

# Stedin Green Bond Report 2024

June 2025





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# About this report

Reporting is an important mechanism that demonstrates transparency and accountability to our stakeholders. This report has been produced in line with the requirements set out in our Green Finance Framework, the ICMA “Handbook - Harmonized Framework for Impact Reporting”<sup>1</sup> issued in June 2021.

In this report Stedin accounts for the use of proceeds, allocation and impact reporting of all issued green bonds. We also included some case studies as examples of projects that are being financed by these green bonds.

We have obtained limited assurance on the allocation of green bond proceeds to the eligible categories as included in [the allocation report](#). Other parts of this report were not subject to assurance procedures. See [the assurance report](#).

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<sup>1</sup> To be found [here](#)





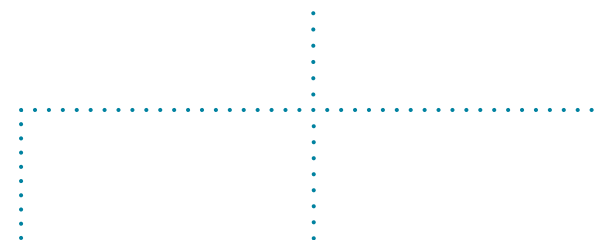
# 1

## Stedin at a Glance

Stedin Group is a semi-public organisation: a public limited company whose shares are owned by government authorities: 61 Dutch municipalities, two provinces and the State of the Netherlands. Stedin Group consists of several business units: grid operator Stedin operates in the regulated market, while our infra partners NetVerder and DNWG Infra carry out nonregulated activities. In 2024, the non-regulated activities accounted for 1.3% of revenue (2023: 1.6%). Stedin Netbeheer, NetVerder and DNWG Infra are separate subsidiaries of Stedin Holding. You will find more information on the various business units on the Stedin Group website.

With our gas and electricity networks, we are a vital link in our service area. We concentrate on all activities related to building, managing and maintaining these energy networks and facilitating the energy market in our service area. We are also preparing to play a role in developing heat networks as part of the new integrated energy system.

 **STEDIN**  
GROEP



**STEDIN**<sup>NET</sup>

 **DNWG**

**NET**  
**VERDER**



## Service area

We manage and maintain the energy networks in most parts of South Holland, Utrecht and Zeeland. Our service area is home to roughly 5.5 million people. It includes three of the four largest cities in the Netherlands, the port and industrial areas of Rotterdam and Zeeland, as well as greenhouse horticulture regions. It also includes parts of the provinces of North Holland and Friesland. Stedin Group operates and has its registered office in the Netherlands. Our head office is located at: Blaak 8, 3011 TA in Rotterdam.



# 2

## Stedin Corporate Strategy

Working together to create an environment filled with new energy.

The Netherlands is moving from a fossil energy system to a sustainable energy system – from centrally generated energy to decentralised generation, such as using solar panels or offshore wind turbines. Even if the sun does not shine or the wind does not blow for a while, the energy system based on supply and demand must be kept in balance.

We are working towards sustainable value creation by implementing our strategy for the period 2023–2027. Our strategy is based around expanding our network capacity while keeping network quality high. We will achieve this by accelerating construction, better utilising networks and continuing to manage networks reliably, and doing this as sustainably as possible.



### Ensuring network capacity

- **Construction:** we are laying even more cables and pipelines and building additional stations. In this way, we can connect our customers to our energy network, including new customers and electricity generators.
- **Utilisation:** construction alone will not suffice. We will improve the utilisation of the network by optimally matching supply and demand, and by using the available network capacity in the smartest possible way. This will reduce network congestion.

### Ensuring network quality

- **Management:** we want to maintain the quality of our performance. Among other things, we do so by safeguarding the quality of our energy network. Our top priority is to continue to ensure a reliable and safe energy supply.

### Caring for people and the environment

- **Sustainability:** the biggest contribution Stedin can make towards improving sustainability in the Netherlands is to expand our network capacity as quickly and effectively as possible. This will enable companies and private citizens in our service area to become more sustainable. We also set ourselves targets to minimise the impact and emissions of our own operations.



