



CSRD Impact of NWB Bank's loan portfolio

Accountability report: Reporting year 2024

Colophon

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Management summary

This report describes the framework, methodology, data accountability and the impact results on the CSRD ESRS categories of the loan portfolio of NWB Bank. NWB Bank finances the Dutch public sector, including water authorities, drinking water utilities, renewable energy projects, municipalities, housing associations and healthcare institutions. All these clients have an impact on Dutch society through their core activities.

The NWB Bank (Nederlandse Waterschapsbank) is driven by a profound recognition of the significance of building a water-conscious and sustainable society. The bank's strategy in doing so is embedded in a foundation, a capstone and three strategic pillars: to be a sustainable and efficient organisation, to achieve responsible returns and social impact by being the bank of and for the public water sector, to be a key player for the public sector and to be a financing partner for improving sustainability in the Netherlands. NWB Bank's impact and the impact of its clients is derived from and contributes to these pillars and the ability to manage the capstone effort.

Driven by the implementation of the Corporate Sustainability Reporting Directive (CSRD) in NWB Bank's annual report, the structure of this report has been changed from a 'SDG Impact Report' into an 'ESG Impact Report'. This renewed focus aligns the developed impact indicators with the major E-, S-, and G-themes and sub-themes identified by the CSRD's European Sustainability Reporting Standards (ESRS). The topics that are highly relevant to the bank and its customers are 'climate change', 'water and marine resources', 'biodiversity and ecosystems', 'resource use and circular economy' and 'consumers and end-users'.

Current report distinguishes impact made over the reporting year and impact made over the entire reporting period. The measurement over the reporting year is based on the 2023 loan portfolio. The measurement over the reporting period is based on the loan portfolio of 2021, 2022 and 2023.

The results of all the 'Key Performance Indicators' (KPI's) are presented per CSRD ESRS theme in the tables below (S1.1 to S1.5). The explanations and interpretation can be found in chapters 3 and 4.

Table S1.1 – Summary of the results for the reporting year

CSRD ESRS	KPI	Results absolute 1-measurement	Results absolute 2-measurement	Impact results - absolute	Impact results absolute – attributed to NWB Bank
E1 – Climate change	Tested flood defences	92.25 %	93.65 %	1.4 % pt.	
	Flood defences that meet requirements	67.97 %	69.69 %	1.71 % pt.	
	Flooding standards	0.31 %	0.36 %	0.06 % pt.	
	Heat stress	0.35 °C	0.35 °C	0.00 °C	
	Energy performance	185.08 kWh/m ²	175.93 kWh/m ²	-9.14 kWh/m ²	-0.60 kWh/m ²
E3 – Water and marine resources	Quality of surface water – % phosphor removed from water	87.29 %	85.73 %	-1.56 % pt.	
	Quality of surface water – % nitrogen removed from water	85.83 %	83.69 %	-2.14 % pt.	
	Quality of surface water – % oxygen-binding substances removed from water	93.18 %	92.11 %	-1.07 % pt.	
	Quality of surface water – biological status (WFD targets)	14.06 %	12.77 %	-1.29 % pt.	
	Quality of surface water – chemical status (WFD targets)	4.59 %	0.72 %	-3.87 % pt.	
	Quality of surface water – total status (WFD targets)	0.00 %	0.00 %	0.00 % pt.	
	Water quality - compliance rate	98.67 %	97.61 %	-1.06 % pt.	
	Water quality - drinking water	99.90 %	99.90 %	0.00 % pt.	
E4 – Biodiversity and ecosystems	Quality of surface water – ecological status (WFD targets)	0.00 %	0.15 %	0.15 % pt.	
	Area of public green space without agriculture	30.07 %	30.07 %	0.00 % pt.	
	Protected nature	33.31 %	33.31 %	0.00 % pt.	
	Blue green networks	5.58 %	5.58 %	0.00 % pt.	
E5 – Resource use and circular economy	Circularity: purified sewage water used as raw material	13,554,076 m ³	139,787,336 m ³	126,233,260 m ³	
	Circularity: purified sewage water used as raw material compared to the potential	0.85 %	5.00 %	4.15 % pt.	
S4 – Consumers and end users	Amount of housing stock social houses per social housing association	2,116,193	2,122,025	5,832	243
	Total allocations within income limits	70.39 %	67.04 %	-3.34 % pt.	
	E, F, G energy labels	9.30 %	6.96 %	-2.33 % pt.	
	Liveability costs	€83,810,113	€89,259,385	€5,449,272	€452,999

	Maintenance costs	€4,335,319,894	€4,705,503,398	€370,183,504	€23,963,133
	Improvement costs	€2,918,274,579	€3,076,007,454	€157,732,875	€12,106,142
	Total development costs	€7,337,142,913	€7,870,440,244	€533,297,331	€36,490,954

Table S1.2 – Summary of the GHG emissions for the reporting year

Sector	Results absolute 1-measurement	Results absolute 2-measurement	Impact results - absolute	Impact results absolute – attributed to NWB Bank
Drinking water utilities	286,372 tCO ₂ e	246,133 tCO ₂ e	-40,239 tCO ₂ e	-8,474 tCO ₂ e
Educational institutions	17,073 tCO ₂ e	19,657 tCO ₂ e	2,584 tCO ₂ e	-249 tCO ₂ e
Healthcare institutions	1,176,598 tCO ₂ e	1,067,050 tCO ₂ e	-109,548 tCO ₂ e	-3,723 tCO ₂ e
Housing associations	4,899,542 tCO ₂ e	4,256,258 tCO ₂ e	-643,284 tCO ₂ e	-43,904 tCO ₂ e
Municipalities	2,654,725 tCO ₂ e	2,965,182 tCO ₂	310,457 tCO ₂ e	19,269 tCO ₂ e
Provinces	100,183 tCO ₂ e	80,645 tCO ₂ e	-19,538 tCO ₂ e	-2,554 tCO ₂ e
Water authorities	860,449 tCO ₂ e	750,484 tCO ₂ e	-109,964 tCO ₂ e	-78,110 tCO ₂ e
Total	9,994,942 tCO ₂ e	9,385,410 tCO ₂ e	-609,532 tCO ₂ e	-117,745 tCO ₂ e

Table S1.3 – CSRD category E1 Climate change and corresponding KPI's – Energy neutral loan portfolio

Share of attributed energy consumption offset by renewables	Results absolute 1-measurement	Results absolute 2-measurement	Impact results – absolute
Heat	12.45 %	14.49 %	2.05 % pt.
Electricity	85.18 %	285.11 %	199.92 % pt.
Total	35.75 %	78.24 %	42.48 % pt.

Table S1.4 – Summary of the results for the reporting period

CSRD ESRS	KPI	Results absolute 0-measurement	Results absolute 1-measurement	Results absolute 2-measurement	Impact results	Impact results – attributed to NWB bank
E1 – Climate change	Tested flood defenses	79.65 %	94.43 %	94.12 %	14.47 % pt.	
	Flood defenses that meet the set of requirements	56.42 %	67.13 %	64.92 %	8.49 % pt.	
	Flooding standards	0.53 %	0.36 %	0.38 %	-0.15 % pt.	
	Heat stress	0.38 °C		0.38 °C	0.00 °C	
	Energy performance	200.03 kWh/m ²	182.50 kWh/m ²	173.83 kWh/m ²		-26.20 kWh/m ²
E3 – Water and marine resources	Quality of surface water – % phosphor	86.59 %	87.09 %	85.37 %	-1.22 % pt.	

	removed from water					
	Quality of surface water – % nitrogen removed from water	84.52 %	85.77 %	83.66 %	-0.86 % pt.	
	Quality of surface water – % oxygen-binding substances removed from water	92.72 %	93.07 %	92.04 %	-0.68 % pt.	
	Quality of surface water – biological status (WFD targets)	13.80 %	14.48 %	13.76 %	-0.04 % pt.	
	Quality of surface water – chemical status (WFD targets)	14.53 %	5.06 %	1.09 %	-13.44 % pt.	
	Quality of surface water – total status (WFD targets)	0.00 %	0.00 %	0.00 %	0.00 % pt.	
	Water quality - compliance rate	98.44 %	98.74 %	97.73 %	-0.71 % pt.	
	Water quality - drinking water	99.90 %	99.90 %	99.90 %	0.00 % pt.	
E4 – Biodiversity and ecosystems	Quality of surface water – ecological status (WFD targets)	0.00 %	0.00 %	0.06 %	0.06 % pt.	
	Area of public green space without agriculture	24.18 %				
	Protected nature			28.06 %		
	Blue green networks			10.30 %		
E5 – Resource use and circular economy	Circularity: purified sewage water used as raw material	1,364 m ³ / m €	1,921 m ³ / m €	18,876 m ³ / m €	17,512 m ³ / m €	

	Circularity: purified sewage water used as raw material compared to the potential	0.64 %	0.93 %	5.68 %	5.03 % pt.	
S4 – Consumers and end users	Amount of housing stock social houses per social housing association	5.79 dwellings / m €	5.05 dwellings / m €	5.12 dwellings / m €		-0.67 dwellings / m €
	Total allocations within income limits	69.58 %	70.65 %	66.92 %	-2.66 % pt.	
	E, F, G energy labels		7.83 %	6.13 %		
	Liveability costs	240 € / m €	210 € / m €	230 € / m €		-10 € / m €
	Maintenance costs	11,255 € / m €	10,475 € / m €	11,292 € / m €		37 € / m €
	Improvement costs	7,066 € / m €	7,128 € / m €	7,585 € / m €		519 € / m €
	Total development costs	18,528 € / m €	17,803 € / m €	19,069 € / m €		541 € / m €

Table S1.5 – Summary of the GHG emissions for the reporting period

Sector	Results absolute 0-measurement	Results absolute 1-measurement	Results absolute 2-measurement	Impact results	Impact results – attributed to NWB bank
Drinking water utilities	41.3 tCO ₂ e / m €	37.8 tCO ₂ e / m €	29.5 tCO ₂ e / m €		-11.8 tCO ₂ e / m €
Educational institutions	12.6 tCO ₂ e / m €	11.8 tCO ₂ e / m €	13.8 tCO ₂ e / m €		1.2 tCO ₂ e / m €
Healthcare institutions	42.4 tCO ₂ e / m €	36.9 tCO ₂ e / m €	32.7 tCO ₂ e / m €		-9.7 tCO ₂ e / m €
Housing associations	11.9 tCO ₂ e / m €	11.1 tCO ₂ e / m €	9.8 tCO ₂ e / m €		1.2 tCO ₂ e / m €
Municipalities	36.4 tCO ₂ e / m €	32.0 tCO ₂ e / m €	34.0 tCO ₂ e / m €		-2.4 tCO ₂ e / m €
Provinces	45.2 tCO ₂ e / m €	34.4 tCO ₂ e / m €	25.9 tCO ₂ e / m €		-19.3 tCO ₂ e / m €
Water authorities	73.6 tCO ₂ e / m €	72.6 tCO ₂ e / m €	60.7 tCO ₂ e / m €		-12.9 tCO ₂ e / m €
Total	29.7 tCO ₂ e / m €	26.4 tCO ₂ e / m €	22.5 tCO ₂ e / m €		-7.2 tCO ₂ e / m €

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1 Introduction

By NWB Bank

1.1 ESG impact reporting

The NWB Bank (Nederlandse Waterschapsbank) is driven by a profound recognition of the significance of building a water-conscious and sustainable society. Our strategy in doing so is embedded in a foundation, a capstone and three strategic pillars: a sustainable and efficient organisation, driving responsible returns and social impact through being the bank of and for the public water sector, being a key player for the public sector as a whole, and being a financing partner for enhancing sustainability in the Netherlands. The impact we have, and the impact our clients have, derives from and contributes to these pillars and our ability to manage the capstone effort.

More and more, the recognition of performance of financial institutions expands beyond narrow financial indicators, moving towards integrating environmental, social and governance (ESG) aspects. Since we first set out to measure our impact in 2023 our methods and coverage have consistently improved. As of 2024, the reporting format too will change. Driven by the implementation of the Corporate Sustainability Reporting Directive (CSRD) in our annual report, we have opted to restructure the 'SDG Impact Report' into an 'ESG Impact Report'. This renewed focus aligns the developed impact indicators with the major E-, S-, and G-themes and sub-themes identified by the CSRD's European Sustainability Reporting Standards (ESRS). At the same time, the continued relevance of the UN Sustainable Development Goals will be demonstrated by remaining included throughout the ESG impact report, as well as in our annual statements.

The joint purpose of the ESG Impact Report and the Sustainability Statements is to report on the measurement and accomplishment of these efforts. Our daily practice would not be complete without monitoring our own, our clients, and our clients' impact.

1.2 ESG topic definition

NWB Bank finances the Dutch public sector, including water authorities, municipalities and renewable energy companies, which have an immediate impact on Dutch society. NWB Bank, in turn, contributes to this impact by providing competitive financing, enabling these organisations to act.

Based on the activities of her clients, the NWB Bank identified (sub-)topics of particular interest. These (sub-)topics derive from and are structured with an ESRS sustainability statement in mind. The legislator offers ESRS standards which discuss the relevant information to disclose on topics of interest to the reporting entity. Currently, ten standards exist with five pertaining to environmental, four to social, and one to governance information. Within the standards, the ESRS offer an indication of sub-topics and sub-sub-topics that should be considered. The topics that are highly relevant to the bank and its

customers are ‘climate change’, ‘water and marine resources’, ‘biodiversity and ecosystems’, ‘resource use and circular economy’, and ‘consumers and end-users’.

The impact that NWB Bank and her customers have in terms of sustainability contributes to the ‘Sustainable Development Goals’ (SDGs). These goals, sometimes referred to as ‘the world’s strategy’, offer 17 targets that aim to end poverty, protect the planet, and improve the lives and prospects of everyone, everywhere. The SDGs were set by UN member states in 2015 as part of the 2030 ‘Agenda for Sustainable Development’. In order to provide further insight in how we contribute to a better world, we map our ESG topics of interest to the UN SDGs.

E1 - Climate change

Climate change is one of the foremost challenges of the 21st century. This covers the topics of mitigation and adaptation, as well as energy production and use. We contribute to climate change action by supporting mitigation activities by our customers and financing renewable energy projects and -additions. The major investments by water authorities consist primarily of climate adaptation activities. Climate ‘mitigation’ and ‘adaptation’ correspond to SDG 13 on climate action, and ‘energy’ corresponds to SDG 7 on affordable and clean energy.



E3 - Water and marine resources

The water authorities and drinking water utilities we fund contribute to wastewater treatment and the provision of clean drinking water. The ‘water and marine resources’ topic corresponds to SDG 6 on ‘clean water and sanitation’.



E4 - Biodiversity and ecosystems

Biodiversity has risen to prominence as a key transition challenge only relatively recently. Many different organisms live in rivers, streams and ditches, which are subject to our financing partners’ operations. Furthermore, we fund many projects and organisations that affect the built environment or manage nature reserves, impacting life on land. The ‘biodiversity and ecosystems’ topic corresponds to two SDGs, number 14 ‘life below water’, and number 15 ‘life on land’.



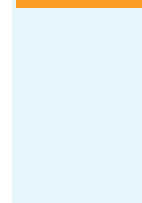
E5 - Resource use and circular economy

Many of the sectors we finance have a major impact on resource and manufactured goods usage. Especially housing construction and healthcare provision have significant footprints. The topic ‘resource use and circular economy’ maps to SDG 11 ‘sustainable cities and communities’.



S4 - Consumers and end-users

The activities of local authorities and housing associations impact the general population to a significant extent through providing living space and social services. ‘Consumers and end-users’ maps to SDG 11 as well.



1.3 From impact to action

Mapping our clients' performance on ESG topics is important to us for a number of reasons. First, it allows us to monitor trends in performance over time and discuss them with our clients, thereby increasing the impact of our funding. In addition, measuring performance also helps us to identify risks that may arise in our portfolio. We also want to clearly show our stakeholders how we are making an impact as a bank – current reporting on the climate footprint of the loan portfolio fulfils this purpose for climate change mitigation yet did not account for other ESG factors present.

Beyond reporting on, we also aim to magnify positive and mitigate negative impacts. As further detailed in chapter 2, the bank's efforts in impact reporting identified a variety of 'Key Performance Indicators' (KPIs) particular to the different topics and client sectors. These KPIs will provide structure to the engagement of the larger organisation both internally and in our conversations with clients and stakeholders.

1.4 Reading guide

This report describes the accountability for the underlying data of the methodology of the impact measurements of NWB Bank's loan portfolio. The portfolio of NWB Bank contains the sectors municipalities, housing associations, drinking water utilities, healthcare institutions, water authorities and renewable energy projects. NWB Bank targets five key topics on which she measures impact. These are 'climate change', 'water and marine resources', 'biodiversity and ecosystems', 'resource use and circular economy', and 'consumers and end-users'.

Chapter 2 lays out the methodology of the impact analysis. In chapter 3 and 4, results are presented per ESG topic. Chapters 5 through 12 provide extensive descriptions of the KPIs, divided by sector.

2 Impact methodology

by NWB Bank

The 'Principles for Impact Reporting for Financial Institutions' (BFI Methodology) guides NWB Bank's impact reporting. Our application of these principles is described below.

2.1 Scope

Starting point for this year's ESG impact assessment is the previous iteration of the SDG impact monitor, which was based on an initial mapping of the different client groups' impact on the SDGs. The 2024 monitor builds on and deepens our assessment, changing some KPIs and strengthening the efforts in biodiversity in particular. Other than that, the major difference discussed previously is the choice to structure the report in line with the ESRS standards' topic structure.

Throughout the first assessment, our aim was to create a complete and accurate picture of our loan portfolio's impact supported by desk research into financial sector standards and best practices, including the 'UN SDGs Indicator List',¹ the 'SDG Impact Measurement Overview' from the Sustainable Finance Platform of the SDG Impact Measurement Working Group,² and impact reports from other financial institutions. This general overview was further supplemented with information on the characteristics and impacts of different sectors, based on publicly available information such as academic articles and publications by umbrella organisations, as well as sector analyses prepared by the bank. The eventual product was a longlist of approximately 25 themes, spread across the six SDGs identified as of particular concern. These were reclassified to the ESRS structure containing ten main topics and various sub-topics. Five relevant ESRS topics are notable, spanning environmental and social concerns in the value chain.

Based on this overview, we identified a shortlist of key performance indicators (KPIs). To do so, we first selected those KPIs that were considered to represent each sector's most material ESG impacts. We then selected those KPIs that were measurable, seeking balance in the number of themes and impact KPIs per ESG topic and per sector. The ultimate goal was to compile a relevant and balanced list of measurable, traceable, and readily available KPIs.

In comparison to last year's list, some changes were made to further strengthen and develop the impact analysis. A new KPI was added to reflect the bank's efforts in biodiversity. We were also forced to exclude a previously collected indicator on healthcare investment, as data quality diminished below our minimum standards.

The final list of impact KPIs was developed in consultation with consultant-researchers of Het PON & Telos. Some KPIs were adjusted or added based on the expertise and experience of Het PON & Telos.

¹ <https://unstats.un.org/sdgs/indicators/indicators-list/>

² <https://www.dnb.nl/groene-economie/platform-voor-duurzame-financiering/werkgroep-sdg-impactmeting/>

Table 2.1 data overview table

CSRD ESRS	KPI	Description	Sector
E1 – Climate change	Tested flood defenses	KMs tested	Water authorities
	Flood defenses that meet the set of requirements	KMs positively tested	Water authorities
	Flooding standards	Percentage of managed surface area that is not yet compliant to the flooding standards	Water authorities
	Heat stress	The average urban heat island effect (UHI) in °C	Municipalities
	GHG emissions	Ton CO ₂ -equivalent / year	Housing associations, Water authorities, Drinking water utilities, Municipalities, Healthcare institutions, Provinces, Education institutions
	'Audacious goal'	Financed sustainable energy production / financed grey energy consumption	Housing associations, Water authorities, Drinking water utilities, Municipalities, Healthcare institutions, Provinces, Education institutions
	Energy performance	Energy performance score	Housing associations
E3 – Water and marine resources	Water quality - surface water	Quality of surface water – % phosphor removed from water	Water authorities
		Quality of surface water – % nitrogen removed from water	Water authorities
		Quality of surface water – % oxygen-binding substances removed from water	Water authorities
		Quality of surface water – biological status (WFD targets)	Water authorities
		Quality of surface water – chemical status (WFD targets)	Water authorities
		Quality of surface water – total status (WFD targets)	Water authorities
	Water quality - compliance rate	Percentage of measurements that meets standards (local standards)	Water authorities
	Water quality - drinking water	Percentage of measurement that meets standards ('Drinkwaterbesluit')	Drinking water utilities
E4 – Biodiversity and ecosystems	Water quality - surface water	Quality of surface water – ecological status (WFD targets)	Water authorities
	Area of public green space without agriculture	m ² of public green space	Municipalities

	Protected nature	Percentage of nature that is protected	Water authorities
	Blue green networks	Share of ecological connections in the landscape in percentage	Municipalities
E5 – Resource use and circular economy	Circularity: purified sewage water used as raw material	Use of treated sewage water as raw material	Water authorities
	Circularity: purified sewage water used as raw material compared to the potential	Percentage of treated sewage water used as raw material	Water authorities
S4 – Consumers and end users	Amount of housing stock social houses per social housing association	Number of units / year	Housing associations
	Total allocations within income limits	Number of allocations / year	Housing associations
	E, F, G energy labels	Percentage of all dwellings with energy label E, F or G	Housing associations
	Development costs	Livability costs	Housing associations
		Maintenance costs	Housing associations
		Improvement costs	Housing associations
		Total development costs	Housing associations

2.2 Attribution

NWB Bank's share in a client's or project's impact is calculated by multiplying the client's or project's total impact by the proportional share of the outstanding loan volume with NWB Bank in the total balance sheet of the client. Attribution is calculated through the following formula:

$$\sum \text{Client or project impact} \times \frac{\text{Outstanding loan volume}}{\text{Total balance sheet (equity + debt)}}$$

The impact figures are derived or calculated using public data from, among others, Dutch Central Bureau of Statistics (CBS), the Human Environment and Transport Inspectorate, the Water Authorities, Climate Monitor, and the sustainability reports of the institutions funded by NWB Bank. The selected clients for which data is collected is based on the loan portfolio as at 31-12-2023.

Where some KPIs offer immediate causal pathways between financing and ESG impact results, some preclude such clarity. In such cases, where attribution in terms of financing volume does not make sense, we do not calculate this metric. Oftentimes, such KPIs offer insight into broad trends experienced and influenced by target sectors.

2.3 Data quality

An important element of the calculation is the quality of the data. The assessment of data quality distinguishes between the following five levels involved in the calculation:

- Class 1 concerns individual data or actual consumption data that have been subject to audit by a third party.
- Class 2 concerns unaudited data or other primary consumption data.
- Class 3 concerns average data specific to the sector or comparable institutions.
- Class 4 concerns accessed data by region or country.
- Class 5 concerns rough estimates.

Table 2.2 Generic data quality table

Data quality (Highest to lowest)	Description
1	Audited impact data or actual primary data
2	Non-audited impact data, or other primary data
3	Averaged data that is peer/(sub)-sectorspecific
4	Proxy data on the basis of region or country
5	Estimated data with very limited support

2.4 Neutrality

Neutrality is an essential starting point for the selection of KPIs. Our approach therefore includes both positive and negative impacts, based on thorough research and sector best-practice standards.

The aim of the impact report is to enable stakeholders to make unbiased decisions, free from prejudice and favouritism. Doing so candidly means we must eliminate any risk of ‘green washing’ or otherwise misconstruing the bank’s efforts in the ESG impact sphere.

2.5 Aggregation

Aggregation of positive and negative impact results distorts key information on the effects of clients’ operations on ESG topics. In order to safeguard transparent and meaningful impact reporting, negative effects are not offset against positive effects.

2.6 Consistency

Consistent reporting ensures that results are comparable over time and between reports. Consistency also helps to meet the principles of other frameworks, such as the Partnership for Carbon Accounting Financials (PCAF), which derives some of its principles from the Greenhouse Gas (GHG) Protocol.

