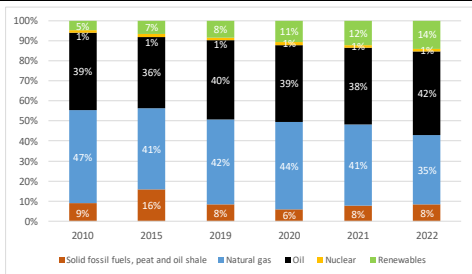


# REPowerEU Two Years on\_Netherlands

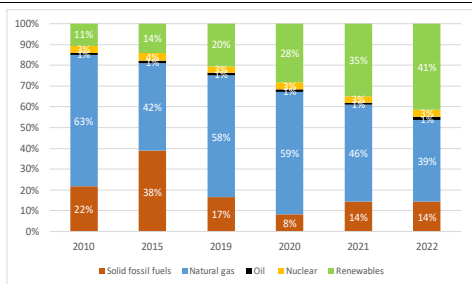
## Key energy figures

Graph 1: Energy mix



Source: Eurostat

Graph 2: Electricity mix



Source: Eurostat

## Save energy

### 1. KEY ENERGY SAVINGS MEASURES

Netherlands is implementing energy efficiency measures to contribute to energy security further, such as:

- The **'Flip the Switch' campaign to incentivise energy savings** is aimed at households, consumers, businesses and the public sector. Initially the campaign focused on short-term actions, but it has been extended to actions aimed at preparing

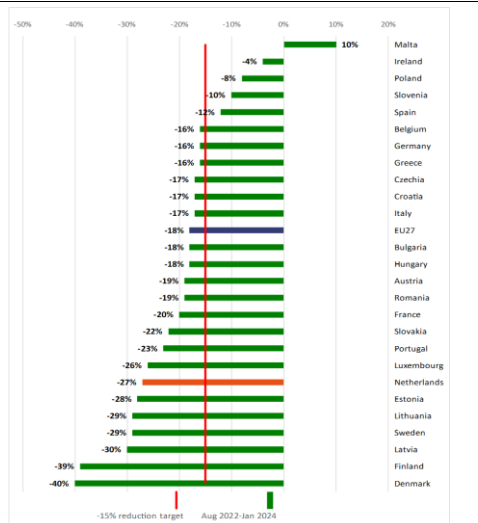
society for the winter and more structural actions.

- The **obligation for businesses to implement energy efficiency measures** resulting from an energy audit has been extended to include a wider range of measures and a broader range of businesses.
- **Investment subsidy for sustainable energy and energy savings (ISDE)** (EUR 624 million), which awards grants for investments in small-scale heat pumps, solar boilers, insulation and heat connections to improve energy efficiency and the National Insulation Program with the goal to insulate 2.5 million homes.

### 2. GAS DEMAND REDUCTION

Netherlands has reduced its gas consumption by **27%** in the period **August 2022 – January 2024**, above the decrease achieved at EU level (18%) and the 15% voluntary gas demand reduction agreed at the EU level <sup>(1)</sup>.

Graph 3: Natural gas demand reduction (August 2022 – January 2024)



(1) Cyprus does not use natural gas  
Source: Eurostat, DG ENER calculations

(1) Council Regulation (EU) 2023/706 of 30 March 2023, amending Regulation (EU) 2022/1369

# Diversify energy supplies

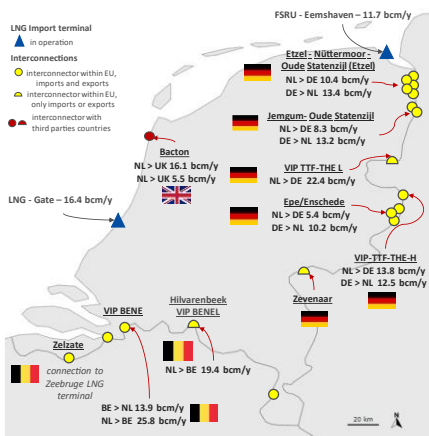
## 1. KEY ACTIONS

As the Netherlands is one of the main EU gas producing countries, the role of natural gas is still very important in the Dutch energy system, and in 2022 it still accounted for 30% of gross available energy and for 39% of gross electricity production<sup>(2)</sup> (but in steep decline compared to 2021, respectively from 40% and 48%).