# 3

## Contribution to the UN Sustainable development goals

In 2015, the UN adopted the 2030 Agenda for Sustainable Development to secure the rights and Goals are an inspiration for Stedin in formulating its own corporate (ESG) strategy. As a corporation we are conscious that our actions have an impact on all these goals albeit to varying degrees.

The core activities of Stedin contribute directly or indirectly to the achievement of SDG 7 (Affordable and Clean Energy) and SDG 9 (Industry, Innovation and Infrastructure). On these two goals our core activities also have the greatest impact. We identified a further goals to which Stedin feels its actions and activities contribute significantly; being SDG 3 (Good Health and Well Being), SDG 4 (Quality Education), SDG 8 (Decent Work and Economic Growth), SDG 11 (Sustainable cities and communities), SDG 12 (Responsible Consumption and Production), SDG 13 (Climate Action) and SDG 15 (Life on Land).

For further detail on our impact we refer to our 2024 annual report.



# 4

## Stedin 2021 Green Finance Framework

Stedins Green Finance Framework stems from November 2021 and is based on the International Capital Markets Association (“ICMA”) Green Bond Principles (“GBP”), 2021 version<sup>2</sup> and Loan Market Association (“LMA”) Green Loan Principles (“GLP”), 2021 version<sup>3</sup>. This was independently validated and confirmed by ISS-ESG.

The Framework follows best market practice and has the following four core components:

1. Use of Proceeds
2. Process for Project Evaluation and Selection
3. Management of Proceeds
4. Reporting

The Stedin Group Green Finance Framework also follows the recommendations of the Green Bond Principles regarding External Review. It reflects the tighter criteria set under the EU Taxonomy Climate Delegated Act<sup>4</sup> (April, 2021) and the transparency requirements under the (then proposed) EU Green Bond Standard<sup>5</sup> (July, 2021).

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<sup>2</sup> To be found [here](#)

<sup>3</sup> To be found [here](#)

<sup>4</sup> To be found [here](#)

<sup>5</sup> To be found [here](#)

This Framework may be further revised or updated to remain consistent with shifting expectations, best market practices and the regulatory landscape. This Framework will apply to any Green Finance Instruments issued by Stedin Group and will be in force as long as any Green Finance Instrument is outstanding.

Stedin intends to update its Green Finance over the course of 2025.

### No EU Taxonomy alignment

For 2024, we are unable to demonstrably prove that our activities have made a substantial contribution to environmental sustainability. Although the majority of our activities are related to ecological sustainability efforts and we can confirm that our company does not cause significant harm or serious detriment to the six climate and environmental objectives of the EU Taxonomy, we are not yet able to demonstrate full compliance with the minimum safeguards in the area of human rights throughout the entire year 2024. Please also see pages 132 and 162 of 2024 annual report on the status on EU taxonomy alignment.

### Use of Proceeds

In accordance with the Green Finance Framework, proceeds of Stedin Groep’s Green Finance Instruments will be used to finance and/or refinance, in whole or in part, new or existing Eligible Green Projects from any of the Eligible Green Project Categories as described below, together forming the Eligible Green Project Portfolio.

**Renewable Energy** includes the total E-Grid of Stedin and as such also all distribution stations, substations, cables and connections to wind and solar parks, households and businesses, facilitating, integrating and increasing the share of renewable energy in the grid. Replacing gas and other fossil fuels as an energy source implies Stedin needs to extend its E-Grid and existing infrastructure which requires capacity upgrades to transport higher quantities of Renewable Energy. Ultimately this contributes to lower CO<sub>2</sub> emissions.

**Energy Efficiency** includes all Smart Meters installed at customers by Stedin. Smart Meters contribute to a better customer understanding of energy usage. This enables active energy savings by customers and is essential for a future tariff structure where tariffs depends on the maximum peak per household. Lowering the maximum peak load would result in lower future investment requirements and thereby creating efficiency. Energy savings by customers also results in lower CO<sub>2</sub> emissions.