Information is reported consistently. Assumptions, choices, estimates, and calculation approaches underlying the results are documented. In this way, we and our stakeholders continue to have a good understanding of what the attributed relative impact entails.

The pursuit of consistency in methodology does not mean that we cannot be open to improvement and refinement based on evolving insights; a conviction supported by the changes introduced in this year's version of the report.

2.7 Similarity

The impact reporting is sufficiently comparable and detailed to understand the context of the KPIs. To this end, we will continue to include performance over a number of years.

In addition, we present progress relative to set targets and distinguish between indirect and direct (attributable) impacts. When we, for example, finance wind turbines, we can measure a direct impact on the production of renewable energy. When we, on the other hand, finance municipalities, such 'balance sheet financing' is not immediately attributable as we have no say in, control over, or monitoring abilities to inform us of impact made.

2.8 Reliability

Reliability is essential to prevent material errors distorting and undermining decision-making. Through embedding the impact assessment's processes within the bank, the reliability of transmitted data is safeguarded. This principle is also included in other frameworks such as the PCAF, which borrows this principle from the GHG Protocol.

2.9 Best-in-class benchmarking

Where benchmarks are used, we include best-in-class benchmarks to ensure that the Bank's impact is compared to a realistic measure. Best-in-class benchmarking ensures that positive impacts are not exaggerated, and negative impacts are not artificially minimised. Through doing so, our results are reliable, and we prevent greenwashing. Benchmarks can also provide useful information for interpreting results by contextualising the Bank's impact performance.

2.10 Transparency

Transparency enhances the credibility of impact information and allows third-party validation. Relevant assumptions, references, and calculation methods are disclosed transparently by means of this report.

2.11 Timeliness

Timeliness requires that published impact information is up to date. Failure to publish impact information in a timely manner diminishes its usefulness for reporting and decision-making. We disclose impact information in the annual report, as well as providing specific reports inclusive of methodology, data assessments, and additional KPIs and information.

2.12 Restrictions

As of yet, there is insufficient data available on a number of ways in which our clients have an impact on ESG topics. Additionally, some types of impact are only partially included.

An example of this limitation is data availability in terms of timeliness and completeness. Although we continuously use the most recent data, this is often one year out of date. For other KPIs, clients may only report limited information themselves. In the case of Scope 3 GHG emissions for example, some sectors have had to be excluded. No calculations or data are available that would allow us to make a reasonable estimate of these GHG emissions.

2.13 Calculating impact is an ongoing process

Comparability and transparency of impact accounting requires uniform disclosure, following the same guidelines and methodology and ideally using the same metrics. However, the methodology used in this report is not yet set and fixed. Our impact assessment and reporting is an ongoing process in which we are continually looking for improvements.

The impact presented in this report is not conclusive. By improving methodology or using better data sources, today's world may look different tomorrow. If and when such changes occur, previous years' results will be recalculated to enable fair comparisons over time.

2.14 Methodology measured impact over the reporting year

To measure the impact made in the current reporting year compared to the previous year, all clients with a loan in both years are taken into account. If the client wasn't part of the loan portfolio in one of the two years, there is no impact.

Three different ways of calculating the total impact per KPI have been used:

- When the KPI is an absolute measure, the total value per year is the sum of the values per client.

$$\text{Total value per KPI per year} = \sum \text{Client indicator value}$$

- When the KPI is a relative measure and the underlying absolute values are available, the total value per measurement year is calculated with the sum of the underlying absolute values per client.

$$\text{Total value per KPI per year} = \frac{\sum \text{Numerator per client}}{\sum \text{Denominator per client}}$$

- When the KPI is a relative measure, but the underlying absolute values are not available, the total value per measurement year is the average of the values per client

$$\text{Total value per KPI per year} = \frac{\sum \text{Client indicator value}}{\text{Number of clients}}$$

The absolute difference between the results of the two measurement years is the realized impact.

$$\begin{aligned} \text{Impact over reporting year} &= \\ \text{Total value of reporting year } (t_0) &- \text{total value of previous year } (t_{-1}) \end{aligned}$$

2.15 Methodology measured impact over the reporting period

To be able to make a fair comparison of the realized impact over the entire reporting period, the impact is expressed into standardized values, independent of the size and content of the client portfolio. Two different methods are used to calculate the total value per KPI per year:

- When the KPI is a relative measure, the total value per indicator per year is the weighted average of the clients (weighted according to ratio outstanding loan to total balance sheet)

$$\text{Total value per KPI per year} = \frac{\sum \text{Client indicator value} \times \frac{\text{outstanding loan}}{\text{balance sheet}}}{\text{Number of clients}}$$

- When the KPI is an absolute measure, the total value per indicator per year is the sum of the values per client and divided by the size of the loan portfolio of that year (in million €)

$$\text{Total value per KPI per year} = \frac{\sum \text{Client indicator value}}{\sum \text{Outstanding loans (in million €)}}$$

The absolute difference between the results of the two measurement years is the realized impact.

$$\begin{aligned} \text{Impact over reporting year} &= \\ \text{Total value of reporting year } (t_0) &- \text{total value of previous year } (t_{-1}) \end{aligned}$$

3 Impact results reporting year

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This chapter presents the impact results of the 2024 reporting year on all KPIs. There is a clear distinction between the reporting year presented in this chapter and the reporting period, presented in Chapter 4. That distinction is as follows:

- **Reporting year:** for the reporting year, all figures are calculated based on all individual clients who are clients in the current and previous year. This makes it possible to look specifically at the impact of NWB bank's individual clients. In this chapter, 2022 and 2023 are compared for reporting year 2024 because these are the two most recent years from which data is available. In some cases, 2024 is the latest year available. This is clearly indicated in the text. Where 2023 is the most recent year, a qualitative estimate of the expectation for the 2024 numbers has been made. This estimate has been added in italics.
- **Reporting period:** calculations for the reporting period are based on the total client portfolio, regardless of whether the clients are NWB bank clients in all years. The client portfolio is measured in terms of the total loan balance ratio. This allows a numerical comparison over the years, hence, assesses the impact of the NWB bank's total portfolio. In the text a comparison is made between the base year (2021) and the most recent year.

3.1 E1 – Climate change

This category covers adapting to and mitigating climate change, energy consumption and the risks and opportunities associated with climate change.

Flood defences

The vast majority of flood defences (such as dams or water reservoirs) in the Netherlands are managed and maintained by the water authorities. On 1 January 2017, a new safety standard for primary flood defences was introduced. The new standard determines that the risk of deadly casualties as results of a flood should be as low as 1:100,000, or 0.00001%.³. Not all Dutch flood defence mechanisms meet this new standard, yet. As a result, the number of defences that meet the requirements is relatively low. That does not, however, mean that those flood defences are unsafe. As of 2023, 9,081 km (69.69%) of the primary and regional flood defences meet the requirements, compared to 8,972 km (67.97%) the year before. The total length of tested flood defences is 12,203 km (93.65%), compared to 12,176 km (92.25%) in 2022. Considering the new standards, the aim is to achieve 100% compliance with flood defences by 2050.

Expectations for 2024: Lower risk of deadly casualties

The risk of deadly casualties is expected to be lower in 2024. Because of the new standard and target, more and more flood defences are expected to be tested, and action are taken to comply with the standard.

³ <https://live-waves.databank.nl/dashboard/dashboard/waterveiligheid>

Flooding standards

The number of hectares, where the working standards of NBW (national water agreement) are not yet met (divided by the total managed surface area), but where effective measures are taken in an ongoing or upcoming area process is 0.36% in 2023. This percentage was 0.31% a year before.

Expectations for 2024: Higher effective water management

Dutch governmental bodies are working towards a spatial design that allows for effective water management. Those processes are time consuming and differ from how the Dutch landscape used to be designed. The effective measures will increase over time.

Heat stress

Heat stress is measured by the annual average temperature difference created by the 'heat island' effect. An effect as a result of trapping heat, mainly induced by the configuration and design of urban areas. The heat stress measurement indicates the difference in temperature between urban areas compared to rural areas. This temperature difference is on average 0.35°C, which is relatively high. The temperature difference did not change compared to the year before.

Expectations for 2024: Changing urban design reduces heat stress

The design of urban areas is the main cause of heat stress. Municipalities are actively pursuing measures to combat heat trapping, by introducing greenery and reducing paved areas. As a result, the average heat stress should be reduced over time. However, the Netherlands is also an increasingly urbanized area. Hence, reducing heat stress is also highly dependent on how contemporary urbanized areas are designed.

Energy consumption

Aedes, the umbrella organisation for social housing associations in the Netherlands, aims to phase out housing with a lower energy label (E, F or G) by 2028, except for monumental houses and houses 'to be demolished'. Together with E, F and G energy labels, there will also be an increasing focus on reducing heat demand through insulation. Energy labels are measured using the Energy Performance Index, in kWh/m²/year. This is the annual energy consumption divided by the surface area of the house. The average energy consumption has decreased by 9.14 kWh/m² between 2024 and 2023, of which 0.6 kWh/m² is attributable to the NWB Bank (according to the used methodology). Around 70 percent of this reduction is due to sustainability measures, taken by the social housing associations, such as applying insulation and improvement of the airtightness. In addition, the proportion of homes with solar panels has continued to increase over the past year, resulting in a positive impact. Finally, the installation of more sustainable and efficient heating and plumbing systems also improve the energy label score⁴.

Expectations for 2024: The numbers described above are from measurement year 2024.

⁴ <https://benchmark.aedes.nl/nl/editie-2023/duurzaamheid>

Table 3.1 CSRD category E1 Climate change and corresponding KPI's

KPI	Results absolute 1-measurement	Results absolute 2-measurement	Impact results – absolute	Impact results absolute – attributed to NWB Bank
Tested flood defences	92.25 %	93.65 %	1.4 % pt.	
Flood defences that meet requirements	67.97 %	69.69 %	1.71 % pt.	
Flooding standards	0.31 %	0.36 %	0.06 % pt.	
Heat stress	0.35 °C	0.35 °C	0.00 °C	
Energy performance	185.08 kWh/m ²	175.93 kWh/m ²	-9.14 kWh/m ²	-0.60 kWh/m ²

3.1.1 Audacious goal – Energy positive loan portfolio

NWB Bank wants to achieve an ‘energy positive’ loan portfolio by 2035. This requires the renewable energy production to exceed the fossil energy consumption, in the same portfolio.

The calculation of energy neutrality is based on the use of natural gas and electricity by client operations and can be found in NWB Bank’s annual report of 2023.⁵ The formula also described how much of the gains in energy neutrality is attributed to the NWB Bank. Because of this initial step, no separate ‘attribution’ column is included.

Our renewables project finance efforts saw continued growth in 2023, leading to the first positive sub-category ratio for the audacious goal. Almost tripling, renewable electricity production across the portfolio exceeded 1.250 million kWh; enough to supply over 500.000 Dutch households with clean power. At the same time, fossil electricity usage decreased. This was mostly due to a significant decrease in water authorities’ grey power usage. Heat generation remains largely dependent on fossil sources, although renewable generation by heat networks rapidly improves. It is important to note that we will only consider the ‘audacious goal’ achieved if both subset ratios exceed 100%.

Expectations for 2024: Progress towards goal

Our outlook on the audacious goal for 2024 is positive as the total renewable energy project finance outstanding continues to grow. In terms of heat networks, little prospective information is available, leading us to assume conservative but steady growth in the share of renewables. Beyond 2024, early renewables project finance loans will start to run off the books. This will exert downward pressure on the total renewable electricity production financed, potentially stabilising below this year’s reported level. Energy usage across the portfolio is expected to grow at par with growth in total exposure outstanding.

⁵ Jaarverslag 2023 (page 63)

Table 3.1.1 CSRD category E1 Climate change and corresponding KPI's – Energy neutral loan portfolio

Share of attributed energy consumption offset by renewables	Results absolute 1-measurement	Results absolute 2-measurement	Impact results – absolute
Heat	12.45 %	14.49 %	2.05 % pt.
Electricity	85.18 %	285.11 %	199.92 % pt.
Total	35.75 %	78.24 %	42.48 % pt.

3.1.2 GHG emissions

The GHG emissions generated by the clients in NWB bank's loan portfolio are 9,385,410 tCO₂e in 2023 and 9,994,942 tCO₂e in 2022. This positive reduction of 6,1% (table 3.1.2) is the result of reducing emissions in the following sectors: housing associations, water authorities, healthcare institutions, drinking water utilities and provinces. Housing associations are the biggest contributor to reducing emissions (-643,284 tCO₂e), followed by water authorities (-109,964 tCO₂e) and healthcare institutions (-109,548 tCO₂e). For water authorities, part of the decrease in scope 2 GHG emissions is achieved by purchasing more green electricity locally, from companies in the Netherlands rather than from other European countries. The GHG emissions in the second, third and fourth column of Table 3.1.2 are not attributed to NWB Bank⁶. The GHG emissions in the fifth column of Table 3.1.2 are GHG emissions attributed to NWB Bank. The impact attributed to NWB bank is highest for water authorities, due to the relatively high ratio and volume of loans for water authorities. Despite an increase in the attributed GHG emissions for municipalities, the total attributed GHG emissions decreased for NWB Bank by 117,745 tCO₂e.

Expectations for 2024: Lower emissions expected

GHG emissions in 2024 are expected to be lower than in 2023. This is expected by the rising availability of greener energy sources, the focus on conserving energy and options for more sustainable choices when purchasing goods and services. Whether these actions will result in reduced financed GHG emissions will partly depend on the loan volume-to-total balance ratio, at the client level.

⁶ The figures in table 3.1.2 have been calculated as part of the calculations for the PCAF report. All figures presented in the PCAF report are financed GHG emissions. This impact report presents both absolute figures before attribution (generated GHG emissions) and figures after attribution (financed GHG emissions). The underlying sources and calculation methods are similar.

Table 3.1.2 CSRD category E1 Climate change and corresponding KPI's – GHG emissions

Sector	Results absolute 1-measurement	Results absolute 2-measurement	Impact results - absolute	Impact results absolute – attributed to NWB Bank
Drinking water utilities	286,372 tCO ₂ e	246,133 tCO ₂ e	-40,239 tCO ₂ e	-8,474 tCO ₂ e
Educational institutions	17,073 tCO ₂ e	19,657 tCO ₂ e	2,584 tCO ₂ e	-249 tCO ₂ e
Healthcare institutions	1,176,598 tCO ₂ e	1,067,050 tCO ₂ e	-109,548 tCO ₂ e	-3,723 tCO ₂ e
Housing associations	4,899,542 tCO ₂ e	4,256,258 tCO ₂ e	-643,284 tCO ₂ e	-43,904 tCO ₂ e
Municipalities	2,654,725 tCO ₂ e	2,965,182 tCO ₂ e	310,457 tCO ₂ e	19,269 tCO ₂ e
Provinces	100,183 tCO ₂ e	80,645 tCO ₂ e	-19,538 tCO ₂ e	-2,554 tCO ₂ e
Water authorities	860,449 tCO ₂ e	750,484 tCO ₂ e	-109,964 tCO ₂ e	-78,110 tCO ₂ e
Total	9,994,942 tCO ₂ e	9,385,410 tCO ₂ e	-609,532 tCO ₂ e	-117,745 tCO ₂ e

3.2 E3 – Water and marine resources

This category covers water consumption, water abstraction, water discharge and the extraction and use of marine resources.

Quality of surface water

An important part for achieving good water quality is the treatment of wastewater by higher standards. Removing oxygen binding substances and nutrients from wastewater, such as phosphor and nitrogen, is essential for healthy surface waterbodies. The European Directive on urban wastewater treatment, Commission Directive 91/271/EEG, states at least 75%.⁷ of the oxygen binding substances need to be removed. These percentages vary between nutrients: removal of at least 80% is advised for phosphorus and 70-80% for nitrogen.⁸ Undoubtedly, it would be best to remove 100% of these substances and stopping our wastewater from contributing any harmful substances or nutrients to our environment. At present, wastewater treatment plants easily meet the targets set by the European Directive, with percentages ranging from 83.69 and 92.11. However, harmful substances were removed between 2022 and 2023, resulting in a decrease ranging from 1.07%-pt. to 2.14%-pt.

The objectives set out in the European Water Framework Directive (WFD [Dutch: Kaderrichtlijn Water - KRW]) are key to achieve proper water quality. In the Netherlands, water authorities are the main actors in achieving these objectives.⁹. According to the WFD, the total quality of a water body consists of the ecological and chemical conditions. The ecological status of surface water body depends on four factors: the biological state of the water, physiochemical, river basin specific toxic substances and hydromorphic conditions. A water body cannot meet a 'good' status without complying to the biological conditions. The chemical condition is based on a set of chemicals, to which a body either complies or does not. In 2024, the chemical status of the surface water decreased, while the biological status remained almost the same. The total compliance to the WFD quality standards remains 0%, also due to the presence of chemicals listed in the river basis

⁷ In case of chemicals that demand oxygen (COD)

⁸ Directive 91/271/EEG. The percentages are based on the volume of effluent.

⁹ <https://unievanwaterschappen.nl/waterkwaliteit/kaderrichtlijn-water-krw/>

specific toxic substances. Due to a change in measuring methods and listed chemicals, comparison between years is difficult.

Expectations for 2024: the numbers described above are from measurement year 2024.

Drinking water quality

The Human Environment and Transport Inspectorate (ILT) is responsible for measuring the quality of drinking water in the Netherlands. Every year, the inspectorate analyses whether drinking water meets the required quality and safety standards. Based on 565.689 samples, the inspectorate has reported that 99.9% of the samples met the required quality and safety standards.

Expectations for 2024: Continuing compliance with quality standards

The drinking water bodies must comply with robust and rigorous standards, resulting in an expected continued 99.9% compliance rate.

It is important that wastewater is purified. The requirements for purification are mentioned in the Commission Directive 91/271/EEG.¹⁰ Those requirements entail the reduction of present nutrients, chemical substances that demand oxygen (COD) and biochemical substances that demand oxygen (BOD5). To determine whether these requirements are met - year-round - water authorities intensively measure discharges to surface water. 97.6% of the discharges met the requirements in 2023. This was 1%-pt. higher than in 2022.

¹⁰ <https://eur-lex.europa.eu/eli/dir/1991/271/oj/eng>

Table 3.2 CSRD category E3 Water and marine resources and corresponding KPI's

KPI	Results absolute 1-measurement	Results absolute 2-measurement	Impact results - absolute	Impact results absolute – attributed to NWB Bank
Quality of surface water – % phosphor removed from water	87.29 %	85.73 %	-1.56 % pt.	
Quality of surface water – % nitrogen removed from water	85.83 %	83.69 %	-2.14 % pt.	
Quality of surface water – % oxygen-binding substances removed from water	93.18 %	92.11 %	-1.07 % pt.	
Quality of surface water – biological status (WFD targets)	14.06 %	12.77 %	-1.29 % pt.	
Quality of surface water – chemical status (WFD targets)	4.59 %	0.72 %	-3.87 % pt.	
Quality of surface water – total status (WFD targets)	0.00 %	0.00 %	0.00 % pt.	
Water quality - compliance rate	98.67 %	97.61 %	-1.06 % pt.	
Water quality - drinking water	99.90 %	99.90 %	0.00 % pt.	

3.3 E4 – Biodiversity and ecosystems

This category focuses on the impact on biodiversity loss, species status and the size and conditions of ecosystems.

Quality of surface water

The ecological status of surface water bodies depends on four factors: the biological state of the water, physiochemical, river basin specific toxic substances and hydromorphic conditions. A water body cannot meet a 'good' status without complying to the biological conditions. The chemical condition is based on a set of chemicals, to which a body either complies or does not. The biological and the chemical are described in the previous paragraph. The ecological status is considered poor if any of the factors are regarded inadequate, as such, all factors need to meet the quality requirements. The ecological status of surface water is currently insufficient at almost all locations in the Netherlands, only 0.15% meet the criteria in 2024. This is a small increase in comparison to 2023. There are water bodies where the biological status is of sufficient quality, but where the physiochemical requirements and/or the compliance to specific toxic substances fails.

Expectations for 2024: the numbers described above are from measurement year 2024.

Ecosystem size and condition

One of the selected KPIs is the amount of public green space. To measure the total surface of public green areas maps containing trees, bushes, and low vegetation are used. The municipalities

in the NWB Bank's loan portfolio have a green area of 26,766,639 m² in 2021. This is 30% of the total public surface of the municipalities in the loan portfolio.

There are no definite guidelines for the amount of public green space to strive for in the Netherlands. However, two criteria are often considered. The first criterion is the minimum of 75m² of green space per dwelling, where everything that is not hardened surface is counted as green space (such as parks, lawns, roadsides and water) according to the 'Nota Ruimte' of the national government¹¹. The second criterion is the recommendation of the World Health Organisation and concerns the presence of at least one hectare of contiguous green space per neighbourhood or municipality. For biodiversity, recreation and human well-being, green spaces should not be too fragmented. The NWB Bank has a cross-sectoral goal focused on protecting and restoring natural habitats. The goal is to reach ecological connections between green components for at least 10% of the municipality's land area by 2030 and 30% by 2050. Only 18.5% of the municipalities in NWB Bank's loan portfolio met this goal in 2021.

It is commonly accepted among scholars, scientists and governments that there is a 'biodiversity crisis': life on land is under serious stress. Nature in the Netherlands is generally too fragmented and the conditions of - particularly outside and even inside - protected sites for particular animal and plant species are sub-par. Hence, the EU adopted the United Nations goal to protect 30% of the global land and water surface in its EU-Biodiversity strategy. In the Netherlands, land and inland water surfaces are protected under Natura 2000 or NNN (Nature Network Netherlands¹²) status. Currently 33.31% of land and inland water¹³ is protected by these regulations within the water authorities of the NWB-Bank's loan portfolio. Although the Dutch governments are working on the establishment of sufficient protected area, there is still work left.

The NWB bank targets having at least 5% of land area covered by blue-green networks in 2030, and 10% by 2050. Blue-green networks consist of small natural elements that cross rural land¹⁴. These small elements are an important contribution to the biodiversity and (quality of) nature goals. The average blue-green network of municipalities is 5.58%. Of all municipalities in NWB Bank's loan portfolio, 58.79% have at least 5% of area covered by blue-green networks.

Expectations for 2024: Less resources available for achieving blue-green network realisation
Since the termination of the National Program for Rural Areas (Nationaal Programma Landelijk Gebied) which obligated commitment and financed achieving biodiversity goals, responsible governmental bodies have less resources to work towards biodiversity and nature goals in rural areas. Although many local and regional governments and initiatives are still pursuing the goals in that program, the termination and loss of resources probably results in a standstill of blue-green network realisation.

¹¹ https://www.pbl.nl/publicaties/Milieu-_en_Natuureffecten_Nota_Ruimte

¹² Natuur Netwerk Nederland

¹³ Coastal and marine areas are not included in this calculation. 31% of the Dutch coastal and marine waters are protected under N2000 or The European Marine Strategy Framework Directive (MSFD)

¹⁴ Meaning land for agricultural purposes, but also privately owned land or owned by governments, but excluding urban area and protected nature (NNN and N2000)

Table 3.3 CSRD category E4 biodiversity and ecosystems and corresponding KPI's

KPI	Results absolute 1-measurement	Results absolute 2-measurement	Impact results - absolute	Impact results absolute – attributed to NWB Bank
Quality of surface water – ecological status (WFD targets)	0.00 %	0.15 %	0.15 % pt.	
Area of public green space without agriculture	30.07 %	30.07 %	0.00 % pt.	
Protected nature	33.31 %	33.31 %	0.00 % pt.	
Blue green networks	5.58 %	5.58 %	0.00 % pt.	

3.4 E5 – Resource use and circular economy

This category focuses on material inflows, material outflows related to products and services and waste.

Water authorities set out to achieve 100% circular water usage by 2050. To achieve this goal, all 350 wastewater treatment plants must function as water sources. To this end, wastewater needs to be filtered at a higher level, to be reused in natural areas, on agricultural land or in drinking water infiltration areas. Two KPI's measure the progress on attaining circular water usage: how much purified water is used for creating raw material for industrial, irrigation or dehydration purposes, and how this amount compares to the total potential for creating raw materials from wastewater. In 2023 the wastewater usage is 5% in comparison to its potential, which is a large increase since 2022, when 0.85% of the potential was accounted for. The total amount increased from 13,554,076 m³ to 139,787,336 m³.