## 2. GAS INFRASTRUCTURE DEVELOPMENTS

Because of the collapse of indigenous production, import dependency on non-EU countries for natural gas went up from 21% in 2013 to 62% in 2022, with Russian gas comprising 35% of gas imports. The Groningen gas field has ceased to operate since 1 October 2023 (except in some exceptional circumstances). To compensate, a total of 35 bcm is forecast to be extracted from small onshore fields until 2047; in 2022 Groningen still accounted for 30% of gross available energy and for 39% of gross electricity production (but in steep decline compared to 2021, respectively from 40% and 48%). The Netherlands also benefits from two LNG terminals (in Eemshaven and Rotterdam) and six underground gas storage facilities (with a combined capacity of 14.2 bcm).

Map 1: **Cross-border gas infrastructure**



Source: European Commission map recreation (based on ENTSO-G)

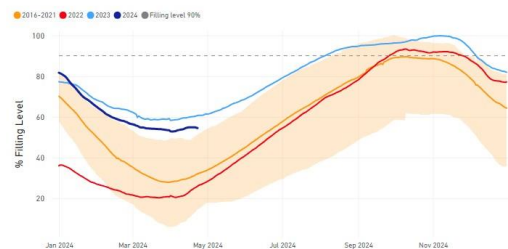
(2) Ibid.  
 (3) The Netherlands operates 6 underground storage facilities managed by 5 operators: UGS EnergyStock (managed by UGS EnergyStock), UGS Nüßtermoor H-1 (managed by UGS Nüßtermoor H-1), CUGS Grijpskerk and UGS Norg (Langelo) (managed by NAM), UGS Alkmaar (managed by TAQA Pek Gas), UGS Bergermeer (managed by TAQA Gas Storage)

## 3. GAS STORAGE

The Netherlands has **the third largest storage capacity<sup>(3)</sup> in the EU in absolute numbers** after Germany and Italy, with almost 15.5 bcm, representing 46% of its annual gas consumption in 2022.

Netherlands fulfilled its gas storage obligations last winter, reaching 99.6% by 1 November 2023<sup>(4)</sup>, and ended the winter season with a storage filled at 52.88% by 1 April 2024.

Graph 4: **Storage levels in Netherlands**



Source: JRC calculation based on AGSI+ Transparency Platform, 2024

## Energy platform

- In the **four EU tenders** for joint gas purchase organised **under AggregateEU in 2023**, 113 companies across the EU expressed gas demand of over 54 bcm. 48 suppliers replied with bids of more than 61 bcm, resulting in **over 42 bcm of demand matched**.
- In the **first mid-term tender of 2024**, 19 companies expressed 34 bcm of gas demand for the next 5 years, with **97.4 bcm offered by suppliers**.
- According to the indicative data obtained through AggregateEU, companies from the **Netherlands** aggregated gas demand of **5.74 bcm** in 2023 under the EU Energy Platform. This represents the equivalent of 17.18% of the country's yearly gas consumption.

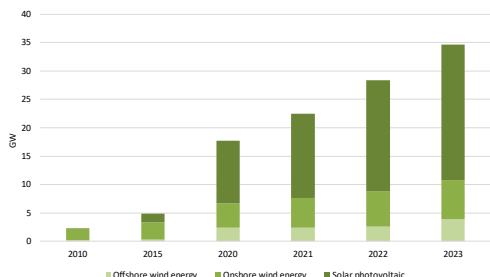
# Produce clean energy

## 1. INSTALLED RENEWABLE ELECTRICITY CAPACITY, IN WIND AND SOLAR

In **2023**, Netherlands installed around 6.3 GW of renewable electricity capacity, bringing the total to **35.6 GW** (vs. 23.5 GW in 2021).