**Green Buildings** relates to all buildings with at the minimum a EPBD label A++, currently being our offices in Utrecht and Goes. Stedin has invested in energy efficiency of its offices which results in lower energy usage and CO<sub>2</sub> emissions.

The Clean Transport category as defined in the Green Finance Framework has not been included as a separate category in the Eligible Green Project Portfolio at this moment. These assets are part of our E-Grid and included in the Renewable Energy category.



# 5

## Green Bonds

Stedin Groep has five Green Bonds outstanding, each with a nominal value of €500.000.000. Our debut Green Bond was issued in May 2019. Followed by a second one in November 2021 and a third one in May 2022. These were all fully allocated in our 2022 Green Bond report. Since then Stedin issued a fourth 7 year Green Bond in June 2024 and a 12 year Green Bond in February 2025. All issues were arranged under our Euro Medium Term Note programme (EMTN).

The 12 year Green Bond issued in February 2025 was largely used to refinance short term debt accrued in 2024 and therefore the procurement of assets included in our Green Asset portfolio in 2024. We therefore decided to include this bond in the report and report it as being fully allocated. Stedins network driven investments in its electricity network amounted to EUR 508 mln over 2024.



# Green Bond Allocation reporting

## Valuation date portfolio Eligible assets: 31 December 2024

The proceeds of Stedin Groep’s Green Finance Instruments have been used to finance and/or refinance, in whole or in part, new or existing Eligible Green Projects from any of [the Eligible Green Project Categories](#), together forming the Eligible Green Project Portfolio.

Proceeds from all the Green Bonds issued have been fully allocated to the Eligible Green Project Portfolio. The reporting principles for the allocation report can be found in the Green Finance Framework. In its Green Finance Framework Stedin indicates it would report Eligible Green Projects on their asset value, additional information about each category is included in the paragraph ‘notes to the allocation report’ below.

All Eligible Green Projects included in the Green Project Portfolio are realised and operated within the service area of Stedin Groep in The Netherlands. Growth in the Eligible Green Project portfolio is driven by the increase in eligible assets under the Renewable Energy category, primarily being Stedin’s E-Grid.

This growth is in part the result of the increase in the asset value of Stedin’s E grid, from € 3,613 year end 2021 to € 4,726 year end 2024. Furthermore the The Renewable Electricity Production Ratio, defined as the share of renewable electricity produced as a proportion of all electricity produced in the Netherlands, increased over the same period from 33.1%<sup>7</sup> to 52.4%<sup>8</sup>.

The growth in portfolio of Eligible Green Assets has been calculated by applying the same methodology as has been used for the calculation of the year-end 2024 figures on the year-end 2021 figures. All issued Green Bonds are fully used for refinancing of existing (short term) debt.

Use of proceeds Allocation Table							
	Asset Value (€ mln) <sup>6</sup>	Eligibility (%)	Eligible assets (€ mln)	Issued Instruments	Issue Date	Maturirty Date	Amount (€ mln)
Renewable energy	4,726	52%	2,479	XS2079678400	14/11/2019	14/11/2029	500
Energy efficiency	292	100%	292	XS2407985220	16/11/2021	16/11/2026	500
Clean transport	–	100%	–	XS2487016250	03/06/2022	03/06/2029	500
Green buildings	32	100%	32	XS2841150316	20/06/2024	20/06/2031	500
				XS2997384776	12/02/2025	12/02/2037	500
Total Eligible Green project portfolio			2,803	Total Green Funding			2,500
Total Eligible Green project portfolio Unallocated			303				
Percentage of Net Proceeds of Green Funding allocated to Eligible Green Project Portfolio:							100%
Growth in Eligible Green Assets in the portfolio since financial year 2021 (in € mln)							1238
Growth in Eligible Green Assets in the portfolio since financial year 2021 (in %)							79%

6 The asset value of the eligible green project portfolio is subject to [the limited assurance report](#).

7 To be found [here](#)

8 To be found [here](#)



## Green Bond Allocation reporting - Notes to the allocation report

In its Green Finance framework Stedin indicates it would report Eligible Green Projects on their asset value. Asset value is stated at cost less accumulated depreciation and impairment loss.