Expectations for 2024: Increased circularity due to developed strategies and policies

Water authorities have the ambition to be 100% circular by 2050. The first step is to use 50% less primary raw materials by 2030. To attain these goals, water authorities need to develop strategies for water circularity. Compared to 2022, more water authorities are expected to have developed a policy and an action plan on resource use and circular economy. 90% of the water authorities have (partially) incorporated these objectives into their policies.¹⁵ The expectations are that with this recent ambition the circularity will increase more in the upcoming years.

¹⁵ <https://unievannwaterschappen.nl/wp-content/uploads/Klimaatmonitor-Waterschappen-verslagjaar-2023.pdf>

Table 3.4 CSRD category E5 Resource use and circular economy and corresponding KPI's

KPI	Results absolute 1-measurement	Results absolute 2-measurement	Impact results - absolute	Impact results absolute – attributed to NWB Bank
Circularity: purified sewage water used as raw material	13,554,076 m ³	139,787,336 m ³	126,233,260 m ³	
Circularity: purified sewage water used as raw material compared to the potential	0.85 %	5.00 %	4.15 % pt.	

3.5 S4 – Consumers and end users

This category concerns the personal safety, privacy and social inclusion of consumers and end-users.

Affordable and low-cost rental housing

Waiting lists for people who need housing, are a common phenomenon in the social housing industry. There is a very high demand for affordable rental housing, while the supply of social housing is limited. Demand is expected to increase even more in the coming years, as stated by the national government. In addition, there is little additional construction of houses by housing associations. Very few social housing units have been added in the Netherlands in recent years, while the population has grown considerably. Housing associations have set the ambition to realise a total of 30,000 DAEB homes (non-commercial) per year between 2029 and 2035, by signing the National Performance Agreements (NPA)¹⁶.

In 2022, the total amount of housing stock (by social housing associations, in the loan portfolio of NWB Bank) increased by 5,832 housing units, of which 243 are attributable to the NWB Bank (according to the used methodology). The total housing stock was 2,122,025 housing units in 2022, and 2,166,193 in 2021.

Expectations for 2024: Slight increase in number of social housing units in 2024

In the first half of 2024, over 8,200 dwellings of housing associations are added to the housing stock. More houses are built or put into use in 2024 in comparison to 2023, when nearly 6,300 housing association dwellings were completed¹⁷. The expectation for the 2024 is to uphold this positive trend, resulting in a slight increase in the number of housing units.

Allocations within income limits

Housing associations are obliged to provide social housing for people with low incomes, who have little chance of finding housing in the private sector. To partake in this social housing provision, households must uphold to a maximum of annual income, set by the Dutch government. Households are divided into two groups: the primary and secondary group. Both groups are entitled to social housing, but the primary group is additionally entitled to rental allowance. The

¹⁶ Rapport Nationale Prestatieafspraken corporatiesector 2025–2035

¹⁷ <https://www.cbs.nl/nl-nl/nieuws/2024/39/meer-nieuwbouwwoningen-van-woningcorporaties-in-eerste-helft-2024>

income limits for the primary group are therefore lower than for the secondary group. There are no national agreements on fair distribution among these two groups, but in previous years about 80% of the vacant supply was assigned to the primary group - whilst they make up 58% of the total households eligible for social housing. Various regional agreements have been made in this regard to bring the distribution back to 70/30.¹⁸ The KPI ‘*allocations within income limits*’ calculates the percentage allocated to the primary group compared to the total target group. The income threshold for determining whether a household belongs to the primary or secondary group is adjusted annually.¹⁹ The housing associations in NWB Bank’s loan portfolio have allocated 67.04% of their vacant houses in 2024 to households within the primary group. The decrease in the share of allocations to the primary group benefits the possibility for people in the secondary group to find suitable housing.

Expectations for 2024: the numbers described above are from measurement year 2024.

Energy labels

According to The National Performance Agreements, Aedes, the umbrella organisation for social housing associations in the Netherlands, aims to phase out dwellings with a lower energy label (E, F or G) by 2028, except for monumental houses and houses ‘to be demolished’. According to NWB Bank, 3% of the dwellings are part of this exception. In 2023, 9.3 per cent of all dwellings had E, F or G energy labels, in 2024 this reduced to 7.0 per cent. The phasing out of dwellings with an E, F or G energy label by housing associations is well on track. Housing associations and local authorities are pushing for this rapid phase-out because it also helps to combat energy poverty. A good example of this are the local energy counters and energy teams.

Expectations for 2024: The numbers described above are from measurement year 2024.

Development costs for housing association houses

The total investment in developing houses have increased by 7.3% in 2022, compared to 2021. These investments contain development costs related to liveability²⁰, maintenance or improvements. The investments in all three categories have increased considerably in 2022, compared to 2021. This is mainly due to an increase in construction costs. When accounting for the increase in construction costs, there is still a slight increase in expenditure by maintenance and improvements.²¹

¹⁸ <https://www.woonplus.nl/media/1194/huurbeleid-2021.pdf>

¹⁹ The exact numbers of all the limits and categories can be obtained from: <https://aedes.nl/huurbeleid-en-betalbaarheid/huurbeleid-2024>

²⁰ It is important to note that there are big differences between corporations in what they define as liveability costs. There is no accepted definition or guideline.

²¹ https://www.ilent.nl/binaries/ilt/documenten/leefomgeving-en-wonen/autoriteit-woningcorporaties/publicaties-cijfers-en-wetgeving/rapporten/staat-van-de-corporatiesector-2023/000.113_Staat+van+de+Corporatiesector_02_WT.pdf

Expectations for 2024: Increased spending on development costs

For the past three years, social housing associations have been increasingly investing in liveability, meaning the quality of living and living environment. In 2023, on average 160 euro was spend per rental unit. This expenditure is expected to increase further in the coming years. Not only because many houses are outdated, but also because investments in sustainability are needed, in addition to maintenance work. Inflation will also increase the costs ²².

Table 3.5 CSRD category S4 Consumers and end users and corresponding KPI's

KPI	Results absolute 1-measurement	Results absolute 2-measurement	Impact results - absolute	Impact results absolute – attributed to NWB Bank
Amount of housing stock social houses per social housing association	2,116,193	2,122,025	5,832	243
Total allocations within income limits	70.39 %	67.04 %	-3.34 % pt.	
E, F, G energy labels	9.30 %	6.96 %	-2.33 % pt.	
Liveability costs	€83,810,113	€89,259,385	€5,449,272	€452,999
Maintenance costs	€4,335,319,894	€4,705,503,398	€370,183,504	€23,963,133
Improvement costs	€2,918,274,579	€3,076,007,454	€157,732,875	€12,106,142
Total development costs	€7,337,142,913	€7,870,440,244	€533,297,331	€36,490,954

²² <https://benchmark.aedes.nl/nl/editie-2023/onderhoud>

4 Impact results reporting period

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This chapter presents the impact results of the 2024 reporting period on all KPIs. There is a clear distinction between the reporting period, presented in this chapter, and the reporting year, presented in Chapter 3. The underlying objectives are like those of chapter 3, so this chapter will refer to sections of the previous chapter several times. That distinction is as follows:

- **Reporting year:** for the reporting year, all figures are calculated based on all individual clients who are clients in the current and previous year. This makes it possible to look specifically at the impact of NWB bank's individual clients. In this chapter, 2022 and 2023 are compared for reporting year 2024 because these are the two most recent years from which data is available. In some cases, 2024 is the latest year available. This is clearly indicated in the text. Where 2023 is the most recent year, a qualitative estimate of the expectation for the 2024 numbers has been made. This estimate has been added in italics.
- **Reporting period:** calculations for the reporting period are based on the total client portfolio, regardless of whether the clients are NWB bank clients in all years. The client portfolio is measured in terms of the total loan balance ratio. This allows a numerical comparison over the years, hence, assesses the impact of the NWB bank's total portfolio. In the text a comparison is made between the base year (2021) and the most recent year.

4.1 E1 – Climate change

This category covers adapting to and mitigating climate change, energy consumption, and the risks and opportunities associated with climate change.

Flood defences

Most flood defences (such as dams or water reservoirs) in the Netherlands are managed and maintained by the water authorities. On 1 January 2017, a new safety standard for primary flood defences was introduced. The new standard determines that the risk of deadly casualties as results of a flood should be as low as 1: 100,000 or 0.00001%.²³. Not all Dutch flood defences meet this new standard, yet. As a result, the number of defences that meet the requirements is relatively low. That does not, however, mean that those flood defences are unsafe. The number of flood defences that meet the set of requirements shows a positive development over time. Between the first and second measurement, a positive development of 8.49% pt is observable. Also, the percentage of tested defences, in total, has risen by 14.47% pt.

Flooding standards

The number of hectares, where working standards NBW (national water agreement) are not yet met (divided by the total managed surface area), but where effective measures are taken, declined with 0.15% pt. The KPI heat stress shows no decrease or increase during the reporting period.

²³ <https://live-waves.databank.nl/dashboard/dashboard/waterveiligheid>

Heat stress

Heat stress is measured by the annual average temperature difference created by the 'heat island' effect. An effect as a result of trapping heat, mainly induced by the configuration and design of urban areas. The heat stress measurement indicates the difference in temperature between urban areas compared to rural areas. This temperature difference is on average 0.35°C, which is relatively high. The temperature difference did not change during the reporting period.

Energy consumption

The KPI for energy consumption is measured in kWh/m²/year. This is the annual energy consumption divided by the surface area of the house. Throughout the reporting period, this KPI shows a downward trend, meaning that on average, households have used less energy. A focus on proper insulation, sustainability standards for homes and rising energy costs, result in less energy consumption. On average, the consumption decreased by 13.1%, from 200 kWh/m² to 174 kWh/m².

Table 4.1 CSRD category E1 Climate change and corresponding KPI's

KPI	Results absolute 0-measurement	Results absolute 1-measurement	Results absolute 2-measurement	Impact results	Impact results – attributed to NWB bank
Tested flood defenses	79.65 %	94.43 %	94.12 %	14.47 % pt.	
Flood defenses that meet the set of requirements	56.42 %	67.13 %	64.92 %	8.49 % pt.	
Flooding standards	0.53 %	0.36 %	0.38 %	-0.15 % pt.	
Heat stress	0.38 °C		0.38 °C	0.00 °C	
Energy performance	200.03 kWh/m ²	182.50 kWh/m ²	173.83 kWh/m ²		-26.20 kWh/m ²

4.1.1 GHG emissions

The total financed GHG emissions of NWB Bank's loan portfolio have declined, from 29.7 tCO₂e / m € in 2021, and 26.4 tCO₂e / m € in 2022, to 22.5 tCO₂e / m € in 2023 (table 4.1.1). Water authorities have the highest financed GHG emissions in relative terms but also show the largest a reduction over the years, mainly in scope 2 (greening of electricity). In relative terms, municipalities and healthcare institutions are the second largest contributors to GHG emissions. Municipalities haven't reduced their emissions much in recent years. In 2024 a new inventory of property data was carried out by the 'Kadaster'.²⁴ This led to an increase in the total floor area owned by municipalities, and this increased scope 1 GHG emissions.

²⁴Kadaster registers of all real estate (land and buildings) in the Netherlands, showing who has what rights.

Table 4.1.1 CSRD category E1 Climate change and corresponding KPI's – GHG emissions

Sector	Results absolute 0-measurement	Results absolute 1-measurement	Results absolute 2-measurement	Impact results	Impact results – attributed to NWB bank
Drinking water utilities	41.3 tCO ₂ e / m €	37.8 tCO ₂ e / m €	29.5 tCO ₂ e / m €		-11.8 tCO ₂ e / m €
Educational institutions	12.6 tCO ₂ e / m €	11.8 tCO ₂ e / m €	13.8 tCO ₂ e / m €		1.2 tCO ₂ e / m €
Healthcare institutions	42.4 tCO ₂ e / m €	36.9 tCO ₂ e / m €	32.7 tCO ₂ e / m €		-9.7 tCO ₂ e / m €
Housing associations	11.9 tCO ₂ e / m €	11.1 tCO ₂ e / m €	9.8 tCO ₂ e / m €		1.2 tCO ₂ e / m €
Municipalities	36.4 tCO ₂ e / m €	32.0 tCO ₂ e / m €	34.0 tCO ₂ e / m €		-2.4 tCO ₂ e / m €
Provinces	45.2 tCO ₂ e / m €	34.4 tCO ₂ e / m €	25.9 tCO ₂ e / m €		-19.3 tCO ₂ e / m €
Water authorities	73.6 tCO ₂ e / m €	72.6 tCO ₂ e / m €	60.7 tCO ₂ e / m €		-12.9 tCO ₂ e / m €
Total	29.7 tCO ₂ e / m €	26.4 tCO ₂ e / m €	22.5 tCO ₂ e / m €		-7.2 tCO ₂ e / m €

4.2 E3 – Water and marine resources

This category covers water consumption, water abstraction, water discharge and the extraction and use of marine resources.

Quality of surface water

An important part for achieving good water quality is the treatment of wastewater by higher standards. Removing oxygen binding substances and nutrients from wastewater, such as phosphor and nitrogen, is essential for healthy surface waterbodies. The European Directive on urban wastewater treatment, Commission Directive 91/271/EEG, states at least 75%.²⁵ of the oxygen binding substances need to be removed.²⁶ At present, wastewater treatment plants easily meet the targets set by the European Directive, with percentages ranging from 83.66 and 93.07. However, the percentage of removed harmful substances decreased by a range of 0.68% -pt. to 1.22% -pt., over the reporting period for the clients of the NWB Bank.

The objectives set out in the European Water Framework Directive (WFD [Dutch: Kaderrichtlijn Water - KRW]) are key to achieve proper water quality. In the Netherlands, water authorities are the main actors in achieving these objectives.²⁷ According to the WFD, the total quality of a water body consists of the ecological and chemical conditions. The ecological status of surface water body depends on four factors: the biological state of the water, physiochemical, river basin specific toxic substances and hydromorphic conditions. A water body cannot meet a 'good' status without complying to the biological conditions. The chemical condition is based on a set of chemicals, to which a body either complies or does not. For the reporting period, the chemical status of the surface water decreased, while the biological status remained almost the same. The total compliance to the WFD quality standards remains 0%, also due to the presence of chemicals listed in the river basis specific toxic substances. Due to a change in measuring methods and listed chemicals, comparison between years is difficult.

²⁵ In case of chemicals that demand oxygen (COD)

²⁶ Directive 91/271/EEG. The percentages are based on the volume of effluent.

²⁷ <https://unievenwaterschappen.nl/waterkwaliteit/kaderrichtlijn-water-krw/>

Drinking water quality

It is important that wastewater is purified. The requirements for purification are mentioned in the Commission Directive 91/271/EEG.²⁸ Those requirements entail the reduction of present nutrients, chemical substances that demand oxygen (COD) and biochemical substances that demand oxygen (BOD5). To determine whether these requirements are met - year-round - water authorities intensively measure discharges to surface water. Throughout the reporting period the discharges that meet the requirements are mostly similar over time.

The Human Environment and Transport Inspectorate (ILT) is responsible for measuring the quality of drinking water in the Netherlands. Every year, the inspectorate analyses whether drinking water meets the required quality and safety standards. Throughout the reporting period 99.9% meet the requirements.

Table 4.2 CSRD category E3 Water and marine resources and corresponding KPI's

KPI	Results absolute 0-measurement	Results absolute 1-measurement	Results absolute 2-measurement	Impact results	Impact results – attributed to NWB bank
Quality of surface water – % phosphor removed from water	86.59 %	87.09 %	85.37 %	-1.22 % pt.	
Quality of surface water – % nitrogen removed from water	84.52 %	85.77 %	83.66 %	-0.86 % pt.	
Quality of surface water – % oxygen-binding substances removed from water	92.72 %	93.07 %	92.04 %	-0.68 % pt.	
Quality of surface water – biological status (WFD targets)	13.80 %	14.48 %	13.76 %	-0.04 % pt.	
Quality of surface water – chemical status (WFD targets)	14.53 %	5.06 %	1.09 %	-13.44 % pt.	
Quality of surface water – total status (WFD targets)	0.00 %	0.00 %	0.00 %	0.00 % pt.	
Water quality - compliance rate	98.44 %	98.74 %	97.73 %	-0.71 % pt.	
Water quality - drinking water	99.90 %	99.90 %	99.90 %	0.00 % pt.	

²⁸ <https://eur-lex.europa.eu/eli/dir/1991/271/oj/eng>

4.3 E4 – Biodiversity and ecosystems

This category focuses on biodiversity loss, species status and ecosystem size and condition.

Quality of surface water

The ecological status of surface water body depends on four factors: the biological state of the water, physiochemical, river basin specific toxic substances and hydromorphic conditions. A water body cannot meet a 'good' status without complying to the biological conditions. The chemical condition is based on a set of chemicals, to which a body either complies or does not. The biological and the chemical are described in the previous paragraph. The ecological status is considered poor if any of the factors are regarded inadequate, as such, all factors need to meet the quality requirements. Over the reporting period only 0.06% meet the ecological criteria. This is a small increase. There are water bodies where the biological status is of sufficient quality, but where the physiochemical requirements and/or the compliance to specific toxic substances fails.

Ecosystem size and condition

One of the selected KPIs is the amount of public green space. To measure the total surface of public green areas, maps containing trees, bushes, and low vegetation are used. The municipalities in the NWB Bank's loan portfolio have a green area of 26,766,639 m² in 2021. This is 30% of the total surface owned by the municipalities in the loan portfolio. It is not possible to make a comparison throughout the reporting period, due to lack of available data.

It is commonly accepted among scholars, scientists and governments that there is a 'biodiversity crisis': life on land is under serious stress. Nature in the Netherlands is generally too fragmented and the conditions of - particularly outside and even inside - protected sites for particular animal and plant species are sub-par. Hence, the EU adopted the United Nations goal to protect 30% of the global land and water surface in its EU-Biodiversity strategy. In the Netherlands, land and inland water surfaces are protected under Natura 2000 or NNN (Nature Network Netherlands.²⁹) status. Currently 28.06% of land and inland water³⁰ is protected by these regulations, within the areas of all the water authorities of the NWB-Bank's loan portfolio. For this KPI it is not possible to make a comparison for the reporting period, due to lack of available data.

The NWB bank targets having at least 5% of land area covered by blue-green networks in 2030, and 10% by 2050. Blue-green networks consist of small natural elements that cross rural land.³¹ These small elements are an important contribution to the biodiversity and (quality of) nature goals. The average blue-green network of municipalities is 10.3% of all municipalities in NWB Bank's loan portfolio. For this KPI it is not possible to make a comparison of the reporting period, due to lack of available data.

Due to the calculation method for blue-green networks, there is a discrepancy with chapter 3. In chapter 3, the total area of the blue-green networks was compared with the total area of all clients. In this chapter, a different method is used. The percentage of blue-green networks in Table 4.3 is higher than in Table 3.3. This is because the calculation of the impact for the reporting period is

²⁹ Natuur Netwerk Nederland

³⁰ Coastal and marine areas are not included in this calculation. 31% of the Dutch coastal and marine waters are protected under N2000 or The European Marine Strategy Framework Directive (MSFD)

³¹ Meaning land for agricultural purposes, but also privately owned land or owned by governments, but excluding urban area and protected nature (NNN and N2000)

based on a weighted average based on the ratio of loan volume versus total balance sheet per municipality. A few municipalities have a relatively high percentage of blue-green networks and a relatively high ratio of loan volume versus total balance sheet. These percentages therefore count for more and result in a higher total percentage for reporting period (Table 4.3) than for reporting year (Table 3.3).

Table 4.3 CSRD category E4 biodiversity and ecosystems and corresponding KPI's

KPI	Results absolute 0-measurement	Results absolute 1-measurement	Results absolute 2-measurement	Impact results	Impact results – attributed to NWB bank
Quality of surface water – ecological status (WFD targets)	0.00 %	0.00 %	0.06 %	0.06 % pt.	
Area of public green space without agriculture	24.18 %				
Protected nature			28.06 %		
Blue green networks			10.30 %		

4.4 E5 – Resource use and circular economy

This category focuses on material inflows, material outflows related to products and services and waste.

The Netherlands needs to start reusing its water in a closed-loop system. To achieve this goal, all 350 wastewater treatment plants must function as water sources. To this end, wastewater needs to be filtered at a higher level, to be reused in natural areas, on agricultural land or in drinking water infiltration areas. Two KPI's measure the progress on attaining circular water usage: how much purified water is used for creating raw material for industrial, irrigation or dehydration purposes, and how this amount compares to the total potential for creating raw materials from wastewater.

The total m³ / m € throughout the reporting period has increased a lot. Especially in 2023 the increase was notable. It is expected to increase even more in the upcoming years, because of the amount of new potential technologies.

Table 4.4 CSRD category E5 Resource use and circular economy and corresponding KPI's

KPI	Results absolute 0-measurement	Results absolute 1-measurement	Results absolute 2-measurement	Impact results	Impact results – attributed to NWB bank
Circularity: purified sewage water used as raw material	1,364 m ³ / m €	1,921 m ³ / m €	18,876 m ³ / m €	17,512 m ³ / m €	
Circularity: purified sewage water used as raw material compared to the potential	0.64 %	0.93 %	5.68 %	5.03 % pt.	

4.5 S4 – Consumers and end users

This category concerns the personal safety, privacy and social inclusion of consumers and end-users.

Affordable and low-cost rental housing

Housing associations have set the ambition to realise a total of 30,000 DAEB homes (non-commercial) per year between 2029 and 2035, by signing the National Performance Agreements (NPA).³²

The total amount of financed housing stock (by social housing associations, in the loan portfolio of NWB Bank) per million euro has remained relatively stable over the years (between 5 and 6 dwellings per million euro). Due to the high demand for housing and national performance agreements in the Netherlands, there is a strong desire to increase the housing stock in the upcoming years.

Allocations within income limits

Housing associations are obliged to provide social housing for people with low incomes, who have little chance of finding housing in the private sector. To partake in this social housing provision, households must uphold to a maximum of annual income, set by the Dutch government. Households are divided into two groups: the primary and secondary group. Both groups are entitled to social housing, but the primary group is additionally entitled to rental allowance. The income limits for the primary group are therefore lower than for the secondary group. There are no national agreements on fair distribution among these two groups, but in previous years about 80% of the vacant supply was assigned to the primary group - whilst they make up 58% of the total households eligible for social housing. Various regional agreements have been made in this regard to bring the distribution back to 70/30.³³ In the KPI 'allocations within income limits' calculates the percentage allocated to the primary group, compared to the total target group (primary and secondary). The housing associations in NWB Bank's loan portfolio have allocated almost 70%, in all the reporting years, of their vacant houses to households within the primary group.

³² Rapport Nationale Prestatieafspraken corporatiesector 2025-2035

³³ <https://www.woonplus.nl/media/1194/huurbeleid-2021.pdf>

Energy labels

According to The National Performance Agreements, Aedes, the umbrella organisation for social housing associations in the Netherlands, aims to phase out dwellings with a lower energy label (E, F or G) by 2028, except for monumental houses and houses 'to be demolished'. According to NWB Bank, 3% of the dwellings are part of this exception. In 2023, 7.8 per cent of all dwellings had E, F or G energy labels, in 2024 this reduced to 6.1 per cent. The phasing out of dwellings with an E, F or G energy label by housing associations is well on track. Housing associations and local authorities are pushing for this rapid phase-out because it also helps to combat energy poverty. A good example of this are the local energy counters and energy teams.

Development costs for housing association houses

The total investment in the development of houses have increased by 541.54 €/ m €, over the reporting years. These investments contain development costs related to liveability³⁴, maintenance or improvements. The investments in maintenance, and the amount of improvements per invested million €, have increased considerably over the years.

