

## Energy affordability indicator - methodology

## Structure of energy affordability indicator

This indicator shows the share of disposable income that households spend on their energy bills. The evolution of disposable income to year-end 2022 comes from CBS StatLine (Statistics Netherlands, 2024a); for the 2023-2026 period we use the income development directly from our Spring Projections published in June 2024. The energy bill represents the gas and electricity bill of an average household. The amounts have been compiled by calculating the various fixed and variable components of the energy bill based on average energy consumption. Transmission costs, fixed supply costs and possible tax credits make up the fixed part of the energy bill, while variable supply costs and taxes on consumption represent the variable costs. For 2024 prices, we use current figures from CBS StatLine (Statistics Netherlands, 2024b). For 2025 and 2026 prices, we use the difference between futures prices in 2024 and those in the following two years to calculate the price increase (ECB, 2024). We use the expected changes in network costs to calculate transmission costs (Netbeheer Nederland, 2023). For energy taxes, we use the rates from the tax plan (State Finances, 2023) and the outline coalition agreement between PVV, VVD, NSC and BBB (Government formation, 2024). Furthermore, households are expected to use more electricity and less gas in the coming years. In our calculations, we assume an increase in electricity consumption of 0.75% per year (CE Delft, 2020) and a decrease of 35 m3 of gas per year per household. This decrease in gas consumption is required to meet the targets for a gas-free society by 2050.

Calculation of percentage of households that are financially vulnerable to energy costs

To calculate the percentage of households that are financially vulnerable to higher energy costs, we first link Statistics Netherlands microdata on energy consumption per dwelling and household disposable income for the latest year available, i.e. 2022. We then use the expected average growth in both income and energy prices to calculate the percentage for 2024-2026. Besides the shift from gas to electricity consumption mentioned above, we do not include any other behavioural effects. We then calculate the energy ratio for each year: the energy bill divided by disposable income. If a household spends more than 10% of its disposable income on energy, then it is considered financially vulnerable to energy costs. This is known as the High Energy Ratio (Statistics Netherlands, 2023).

Results based on calculations by DNB using non-public microdata from Statistics Netherlands.

## References



Statistics Netherlands (2023). Methoderapport Monitor Energiearmoede. Link

Statistics Netherlands (2024a). Household income; income classes, household characteristics. CBS StatLine. <u>Link</u>

Statistics Netherlands (2024b). Average energy rates for consumers. CBS StatLine. Link

CE Delft (2020). Electrification and Demand Profile 2030. Link

ECB (2024). Energy futures.

Government formation (2024). *Outline coalition agreement between PVV, VVD, NSC and BBB.* <u>Link</u>

Netbeheer Nederland (2023). *De energietransitie en de financiële impact voor netbeheerders*. <u>Link</u>

State finances (2023). 4.22 Linked amendments to Environmental Tax Act and Surcharge for Renewable Energy and Climate Transition Act. Link