In addition, the following definitions apply for each category:

- Renewably Energy pertains to the E-Grid. Its value is determined by taking the gross asset value for the E-grid, from which the customer received construction contributions on the E-Grid are deducted. To this net value as per our fiscal year end, the Renewable Electricity Production Ratio of a certain year is applied. The Renewable Electricity Production Ratio is defined as the share of renewable electricity produced as a proportion of all electricity produced in the Netherlands. In 2024, this figure corresponded to 52.4% (2021: 33.1%).
- Energy Efficiency is defined as the asset value of Smart Meters per our fiscal year end.
- Green Buildings includes the asset value of offices which are certified with a EBCD label A++ as per our fiscal year end.





## Green Bond Impact reporting

Portfolio date: 31 December 2024

As Stedin is committed to transparency and the application of market best practices, the table below provides our impact reporting in line with the ICMA Harmonized Framework for Green Bond Impact Reporting (June, 2021). For each of the Eligible Green Project Categories the estimated energy savings and / or avoided CO<sub>2</sub> emissions are stated in the table below.

Impact reporting table								
Green Bond Principles category	Eligible assets (€ mln)	Share of Total portfolio Financing	Eligibility for Green Bonds	Renewable energy transported (2024, in MWh)	Estimated annual avoided CO <sub>2</sub> emissions (in t CO <sub>2</sub> eq.) Scope I + II	Estimated annual avoided CO <sub>2</sub> emissions (in t CO <sub>2</sub> eq.) Scope III	Number of smart meters installed	Estimated energy consumption savings (in GJ)
Renewable energy	2,479	88%	100%	13,040,041		4,277,134		
Energy efficiency	292	10%	100%			110,479	2,122,000	1,212,571
Green buildings	32	1%	100%		1,034			13,783





## Green Bond Impact reporting - Notes to the impact report

### Renewable Energy

The renewable electricity transported has been estimated by applying the Renewable Electricity Production Ratio of a certain year to the total number of KWhs of electricity transported in that year. This methodology was chosen to remain consistent with the methodology applied to derive the Eligible asset value in the [allocation table](#).

The estimated annual avoided CO<sub>2</sub> emissions have then been calculated using the total emission from the activity, using the WTW conversion factor of 0.328<sup>9</sup>.

Stedin notes that the positive impacts reported are a result of efforts made by both Stedin and other key stakeholders within the energy value chain. Including (and not limited to) the ones mentioned below:

- Electricity producers: Establishment of new renewable energy production facilities along Stedin's grid
- Consumers within Stedin's service area: Growing demand for renewable energy

### Energy Efficiency

The energy consumption savings have been based on research indicating that smart meters account for a total 4 petajoule in energy savings for a total of 7 mln<sup>10</sup> households with a smart meter, ie 0.57 GJ per household. This equates to approximately 1% of the total domestic energy usage.

The avoided CO<sub>2</sub> emissions have then been calculated using the total emission from the activity, using the WTW conversion factor of 0.328<sup>11</sup>

### Green Buildings

The Utrecht premises have been renovated, leading to a smaller and more energy efficient building. As a result of the renovation, the total number of m<sup>2</sup> declined by 7,361 m<sup>2</sup>, from 15,886 m<sup>2</sup> to 8,525 m<sup>2</sup>.

The renovations in Goes were aimed at closing two of our three offices in the area and concentrating all activities in a single sustainable location with an office space of 4,585 m<sup>2</sup>.

Avoided CO<sub>2</sub> emissions are calculated on the basis of the estimated energy use of the pre-renovation building compared to the energy use of the post-renovation building.