Table 4.5 CSRD category S4 Consumers and end users and corresponding KPI's

KPI	Results absolute 0-measurement	Results absolute 1-measurement	Results absolute 2-measurement	Impact results	Impact results – attributed to NWB bank
Amount of housing stock social houses per social housing association	5.79 dwellings / m €	5.05 dwellings / m €	5.12 dwellings / m €		-0.67 dwellings / m €
Total allocations within income limits	69.58 %	70.65 %	66.92 %	-2.66 % pt.	
E, F, G energy labels		7.83 %	6.13 %		
Liveability costs	240 € / m €	210 € / m €	230 € / m €		-10 € / m €
Maintenance costs	11,255 € / m €	10,475 € / m €	11,292 € / m €		37 € / m €
Improvement costs	7,066 € / m €	7,128 € / m €	7,585 € / m €		519 € / m €
Total development costs	18,528 € / m €	17,803 € / m €	19,069 € / m €		541 € / m €

³⁴ It is important to note that there are big differences between corporations in what they define as liveability costs. There is no accepted definition or guideline.

5 Factsheets housing associations

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5.1 General factsheet

Topic	Description
Portfolio covered	95.6% of NWB Bank's loan portfolio is covered for this customer group. This percentage is an indication of the completeness of the dataset. It is calculated by looking at the collected data for the customers in the loan portfolio of NWB Bank. The percentage is lower than 100% if there are missing data. The missing data are either not available, or it was not possible to collect or calculate these data correctly.
KPIs	<ul style="list-style-type: none">- GHG emissions- Energy performance- E, F, G energy labels- Amount of housing stock social houses per social housing association- Total allocations within income limits- Livability costs- Maintenance costs- Improvement costs- Total development costs
Limitations	Throughout the years, some housings associations have merged or split (Overview of merged housing associations: https://www.ilent.nl/onderwerpen/publicaties-cijfers-en-wetgeving-autoriteit-woningcorporaties/actuele-gegevens-woningcorporaties/overzicht-fusies-woningcorporaties , the overview of split housing associations (https://www.ilent.nl/onderwerpen/publicaties-cijfers-en-wetgeving-autoriteit-woningcorporaties/actuele-gegevens-woningcorporaties/overzicht-splitsingen-woningcorporaties)). All sources that have been used for the KPIs have been corrected for that.

5.2 Loan portfolio housing associations

Topic	Description
Data	Loan portfolio housing associations
Data files	Original: 241218_Leningportefeuille_woco_voorbewerkingen.xlsx Edited: 241125_passivalening_koppeling_origineledvi.xlsx
Data Source	NWB Bank
Year	2021, 2022, 2023
Calculation steps	First, the loan portfolio of housing associations were cut out of the total loan portfolio of NWB Bank. Using the script '241121_koppeling_woningcorporaties.ipynb', the loans and passive of housing associations were merged per housing associations. The output of this script was then further edited in excel, in order to get the loan portfolio and total balance sheet for the housing associations that existed on 31-12-2023. Using the overview of merged housing associations (https://www.ilent.nl/onderwerpen/publicaties-cijfers-en-wetgeving-autoriteit-woningcorporaties/actuele-gegevens-woningcorporaties/overzicht-fusies-woningcorporaties) and the overview of split housing associations (https://www.ilent.nl/onderwerpen/publicaties-cijfers-en-wetgeving-autoriteit-woningcorporaties/actuele-gegevens-woningcorporaties/overzicht-splitsingen-woningcorporaties) a list was made of housing associations that merged or split

	(Fusies woningcorporaties.docx). Using this list, loans of housing associations was either summed or divided for merged or split housing associations in excel. See the steps in edited file 241125_passivalening_koppeling_origineledvi.xlsx for further information about the procedure.
Script name	241121_koppeling_woningcorporaties.ipynb iLoanportfolio_q241204.ipynb
Location script	Werkmap\2_Data\a_Loan portfolio\1.5 Script
Last update	18-12-2024
Date of download	Not applicable
Link to webpage	Not applicable
Filters used to obtain the datafile	Not applicable
Internal location	Werkmap\2_Data\a_Loan portfolio\1.2 Origineel bronbestand Werkmap\2_Data\a_Loan portfolio\1.3 Bewerkt data Werkmap\2_Data\a_Loan portfolio\1.4 Upload naar database
Data quality	2
Unit of measurement	Euro
Selections	SicCodeOmschrijving = '0030000000 HOUSING ASSOCIATIONS' or '0030000000 HOUSING CORPORATIONS'
Data transformation	The loan portfolio of merged or split housing associations was edited.
Data missing	The loan portfolio of merged or split housing associations was edited, sometimes causing missing values.
Print screens	Werkmap\2_Data\a_Loan portfolio\1.1 Screenshots

5.3 Total balance sheet housing associations

Topic	Description
Data	Total balance sheet
Data files	Original file: dVi2022 H3.xlsx, dVi2021 H3.xlsx, dVi2020 H3.xlsx Edited file: 240911 passiva nog missende woco's.xlsx 241125_passivalening_koppeling_origineledvi.xlsx Fusies woningcorporaties.docx Upload to database: 241125_passivalening_koppeling_origineledvi.xlsx, sheet: upload naar database
Data Source	Inspectie Leefomgeving en Transport (ilent); Autoriteit woningcorporaties
Year	2020, 2021, 2022
Calculation steps	First, the total balance sheets of 2020, 2021 and 2022, together with the loan portfolio of 2021-2023 were merged using the script 241121_koppeling_woningcorporaties.ipynb. The output of this script was then further edited in excel, in order to get the total balance sheet for the housing associations that existed on 31-12-2023. Using the overview of merged housing associations (https://www.ilent.nl/onderwerpen/publicaties-cijfers-en-wetgeving-autoriteit-woningcorporaties/actuele-gegevens-woningcorporaties/overzicht-fusies-woningcorporaties) and the overview of split housing associations (https://www.ilent.nl/onderwerpen/publicaties-cijfers-en-wetgeving-autoriteit-woningcorporaties/actuele-gegevens-woningcorporaties/overzicht-splitsingen-

	woningcorporaties) a list was made of housing associations that merged or split (Fusies woningcorporaties.docx). Using this list, the total balance sheet of housing associations was either summed or divided for merged or split housing associations in excel. See the steps in edited file 241125_passivalening_koppeling_origineeldvi.xlsx for further information about the procedure.
Script name	241121_koppeling_woningcorporaties.ipynb iTotalbalancesheet_q241204.ipynb
Location script	For 241121_koppeling_woningcorporaties Werkmap\2_Data\b_Total balance sheet\Housing associations\1.5 Script For the total balance sheet: Werkmap\2_Data\b_Total balance sheet\1.5 Script
Last update	Not applicable
Date of download	25-11-2024
Link to webpage	https://data.overheid.nl/dataset/verantwoordingsinformatie-woningcorporaties-dvi2022-hfd3 https://data.overheid.nl/dataset/verantwoordingsinformatie-woningcorporaties-dvi2021-hfd3 https://data.overheid.nl/dataset/verantwoordingsinformatie-woningcorporaties-dvi2020-hfd3
Filters used to obtain the datafile	For each dVI file: Sheet: data 3.1 Column B (Soort_instelling) selected on TE Column C (DAEB_Indicatie) selected on O Column D (Jaar) selected on 2022 for dVI2022, 2021 for dVI2021, 2020 for dVI2020 Column E (Balanskant) selected on PASSIVA Column F (Balanstype) selected on PASSIVA
Internal location	Original files: Werkmap\2_Data\b_Total balance sheet\Housing associations\1.2 Origineel bronbestand Edited file: Werkmap\2_Data\b_Total balance sheet\Housing associations\1.3 Bewerkt data Upload to database: Werkmap\2_Data\b_Total balance sheet\Housing associations\1.4 Upload naar database
Data quality	Score 1 Audited data per social housing association specific.
Unit of measurement	Euro
Selections	Not applicable
Data transformation	The balance sheet of merged or split housing associations was edited.
Data missing	For a small number of social housing associations, total balance sheet data were missing in the data file used. For these social housing associations, total balance sheet data were taken from the annual reports.
Print screens	Werkmap\2_Data\b_Total balance sheet\Housing associations\1.1 Printscreens

5.4 Factsheets per KPI

5.4.1 GHG emissions per housing association

Topic	Description												
Data	GHG emissions												
Calculation steps	No calculations have been done, but the information from various original files is combined into one file.												
Script name	i_vGHG_q241209.ipynb												
Location script	Werkmap\2_Data\E1_Climate\GHG emissies\1.5 Script												
Limitations	No limitations												
CSRD	E1 - Climate												
Data quality estimate	2.0 <table border="1"> <thead> <tr> <th>Score</th><th>Quality requirement</th></tr> </thead> <tbody> <tr> <td>1</td><td>Audited data or actual primary data</td></tr> <tr> <td>2</td><td>Non-audited data, or other primary data</td></tr> <tr> <td>3</td><td>Average data that is peer/(sub)sector-specific</td></tr> <tr> <td>4</td><td>Proxy data on the basis of region or country</td></tr> <tr> <td>5</td><td>Estimated data with very limited support</td></tr> </tbody> </table>	Score	Quality requirement	1	Audited data or actual primary data	2	Non-audited data, or other primary data	3	Average data that is peer/(sub)sector-specific	4	Proxy data on the basis of region or country	5	Estimated data with very limited support
Score	Quality requirement												
1	Audited data or actual primary data												
2	Non-audited data, or other primary data												
3	Average data that is peer/(sub)sector-specific												
4	Proxy data on the basis of region or country												
5	Estimated data with very limited support												

Topic	Description
Data	GHG emissions
Data file	Original files: 2021: 20231110_pNWB.vWOCO_2021_IndividueleKlanten 2022: 20231110_pNWB.vWOCO_2022_IndividueleKlanten 2023: 240926_pNWB.vWOCO_2023_IndividueleKlanten_versie2024 Edited file: 241209_housing_202120222023
Data Source	2021, 2022: Impact report NWB Bank 2023 ³⁵ 2023: PCAF report 2024 ³⁶
Year	2021, 2022, 2023
Last update	Not applicable
Date of download	Not applicable
Link to webpage	Not applicable
Filters used to obtain the datafile	Not applicable
Internal location	Original files: Werkmap\2_Data\E1_Climate\GHG emissies\1.2 Origineel bronbestand Edited file: Werkmap\2_Data\E1_Climate\GHG emissies\1.3 Bewerkt data
Data quality estimate	2
Unit of measurement	tCO ₂ e
Selections	Not applicable
Data transformation	Not applicable
Data missing	
Print screens	Not applicable

³⁵ Sustainable Development Goals. Impact of NWB Bank's loan portfolio. Accountability report: Reporting year 2023

³⁶ Greenhouse Gas Emissions of NWB Bank's Loan Portfolio. The GHG footprint of 2023

5.4.2 Energy performance

Topic	Description												
Data	The energy performance of housing associations												
Calculation steps	Not applicable												
Script name	i_vAedesbenchmark_q241217												
Location script	Werkmap\2_Data\E1_Climate\Aedes Benchmark\1.5 Script												
Limitations	No limitations												
CSRD	E1 - Climate												
Data quality estimate	<p>All the data is primary data which is obtained directly from the housing associations. No calculations or estimations were needed.</p> <p>Data quality score = 2</p> <table> <tr> <th>Score</th><th>Quality requirement</th></tr> <tr> <td>1</td><td>Audited data or actual primary data</td></tr> <tr> <td>2</td><td>Non-audited data, or other primary data</td></tr> <tr> <td>3</td><td>Average data that is peer/(sub)sector-specific</td></tr> <tr> <td>4</td><td>Proxy data on the basis of region or country</td></tr> <tr> <td>5</td><td>Estimated data with very limited support</td></tr> </table>	Score	Quality requirement	1	Audited data or actual primary data	2	Non-audited data, or other primary data	3	Average data that is peer/(sub)sector-specific	4	Proxy data on the basis of region or country	5	Estimated data with very limited support
Score	Quality requirement												
1	Audited data or actual primary data												
2	Non-audited data, or other primary data												
3	Average data that is peer/(sub)sector-specific												
4	Proxy data on the basis of region or country												
5	Estimated data with very limited support												

Topic	Description
Data	Energy performance
Data file	Aedes benchmark 2021.xlsx Aedes benchmark 2022.xlsx Aedes benchmark 2023.xlsx Aedes benchmark 2024.xlsx
Data Source	Aedes
Year	2021, 2022, 2023 and 2024
Last update	12-11-2024
Date of download	17-12-2024
Link to webpage	https://aedes.nl/aedes-benchmark/benchmarkresultaten-en-publicaties
Filters used to obtain the datafile	Not applicable
Internal location	Werkmap\2_Data\E1_Climate\Aedes Benchmark\1.2 Origineel bronbestand
Data quality estimate	2
Unit of measurement	kWh/m ²
Selections	Not applicable
Data missing	For a few social housing associations the energy prestatation data was missing in the used data file. These are left empty.
Print screens	Werkmap\2_Data\E1_Climate\Aedes Benchmark\1.1 Printscreens

5.4.3 E, F, G energy labels

Topic	Description												
Data	The percentage of dwellings with energy label E, F or G												
Calculation steps	<p>The data is obtained by performing the following steps:</p> <p>First the unique housing associations were taken from the two source data files. The number of dwellings per energy label were then summed from the source data files. Using the file Fusies woningcorporaties.docx (see Chapter 4.2), the number of dwellings per energy label was summed or divided based on merged or split housing associations. See the steps in edited file 250228_energielabels2023 en 2024 samengevoegd.xlsx for further information about the procedure. The end result of these edits was then imported into the database.</p> <p>In the database, the number of dwellings with energy label E, F or G is divided by the total number of dwellings with a known energy label.</p>												
Script name	i_vefgenergielabels_q250304.ipynb												
Location script	Werkmap\2_Data\E1_Climate\Energy labels\1.5 Script												
Limitations	<p>As mentioned in the calculation steps, the number of dwellings per energy label of merged or split housing associations were summed or divided in order to get the total housing stock for the total list of housing associations that existed 31-12-2023.</p> <p>There are dwellings of which the energy label is unknown. These are not taken into account.</p>												
CSRD	S4 – Consumers and end users												
Data quality estimate	<p>All the data is primary data which is obtained directly from the housing associations. No calculations or estimations were needed.</p> <p>Data quality score = 2</p> <table border="1"> <thead> <tr> <th>Score</th><th>Quality requirement</th></tr> </thead> <tbody> <tr> <td>1</td><td>Audited data or actual primary data</td></tr> <tr> <td>2</td><td>Non-audited data, or other primary data</td></tr> <tr> <td>3</td><td>Average data that is peer/(sub)sector-specific</td></tr> <tr> <td>4</td><td>Proxy data on the basis of region or country</td></tr> <tr> <td>5</td><td>Estimated data with very limited support</td></tr> </tbody> </table>	Score	Quality requirement	1	Audited data or actual primary data	2	Non-audited data, or other primary data	3	Average data that is peer/(sub)sector-specific	4	Proxy data on the basis of region or country	5	Estimated data with very limited support
Score	Quality requirement												
1	Audited data or actual primary data												
2	Non-audited data, or other primary data												
3	Average data that is peer/(sub)sector-specific												
4	Proxy data on the basis of region or country												
5	Estimated data with very limited support												

Topic	Description
Data	Energy labels
Data file	<p>Original files:</p> <p>20231103 - NWB_energieverbruik_woningcorporaties.xlsx</p> <p>20250212 - Woningcorporaties_energielabel_NWB.xlsx</p> <p>Edited file:</p> <p>250228_energielabels2023 en 2024 samengevoegd.xlsx</p>
Data Source	Republiq
Year	2023 and 2024
Last update	12-11-2024
Date of download	17-02-2025
Link to webpage	Not applicable

Filters used to obtain the datafile	Not applicable
Internal location	Original data: Werkmap\2_Data\E1_Climate\ Energy labels 1.2 Origineel bronbestand Edited data: Werkmap\2_Data\E1_Climate\Energy labels\1.3 Bewerkt data
Data quality estimate	2
Unit of measurement	Count
Selections	Not applicable
Data missing	For a few social housing associations the energy label data was missing in the used data file. These are left empty.
Print screens	Not applicable

5.4.4 Allocation within income limits

Topic	Description												
Data	The percentage of the housing cooperations housing stock that is allocated within income limits												
Calculation steps	Not applicable												
Script name	i_vAedesbenchmark_q241217												
Location script	Werkmap\2_Data\E1_Climate\Aedes Benchmark\1.5 Script												
Limitations	No limitations												
CSRD	S4 - Consumers and end users												
Data quality estimate	<p>All the data is primary data which is obtained directly from the housing associations. No calculations or estimations needed.</p> <p>Data quality score = 2</p> <table> <tr> <th>Score</th><th>Quality requirement</th></tr> <tr> <td>1</td><td>Audited data or actual primary data</td></tr> <tr> <td>2</td><td>Non-audited data, or other primary data</td></tr> <tr> <td>3</td><td>Average data that is peer/(sub)sector-specific</td></tr> <tr> <td>4</td><td>Proxy data on the basis of region or country</td></tr> <tr> <td>5</td><td>Estimated data with very limited support</td></tr> </table>	Score	Quality requirement	1	Audited data or actual primary data	2	Non-audited data, or other primary data	3	Average data that is peer/(sub)sector-specific	4	Proxy data on the basis of region or country	5	Estimated data with very limited support
Score	Quality requirement												
1	Audited data or actual primary data												
2	Non-audited data, or other primary data												
3	Average data that is peer/(sub)sector-specific												
4	Proxy data on the basis of region or country												
5	Estimated data with very limited support												

Topic	Description
Data	Allocation within income limits
Data file	Aedes benchmark 2021.xlsx Aedes benchmark 2022.xlsx Aedes benchmark 2023.xlsx Aedes benchmark 2024.xlsx
Data Source	Aedes
Year	2021, 2022, 2023 and 2024
Last update	12-11-2024
Date of download	17-12-2024

Link to webpage	https://aedes.nl/aedes-benchmark/benchmarkresultaten-en-publicaties
Filters used to obtain the datafile	Not applicable
Internal location	Werkmap\2_Data\E1_Climate\Aedes Benchmark\1.2 Origineel bronbestand
Data quality estimate	2
Unit of measurement	Percentage
Selections	Not applicable
Data missing	For a few social housing associations the energy prestation data was missing in the used data file. These are left empty.
Print screens	Werkmap\2_Data\E1_Climate\Aedes Benchmark\1.1 Printscreens

5.4.5 Livability costs

Topic	Description												
Data	Livability costs social housing associations.												
Calculation steps	First, the expenditures on livability, maintenance, and improvement are selected from the datafile where negative expenditures were marked as missing. This datafile was downloaded into Excel. In Excel, the expenditures of merged housing associations were summed. For an overview of the merged associations, see 'Fusies woningcorporaties.docx'. Once the expenditures for merged housing associations had been totalled in Excel, the adjusted Excel file was uploaded into the database.												
Script name	I_vdevelopmentcosts_q241206												
Location script	Werkmap\2_Data\S4_Consumers and end users\Development costs\1.5 Script\												
Limitations	The data for 2023 are not yet available, therefore data for the years 2020, 2021, and 2022 were used.												
CSRD	S4												
Data quality estimate	<p>All the data is primary data which is obtained directly from the social housing associations. No calculations or estimations were needed. Data quality score = 2</p> <table> <tr> <th>Score</th><th>Quality requirement</th></tr> <tr> <td>1</td><td>Audited data or actual primary data</td></tr> <tr> <td>2</td><td>Non-audited data, or other primary data</td></tr> <tr> <td>3</td><td>Average data that is peer/(sub)sector-specific</td></tr> <tr> <td>4</td><td>Proxy data on the basis of region or country</td></tr> <tr> <td>5</td><td>Estimated data with very limited support</td></tr> </table>	Score	Quality requirement	1	Audited data or actual primary data	2	Non-audited data, or other primary data	3	Average data that is peer/(sub)sector-specific	4	Proxy data on the basis of region or country	5	Estimated data with very limited support
Score	Quality requirement												
1	Audited data or actual primary data												
2	Non-audited data, or other primary data												
3	Average data that is peer/(sub)sector-specific												
4	Proxy data on the basis of region or country												
5	Estimated data with very limited support												

Topic	Description
Data	Development costs on livability
Data file	<p>Original file: dVI2020H3.xlsx dVI2020H3.xlsx dVI2020H3.xlsx</p> <p>Edited file: 241216_Developmentcosts_SQLoutput_bewerkt.xlsx Fusies woningcorporaties.docx</p>
Data Source	Inspectie Leefomgeving en Transport (Rijk)
Year	2020, 2021, and 2022

Last update	18-01-2024
Date of download	25-11-2024
Link to webpage	https://data.overheid.nl/dataset/verantwoordingsinformatie-woningcorporaties-dvi2020-hfd3 https://data.overheid.nl/dataset/verantwoordingsinformatie-woningcorporaties-dvi2021-hfd3 https://data.overheid.nl/dataset/verantwoordingsinformatie-woningcorporaties-dvi2022-hfd3
Filters used to obtain the datafile	Not applicable
Internal location	Werkmap\2_Data\S4_Consumers and end users\Development costs\1.2 Origineel bronbestand Werkmap\2_Data\S4_Consumers and end users\Development costs\1.4 Upload naar database
Data quality estimate	2
Unit of measurement	Euro
Selections	soort_instelling = 'TE' daeb_indicatie = 'O'
Data transformation	The expenditures of merged housing associations were summed.
Data missing	Negative expenditures were marked as missing. For some housing associations some expenditures were missing. The expenditures for new housing associations that formed due to a split of existing housing associations were marked as missing, as their expenditures are unknown.
Print Screens	Werkmap\2_Data\S4_Consumers and end users\Development costs\1.1 Printscreens\Printscreen dVi2022H3.png Werkmap\2_Data\S4_Consumers and end users\Development costs\1.1 Printscreens\Printscreen dVi2021H3.png Werkmap\2_Data\S4_Consumers and end users\Development costs\1.1 Printscreens\Printscreen dVi2020H3.png

5.4.6 Maintenance costs

Topic	Description
Data	Maintenance costs social housing associations.
Calculation steps	First, the expenditures on livability, maintenance, and improvement are selected from the datafile where negative expenditures were marked as missing. This datafile was downloaded into Excel. In Excel, the expenditures of merged housing associations were summed. For an overview of the merged associations, see 'Fusies woningcorporaties.docx'. Once the expenditures for merged housing associations had been totalled in Excel, the adjusted Excel file was uploaded into the database.
Script name	I_vdevelopmentcosts_q241206
Location script	Werkmap\2_Data\S4_Consumers and end users\Development costs\1.5 Script\
Limitations	The data for 2023 are not yet available, therefore data for the years 2020, 2021, and 2022 were used.
CSRD	S4
Data quality estimate	All the data is primary data which is obtained directly from the social housing associations. No calculations or estimations were needed. Data quality score = 2

	Score	Quality requirement	
	1	Audited data or actual primary data	
	2	Non-audited data, or other primary data	
	3	Average data that is peer/(sub)sector-specific	
	4	Proxy data on the basis of region or country	
	5	Estimated data with very limited support	

Topic	Description
Data	Development costs on maintenance
Data file	Original file: dVI2020H3.xlsx dVI2020H3.xlsx dVI2020H3.xlsx Edited file: 241216_Developmentcosts_SQLoutput_bewerkt.xlsx Fusies woningcorporaties.docx
Data Source	Inspectie Leefomgeving en Transport (Rijk)
Year	2020, 2021, and 2022
Last update	18-01-2024
Date of download	25-11-2024
Link to webpage	https://data.overheid.nl/dataset/verantwoordingsinformatie-woningcorporaties-dvi2020-hfd3 https://data.overheid.nl/dataset/verantwoordingsinformatie-woningcorporaties-dvi2021-hfd3 https://data.overheid.nl/dataset/verantwoordingsinformatie-woningcorporaties-dvi2022-hfd3
Filters used to obtain the datafile	Not applicable
Internal location	Werkmap\2_Data\S4_Consumers and end users\Development costs\1.2 Origineel bronbestand Werkmap\2_Data\S4_Consumers and end users\Development costs\1.4 Upload naar database
Data quality estimate	2
Unit of measurement	euro
Selections	soort_instelling = 'TE' daeb_indicatie = 'O'
Data transformation	The expenditures of merged housing associations were summed.
Data missing	Negative expenditures were marked as missing. For some housing associations some expenditures were missing. The expenditures for new housing associations that formed due to a split of existing housing associations were marked as missing, as their expenditures are unknown.
Print Screens	Werkmap\2_Data\S4_Consumers and end users\Development costs\1.1 Printscreens\Printscreen dVi2022H3.png Werkmap\2_Data\S4_Consumers and end users\Development costs\1.1 Printscreens\Printscreen dVi2021H3.png Werkmap\2_Data\S4_Consumers and end users\Development costs\1.1 Printscreens\Printscreen dVi2020H3.png