In **2023**, the annual growth rate of installed renewables power capacity stood at **21.5%** compared to 25.8% in 2021<sup>(5)</sup>.

Graph 5: **Installed solar and wind power capacity (in GW)**



- (1) The renewable power capacity data reflects the capacity installed and connected at the end of the calendar year.
- (2) In 2023, Netherlands installed 2 GW of wind power capacity (vs. 1 GW in 2021).
- (3) In 2023, Netherlands installed 4.3 GW of solar photovoltaic capacity (vs. 3.7 GW in 2021).

Source: IRENA, Renewable capacity statistics, 2024

## 2. ELECTRICITY INFRASTRUCTURE DEPLOYMENT

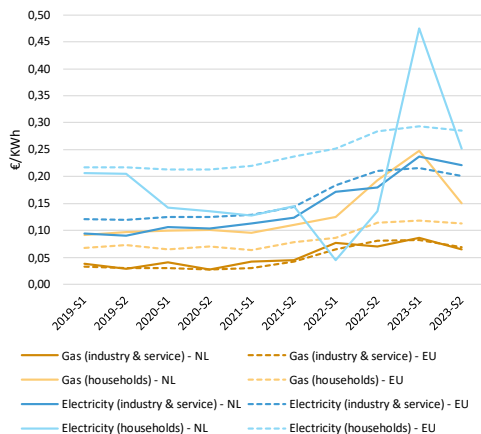
Capacity constraints in the electricity grid remain a significant bottleneck for the rollout of renewable energy installations and, increasingly, for meeting electricity demand. The Dutch electricity grid can no longer accommodate the rapidly growing demand for transmission capacity. This can be seen in the regular refusal by network operators to allow new producers of electricity to connect to the grid.

Additional investment in the expansion of electricity infrastructure, both at transmission and distribution levels, is therefore necessary to ensure increased penetration of renewable electricity, but also to meet electricity demand and the further electrification of the economy. A substantial investment plan from 2023 to 2030 of around EUR 60 billion has been agreed.

<sup>(5)</sup> International Renewable Energy Agency (2024). Renewable capacity statistics 2024

# Energy price developments

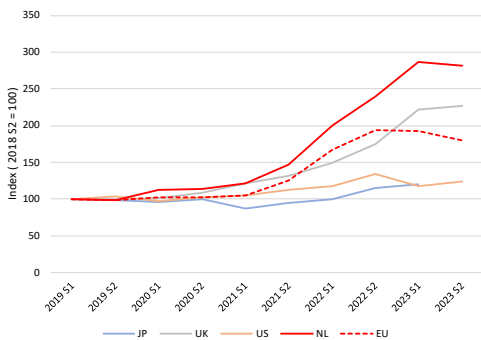
Graph 6: **Netherlands' energy retail prices for households and industry & service**



- (1) For industry, consumption bands are I3 for gas and IC for electricity, which refer to medium-sized consumers and provide an insight into affordability
- (2) For households, the consumption bands are D2 for gas and DC for electricity
- (3) Industry prices are shown without VAT and other recoverable taxes/levies/fees as non-household consumers are usually able to recover VAT and some other taxes

Source: Eurostat

Graph 7: **Trends in electricity prices for non-household consumers (EU and foreign partners)**



- (1) For Eurostat data (EU and NL), the band consumption is ID referring to large-sized consumers with an annual consumption of between 2 000 MWh and 20 000 MWh, such as in electricity intensive manufacturing sectors, and gives an insight into international competitiveness
- (2) JP = Japan