To support the calculation, we used the average energy consumption for Dutch office buildings (900 MJ / m<sup>2</sup>)<sup>12</sup> compared to the energy consumption post-renovation (351.4 MJ / m<sup>2</sup>) for Utrecht and (358.9 MJ / m<sup>2</sup>) for Goes based on the respective recent energy performance certificates.

The avoided CO<sub>2</sub> emissions have then been calculated using the direct emission from the activity, using the TTW conversion factor of 0.270 (scope I&II)<sup>13</sup>.



9 To be found [here](#)

10 To be found [here](#)

11 To be found [here](#)

12 To be found [here](#)

13 To be found [here](#)

# 6

## Case studies

This section contains some examples of how we expand our network capacity by accelerating construction, better utilising networks and continuing to manage networks reliably. This all as sustainably as possible. Construction alone will not suffice. We will improve the utilisation of the network by optimally matching supply and demand, and by using the available network capacity in the smartest possible way. These are all examples of investments we made in our network in the various parts of our service area.

### Roof off for transformer replacement in Doorn

In March, Stedin lifted the damaged transformer out of the transformer station on Amersfoortseweg in Doorn. This was done in spectacular fashion, as the roof had to be removed to get the transformer out. Something that doesn't happen every day; in fact, in most cases, a transformer is taken out through the door. It was an exciting project, because if things went wrong, tens of thousands of households would be without power for an extended period. We consulted the municipalities and local residents to ensure a proper execution, and were also mindful of the bats that live in the station. The repair was needed to secure local power supply and future-proof the electricity grid.



### Energy hub leads to more capacity on electricity grid

The Netherlands' first energy hub was inaugurated at Tholen in Zeeland in June amid great interest. Companies can use this e-hub to share power with each other by combining generation, storage and smart use of the electricity grid, covering peaks in supply and demand. This offers companies at Slabbecoornpolder and Welgelegen business parks in Tholen extra capacity, freeing up capacity on the grid in the wider region. In September 2023, business collective REC Tholen and grid manager Stedin signed a group capacity agreement for this purpose.





## Rotterdam

The Port of Rotterdam Authority is realising a power connection for the Cruise terminal on the Holland-Amerika-kade. With this connection, diesel generators will no longer be needed to provide power to ships when they are docked. For this power connection, Stedin laid a route of some 2.5 kilometres of cable straight through some of the busiest areas the city. With the construction of the route, Stedin is contributing to making the port more sustainable. Thanks to good agreements with the surrounding area, the Port Authority, Rotterdam municipality and our contractors, we managed to lay the cables ahead of schedule and with minimum disturbance for the affected neighbourhoods.

In preparation and during the work, we kept in touch with residents and business owners as much as possible. By communicating openly and clearly we kept disturbance limited to a minimum.



## Phasing out 'SF6'

Stedin is phasing out 'SF6' switching gear. SF6 is used as an insulation medium in our high and medium voltage switching gear. It is however a very potent greenhouse gas, about 23,000 times stronger than CO2. In line with European regulations we'll install SF6 free switching gear in  $\leq 24\text{KV}$  voltage installations. Stedin is actively taking measures to reduce the use of SF6 to comply with the new regulations. This includes investigating alternative (SF6-free) insulation options, incorporating these alternatives into processes and systems, and investing in communication to and training of our employees.

# 7

## Limited assurance report auditor

To the Supervisory Board and the Board of Management of Stedin Holding N.V.

### Our conclusion

We have examined the Asset Value as per 31 December 2024 as included in the Green Bond Allocation Reporting (page 10) of the Green Bond Report 2024 of Stedin Holding N.V. ("Company") based in Rotterdam.

Based on the procedures performed and assurance evidence obtained, nothing has come to our attention that causes us to believe that the Asset Value as per 31 December 2024 as included in the Green Bond Allocation Reporting (page 10) of the Green Bond Report 2024 of Stedin Holding N.V. is not prepared, in all material respects, in accordance with the applicable criteria.