5.4.7 Improvement costs

Topic	Description												
Data	Improvement costs social housing associations.												
Calculation steps	First, the expenditures on livability, maintenance, and improvement are selected from the datafile where negative expenditures were marked as missing. This datafile was downloaded into Excel. In Excel, the expenditures of merged housing associations were summed. For an overview of the merged associations, see 'Fusies woningcorporaties.docx'. Once the expenditures for merged housing associations had been totalled in Excel, the adjusted Excel file was uploaded into the database.												
Script name	I_vdevelopmentcosts_q241206												
Location script	Werkmap\2_Data\S4_Consumers and end users\Development costs\1.5 Script\												
Limitations	The data for 2023 are not yet available, therefore data for the years 2020, 2021, and 2022 were used.												
CSRD	S4												
Data quality estimate	<p>All the data is primary data which is obtained directly from the social housing associations. No calculations or estimations were needed. Data quality score = 2</p> <table> <tr> <th>Score</th><th>Quality requirement</th></tr> <tr> <td>1</td><td>Audited data or actual primary data</td></tr> <tr> <td>2</td><td>Non-audited data, or other primary data</td></tr> <tr> <td>3</td><td>Average data that is peer/(sub)sector-specific</td></tr> <tr> <td>4</td><td>Proxy data on the basis of region or country</td></tr> <tr> <td>5</td><td>Estimated data with very limited support</td></tr> </table>	Score	Quality requirement	1	Audited data or actual primary data	2	Non-audited data, or other primary data	3	Average data that is peer/(sub)sector-specific	4	Proxy data on the basis of region or country	5	Estimated data with very limited support
Score	Quality requirement												
1	Audited data or actual primary data												
2	Non-audited data, or other primary data												
3	Average data that is peer/(sub)sector-specific												
4	Proxy data on the basis of region or country												
5	Estimated data with very limited support												

Topic	Description
Data	Development costs on improvement
Data file	<p>Original file: dVI2020H3.xlsx dVI2020H3.xlsx dVI2020H3.xlsx</p> <p>Edited file: 241216_Developmentcosts_SQLoutput_bewerkt.xlsx Fusies woningcorporaties.docx</p>
Data Source	Inspectie Leefomgeving en Transport (Rijk)
Year	2020, 2021, and 2022
Last update	18-01-2024
Date of download	25-11-2024
Link to webpage	<p>https://data.overheid.nl/dataset/verantwoordingsinformatie-woningcorporaties-dvi2020-hfd3</p> <p>https://data.overheid.nl/dataset/verantwoordingsinformatie-woningcorporaties-dvi2021-hfd3</p> <p>https://data.overheid.nl/dataset/verantwoordingsinformatie-woningcorporaties-dvi2022-hfd3</p>
Filters used to obtain the datafile	Not applicable
Internal location	<p>Werkmap\2_Data\S4_Consumers and end users\Development costs\1.2 Origineel bronbestand</p> <p>Werkmap\2_Data\S4_Consumers and end users\Development costs\1.4 Upload naar database</p>

Data quality estimate	2
Unit of measurement	euro
Selections	soort_instelling = 'TE' daeb_indicatie = 'O'
Data transformation	The expenditures of merged housing associations were summed.
Data missing	Negative expenditures were marked as missing. For some housing associations some expenditures were missing. The expenditures for new housing associations that formed due to a split of existing housing associations were marked as missing, as their expenditures are unknown.
Print Screens	Werkmap\2_Data\S4_Consumers and end users\Development costs\1.1 Printscreens\Printscreen dVi2022H3.png Werkmap\2_Data\S4_Consumers and end users\Development costs\1.1 Printscreens\Printscreen dVi2021H3.png Werkmap\2_Data\S4_Consumers and end users\Development costs\1.1 Printscreens\Printscreen dVi2020H3.png

5.4.8 Total development costs

Topic	Description												
Data	Total development costs social housing associations.												
Calculation steps	First, the expenditures on livability, maintenance, and improvement are selected from the datafile where negative expenditures were marked as missing. This datafile was downloaded into Excel. In Excel, the expenditures of merged housing associations were summed. For an overview of the merged associations, see 'Fusies woningcorporaties.docx'. Once the expenditures for merged housing associations had been totalled in Excel, the adjusted Excel file was uploaded into the database. The expenditures on livability, maintenance and improvements were then summed to get the total costs on development.												
Script name	I_vdevelopmentcosts_q241206												
Location script	Werkmap\2_Data\S4_Consumers and end users\Development costs\1.5 Script												
Limitations	The data for 2023 are not yet available, therefore data for the years 2020, 2021, and 2022 were used.												
CSRD	S4												
Data quality estimate	<p>All the data is primary data which is obtained directly from the social housing associations. No calculations or estimations were needed. Data quality score = 2</p> <table> <tr> <th>Score</th><th>Quality requirement</th></tr> <tr> <td>1</td><td>Audited data or actual primary data</td></tr> <tr> <td>2</td><td>Non-audited data, or other primary data</td></tr> <tr> <td>3</td><td>Average data that is peer/(sub)sector-specific</td></tr> <tr> <td>4</td><td>Proxy data on the basis of region or country</td></tr> <tr> <td>5</td><td>Estimated data with very limited support</td></tr> </table>	Score	Quality requirement	1	Audited data or actual primary data	2	Non-audited data, or other primary data	3	Average data that is peer/(sub)sector-specific	4	Proxy data on the basis of region or country	5	Estimated data with very limited support
Score	Quality requirement												
1	Audited data or actual primary data												
2	Non-audited data, or other primary data												
3	Average data that is peer/(sub)sector-specific												
4	Proxy data on the basis of region or country												
5	Estimated data with very limited support												

Topic	Description
Data	Development costs on livability
Data file	Original file: dVi2020H3.xlsx Sheet 'Data H2.1' dVi2020H3.xlsx Sheet 'Data H2.1' dVi2020H3.xlsx Sheet 'Data H2.1'

	Edited file: 241216_Developmentcosts_SQLoutput_bewerkt.xlsx Fusies woningcorporaties.docx
Data Source	Inspectie Leefomgeving en Transport (Rijk)
Year	2020, 2021, and 2022
Last update	18-01-2024
Date of download	25-11-2024
Link to webpage	https://data.overheid.nl/dataset/verantwoordingsinformatie-woningcorporaties-dvi2020-hfd3 https://data.overheid.nl/dataset/verantwoordingsinformatie-woningcorporaties-dvi2021-hfd3 https://data.overheid.nl/dataset/verantwoordingsinformatie-woningcorporaties-dvi2022-hfd3
Filters used to obtain the datafile	Not applicable
Internal location	Werkmap\2_Data\S4_Consumers and end users\Development costs\1.2 Origineel bronbestand Werkmap\2_Data\S4_Consumers and end users\Development costs\1.4 Upload naar database
Data quality estimate	2
Unit of measurement	euro
Selections	soort_instelling = 'TE' daeb_indicatie = 'O'
Data transformation	The expenditures of merged housing associations were summed.
Data missing	Negative expenditures were marked as missing. For some housing associations some expenditures were missing. The expenditures for new housing associations that formed due to a split of existing housing associations were marked as missing, as their expenditures are unknown.
Print Screens	Werkmap\2_Data\S4_Consumers and end users\Development costs\1.1 Printscreens\Printscreen dVi2022H3.png Werkmap\2_Data\S4_Consumers and end users\Development costs\1.1 Printscreens\Printscreen dVi2021H3.png Werkmap\2_Data\S4_Consumers and end users\Development costs\1.1 Printscreens\Printscreen dVi2020H3.png

5.4.9 Amount of social housing stock per housing association

Topic	Description
Data	Number of total rental units per year per social housing association.
Calculation steps	The data is obtained by performing the following steps: First the datafiles on housing stock from dVi2022H2, dVi2021H2 and dVi2020H2 were put together in the database, and the right selections were made. That file was then downloaded to excel, in order to edit the data in case of merged or split housing associations. Using the file Fusies woningcorporaties.docx (see Chapter 4.2), the housing stock was summed or divided based on merged or split housing associations. See the steps in edited file 241128_verhuureenheden_output_SQL.xlsx for further information about the procedure. The edited housing stock of social housing associations was then imported into the database.
Script name	i_vhousingstock_q241128
Location script	Werkmap\2_Data\S4_Consumers and end users\Housing stock housing associations\1.5 Script

Limitations	Not applicable												
CSRD	S4 - Consumers and end users												
Data quality estimate	2 - Non-audited data, or other primary data <table border="1"> <thead> <tr> <th>Score</th><th>Quality requirement</th></tr> </thead> <tbody> <tr> <td>1</td><td>Audited data or actual primary data</td></tr> <tr> <td>2</td><td>Non-audited data, or other primary data</td></tr> <tr> <td>3</td><td>Average data that is peer/(sub)sector-specific</td></tr> <tr> <td>4</td><td>Proxy data on the basis of region or country</td></tr> <tr> <td>5</td><td>Estimated data with very limited support</td></tr> </tbody> </table>	Score	Quality requirement	1	Audited data or actual primary data	2	Non-audited data, or other primary data	3	Average data that is peer/(sub)sector-specific	4	Proxy data on the basis of region or country	5	Estimated data with very limited support
Score	Quality requirement												
1	Audited data or actual primary data												
2	Non-audited data, or other primary data												
3	Average data that is peer/(sub)sector-specific												
4	Proxy data on the basis of region or country												
5	Estimated data with very limited support												

Topic	Description
Data	Number of total rental units per year per housing association
Data file	Original data: dVi2022H2.xlsx dVi2021H2.xlsx dVi2020H2.xlsx Edited data: 241128_verhuureenheden_output_SQL.xlsx Fusies woningcorporaties.docx
Data Source	Inspectie Leefomgeving en Transport (Rijk)
Year	2020, 2021, and 2022
Last update	18-01-2024
Date of download	25-11-2024
Link to webpage	https://data.overheid.nl/dataset/verantwoordingsinformatie-woningcorporaties-dvi2022-hfd2 https://data.overheid.nl/dataset/verantwoordingsinformatie-woningcorporaties-dvi2021-hfd2 https://data.overheid.nl/dataset/verantwoordingsinformatie-woningcorporaties-dvi2020-hfd21
Filters used to obtain the datafile	Not applicable
Internal location	Werkmap\2_Data\S4_Consumers and end users\Housing stock housing associations\1.2 Origineel bronbestand Werkmap\2_Data\S4_Consumers and end users\Housing stock housing associations\1.3 Bewerkt data
Data quality estimate	2
Unit of measurement	Number of rental units
Selections	Soort_instelling_ultimo = 'TI' DAEB_indicatie_ultimo = 'J' Eenheidsoort = 'Woonruimte'
Data missing	As mentioned in the calculation steps, the housing stock of merged or split housing associations were summed or divided in order to get the total housing stock for the total list of housing associations that existed 31-12-2023.
Print Screens	Werkmap\2_Data\S4_Consumers and end users\Housing stock housing associations\1.1 Printscreens\Printscreen dVi2022H2.png Werkmap\2_Data\S4_Consumers and end users\Housing stock housing associations\1.1 Printscreens\Printscreen dVi2021H2.png Werkmap\2_Data\S4_Consumers and end users\Housing stock housing associations\1.1 Printscreens\Printscreen dVi2020H2.png

6 Factsheets water authorities

By Sanne Paenen, Anne van der Heijden & Fenna Bijster
Het PON & Telos

6.1 General factsheet

Topic	Description
Portfolio covered	97.9 % of NWB Bank's portfolio is covered for this customer group. This percentage is an indication of the completeness of the dataset. It is calculated by looking at the collected data for the customers in the loan portfolio of NWB Bank. The percentage is lower than 100% if there are missing data. The missing data are either not available or it was not possible to collect or calculate these data correctly.
KPIs	<ul style="list-style-type: none"> - GHG emissions - Tested flood defenses - Flood defenses that meet the set of requirements - Flooding standards - Quality of surface water – % phosphor removed from water - Quality of surface water – % nitrogen removed from water - Quality of surface water – % oxygen-binding substances removed from water - Quality of surface water – biological status (WFD targets) - Quality of surface water – chemical status (WFD targets) - Quality of surface water – total status (WFD targets) - Water quality - compliance rate - Quality of surface water – ecological status (WFD targets) - Protected nature - Circularity: purified sewage water used as raw material - Circularity: purified sewage water used as raw material compared to the potential
Limitations	None

6.2 Loan portfolio water authorities

Topic	Description
Data	Loan portfolio water authorities
Data files	Original files: Leningportefeuille NWB 2021.xlsx Leningportefeuille NWB 2022.xlsx 240626 leningportefeuille NWB 2023.xlsx Edited file: 241204_Leningportefeuille.xlsx
Data Source	NWB
Year	2021, 2022, 2023
Calculation steps	Not applicable
Script name	iLoanportfolio_q241204.ipynb
Location script	Werkmap\2_Data\A_Loan portfolio\1.5 Script
Last update	Not applicable
Date of download	Not applicable
Link to webpage	Not applicable
Filters used to obtain the datafile	Not applicable
Internal location	Werkmap\2_Data\A_Loan portfolio\1.2 Origineel bronbestand Werkmap\2_Data\A_Loan portfolio\1.3 Bewerkt data

Data quality	1
Unit of measurement	Euro
Selections	SicCodeOmschrijving 0023000000 WATER AUTHORITIES
Data transformation	The sector of each client is determined based on Code (derived from CodeOmschrijving). The institution code is added from the total balance sheet.
Data missing	Not applicable
Print screens	Not applicable

6.3 Total balance sheet water authorities

Topic	Description
Data	Total balance sheet per water authority
Data file	Original files: Totale passiva 2023.xlsx Already checked by an accountant for PCAF 2022 & 2023: Totale passiva 2022.xlsx Totale passiva waterschappen 2021.xlsx Edited file: Passiva_waterschap_2021_2022_2023.xlsx
Data Source	Unie van Waterschappen, WAVES, ABF Research
Year	2021, 2022, 2023
Last update	7-10-2024
Date of download	6-10-2022; 27-09-2023; 28-10-2024
Calculation steps	Not applicable
Script name	iTotalbalancesheet_q241204.ipynb
Location script	Werkmap\2_Data\b_Total balance sheet\1.5 Script
Link to webpage	https://live-waves.databank.nl/jive
Filters used to obtain the datafile	Waterschapsspiegel > Alle gegevens > Financiën > Gerealiseerd > Balans > Total passiva Year: 2021, 2022, 2023
Internal location	Werkmap\Waterschappen\b.Ruwe data
Data quality	Score 1 High data quality. Provided directly by water authorities from internal accounting systems. Passiva data have been verified by an auditor.
Unit of measurement	Euro
Selections	Not applicable
Data transformation	Several institution codes were added manually. The Coc number was taken from the loan portfolio. Codes from Unie van Waterschappen and Informatiehuishwater.
Data missing	Not applicable
Print screens	Werkmap\2_Data\b_Total balance sheet\Water authorities\1.1 Printscreens\Totale passiva 2023.png Already checked by an accountant for PCAF 2022 & 2023: Werkmap\2_Data\b_Total balance sheet\Water authorities\1.1 Printscreens\ 230927 passiva waterschappen.png Werkmap\2_Data\b_Total balance sheet\Water authorities\1.1 Printscreens\ 20221004 totale passiva waterschappen.png

Topic	Description
Data	Institution code Unie van Waterschappen
Data file	perc_phosphor_nitrogen_COD_removed.xlsx
Data Source	Unie van Waterschappen
Year	2021, 2022, 2023
Last update	07-10-2024
Date of download	29-10-2024
Link to webpage	https://live-waves.databank.nl/jive?workspace_guid=1947886d-bdb4-4798-b577-d7143d19ca41
Filters used to obtain the datafile	Inhoud: Rendement voor fosforverwijdering, rendement voor stikstofverwijdering, rendement voor CZV verwijdering Niveau: Waterschappen Jaar: 2019, 2020, 2021, 2022, 2023
Internal location	Werkmap\2_Data\E3_Water and marine resources\Phosphor, Nitrogen, COD removed\1.2 Origineel bronbestand
Data quality estimate	2
Unit of measurement	Not applicable
Selections	Not applicable
Data missing	Not applicable
Print screens	Werkmap\2_Data\E3_Water and marine resources\Phosphor, Nitrogen, COD removed\1.1 Printscreens

Topic	Description
Data	Institutioncode Informatiehuiswater
Data file	3b_oppervlaktewaterlichamen_SGBP3_20220518.csv 3b_oppervlaktewaterlichamen_SGBP3_20221017.csv 3b_oppervlaktewaterlichamen_SGBP3_20230920.csv KRW-toestandsoordelen-oppervlaktewater-2024-NL-20240910.csv
Data Source	Informatiehuis water (samenwerking RWS, waterschappen en provincies)
Year	2021, 2022, 2023, 2024
Last update	29-04-2022, 17-10-2022, 20-09-2023, 10-09-2024
Date of download	06-11-2024
Link to webpage	https://www.waterkwaliteitsportaal.nl/bronbestanden-2021-stroomgebiedbeheerplannen-2022-2027 https://www.waterkwaliteitsportaal.nl/bronbestanden-2022 https://www.waterkwaliteitsportaal.nl/bronbestanden-2023 https://www.waterkwaliteitsportaal.nl/krw-bronbestanden
Filters used to obtain the datafile	Not applicable
Internal location	Werkmap\2_Data\E3_Water and marine resources\WFD targets\1.2 Origineel bronbestand
Data quality estimate	2
Unit of measurement	Not applicable
Data missing	Not applicable
Print screens	Werkmap\2_Data\E3_Water and marine resources\WFD targets\1.1 Printscreens

6.4 Factsheet per data source used per KPI

6.4.1 GHG emissions per water authority

Topic	Description												
Data	GHG emissions												
Calculation steps	No calculations have been done for the years 2022 and 2023. For the year 2021, the PCAF 2024 method has been applied to 2021 data.												
Script name	i_vGHG_q241209.ipynb												
Location script	Werkmap\2_Data\E1_Climate\GHG emissies\1.5 Script												
Limitations	No limitations												
CSRD	E1 - Climate												
Data quality estimate	2.8 <table> <tr> <th>Score</th><th>Quality requirement</th></tr> <tr> <td>1</td><td>Audited data or actual primary data</td></tr> <tr> <td>2</td><td>Non-audited data, or other primary data</td></tr> <tr> <td>3</td><td>Average data that is peer/(sub)sector-specific</td></tr> <tr> <td>4</td><td>Proxy data on the basis of region or country</td></tr> <tr> <td>5</td><td>Estimated data with very limited support</td></tr> </table>	Score	Quality requirement	1	Audited data or actual primary data	2	Non-audited data, or other primary data	3	Average data that is peer/(sub)sector-specific	4	Proxy data on the basis of region or country	5	Estimated data with very limited support
Score	Quality requirement												
1	Audited data or actual primary data												
2	Non-audited data, or other primary data												
3	Average data that is peer/(sub)sector-specific												
4	Proxy data on the basis of region or country												
5	Estimated data with very limited support												

Topic	Description
Data	GHG emissions
Data file	2022: 241028 Totaaloverzicht emissies waterschappen 2022 NWB Bank.xlsx 2023: 240930_Waterschappen_NWB_bank_verslagjaar2023.xlsx Edited files: 2021: 241120 GHG emissies Waterschappen 2021 NWB Bank 2022, 2023: 241209_waterauthorities_202120222023.xlsx
Data Source	PCAF report 2024 ³⁷
Year	2021, 2022, 2023
Last update	Not applicable
Date of download	Not applicable
Link to webpage	Not applicable
Filters used to obtain the datafile	Not applicable
Internal location	Original files: Werkmap\2_Data\E1_Climate\GHG emissies\1.2 Origineel bronbestand Edited files: Werkmap\2_Data\E1_Climate\GHG emissies\1.3 Bewerkt data
Data quality estimate	2.8
Unit of measurement	tCO ₂ e
Selections	Not applicable
Data transformation	Not applicable
Data missing	Not applicable
Print screens	Not applicable

³⁷ Greenhouse Gas Emissions of NWB Bank's Loan Portfolio. The GHG footprint of 2023

6.4.2 Quality of surface water – % phosphor removed from water

Topic	Description												
Data	Percentage of phosphor (P total) removed from water by sewage treatment plants per water authority												
Calculation steps	Not applicable												
Script name	i_vphospornitrogencodremoved_q241106												
Location script	Werkmap\2_Data\E3_Water and marine resources\Phosphor, Nitrogen, COD removed\1.5 Script												
Limitations	Not applicable												
CSRD	E3 - Water and marine resources												
Data quality estimate	<p>2 – Non-audited data, or other primary data. The data is directly collected from the sewage treatment plants.</p> <table> <tr> <th>Score</th><th>Quality requirement</th></tr> <tr> <td>1</td><td>Audited data or actual primary data</td></tr> <tr> <td>2</td><td>Non-audited data, or other primary data</td></tr> <tr> <td>3</td><td>Average data that is peer/(sub)sector-specific</td></tr> <tr> <td>4</td><td>Proxy data on the basis of region or country</td></tr> <tr> <td>5</td><td>Estimated data with very limited support</td></tr> </table>	Score	Quality requirement	1	Audited data or actual primary data	2	Non-audited data, or other primary data	3	Average data that is peer/(sub)sector-specific	4	Proxy data on the basis of region or country	5	Estimated data with very limited support
Score	Quality requirement												
1	Audited data or actual primary data												
2	Non-audited data, or other primary data												
3	Average data that is peer/(sub)sector-specific												
4	Proxy data on the basis of region or country												
5	Estimated data with very limited support												

Topic	Description
Data	Percentage of phosphor removed
Data file	perc_phosphor_nitrogen_COD_removed.xlsx
Data Source	Unie van Waterschappen
Year	2021, 2022, 2023
Last update	07-10-2024
Date of download	29-10-2024
Link to webpage	https://live-waves.databank.nl/jive?workspace_guid=1947886d-bdb4-4798-b577-d7143d19ca41
Filters used to obtain the datafile	<p>Inhoud: Rendement voor fosforverwijdering, rendement voor stikstofverwijdering, rendement voor CZV verwijdering</p> <p>Niveau: Waterschappen</p> <p>Jaar: 2019, 2020, 2021, 2022, 2023</p>
Internal location	Werkmap\2_Data\E3_Water and marine resources\Phosphor, Nitrogen, COD removed\1.2 Origineel bronbestand
Data quality estimate	2
Unit of measurement	Percentage (%)
Selections	Not applicable
Data missing	Not applicable
Print screens	Werkmap\2_Data\E3_Water and marine resources\Phosphor, Nitrogen, COD removed\1.1 Printscreens

6.4.3 Quality of surface water – % nitrogen removed from water

Topic	Description												
Data	Percentage of nitrogen (N total) removed from water by sewage treatment plants per water authority												
Calculation steps	Not applicable												
Script name	i_vphosphornitrogencodremoved_q241106												
Location script	Werkmap\2_Data\E3_Water and marine resources\Phosphor, Nitrogen, COD removed\1.5 Script												
Limitations	Not applicable												
CSRD	E3 - Water and marine resources												
Data quality estimate	<p>2 – Non-audited data, or other primary data. The data is directly collected from the sewage treatment plants.</p> <table> <tr> <th>Score</th><th>Quality requirement</th></tr> <tr> <td>1</td><td>Audited data or actual primary data</td></tr> <tr> <td>2</td><td>Non-audited data, or other primary data</td></tr> <tr> <td>3</td><td>Average data that is peer/(sub)sector-specific</td></tr> <tr> <td>4</td><td>Proxy data on the basis of region or country</td></tr> <tr> <td>5</td><td>Estimated data with very limited support</td></tr> </table>	Score	Quality requirement	1	Audited data or actual primary data	2	Non-audited data, or other primary data	3	Average data that is peer/(sub)sector-specific	4	Proxy data on the basis of region or country	5	Estimated data with very limited support
Score	Quality requirement												
1	Audited data or actual primary data												
2	Non-audited data, or other primary data												
3	Average data that is peer/(sub)sector-specific												
4	Proxy data on the basis of region or country												
5	Estimated data with very limited support												