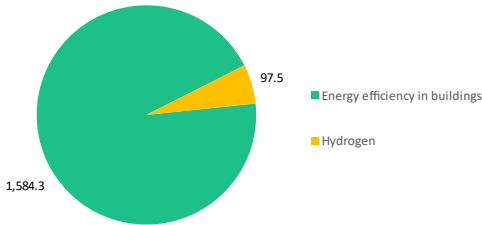
Source: Eurostat, IEA

## Smartly combine investments and reforms in the RRP

### Amended Recovery and Resilience Plan, (RRP) including a REPowerEU chapter:

- Approved by Council: on 17 October 2023
- Total amount: EUR 5.4 billion
- Amount allocated for energy: EUR 1.68 billion
- Climate tagging: RRP: 54.9 %; REPowerEU chapter: 100 %

Graph 8: **Energy-related investments in the RRP (in EUR million)**



Source: European Commission

### Tangible results: reforms & investments

- **Energy efficiency:** renovation subsidy scheme providing subsidies to owners of public real estate, such as buildings of local administrations or educational and health institutions, in order to improve the buildings' energy efficiency.
- **Renewables (Offshore wind):** Investment for the improvement of shipping safety near offshore wind farms through: the procurement of five new electric recharging points at sea for electric vessels and five new recharging points in the quay for electric vessels (including hybrid vessels); the procurement of three emergency response towing vessels;
- **Hydrogen:** investment for the construction of at least two demonstration facilities for innovative green hydrogen technologies to demonstrate the feasibility of large-scale electrolysis and green hydrogen deployment; and at least three research projects focusing on the production, storage, transport and use of green hydrogen.

## Highlights of the National Energy and Climate Plan

- The **draft updated NECP** was submitted to the European Commission in June 2023.
- Member States are due to submit their **final updated NECP by 30 June 2024**, taking into account the Commission recommendations.
- For more information see the dedicated [webpage of the European Commission on the NECPs](#).

## Strengthening competitiveness with the Net Zero Industry Act

**Netherlands remains highly dependent on non-EU countries for clean energy technologies, particularly for components of wind turbines, but exhibits positive developments in solar module manufacturing and a growing foothold in battery manufacturing.** In early 2024 the Netherlands launched the SolarNL initiative, a national research, innovation, and industrial investment program to stimulate PV manufacturing in the Netherlands and Europe. This initiative builds on a dynamic ecosystem of small and innovative PV module manufacturers, based in e.g. Westknollendam, and The Hague. Overall manufacturing capacity for PV ought to increase. Despite a substantial deployment of on and offshore wind energy, there is no manufacturing capacity for wind turbine components in the Netherlands. Regarding battery facilities, the opening of the first lithium-ion battery factory in Helmond last year paved the way forward. This capacity is likely to increase in future if the gigafactory project carried by an Anglo-Korean company materialises. When it comes to hydrogen, backed by the investments carried out in the framework of the state aid supported Important Project of Common European Interest Hy2Tech program, the Fuel Cell Giga Factory (FCGF) project in Arnhem is set to pioneer the initial industrial deployment of large-scale fuel cell manufacturing, set to come online in 2026.

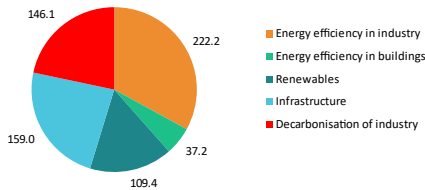
## Other EU initiatives

Cohesion Policy provides significant support to REPowerEU in all EU MS, with a total of EUR 89 billion worth of investments focusing on regions most in need in the energy transition.

Most resources concentrate on energy efficiency in the buildings sector (i.e. 720 000 dwellings across the EU will be renovated and public buildings will decrease their energy consumption by 6000 GWh/year) and on energy infrastructure (i.e. 4.9 GWh of additional electricity storage deployed), followed by renewables (e.g. 9.5 GW of additional renewable energy capacities installed).

Graph 9: **2021-2027 energy-related investments in the Cohesion Funds supporting REPowerEU**

Cohesion Policy energy related investments in NL: EUR 674 million



Source: Cohesion Open Data<sup>(6)</sup>

<sup>(6)</sup> <https://cohesiondata.ec.europa.eu/d/hgyj-gyin>