-occupied
Corporatieverhuur	Housing association rental
Particuliere huur	Private rental



Policy measures

15,3 Mton in 2030 (3,4 Mton reduction)

RESIDENTIAL BUILDINGS 2,2 Mton

COMMERCIAL & PUBLIC
1 Mton

NEW BUILDINGS 0,2 Mton

DISTRICT ORIENTED APPROACH

Integrated approach:

Pilots + knowledge sharing platform

GENERAL APPROACH
Insulation and energy efficiency of buildings

PRIVATE RESIDENTIAL

Indicative standards (not net zero)

SOCIAL HOUSING/RENTAL

Extra investments housing corporations, standards

COMMERCIAL & PUBLIC standards and roadmaps

Sufficient sustainable energy

TAX SHIFT

Higher natural gas, lower electricity taxes

COST REDUCTION

Innovation, Industrialisation SUBSIDIES

Home Owners and Housing corporations

FINANCE

Heat fund

Loans linked to building

Market organisation Heat, natural gas and electricity

District-oriented approach

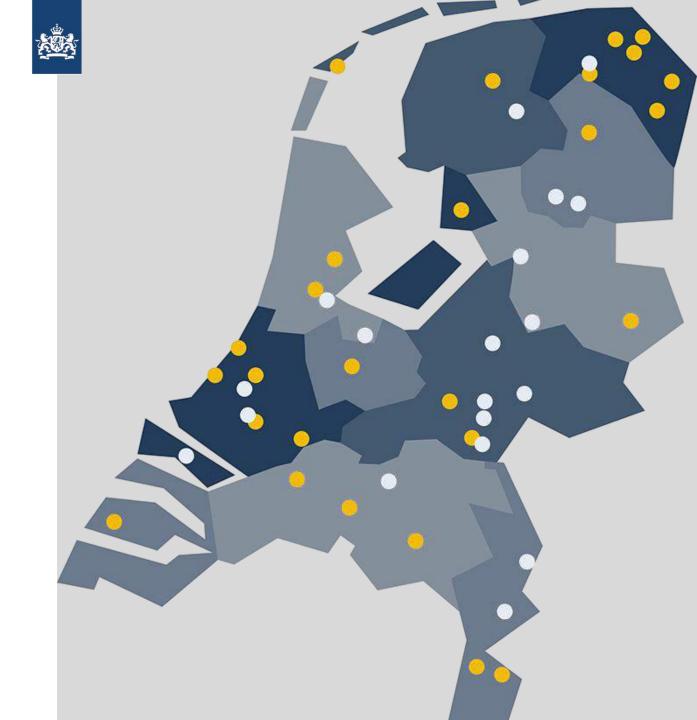
Test Beds for Natural Gas-free Districts

We want to **learn**, share **knowledge** and **experience** with different heating and insulation techniques in different types of buildings and neighbourhoods, in close collaboration with the inhabitants





- 27 pilot neighbourhoods in 2019
- 19 pilot neighbourhoods in 2020
- In total 100 neighbourhoods in 2021
- Goal is 30.000-50.000 homes in 2021
- By 2030, roughly 1.5 million existing homes will have to be made more sustainable and we will need to have settled into a rhythm of renovating 200,000 homes per year.
- Municipalities are in the lead, participation of inhabitants, planning, coordination of investments
- National government facilitates





Are we on track?

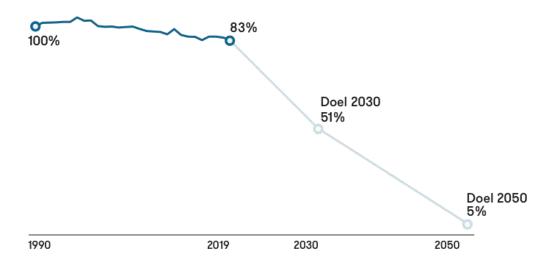
Netherlands Environmental Assessment Agency (PBL):

We will not achieve the target with the current set of policy measures (48% reduction by 2030 at most)

Green Deal has raised the European ambition: 55% reduction by 2030.

Not yet translated to new national target for the built environment.

Next cabinet has to raise the bar.



Challenges:

- Affordability for households / housing cost neutrality
- Public support
- Financing the transition
- Wait for innovation or go hybrid?

Learn from other countries