Topic	Description
Data	Percentage of nitrogen removed
Data file	perc_phosphor_nitrogen_COD_removed.xlsx
Data Source	Unie van Waterschappen
Year	2021, 2022, 2023
Last update	07-10-2024
Date of download	29-10-2024
Link to webpage	https://live-waves.databank.nl/jive?workspace_guid=1947886d-bdb4-4798-b577-d7143d19ca41
Filters used to obtain the datafile	<p>Inhoud: Rendement voor fosforverwijdering, rendement voor stikstofverwijdering, rendement voor CZV verwijdering</p> <p>Niveau: Waterschappen</p> <p>Jaar: 2019, 2020, 2021, 2022, 2023</p>
Internal location	Werkmap\2_Data\E3_Water and marine resources\Phosphor, Nitrogen, COD removed\1.2 Origineel bronbestand
Data quality estimate	2
Unit of measurement	Percentage (%)
Selections	Not applicable
Data missing	Not applicable
Print screens	Werkmap\2_Data\E3_Water and marine resources\Phosphor, Nitrogen, COD removed\1.1 Printscreens

6.4.4 Quality of surface water – % oxygen-binding substances removed from water

Topic	Description												
Data	Percentage of chemical oxygen demand (COD) removed from water by sewage treatment plants per water authority												
Calculation steps	Not applicable												
Script name	i_vphosphornitrogencodremoved_q241106												
Location script	Werkmap\2_Data\E3_Water and marine resources\Phosphor, Nitrogen, COD removed\1.5 Script												
Limitations	Not applicable												
CSRD	E3 - Water and marine resources												
Data quality estimate	<p>2 – Non-audited data, or other primary data. The data is directly collected from the sewage treatment plants.</p> <table> <tr> <th>Score</th><th>Quality requirement</th></tr> <tr> <td>1</td><td>Audited data or actual primary data</td></tr> <tr> <td>2</td><td>Non-audited data, or other primary data</td></tr> <tr> <td>3</td><td>Average data that is peer/(sub)sector-specific</td></tr> <tr> <td>4</td><td>Proxy data on the basis of region or country</td></tr> <tr> <td>5</td><td>Estimated data with very limited support</td></tr> </table>	Score	Quality requirement	1	Audited data or actual primary data	2	Non-audited data, or other primary data	3	Average data that is peer/(sub)sector-specific	4	Proxy data on the basis of region or country	5	Estimated data with very limited support
Score	Quality requirement												
1	Audited data or actual primary data												
2	Non-audited data, or other primary data												
3	Average data that is peer/(sub)sector-specific												
4	Proxy data on the basis of region or country												
5	Estimated data with very limited support												

Topic	Description
Data	Percentage of COD removed
Data file	perc_phosphor_nitrogen_COD_removed.xlsx
Data Source	Unie van Waterschappen
Year	2021, 2022, 2023
Last update	07-10-2024
Date of download	29-10-2024
Link to webpage	https://live-waves.databank.nl/jive?workspace_guid=1947886d-bdb4-4798-b577-d7143d19ca41
Filters used to obtain the datafile	Inhoud: Rendement voor fosforverwijdering, rendement voor stikstofverwijdering, rendement voor CZV verwijdering Niveau: Waterschappen Jaar: 2019, 2020, 2021, 2022, 2023
Internal location	Werkmap\2_Data\E3_Water and marine resources\Phosphor, Nitrogen, COD removed\1.2 Origineel bronbestand
Data quality estimate	2
Unit of measurement	Percentage (%)
Selections	Not applicable
Data missing	Not applicable
Print screens	Werkmap\2_Data\E3_Water and marine resources\Phosphor, Nitrogen, COD removed\1.1 Printscreens

6.4.5 Quality of surface water – biological status (WFD targets)

Topic	Description												
Data	Biological status of surface water												
Calculation steps	<p>Biological status of surface water according to the Water Framework Directive (Kaderrichtlijn water, KRW) is a combination of the measurements on fytoplankton, fish, macrofauna, and waterflora.</p> <p>For 2021, 2022 and 2023, the file with measured values for all water bodies is combined with a file containing the responsible water authorities per water body. For 2024, the responsible water authority was already included in the dataset with measurements. Subsequently, the percentage of water bodies that pass the criteria (value equals “voldoet”, “goed” or “zeer goed”) is calculated for each water authority. If a water body is managed by two water authorities it is included in the calculation for both water authorities.</p>												
Script name	i_vWFDtargets_q241112.ipynb												
Location script	Werkmap\2_Data\E3_Water and marine resources\WFD targets\1.5 Script												
Limitations	Not applicable.												
CSRD	E3 – Water and marine resources												
Data quality estimate	<p>2 – Non-audited data, or other primary data. The data is directly presented by the responsible water authorities. Data is collected by methodology and following legislation of the European Water Framework Directive.</p> <table border="1"> <thead> <tr> <th>Score</th><th>Quality requirement</th></tr> </thead> <tbody> <tr> <td>1</td><td>Audited data or actual primary data</td></tr> <tr> <td>2</td><td>Non-audited data, or other primary data</td></tr> <tr> <td>3</td><td>Average data that is peer/(sub)sector-specific</td></tr> <tr> <td>4</td><td>Proxy data on the basis of region or country</td></tr> <tr> <td>5</td><td>Estimated data with very limited support</td></tr> </tbody> </table>	Score	Quality requirement	1	Audited data or actual primary data	2	Non-audited data, or other primary data	3	Average data that is peer/(sub)sector-specific	4	Proxy data on the basis of region or country	5	Estimated data with very limited support
Score	Quality requirement												
1	Audited data or actual primary data												
2	Non-audited data, or other primary data												
3	Average data that is peer/(sub)sector-specific												
4	Proxy data on the basis of region or country												
5	Estimated data with very limited support												

Topic	Description
Data	Biological status of surface water
Data file	4_oordelen_owl_2021_20220429.csv 4_oordelen_owl_2022_20221102.csv 4_oordelen_owl_2023_20230920.csv KRW-toestandsoordelen-oppervlaktewater-2024-NL-20240910.csv
Data Source	Informatiehuis water (samenwerking RWS, waterschappen en provincies)
Year	2021, 2022, 2023, 2024
Last update	29-04-2022, 02-11-2022, 20-09-2023, 10-09-2024
Date of download	06-11-2024
Link to webpage	https://www.waterkwaliteitsportaal.nl/bronbestanden-2021-stroomgebiedbeheerplannen-2022-2027 https://www.waterkwaliteitsportaal.nl/bronbestanden-2022 https://www.waterkwaliteitsportaal.nl/bronbestanden-2023 https://www.waterkwaliteitsportaal.nl/krw-bronbestanden
Filters used to obtain the datafile	Not applicable
Internal location	Werkmap\2_Data\E3_Water and marine resources\WFD targets\1.2 Origineel bronbestand
Data quality estimate	2
Unit of measurement	Not applicable
Data missing	Not applicable

Print screens	Werkmap\2_Data\E3_Water and marine resources\WFD targets\1.1 Printscreens
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Topic	Description
Data	Surface water bodies
Data file	3b_oppervlaktewaterlichamen_SGBP3_20220518.csv 3b_oppervlaktewaterlichamen_SGBP3_20221017.csv 3b_oppervlaktewaterlichamen_SGBP3_20230920.csv
Data Source	Informatiehuis water (samenwerking RWS, waterschappen en provincies)
Year	2021, 2022, 2023
Last update	18-05-2022, 17-10-2022, 20-09-2023
Date of download	06-11-2024
Link to webpage	https://www.waterkwaliteitsportaal.nl/bronbestanden-2021-stroomgebiedbeheerplannen-2022-2027 https://www.waterkwaliteitsportaal.nl/bronbestanden-2022 https://www.waterkwaliteitsportaal.nl/bronbestanden-2023 https://www.waterkwaliteitsportaal.nl/krw-bronbestanden
Filters used to obtain the datafile	Not applicable
Internal location	Werkmap\2_Data\E3_Water and marine resources\WFD targets\1.2 Origineel bronbestand
Data quality estimate	2
Unit of measurement	Not applicable
Selections	Not applicable
Data missing	Not applicable
Print screens	Werkmap\2_Data\E3_Water and marine resources\WFD targets\1.1 Printscreens

6.4.6 Quality of surface water – ecological status (WFD targets)

Topic	Description
Data	Ecological status or potential of surface water
Calculation steps	Ecological status of surface water according to the Water Framework Directive (Kaderrichtlijn water, KRW) is a combination of the biological status and some additional physical and chemical characteristics. For 2021, 2022 and 2023, the file with measured values for all water bodies is combined with a file containing the responsible water authorities per water body. For 2024, the responsible water authority was already included in the dataset with measurements. Subsequently, the percentage of water bodies that pass the criteria (value equals “voldoet”, “goed” or “zeer goed”) is calculated for each water authority. If a water body is managed by two water authorities it is included in the calculation for both water authorities.
Script name	i_vWFDtargets_q241112.ipynb
Location script	Werkmap\2_Data\E3_Water and marine resources\WFD targets\1.5 Script
Limitations	No limitations
CSRD	E4 – Biodiversity and ecosystems
Data quality estimate	2 – Non-audited data, or other primary data. The data is directly presented by the responsible water authorities. Data is collected by methodology and following legislation of the European Water Framework Directive.

	Score	Quality requirement
	1	Audited data or actual primary data
	2	Non-audited data, or other primary data
	3	Average data that is peer/(sub)sector-specific
	4	Proxy data on the basis of region or country
	5	Estimated data with very limited support

Topic	Description
Data	Ecological status of surface water
Data file	4_oordelen_owl_2021_20220429.csv 4_oordelen_owl_2022_20221102.csv 4_oordelen_owl_2023_20230920.csv KRW-toestandsoordelen-oppervlaktewater-2024-NL-20240910.csv
Data Source	Informatiehuis water (samenwerking RWS, waterschappen en provincies)
Year	2021, 2022, 2023, 2024
Last update	29-04-2022, 17-10-2022, 20-09-2023, 10-09-2024
Date of download	06-11-2024
Link to webpage	https://www.waterkwaliteitsportaal.nl/bronbestanden-2021-stroomgebiedbeheerplannen-2022-2027 https://www.waterkwaliteitsportaal.nl/bronbestanden-2022 https://www.waterkwaliteitsportaal.nl/bronbestanden-2023 https://www.waterkwaliteitsportaal.nl/krw-bronbestanden
Filters used to obtain the datafile	Not applicable
Internal location	Werkmap\2_Data\E3_Water and marine resources\WFD targets\1.2 Origineel bronbestand
Data quality estimate	2
Unit of measurement	Not applicable
Data missing	Not applicable
Print screens	Werkmap\2_Data\E3_Water and marine resources\WFD targets\1.1 Printscreens

Topic	Description
Data	Surface water bodies
Data file	3b_oppervlaktewaterlichamen_SGBP3_20220518.csv 3b_oppervlaktewaterlichamen_SGBP3_20221017.csv 3b_oppervlaktewaterlichamen_SGBP3_20230920.csv
Data Source	Informatiehuis water (samenwerking RWS, waterschappen en provincies)
Year	2021, 2022, 2023
Last update	18-05-2022, 17-10-2022, 20-09-2023
Date of download	06-11-2024
Link to webpage	https://www.waterkwaliteitsportaal.nl/bronbestanden-2021-stroomgebiedbeheerplannen-2022-2027 https://www.waterkwaliteitsportaal.nl/bronbestanden-2022 https://www.waterkwaliteitsportaal.nl/bronbestanden-2023 https://www.waterkwaliteitsportaal.nl/krw-bronbestanden
Filters used to obtain the datafile	Not applicable
Internal location	Werkmap\2_Data\E3_Water and marine resources\WFD targets\1.2 Origineel bronbestand
Data quality estimate	2

Unit of measurement	Not applicable
Selections	Not applicable
Data missing	Not applicable
Print screens	Werkmap\2_Data\E3_Water and marine resources\WFD targets\1.1 Printscreens

6.4.7 Quality of surface water – chemical status (WFD targets)

Topic	Description												
Data	Chemical status of surface water												
Calculation steps	Chemical status of surface water according to the Water Framework Directive (Kaderrichtlijn water, KRW) is a combination of measures of chemical substances. For 2021, 2022 and 2023, the file with measured values for all water bodies is combined with a file containing the responsible water authorities per water body. For 2024, the responsible water authority was already included in the dataset with measurements. Subsequently, the percentage of water bodies that pass the criteria (value equals “voldoet”, “goed” or “zeer goed”) is calculated for each water authority. If a water body is managed by two water authorities it is included in the calculation for both water authorities.												
Script name	i_vWFDtargets_q241112.ipynb												
Location script	Werkmap\2_Data\E3_Water and marine resources\WFD targets\1.5 Script												
Limitations	Not applicable												
CSRD	E3 – Water and marine resources												
Data quality estimate	<p>2 – Non-audited data, or other primary data. The data is directly presented by the responsible water authorities. Data is collected by methodology and following legislation of the European Water Framework Directive.</p> <table> <tr> <th>Score</th><th>Quality requirement</th></tr> <tr> <td>1</td><td>Audited data or actual primary data</td></tr> <tr> <td>2</td><td>Non-audited data, or other primary data</td></tr> <tr> <td>3</td><td>Average data that is peer/(sub)sector-specific</td></tr> <tr> <td>4</td><td>Proxy data on the basis of region or country</td></tr> <tr> <td>5</td><td>Estimated data with very limited support</td></tr> </table>	Score	Quality requirement	1	Audited data or actual primary data	2	Non-audited data, or other primary data	3	Average data that is peer/(sub)sector-specific	4	Proxy data on the basis of region or country	5	Estimated data with very limited support
Score	Quality requirement												
1	Audited data or actual primary data												
2	Non-audited data, or other primary data												
3	Average data that is peer/(sub)sector-specific												
4	Proxy data on the basis of region or country												
5	Estimated data with very limited support												

Topic	Description
Data	Chemical status of surface water
Data file	4_oordelen_owl_2021_20220429.csv 4_oordelen_owl_2022_20221102.csv 4_oordelen_owl_2023_20230920.csv KRW-toestandsoordelen-oppervlaktewater-2024-NL-20240910.csv
Data Source	Informatiehuis water (samenwerking RWS, waterschappen en provincies)
Year	2021, 2022, 2023, 2024
Last update	29-04-2022, 17-10-2022, 20-09-2023, 10-09-2024
Date of download	06-11-2024
Link to webpage	https://www.waterkwaliteitsportaal.nl/bronbestanden-2021-stroomgebiedbeheerplannen-2022-2027 https://www.waterkwaliteitsportaal.nl/bronbestanden-2022 https://www.waterkwaliteitsportaal.nl/bronbestanden-2023 https://www.waterkwaliteitsportaal.nl/krw-bronbestanden
Filters used to obtain the datafile	Not applicable

Internal location	Werkmap\2_Data\E3_Water and marine resources\WFD targets\1.2 Origineel bronbestand
Data quality estimate	2
Unit of measurement	Not applicable
Data missing	Not applicable
Print screens	Werkmap\2_Data\E3_Water and marine resources\WFD targets\1.1 Printscreens

Topic	Description
Data	Surface water bodies
Data file	3b_oppervlaktewaterlichamen_SGBP3_20220518.csv 3b_oppervlaktewaterlichamen_SGBP3_20221017.csv 3b_oppervlaktewaterlichamen_SGBP3_20230920.csv
Data Source	Informatiehuis water (samenwerking RWS, waterschappen en provincies)
Year	2021, 2022, 2023
Last update	18-05-2022, 17-10-2022, 20-09-2023
Date of download	06-11-2024
Link to webpage	https://www.waterkwaliteitsportaal.nl/bronbestanden-2021-stroomgebiedbeheerplannen-2022-2027 https://www.waterkwaliteitsportaal.nl/bronbestanden-2022 https://www.waterkwaliteitsportaal.nl/bronbestanden-2023 https://www.waterkwaliteitsportaal.nl/kw-bronbestanden
Filters used to obtain the datafile	Not applicable
Internal location	Werkmap\2_Data\E3_Water and marine resources\WFD targets\1.2 Origineel bronbestand
Data quality estimate	2
Unit of measurement	Not applicable
Selections	Not applicable
Data missing	Not applicable
Print screens	Werkmap\2_Data\E3_Water and marine resources\WFD targets\1.1 Printscreens

6.4.8 Quality of surface water – total status (WFD targets)

Topic	Description
Data	Total status of the quality of surface water
Calculation steps	Total status of the quality of surface water according to the Water Framework Directive (Kaderrichtlijn water, KRW) is a combination of the ecological and chemical status of the surface water bodies. For 2021, 2022 and 2023, the file with measured values for all water bodies is combined with a file containing the responsible water authorities per water body. For 2024, the responsible water authority was already included in the dataset with measurements. Subsequently, the percentage of water bodies that pass the criteria (value equals “voldoet”, “goed” or “zeer goed”) is calculated for each water authority. If a water body is managed by two water authorities it is included in the calculation for both water authorities.
Script name	i_vWFDtargets_q241112.ipynb
Location script	Werkmap\2_Data\E3_Water and marine resources\WFD targets\1.5 Script
Limitations	Not applicable.
CSRD	E3 – Water and marine resources

Data quality estimate	<p>2 – Non-audited data, or other primary data. The data is directly presented by the responsible water authorities. Data is collected by methodology and following legislation of the European Water Framework Directive.</p> <table border="1"> <thead> <tr> <th>Score</th><th>Quality requirement</th></tr> </thead> <tbody> <tr> <td>1</td><td>Audited data or actual primary data</td></tr> <tr> <td>2</td><td>Non-audited data, or other primary data</td></tr> <tr> <td>3</td><td>Average data that is peer/(sub)sector-specific</td></tr> <tr> <td>4</td><td>Proxy data on the basis of region or country</td></tr> <tr> <td>5</td><td>Estimated data with very limited support</td></tr> </tbody> </table>	Score	Quality requirement	1	Audited data or actual primary data	2	Non-audited data, or other primary data	3	Average data that is peer/(sub)sector-specific	4	Proxy data on the basis of region or country	5	Estimated data with very limited support
Score	Quality requirement												
1	Audited data or actual primary data												
2	Non-audited data, or other primary data												
3	Average data that is peer/(sub)sector-specific												
4	Proxy data on the basis of region or country												
5	Estimated data with very limited support												

Topic	Description
Data	Total status of the quality of surface water
Data file	4_oordelen_owl_2021_20220429.csv 4_oordelen_owl_2022_20221102.csv 4_oordelen_owl_2023_20230920.csv KRW-toestandsoordelen-oppervlaktewater-2024-NL-20240910.csv
Data Source	Informatiehuis water (samenwerking RWS, waterschappen en provincies)
Year	2021, 2022, 2023, 2024
Last update	29-04-2022, 17-10-2022, 20-09-2023, 10-09-2024
Date of download	06-11-2024
Link to webpage	https://www.waterkwaliteitsportaal.nl/bronbestanden-2021-stroomgebiedbeheerplannen-2022-2027 https://www.waterkwaliteitsportaal.nl/bronbestanden-2022 https://www.waterkwaliteitsportaal.nl/bronbestanden-2023 https://www.waterkwaliteitsportaal.nl/krw-bronbestanden
Filters used to obtain the datafile	Not applicable
Internal location	Werkmap\2_Data\E3_Water and marine resources\WFD targets\1.2 Origineel bronbestand
Data quality estimate	2
Unit of measurement	Not applicable
Data missing	Not applicable
Print screens	Werkmap\2_Data\E3_Water and marine resources\WFD targets\1.1 Printscreens

Topic	Description
Data	Surface water bodies
Data file	3b_oppervlaktewaterlichamen_SGBP3_20220518.csv 3b_oppervlaktewaterlichamen_SGBP3_20221017.csv 3b_oppervlaktewaterlichamen_SGBP3_20230920.csv
Data Source	Informatiehuis water (samenwerking RWS, waterschappen en provincies)
Year	2021, 2022, 2023
Last update	18-05-2022, 17-10-2022, 20-09-2023
Date of download	06-11-2024
Link to webpage	https://www.waterkwaliteitsportaal.nl/bronbestanden-2021-stroomgebiedbeheerplannen-2022-2027 https://www.waterkwaliteitsportaal.nl/bronbestanden-2022 https://www.waterkwaliteitsportaal.nl/bronbestanden-2023 https://www.waterkwaliteitsportaal.nl/krw-bronbestanden

Filters used to obtain the datafile	Not applicable
Internal location	Werkmap\2_Data\E3_Water and marine resources\WFD targets\1.2 Origineel bronbestand
Data quality estimate	2
Unit of measurement	Not applicable
Selections	Not applicable
Data missing	Not applicable
Print screens	Werkmap\2_Data\E3_Water and marine resources\WFD targets\1.1 Printscreens

6.4.9 Water quality – compliance rate

Topic	Description												
Data	<p>Data is obtained from the WAVES databank (Unie van Waterschappen).</p> <p>The compliance rate indicates the percentage of measurements in which the water authorities meet the requirements set for discharges. These can be customized regulations or the standard values for the parameters Ntot, Ptot, OB, COD and BOD5.</p>												
Calculation steps	No calculation steps												
Script name	i_vCompliancerate_q241119.ipynb												
Location script	Werkmap\2_Data\E3_Water and marine resources\Compliance rate\1.5 Script												
Limitations	Not applicable												
CSRD	E3 – Water and marine resources												
Data quality estimate	<p>2 – Non-audited data, or other primary data. The data is directly presented by the responsible water authorities.</p> <table> <tr> <th>Score</th><th>Quality requirement</th></tr> <tr> <td>1</td><td>Audited data or actual primary data</td></tr> <tr> <td>2</td><td>Non-audited data, or other primary data</td></tr> <tr> <td>3</td><td>Average data that is peer/(sub)sector-specific</td></tr> <tr> <td>4</td><td>Proxy data on the basis of region or country</td></tr> <tr> <td>5</td><td>Estimated data with very limited support</td></tr> </table>	Score	Quality requirement	1	Audited data or actual primary data	2	Non-audited data, or other primary data	3	Average data that is peer/(sub)sector-specific	4	Proxy data on the basis of region or country	5	Estimated data with very limited support
Score	Quality requirement												
1	Audited data or actual primary data												
2	Non-audited data, or other primary data												
3	Average data that is peer/(sub)sector-specific												
4	Proxy data on the basis of region or country												
5	Estimated data with very limited support												

Topic	Description
Data	Water quality – compliance rate
Data file	Nalevingspercentage.xlsx
Data Source	WAVES databank (Unie van Waterschappen)
Year	2021, 2022, 2023
Last update	07-10-2024
Date of download	19-11-2024
Link to webpage	https://live-waves.databank.nl/jive
Filters used to obtain the datafile	Waterschapsspiegel > Alle gegevens > Gezuiverd water > Functioneren waterzuivering > [zwnal] Nalevingspercentage > 2021 2022 2023
Internal location	Werkmap\2_Data\E3_Water and marine resources\Compliance rate\1.2 Origineel bronbestand
Data quality estimate	2

Unit of measurement	Percentage
Selections	Not applicable
Data missing	In total, 3 values are provided as “not applicable” by the source
Print screens	Werkmap\2_Data\E3_Water and marine resources\Compliance rate\1.1 Printscreens