### Basis for our conclusion

We performed our examination in accordance with Dutch law, including Dutch Standard 3000A 'Assurance-opdrachten anders dan opdrachten tot controle of beoordeling van historische financiële informatie (attest-opdrachten)' (assurance engagements other than audits or reviews of historical financial information (attestation engagements)). This engagement is aimed to obtain limited assurance. Our responsibilities in this regard are further described in the

'Our responsibilities for the examination of the Asset Value as per 31 December 2024 as included in the Green Bond Allocation Reporting (page 10) of the Green Bond Report 2024' -section of our report.

We are independent of Stedin Holding N.V. in accordance with the 'Verordening inzake de onafhankelijkheid van accountants bij assurance-opdrachten' (ViO, Code of Ethics for Professional Accountants, a regulation with respect to independence). Furthermore, we have complied with the 'Verordening gedrags- en beroepsregels accountants' (VGBA, Dutch Code of Ethics for Professional Accountants). We believe that the assurance evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion.

### Applicable criteria

For this engagement, the following criteria apply:

- Stedin Group Green Finance Framework, November 2021.
- The paragraph 'Notes to the allocation report' as included on page 11 "Green Bond Allocation reporting – Notes to the allocation report" to the Green Bond Report 2024.

The absence of an established practice on which to draw, to evaluate and measure the information in the Allocation Report allow for different, but acceptable, measurement

techniques and can affect comparability between entities and over time.

### Responsibilities of the Board of Management and the Supervisory Board

The Board of Management of the Company is responsible for the preparation of the "Stedin Green Bond Report 2024" and the included Asset Value as per 31 December 2024 as included in the Green Bond Allocation Reporting (page 10) of the Green Bond Report 2024 in accordance with the applicable criteria.

The Board of Management is also responsible for such internal control as it determines is necessary to enable the preparation, measurement or evaluation of the Green Bond Report 2024 and the included Asset Value as per 31 December 2024 as included in the Green Bond Allocation Reporting (page 10) of the Green Bond Report 2024 that is free from material misstatement, whether due to fraud or errors.

The Supervisory Board is responsible for overseeing the Board of Management's reporting process.



**Our responsibilities for the examination of the Asset Value as per 31 December 2024 as included in the Green Bond Allocation Reporting (page 10) of the Green Bond Report 2024**

Our objective is to plan and perform our examination in a manner that allows us to obtain sufficient and appropriate assurance evidence for our conclusion.

The procedures performed in this context differ in nature and timing and are less in extent as compared to reasonable assurance engagements. The level of assurance obtained in a limited assurance engagement is therefore substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

We apply the applicable quality management requirements pursuant to the 'Nadere voorschriften kwaliteitsmanagement' (NVKM, regulations for quality management) and accordingly maintain a comprehensive system of quality management including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Misstatements can arise from fraud or errors and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the decisions of users taken on the basis of the Asset Value as per 31 December 2024 as included in the Green Bond Allocation Reporting (page 10) of the Green Bond Report 2024. The materiality affects the nature, timing and extent of our procedures and the evaluation of the effect of identified misstatements on our conclusion.

Our examination included amongst others:

- Identifying areas of the Asset Value as per 31 December 2024 as included in the Green Bond Allocation Reporting (page 10) of the Green Bond Report 2024 where a material misstatement, whether due to fraud or error, is likely to occur, designing and performing assurance procedures to address these areas, and obtaining assurance evidence that is sufficient and appropriate to provide a basis for our conclusion.
- Considering the internal control related to the examination in order to select assurance procedures that are appropriate in the circumstances, but not for the purpose of expressing a conclusion on the effectiveness of the Board of Management's internal control.

- Making inquiries of management and others within the Board of Management Company.
- Determining the plausibility of the information included in the Asset Value as per 31 December 2024 as included in the Green Bond Allocation Reporting (page 10) of the Green Bond Report 2024.
- Reading the other information in the Stedin Green Bond Report to identify material inconsistencies with the subject matter information or the assurance report.

Rotterdam, 10 June 2025

Deloitte Accountants B.V.

Signed on the original: A. van der Spek