6.4.10 Tested flood defences

Topic	Description												
Data	Tested flood defences												
Calculation steps	<p>Flood defences are divided in primary flood defences and secondary flood defences.</p> <p>In the data file the ‘-’ is replaced by a 0.</p> <p>The percentage of tested flood defences can be calculated by dividing the tested flood defences (sum of primary tested flood defences that do and do not meet the requirements, and secondary tested flood defences) by the total length of flood defences (sum of primary and secondary flood defences) times 100</p>												
Script name	i_vFloodDefenses_q241107												
Location script	Werkmap\2_Data\E1_Climate\Flood defences\1.5 Script\i_vFloodDefenses_q241107.ipynb												
Limitations	Not applicable												
CSRD	E1 - Climate												
Data quality estimate	<p>3- average data that is peer/(sub)sector-specific</p> <table> <tr> <th>Score</th><th>Quality requirement</th></tr> <tr> <td>1</td><td>Audited data or actual primary data</td></tr> <tr> <td>2</td><td>Non-audited data, or other primary data</td></tr> <tr> <td>3</td><td>Average data that is peer/(sub)sector-specific</td></tr> <tr> <td>4</td><td>Proxy data on the basis of region or country</td></tr> <tr> <td>5</td><td>Estimated data with very limited support</td></tr> </table>	Score	Quality requirement	1	Audited data or actual primary data	2	Non-audited data, or other primary data	3	Average data that is peer/(sub)sector-specific	4	Proxy data on the basis of region or country	5	Estimated data with very limited support
Score	Quality requirement												
1	Audited data or actual primary data												
2	Non-audited data, or other primary data												
3	Average data that is peer/(sub)sector-specific												
4	Proxy data on the basis of region or country												
5	Estimated data with very limited support												

Topic	Description
Data	Flood defences
Data file	Flood defences.xlsx
Data Source	Unie van waterschappen (Waves)
Year	2021, 2022, 2023
Last update	07-10-2024
Date of download	04-11-2024
Link to webpage	https://live-waves.databank.nl/jive
Filters used to obtain the datafile	Not applicable
Internal location	24180_Impact meting NWB bank 2024\Werkmap\2_Data\E1_Climate\Flood defences\1.2 Origineel bronbestand
Data quality estimate	3 (based on large amount of actual primary sample data)
Unit of measurement	Percentage

Selections	<ul style="list-style-type: none"> Waterschapsspiegel/Alle gegevens/ Waterveiligheid/ Algemene gegevens waterkeringen/ Lengte primaire waterkeringen & lengte regionale waterkeringen Waterschapsspiegel/Alle gegevens/ Waterveiligheid/ Beheer primaire waterkeringen/ Voldoen aan wettelijke veiligheidsnormen/ Lengte primaire waterkering die voldoet aan de normen op 32-12 & Lengte waterkering beoordeeld en voldoet niet Waterschapsspiegel/Alle gegevens/ Waterveiligheid/ Beheer regionale waterkeringen/ Lengte regionale waterkering dat is getoetst & lengte regionale waterkering voldoet & lengte regionale waterkering voldoet niet & lengte regionale waterkering behoeft nader onderzoek.
Data missing	There are some missing values in the data file
Print screens	24180_Impact meting NWB bank 2024\Werkmap\2_Data\E1_Climate\Flood defenses\1.1 Printscreens

6.4.11 Flood defences that meet the set of requirements

Topic	Description												
Data	Flood defences that meet the set of requirements												
Calculation steps	<p>Flood defences are divided in primary flood defences and secondary flood defences. In the data file the '-' is replaced by a 0.</p> <p>The percentage of flood defences that meet the requirements can be calculated by dividing the flood defences that meet the requirements (sum of primary flood defences and secondary flood defences) by the total length of flood defences (sum of primary and secondary flood defences) times 100</p>												
Script name	i_vFloodDefenses_q241107												
Location script	Werkmap\2_Data\E1_Climate\Flood defenses\1.5 Script\i_vFloodDefenses_q241107.ipynb												
Limitations	Not applicable												
CSRD	E1 - Climate												
Data quality estimate	<p>3- average data that is peer/(sub)sector-specific</p> <table> <tr> <th>Score</th><th>Quality requirement</th></tr> <tr> <td>1</td><td>Audited data or actual primary data</td></tr> <tr> <td>2</td><td>Non-audited data, or other primary data</td></tr> <tr> <td>3</td><td>Average data that is peer/(sub)sector-specific</td></tr> <tr> <td>4</td><td>Proxy data on the basis of region or country</td></tr> <tr> <td>5</td><td>Estimated data with very limited support</td></tr> </table>	Score	Quality requirement	1	Audited data or actual primary data	2	Non-audited data, or other primary data	3	Average data that is peer/(sub)sector-specific	4	Proxy data on the basis of region or country	5	Estimated data with very limited support
Score	Quality requirement												
1	Audited data or actual primary data												
2	Non-audited data, or other primary data												
3	Average data that is peer/(sub)sector-specific												
4	Proxy data on the basis of region or country												
5	Estimated data with very limited support												

Topic	Description
Data	Flood defences
Data file	Flood defenses.xlsx
Data Source	Unie van waterschappen (Waves)
Year	2021, 2022, 2023
Last update	07-10-2024
Date of download	04-11-2024
Link to webpage	https://live-waves.databank.nl/jive
Filters used to obtain the datafile	n.a.

Internal location	24180_Impact meting NWB bank 2024\Werkmap\2_Data\E1_Climate\Flood defenses\1.2 Origineel bronbestand
Data quality estimate	3 (based on large amount of actual primary sample data)
Unit of measurement	Percentage
Selections	<ul style="list-style-type: none"> Waterschapsspiegel/Alle gegevens/ Waterveiligheid/ Algemene gegevens waterkeringen/ Lengte primaire waterkeringen & lengte regionale waterkeringen Waterschapsspiegel/Alle gegevens/ Waterveiligheid/ Beheer primaire waterkeringen/ Voldoen aan wettelijke veiligheidsnormen/ Lengte primaire waterkering die voldoet aan de normen op 32-12 & Lengte waterkering beoordeeld en voldoet niet Waterschapsspiegel/Alle gegevens/ Waterveiligheid/ Beheer regionale waterkeringen/ Lengte regionale waterkering dat is getoetst & lengte regionale waterkering voldoet & lengte regionale waterkering voldoet niet & lengte regionale waterkering behoeft nader onderzoek.
Data missing	There are some missing values in the data file
Print screens	24180_Impact meting NWB bank 2024\Werkmap\2_Data\E1_Climate\Flood defenses\1.1 Printscreens

6.4.12 Purified sewage water as raw material

Topic	Description												
Data	Purified sewage water												
Calculation steps	No calculation steps												
Script name	i_vPurifiedsewagewater_q241204.ipynb												
Location script	Werkmap\2_Data\E5_Resource use and circular economy\Circularity purified sewage water\1.5 Script												
Limitations	Not applicable												
CSRD	E5 - Resource use and circular economy												
Data quality estimate	3- average data that is peer/(sub)sector-specific <table> <tr> <th>Score</th><th>Quality requirement</th></tr> <tr> <td>1</td><td>Audited data or actual primary data</td></tr> <tr> <td>2</td><td>Non-audited data, or other primary data</td></tr> <tr> <td>3</td><td>Average data that is peer/(sub)sector-specific</td></tr> <tr> <td>4</td><td>Proxy data on the basis of region or country</td></tr> <tr> <td>5</td><td>Estimated data with very limited support</td></tr> </table>	Score	Quality requirement	1	Audited data or actual primary data	2	Non-audited data, or other primary data	3	Average data that is peer/(sub)sector-specific	4	Proxy data on the basis of region or country	5	Estimated data with very limited support
Score	Quality requirement												
1	Audited data or actual primary data												
2	Non-audited data, or other primary data												
3	Average data that is peer/(sub)sector-specific												
4	Proxy data on the basis of region or country												
5	Estimated data with very limited support												

Topic	Description
Data	Use of treated sewage water as raw material
Data file	241203_circularitypurifiedsewagewater.xlsx
Data Source	Unie van Waterschappen
Year	2021, 2022, 2023
Last update	16-10-2024
Date of download	03-12-2024
Link to webpage	https://live-waves.databank.nl/jive
Filters used to obtain the datafile	Niveau: waterschap Jaar: 2021, 2022, 2023
Internal location	Werkmap\2_Data\E5_Resource use and circular economy\Circularity purified sewage water\1.2 Origineel bronbestand

Data quality estimate	3
Unit of measurement	M ³
Selections	Waterspiegel / Alle gegevens / Gezuiverd water / Terugwinning grondstoffen / Terugwinning grondstoffen uit afvalwater / Zoet water / Inzet gezuiverd rioolwater als grondstof
Data missing	For some water authorities data is missing.
Print screens	Werkmap\2_Data\E5_Resource use and circular economy\Circularity purified sewage water\1.1 Screenshots\241203_circularity.png

6.4.13 Purified sewage water as raw material compared to the potential

Topic	Description												
Data	Purified sewage water												
Calculation steps	No calculation steps												
Script name	I_vPurifiedsewagewater_q241204.ipynb												
Location script	Werkmap\2_Data\E5_Resource use and circular economy\Circularity purified sewage water\1.5 Script												
Limitations	Not applicable												
CSRD	E5 - Resource use and circular economy												
Data quality estimate	3- average data that is peer/(sub)sector-specific <table border="1"> <thead> <tr> <th>Score</th><th>Quality requirement</th></tr> </thead> <tbody> <tr> <td>1</td><td>Audited data or actual primary data</td></tr> <tr> <td>2</td><td>Non-audited data, or other primary data</td></tr> <tr> <td>3</td><td>Average data that is peer/(sub)sector-specific</td></tr> <tr> <td>4</td><td>Proxy data on the basis of region or country</td></tr> <tr> <td>5</td><td>Estimated data with very limited support</td></tr> </tbody> </table>	Score	Quality requirement	1	Audited data or actual primary data	2	Non-audited data, or other primary data	3	Average data that is peer/(sub)sector-specific	4	Proxy data on the basis of region or country	5	Estimated data with very limited support
Score	Quality requirement												
1	Audited data or actual primary data												
2	Non-audited data, or other primary data												
3	Average data that is peer/(sub)sector-specific												
4	Proxy data on the basis of region or country												
5	Estimated data with very limited support												

Topic	Description
Data	The percentage of treated sewage water as raw material compared to the potential
Data file	241203_circularitypurifiedsewagewater.xlsx
Data Source	Unie van Waterschappen
Year	2021, 2022, 2023
Last update	16-10-2024
Date of download	03-12-2024
Link to webpage	https://live-waves.databank.nl/jive
Filters used to obtain the datafile	Niveau: waterschap Jaar: 2021, 2022, 2023
Internal location	Werkmap\2_Data\E5_Resource use and circular economy\Circularity purified sewage water\1.2 Origineel bronbestand
Data quality estimate	3
Unit of measurement	%
Selections	Waterspiegel / Alle gegevens / Gezuiverd water / Terugwinning grondstoffen / Terugwinning grondstoffen uit afvalwater / Zoet water / Percentage ingezet gezuiverd rioolwater als grondstof ten opzichte van het potentieel
Data missing	For some water authorities data is missing.

Print screens	Werkmap\2_Data\E5_Resource use and circular economy\Circularity purified sewage water\1.1 Printscreens\241203_circularity.png
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6.4.14 Flooding standards

Topic	Description												
Data	Flooding standards												
Calculation steps	The managed surface area (in hectares) that is not yet compliant to the flooding standards is divided by the total managed surface area to get a percentage.												
Script name	i.vFloodingstandards_q241211												
Location script	\Werkmap\2_Data\E1_Climate\Wateroverlastnormen\1.5 Script												
Limitations	No limitations												
CSRD	E1 - Climate												
Data quality estimate	3- average data that is peer/(sub)sector-specific <table border="1"> <thead> <tr> <th>Score</th><th>Quality requirement</th></tr> </thead> <tbody> <tr> <td>1</td><td>Audited data or actual primary data</td></tr> <tr> <td>2</td><td>Non-audited data, or other primary data</td></tr> <tr> <td>3</td><td>Average data that is peer/(sub)sector-specific</td></tr> <tr> <td>4</td><td>Proxy data on the basis of region or country</td></tr> <tr> <td>5</td><td>Estimated data with very limited support</td></tr> </tbody> </table>	Score	Quality requirement	1	Audited data or actual primary data	2	Non-audited data, or other primary data	3	Average data that is peer/(sub)sector-specific	4	Proxy data on the basis of region or country	5	Estimated data with very limited support
Score	Quality requirement												
1	Audited data or actual primary data												
2	Non-audited data, or other primary data												
3	Average data that is peer/(sub)sector-specific												
4	Proxy data on the basis of region or country												
5	Estimated data with very limited support												

Topic	Description
Data	Flooding standards
Data file	Flooding standards bewerkt.xlsx
Data Source	Unie van Waterschappen (Waves databank)
Year	2021, 2022, 2023
Last update	10/07/2024
Date of download	12/11/2024
Link to webpage	https://live-waves.databank.nl/jive
Filters used to obtain the datafile	Not applicable
Internal location	\Werkmap\2_Data\E1_Climate\ Wateroverlastnormen\1.2 Origineel bronbestand\Flooding standards.xlsx
Data quality estimate	3
Unit of measurement	Hectares
Selections	Alle gegevens/Schoon en voldoende water/Wateroverlast voorkomen
Data missing	One water authority has a missing value in 2023.
Print screens	Werkmap\2_Data\E1_Climate\Wateroverlastnormen\1.1 Printscreens\Printscreen_flooding standards.png

Topic	Description
Data	Total surface area managed
Data file	Total surface area managed.xlsx
Data Source	Unie van Waterschappen (Waves databank)
Year	2021, 2022, 2023
Last update	10/07/2024
Date of download	11/27/2024

Link to webpage	https://live-waves.databank.nl/jive
Filters used to obtain the datafile	Not applicable
Internal location	\\Werkmap\2_Data\E1_Climate\Wateroverlastnormen\1.2 Origineel bronbestand\Flooding standards.xlsx
Data quality estimate	3
Unit of measurement	Hectares
Selections	Waterschapsspiegel/Alle gegevens /Algemeen/Gebiedskenmerken/Totale oppervlakte beheergebied
Data missing	No missing data
Print screens	Werkmap\2_Data\E1_Climate\Wateroverlastnormen\1.1 Printscreens\Printscreen_total hectare.png

6.4.15 Protected nature

Topic	Description												
Data	Protected nature per water authority												
Calculation steps	The area of Natura 2000, national parks, and NNN (Nature Network Netherlands) is combined. This result is joined with the borders of the water authorities to calculate the percentage of protected nature per water authority. This is including protected nature at sea.												
Script name	i_vProtectednature_q241125.ipynb												
Location script	Werkmap\2_Data\E4_Biodiversity and ecosystems\Protected nature\1.5 Script												
Limitations	Not applicable												
CSRD	E4 – Biodiversity and ecosystems												
Data quality estimate	2 – Non-audited data, or other primary data <table border="1"> <thead> <tr> <th>Score</th><th>Quality requirement</th></tr> </thead> <tbody> <tr> <td>1</td><td>Audited data or actual primary data</td></tr> <tr> <td>2</td><td>Non-audited data, or other primary data</td></tr> <tr> <td>3</td><td>Average data that is peer/(sub)sector-specific</td></tr> <tr> <td>4</td><td>Proxy data on the basis of region or country</td></tr> <tr> <td>5</td><td>Estimated data with very limited support</td></tr> </tbody> </table>	Score	Quality requirement	1	Audited data or actual primary data	2	Non-audited data, or other primary data	3	Average data that is peer/(sub)sector-specific	4	Proxy data on the basis of region or country	5	Estimated data with very limited support
Score	Quality requirement												
1	Audited data or actual primary data												
2	Non-audited data, or other primary data												
3	Average data that is peer/(sub)sector-specific												
4	Proxy data on the basis of region or country												
5	Estimated data with very limited support												

Topic	Description
Data	Area of Natura 2000
Data file	natura2000.gpkg
Data Source	PDOK
Year	2024
Last update	19-11-2024
Date of download	20-11-2024
Link to webpage	https://www.nationaalgeoregister.nl/geonetwork/srv/api/records/fe4b36d5-8f69-403f-b084-ce010a4ae3b2
Filters used to obtain the datafile	Not applicable
Internal location	Werkmap\2_Data\E4_Biodiversity and ecosystems\Protected nature\1.2 Origineel bronbestand
Data quality estimate	2

Unit of measurement	Not applicable
Selections	Not applicable
Data transformation	Not applicable
Data missing	Not applicable
Print screens	Werkmap\2_Data\E4_Biodiversity and ecosystems\Protected nature\1.1 Printscreens File name: Schermafbeelding 2024-11-20 101322_Natura2000.png

Topic	Description
Data	Area of National parks
Data file	natpark.gpkg
Data Source	Ministry of Agriculture, Nature and Food Quality
Year	2023
Last update	12-04-2023
Date of download	20-11-2024
Link to webpage	https://www.nationaalgeoregister.nl/geonetwork/opensearch/api/records/4961d305-fbb5-426a-9ba3-53e1ca5f3b18
Filters used to obtain the datafile	Not applicable
Internal location	Werkmap\2_Data\E4_Biodiversity and ecosystems\Protected nature\1.2 Origineel bronbestand
Data quality estimate	2
Unit of measurement	Not applicable
Selections	Not applicable
Data transformation	Not applicable
Data missing	Not applicable
Print screens	Werkmap\2_Data\E4_Biodiversity and ecosystems\Protected nature\1.1 Printscreens File name: Schermafbeelding 2024-11-20 101447_NationaleParken.png

Topic	Description
Data	Area of National Nature Network (NNN)
Data file	inspire-pv-ps.nlps-nnn.gml
Data Source	PDOK
Year	2024
Last update	10-07-2024
Date of download	20-11-2024
Link to webpage	https://www.nationaalgeoregister.nl/geonetwork/srv/api/records/15d2aa2a-1e55-4ca4-986b-0d12768675a1
Filters used to obtain the datafile	Not applicable
Internal location	Werkmap\2_Data\E4_Biodiversity and ecosystems\Protected nature\1.2 Origineel bronbestand
Data quality estimate	2
Unit of measurement	Not applicable
Selections	Not applicable

Data transformation	Not applicable
Data missing	Not applicable
Print screens	Werkmap\2_Data\E4_Biodiversity and ecosystems\Protected nature\1.1 Printscreens File name: Schermafbeelding 2024-11-20 101547_NatuurNetwerkNederland.png

Topic	Description
Data	Border of water authorities
Data file	waterschap.gpkg
Data Source	Het Waterschapshuis
Year	2023
Last update	28-04-2023
Date of download	20-11-2024
Link to webpage	https://www.nationaalgeoregister.nl/geonetwork/opensearch/api/records/465f0e0b-9e7f-4a5f-b005-9fd0c9131e97
Filters used to obtain the datafile	Not applicable
Internal location	Werkmap\2_Data\E4_Biodiversity and ecosystems\Protected nature\1.2 Origineel bronbestand
Data quality estimate	2
Unit of measurement	Not applicable
Selections	Not applicable
Data transformation	Not applicable
Data missing	Not applicable
Print screens	Werkmap\2_Data\E4_Biodiversity and ecosystems\Protected nature\1.1 Printscreens File name: Schermafbeelding 2024-11-20 101726_Waterschapsgrenzen.png

7 Factsheets drinking water utilities

By Sanne Paenen, Anne van der Heijden & Fenna Bijster
Het PON & Telos

7.1 General factsheet

Topic	Description
Portfolio covered	95.7 % of NWB Bank's portfolio is covered for this customer group. This percentage is an indication of the completeness of the dataset. It is calculated by looking at the collected data for the customers in the loan portfolio of NWB Bank. The percentage is lower than 100% if there are missing data. The missing data are either not available or it was not possible to collect or calculate these data correctly.
KPIs	<ul style="list-style-type: none">- GHG emissions- Water quality - drinking water- Protected nature
Limitations	None

7.2 Loan portfolio drinking water utilities

Topic	Description
Data	Loan portfolio drinking water utilities
Data files	Original files: Leningportefeuille NWB 2021.xlsx Leningportefeuille NWB 2022.xlsx 240626 leningportefeuille NWB 2023.xlsx Edited file: 241204_Leningportefeuille.xlsx
Data Source	NWB
Year	2021, 2022, 2023
Calculation steps	Not applicable
Script name	iLoanportfolio_q241204.ipynb
Location script	Werkmap\2_Data\A_Loan portfolio\1.5 Script
Last update	Not applicable
Date of download	Not applicable
Link to webpage	Not applicable
Filters used to obtain the datafile	Not applicable
Internal location	Werkmap\2_Data\A_Loan portfolio\1.2 Origineel bronbestand Werkmap\2_Data\A_Loan portfolio\1.3 Bewerkt data
Data quality	1
Unit of measurement	Euro
Selections	SicCodeOmschrijving 0041000000 WATER UTILITIES 0041200000 DRINKING WATER UTILITY 0041300000 INDUSTRY WATER UTILITY
Data transformation	A unique institution code was created based on the institution code from Stichting Mijnaansluiting.nl. Evides has two institution codes, these are combined into one.
Data missing	Not applicable

Print screens	Not applicable
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Topic	Description
Data	Border of drinking water utilities
Data file	Waterleidingbedrijven.gpkg
Data Source	Stichting Mijnaansluiting.nl http://standaarden.overheid.nl/owms/terms/wsh
Year	2022
Last update	11-11-2022
Date of download	25-11-2024
Link to webpage	https://data.overheid.nl/dataset/gebiedsindeling-netbeheerders-elektriciteit--gas-en-water#panel-description
Filters used to obtain the datafile	Not applicable
Internal location	Werkmap\2_Data\E4_Biodiversity and ecosystems\Protected nature\1.2 Origineel bronbestand
Data quality estimate	2
Unit of measurement	Not applicable
Selections	Not applicable
Data transformation	Not applicable
Data missing	Not applicable
Print screens	Werkmap\2_Data\E4_Biodiversity and ecosystems\Protected nature\1.1 Printscreens File name: 241125 waterleidinggrenzen.png

7.3 Total balance sheet drinking water utilities

Topic	Description
Data	Total balance sheet
Data file	Original data: annual reports Edited file: 241029 Passiva.xlsx
Data Source	Annual reports of the individual drinking water utilities
Year	2023
Calculation steps	Not applicable
Script name	iTotalbalancesheet_q241204.ipynb
Location script	Werkmap\2_Data\b_Total balance sheet\1.5 Script
Last update	Not applicable
Date of download	Not applicable
Link to webpage	Not applicable
Filters used to obtain the datafile	Not applicable
Internal location	Original data: Werkmap\2_Data\b_Total balance sheet\Drinking water utilities\1.2 Origineel bronbestand
Data quality estimate	Score 1 Data received from drinking water utilities. This data is audited by an external accountant.
Unit of measurement	Euro
Selections	Not applicable
Data missing	From one drinking water company the total balance sheet could not be found in the annual report. The data has been received by email and was added to the Excel file of this drinking water company.

Print screens	Not applicable
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7.4 Factsheet per data source used per KPI

7.4.1 GHG emissions per drinking water company

Topic	Description												
Data	GHG emissions												
Calculation steps	No calculations have been done, but the information from various original files is combined into one file.												
Script name	i_vGHG_q241209.ipynb												
Location script	Werkmap\2_Data\E1_Climate\GHG emissies\1.5 Script												
Limitations	No limitations												
CSRD	E1 - Climate												
Data quality estimate	Data quality score = 2.4 <table> <tr> <th>Score</th><th>Quality requirement</th></tr> <tr> <td>1</td><td>Audited data or actual primary data</td></tr> <tr> <td>2</td><td>Non-audited data, or other primary data</td></tr> <tr> <td>3</td><td>Average data that is peer/(sub)sector-specific</td></tr> <tr> <td>4</td><td>Proxy data on the basis of region or country</td></tr> <tr> <td>5</td><td>Estimated data with very limited support</td></tr> </table>	Score	Quality requirement	1	Audited data or actual primary data	2	Non-audited data, or other primary data	3	Average data that is peer/(sub)sector-specific	4	Proxy data on the basis of region or country	5	Estimated data with very limited support
Score	Quality requirement												
1	Audited data or actual primary data												
2	Non-audited data, or other primary data												
3	Average data that is peer/(sub)sector-specific												
4	Proxy data on the basis of region or country												
5	Estimated data with very limited support												

Topic	Description
Data	GHG emissions
Data file	Original files: 2021, 2022: 240122 nulmeting eenmeting CO2 voetafdruk waterleidingbedrijven 2023: 241111 Waterleidingbedrijven 2023 NWB Edited file: 241127_Drinkingwatercompanies202120222023
Data Source	2021, 2022: Impact report NWB Bank 2023 ³⁸ 2023: PCAF report 2024 ³⁹
Year	2021, 2022, 2023
Last update	Not applicable
Date of download	Not applicable
Link to webpage	Not applicable
Filters used to obtain the datafile	Not applicable
Internal location	Original files: Werkmap\2_Data\E1_Climate\GHG emissies\1.2 Origineel bronbestand Edited file: Werkmap\2_Data\E1_Climate\GHG emissies\1.3 Bewerkt data
Data quality estimate	2.4
Unit of measurement	tCO ₂ e
Selections	Not applicable
Data transformation	Not applicable
Data missing	Data for some drinking water utilities is missing. The portfolio covered is 90%
Print screens	Not applicable

³⁸ Sustainable Development Goals. Impact of NWB Bank's loan portfolio. Accountability report: Reporting year 2023

³⁹ Greenhouse Gas Emissions of NWB Bank's Loan Portfolio. The GHG footprint of 2023

7.4.2 Water quality – drinking water

Topic	Description												
Data	Drinking water quality												
Calculation steps	None												
Script name	i_vDrinkingwaterquality_q241113.ipynb												
Location script	Werkmap\2_Data\E3_Water and marine resources\Water quality - drinking water\1.5 Script												
Limitations	Only available on sectoral level												
CSRD	E3 – Water and marine resources												
Data quality estimate	4 – Proxy data on the basis of region or country <table border="1"> <thead> <tr> <th>Score</th><th>Quality requirement</th></tr> </thead> <tbody> <tr> <td>1</td><td>Audited data or actual primary data</td></tr> <tr> <td>2</td><td>Non-audited data, or other primary data</td></tr> <tr> <td>3</td><td>Average data that is peer/(sub)sector-specific</td></tr> <tr> <td>4</td><td>Proxy data on the basis of region or country</td></tr> <tr> <td>5</td><td>Estimated data with very limited support</td></tr> </tbody> </table>	Score	Quality requirement	1	Audited data or actual primary data	2	Non-audited data, or other primary data	3	Average data that is peer/(sub)sector-specific	4	Proxy data on the basis of region or country	5	Estimated data with very limited support
Score	Quality requirement												
1	Audited data or actual primary data												
2	Non-audited data, or other primary data												
3	Average data that is peer/(sub)sector-specific												
4	Proxy data on the basis of region or country												
5	Estimated data with very limited support												

Topic	Description
Data	Drinking water quality
Data file	Original file: 241104 Drinkwaterkwaliteit 2021.pdf page 5 241104 Drinkwaterkwaliteit 2022.pdf page 13 241216 Drinkwaterkwaliteit 2023.pdf page 5 Edited file: 241104 Waterquality drinking water.xlsx
Data Source	Inspectie leefomgeving en transport (ILT)
Year	2021, 2022, 2023
Last update	13-12-2024
Date of download	16-12-2024
Link to webpage	https://www.ilent.nl/documenten/leefomgeving-en-wonen/drinkwater/drinkwater/rapporten/drinkwaterkwaliteit-2023
Filters used to obtain the datafile	Not applicable
Internal location	Original: Werkmap\2_Data\E3_Water and marine resources\Water quality - drinking water\1.2 Origineel bronbestand Edited: Werkmap\2_Data\E3_Water and marine resources\Water quality - drinking water\1.3 Bewerkt data
Data quality estimate	4
Unit of measurement	%
Selections	Not applicable
Data missing	Not applicable
Print screens	Werkmap\2_Data\E3_Water and marine resources\Water quality - drinking water\1.1 Printscreens

8 Factsheets municipalities

By Sanne Paenen, Anne van der Heijden & Fenna Bijster
Het PON & Telos

8.1 General factsheet

Topic	Description
Portfolio covered	99.4 % of NWB Bank's portfolio is covered for this customer group. This percentage is an indication of the completeness of the dataset. It is calculated by looking at the collected data for the customers in the loan portfolio of NWB Bank. The percentage is lower than 100% if there are missing data. The missing data are either not available or it was not possible to collect or calculate these data correctly.
KPIs	<ul style="list-style-type: none">- GHG emissions- Total renewable energy- Total renewable heat- Total renewable electricity- Heat stress- Area of public green space without agriculture- Blue green networks
Limitations	Throughout the years, some municipalities have been merged into new ones. All data sources have been corrected for this, to make sure all data is presented for the municipalities that are current as of 1-1-2024.

8.2 Loan portfolio municipalities

Topic	Description
Data	Loan portfolio
Data files	Original files: Leningportefeuille NWB 2021.xlsx Leningportefeuille NWB 2022.xlsx 240626 leningportefeuille NWB 2023.xlsx Edited file: 241204_Leningportefeuille.xlsx
Data Source	NWB
Year	2021, 2022, 2023
Calculation steps	Not applicable
Script name	iLoanportfolio_q241204.ipynb
Location script	Werkmap\2_Data\A_Loan portfolio\1.5 Script
Last update	Not applicable
Date of download	Not applicable
Link to webpage	Not applicable
Filters used to obtain the datafile	Not applicable
Internal location	Werkmap\2_Data\A_Loan portfolio\1.2 Origineel bronbestand Werkmap\2_Data\A_Loan portfolio\1.3 Bewerkt data
Data quality	1
Unit of measurement	Euro
Selections	SicCodeOmschrijving 0022000000 LOCAL GOVERNMENTS
Data transformation	The institution code is added from the total balance sheet.

Data missing	Not applicable
Print screens	Not applicable

8.3 Total balance sheet municipalities

Topic	Description
Data	Total balance sheet municipalities
Data file	Original file: 240923 passiva gemeente 2023.xlsx Edited file: 240923 passiva gemeente 2023.xlsx
Data Source	Statistics Netherlands (CBS)
Year	2023
Calculation steps	No calculation steps except for correcting for merged municipality Vijfheerenland
Script name	iTotalbalancesheet_q241204.ipynb
Location script	Werkmap\2_Data\b_Total balance sheet\1.5 Script
Last update	23-09-2024
Date of download	23-09-2024
Link to webpage	https://iv3statline.cbs.nl/#/IV3/nl/dataset/45063NED/table?ts=1726647065914
Filters used to obtain the datafile	Gemeenten: allemaal Verslagsoort: Jaarrekening Categorie: Ultimo Onderwerp: 2 ^e plaatsing Taakveld/balanspost: Passiva
Internal location	Original file: Werkmap\2_Data\b_Total balance sheet\Municipalities\1.2 Origineel bronbestand Edited file: Werkmap\2_Data\b_Total balance sheet\Municipalities\1.3 Bewerkt data
Data quality	2 High quality data. The data is directly delivered to CBS by municipalities from internal accounting systems. The data has not been edited by CBS.
Unit of measurement	Euro
Selections	Not applicable
Data transformation	Not applicable
Data missing	Data for the municipality Vijfheerenlanden is missing for 2023. Therefore, data from 2022 is used for the calculations.
Print screens	Werkmap\2_Data\b_Total balance sheet\Municipalities\1.1 Printscreens

8.4 Factsheets per data source used per KPI

8.4.1 GHG emissions per municipality

Topic	Description												
Data	GHG emissions												
Calculation steps	No calculations have been done for the years 2022 and 2023. For the year 2021, the PCAF 2024 method has been applied to 2021 data.												
Script name	i_vGHG_q241209.ipynb												
Location script	Werkmap\2_Data\E1_Climate\GHG emissies\1.5 Script												
Limitations	No limitations												
CSRD	E1 - Climate												
Data quality estimate	3.7 <table border="1"> <thead> <tr> <th>Score</th><th>Quality requirement</th></tr> </thead> <tbody> <tr> <td>1</td><td>Audited data or actual primary data</td></tr> <tr> <td>2</td><td>Non-audited data, or other primary data</td></tr> <tr> <td>3</td><td>Average data that is peer/(sub)sector-specific</td></tr> <tr> <td>4</td><td>Proxy data on the basis of region or country</td></tr> <tr> <td>5</td><td>Estimated data with very limited support</td></tr> </tbody> </table>	Score	Quality requirement	1	Audited data or actual primary data	2	Non-audited data, or other primary data	3	Average data that is peer/(sub)sector-specific	4	Proxy data on the basis of region or country	5	Estimated data with very limited support
Score	Quality requirement												
1	Audited data or actual primary data												
2	Non-audited data, or other primary data												
3	Average data that is peer/(sub)sector-specific												
4	Proxy data on the basis of region or country												
5	Estimated data with very limited support												

Topic	Description
Data	GHG emissions
Data file	2022: 250108_pNWB.vGemeente_2022_IndividueleKlanten_versie2024.xlsx 2023: 250123_pNWB.vGemeente_2023_IndividueleKlanten_versie2024.xlsx
Data Source	PCAF report 2024 ⁴⁰
Year	2022, 2023
Last update	Not applicable
Date of download	Not applicable
Link to webpage	Not applicable
Filters used to obtain the datafile	Not applicable
Internal location	Werkmap\2_Data\E1_Climate\GHG emissies\1.2 Origineel bronbestand
Data quality estimate	3.7
Unit of measurement	tCO ₂ e
Selections	Not applicable
Data transformation	Not applicable
Data missing	Data for some municipalities is missing. The portfolio covered is 97.0%
Print screens	Not applicable

⁴⁰ Greenhouse Gas Emissions of NWB Bank's Loan Portfolio. The GHG footprint of 2023

Topic	Description
Data	GHG emissions
Data file	Original files: <ul style="list-style-type: none"> - Conversion guidance 1224.xlsx - Gemeenten_2021_onbewerkte_lv3_data_20112024_084031.csv - Gemeenten-alfabetisch-2021.xlsx Edited file: 251114_gem_2021.xlsx
Data Source	PCAF report 2024 ⁴¹
Year	2021
Last update	Not applicable
Date of download	Not applicable
Link to webpage	Not applicable
Filters used to obtain the datafile	Not applicable
Internal location	Original files: Werkmap\2_Data\E1_Climate\GHG emissies\1.2 Origineel bronbestand Edited file: Werkmap\2_Data\E1_Climate\GHG emissies\1.3 Bewerkt data
Data quality estimate	3.7
Unit of measurement	tCO ₂ e
Selections	Not applicable
Data transformation	Not applicable
Data missing	Not applicable
Print screens	Not applicable

8.4.2 Heat stress

Topic	Description												
Data	Heat stress												
Calculation steps	The average urban heat island effect (UHI) in °C. This is the average air temperature difference between urban and surrounding rural areas per municipality. First, using the R-script, the average urban heat island effect is calculated per municipality. The output file of this calculation is then automatically written to the database. In the database, the indicator is then transformed into the correct format.												
Script name	241118_Hittestress.R i_vHeatstress_q241113.ipynb												
Location script	Werkmap\2_Data\E1_Climate\Heatstress\1.5 Script												
Limitations	The data is aggregated to the level of a municipality and therefore large differences within the municipality are not visible.												
CSRD	E1 - Climate												
Data quality estimate	2 – Non-audited data, or other primary data <table border="1"> <thead> <tr> <th>Score</th><th>Quality requirement</th></tr> </thead> <tbody> <tr> <td>1</td><td>Audited data or actual primary data</td></tr> <tr> <td>2</td><td>Non-audited data, or other primary data</td></tr> <tr> <td>3</td><td>Average data that is peer/(sub)sector-specific</td></tr> <tr> <td>4</td><td>Proxy data on the basis of region or country</td></tr> <tr> <td>5</td><td>Estimated data with very limited support</td></tr> </tbody> </table>	Score	Quality requirement	1	Audited data or actual primary data	2	Non-audited data, or other primary data	3	Average data that is peer/(sub)sector-specific	4	Proxy data on the basis of region or country	5	Estimated data with very limited support
Score	Quality requirement												
1	Audited data or actual primary data												
2	Non-audited data, or other primary data												
3	Average data that is peer/(sub)sector-specific												
4	Proxy data on the basis of region or country												
5	Estimated data with very limited support												

⁴¹ Greenhouse Gas Emissions of NWB Bank's Loan Portfolio. The GHG footprint of 2023

Topic	Description
Data	Urban heat island effect (UHI) in the Netherlands
Data file	RIVM_R88_20170621_gm_actueelUHI.tif Stedelijk_hitte_eiland_effect_01062022_v2.tif
Data Source	RIVM
Years	2017, 2022
Last update	01-06-2022
Date of download	13-11-2024
Link to webpage	https://nationaalgeoregister.nl/geonetwork/srv/dut/catalog.search#/metadata/c9aa9109-3f32-4f65-84e5-bb1c9ebdfbec
Filters used to obtain the datafile	Not applicable
Internal location	Werkmap\2_Data\E1_Climate\Heatstress\1.2 Origineel bronbestand
Data quality estimate	2
Unit of measurement	Degrees Celsius
Selections	Not applicable
Data missing	Not applicable
Print screens	Werkmap\2_Data\E1_Climate\Heatstress\1.1 Printscreens

Topic	Description
Data	Data on geographic location of Dutch municipalities
Data file	cbsgebiedsindelingen2023.gpkg
Data Source	PDOK / Nationaal Georegister / kadaster
Year	2023
Last update	09-02-2024
Date of download	22-11-2024
Link to webpage	https://www.nationaalgeoregister.nl/geonetwork/srv/api/records/effe1ab0-073d-437c-af13-df5c5e07d6cd
Filters used to obtain the datafile	Not applicable
Internal location	Werkmap\2_Data\E1_Climate\Heatstress\1.2 Origineel bronbestand
Data quality estimate	2
Unit of measurement	Multipolygon
Selections	Not applicable
Data missing	Not applicable
Print screens	Werkmap\2_Data\E1_Climate\Heatstress\1.1 Printscreens

8.4.3 Area of public green space without agriculture

Topic	Description												
Data	Public green space												
Calculation steps	On client level, no calculation is needed. To calculate the total impact, the area in m2 of public green space without agriculture is calculated by multiplying the percentage of public green space without agriculture with the total area of public space.												
Script name	i_vPublicgreenspace_q241219.ipynb												
Location script	Werkmap\2_Data\E4_Biodiversity and ecosystems\Public green space\1.5 Script												
Limitations	Only available for 2021												
CSRD	E4 – Ecosystems and biodiversity												
Data quality estimate	2 – Non-audited data, or other primary data. <table border="1"> <thead> <tr> <th>Score</th><th>Quality requirement</th></tr> </thead> <tbody> <tr> <td>1</td><td>Audited data or actual primary data</td></tr> <tr> <td>2</td><td>Non-audited data, or other primary data</td></tr> <tr> <td>3</td><td>Average data that is peer/(sub)sector-specific</td></tr> <tr> <td>4</td><td>Proxy data on the basis of region or country</td></tr> <tr> <td>5</td><td>Estimated data with very limited support</td></tr> </tbody> </table>	Score	Quality requirement	1	Audited data or actual primary data	2	Non-audited data, or other primary data	3	Average data that is peer/(sub)sector-specific	4	Proxy data on the basis of region or country	5	Estimated data with very limited support
Score	Quality requirement												
1	Audited data or actual primary data												
2	Non-audited data, or other primary data												
3	Average data that is peer/(sub)sector-specific												
4	Proxy data on the basis of region or country												
5	Estimated data with very limited support												

Topic	Description
Data	Public green space
Data file	241219 openbaargroen.xlsx
Data Source	Klimaateffectatlas via Waarstaatjegemeente.nl
Year	2021
Last update	19-02-2024
Date of download	19-12-2024
Link to webpage	https://www.waarstaatjegemeente.nl/viewer?workspace_guid=613b290c-dfe9-4644-b840-2d67f96e59b2
Filters used to obtain the datafile	Duurzame leefomgeving > Klimaatadaptatie > Klimaatadaptatie > Openbaar groen > In m² > Oppervlakte openbare ruimte & Oppervlakte openbare ruimte groen > 2021
Internal location	Werkmap\2_Data\E4_Biodiversity and ecosystems\Public green space\1.2 Origineel bronbestand
Data quality estimate	2 – This data contains the number of squared meters of total public space and of greenery in public space per municipality. This data is collected by Climate Adaptation Services
Unit of measurement	Percentage
Selections	Not applicable
Data missing	Not applicable
Print screens	Werkmap\2_Data\E4_Biodiversity and ecosystems\Public green space\1.1 Printscreens

8.4.4 Blue green networks

Topic	Description												
Data	Blue green networks												
Calculation steps	The area of dry veining and wet veining is divided by the total agricultural area.												
Script name	i_vBluegreennetworks_q241114.ipynb												
Location script	Werkmap\2_Data\E4_Biodiversity and ecosystems\Bluegreen networks\1.5 Script												
Limitations	No limitations												
CSRD	E4 – Biodiversity and ecosystems												
Data quality estimate	<p>Average data that is peer/(sub)sector-specific: 3</p> <table> <tr> <th>Score</th><th>Quality requirement</th></tr> <tr> <td>1</td><td>Audited data or actual primary data</td></tr> <tr> <td>2</td><td>Non-audited data, or other primary data</td></tr> <tr> <td>3</td><td>Average data that is peer/(sub)sector-specific</td></tr> <tr> <td>4</td><td>Proxy data on the basis of region or country</td></tr> <tr> <td>5</td><td>Estimated data with very limited support</td></tr> </table>	Score	Quality requirement	1	Audited data or actual primary data	2	Non-audited data, or other primary data	3	Average data that is peer/(sub)sector-specific	4	Proxy data on the basis of region or country	5	Estimated data with very limited support
Score	Quality requirement												
1	Audited data or actual primary data												
2	Non-audited data, or other primary data												
3	Average data that is peer/(sub)sector-specific												
4	Proxy data on the basis of region or country												
5	Estimated data with very limited support												

Topic	Description
Data	Blue green networks
Data file	GBDA_gemeente.xlsx
Data Source	Cobra Groeninzicht
Year	2023
Last update	2023
Date of download	23-10-2024
Link to webpage	https://www.cobra-groeninzicht.nl/futuretrees/groenblauwe-dooradering/#:~:text=De%20realisatie%20van%20minstens%2010,en%20schoon%20water%20te%20voldoen
Filters used to obtain the datafile	Not applicable
Internal location	Werkmap\2_Data\E4_Biodiversity and ecosystems\Bluegreen networks\1.2 Origineel bronbestand
Data quality estimate	3
Unit of measurement	Percentage
Selections	Not applicable
Data missing	Not applicable
Print screens	Werkmap\2_Data\E4_Biodiversity and ecosystems\Bluegreen networks\1.1 Printscreens

9 Factsheets healthcare institutions

By Sanne Paenen, Anne van der Heijden & Fenna Bijster
Het PON & Telos

9.1 General factsheet

Topic	Description
Portfolio covered	91.4 % of NWB Bank's portfolio is covered for this customer group. This percentage is an indication of the completeness of the dataset. It is calculated by looking at the collected data for the customers in the loan portfolio of NWB Bank. The percentage is lower than 100% if there are missing data. The missing data are either not available or it was not possible to collect or calculate these data correctly.
KPIs	- GHG emissions
Limitations	None

9.2 Loan portfolio healthcare institutions

Topic	Description
Data	Loan portfolio
Data files	Original files: Leningportefeuille NWB 2021.xlsx Leningportefeuille NWB 2022.xlsx 240626 leningportefeuille NWB 2023.xlsx Edited file: 241204_Leningportefeuille.xlsx
Data Source	NWB
Year	2021, 2022, 2023
Calculation steps	Not applicable
Script name	iLoanportfolio_q241204.ipynb
Location script	Werkmap\2_Data\A_Loan portfolio\1.5 Script
Last update	Not applicable
Date of download	Not applicable
Link to webpage	Not applicable
Filters used to obtain the datafile	Not applicable
Internal location	Werkmap\2_Data\A_Loan portfolio\1.2 Origineel bronbestand Werkmap\2_Data\A_Loan portfolio\1.3 Bewerkt data
Data quality	1
Unit of measurement	Euro
Selections	SicCodeOmschrijving 0031000000 HEALTH CARE INSTITUTIONS
Data transformation	Not applicable
Data missing	Not applicable
Print screens	Not applicable

9.3 Total balance sheet healthcare institutions

Topic	Description
Data	Total balance sheet per healthcare institution
Data file	241014 passiva zorg.xlsx
Data Source	Annual reports of healthcare institutions CIBG; Ministerie van Volksgezondheid Welzijn en Sport
Year	2023
Calculation steps	Not applicable
Script name	iTotalbalancesheet_q241204.ipynb
Location script	Werkmap\2_Data\b_Total balance sheet\1.5 Script
Last update	Not applicable
Date of download	Several dates in September – October 2024 for the annual reports of healthcare institutions 19-8-2024 for CIBG; Ministerie van Volksgezondheid Welzijn en Sport
Link to webpage	https://www.jaarverantwoordingzorg.nl/gegevens-bekijken/verantwoordingsgegevens-per-verslagjaar-datasets
Filters used to obtain the datafile	Not applicable
Internal location	Werkmap\2_Data\b_Total balance sheet\Healthcare institutions\1.4 Upload naar database
Data quality estimate	Score 2 Data is acquired from individual annual reports of healthcare institutions. The source data in the annual report is audited. Data is acquired by CIBG from individual annual reports of healthcare institutions. The source data in the annual report is audited, the composite dataset of CIBG is not.
Unit of measurement	Euro
Selections	Not applicable
Data	Total balance sheet per healthcare institution
Data file	241014 passiva zorg.xlsx
Data Source	Annual reports of healthcare institutions CIBG; Ministerie van Volksgezondheid Welzijn en Sport

9.4 Factsheet per data source used per KPI

9.4.1 GHG emissions per healthcare institution

Topic	Description
Data	GHG emissions
Calculation steps	No calculations have been done, but the information from various original files is combined into one file.
Script name	i_vGHG_q241209.ipynb
Location script	Werkmap\2_Data\E1_Climate\GHG emissies\1.5 Script
Limitations	No limitations
CSRD	E1 - Climate
Data quality estimate	3.2

	Score	Quality requirement	
	1	Audited data or actual primary data	
	2	Non-audited data, or other primary data	
	3	Average data that is peer/(sub)sector-specific	
	4	Proxy data on the basis of region or country	
	5	Estimated data with very limited support	

Topic	Description
Data	GHG emissions
Data file	Original files: 2021, 2022: 240122 nulmeting eenmeting CO2 voetafdruk zorg 2023: 241113 pNWB.vZorg_2023_IndividueleKlanten_versie2024 Edited file: 241127_Health202120222023
Data Source	2021, 2022: Impact report NWB Bank 2023 ⁴² 2023: PCAF report 2024 ⁴³
Year	2021, 2022, 2023
Last update	Not applicable
Date of download	Not applicable
Link to webpage	Not applicable
Filters used to obtain the datafile	Not applicable
Internal location	Original files: Werkmap\2_Data\E1_Climate\GHG emissies\1.2 Origineel bronbestand Edited file: Werkmap\2_Data\E1_Climate\GHG emissies\1.3 Bewerkt data
Data quality estimate	3.2
Unit of measurement	tCO ₂ e
Selections	Not applicable
Data transformation	Not applicable
Data missing	Data for some healthcare institutions is missing. The portfolio covered is 91.4%
Print screens	Not applicable

⁴² Sustainable Development Goals. Impact of NWB Bank's loan portfolio. Accountability report: Reporting year 2023

⁴³ Greenhouse Gas Emissions of NWB Bank's Loan Portfolio. The GHG footprint of 2023

10 Factsheets provinces

By Sanne Paenen, Anne van der Heijden & Fenna Bijster
Het PON & Telos

10.1 General factsheet

Topic	Description
Portfolio covered	100% of NWB Bank's portfolio is covered for this customer group. This percentage is an indication of the completeness of the dataset. It is calculated by looking at the collected data for the customers in the loan portfolio of NWB Bank. The percentage is lower than 100 % if there are missing data. The missing data are either not available or it was not possible to collect or calculate these data correctly.
KPIs	- GHG emissions -
Limitations	None

10.2 Loan portfolio provinces

Topic	Description
Data	Loan portfolio provinces
Data files	Original files: Leningportefeuille NWB 2021.xlsx Leningportefeuille NWB 2022.xlsx 240626 leningportefeuille NWB 2023.xlsx Edited file: 241204_Leningportefeuille.xlsx
Data Source	NWB
Year	2021, 2022, 2023
Calculation steps	Not applicable
Script name	iLoanportfolio_q241204.ipynb
Location script	Werkmap\2_Data\A_Loan portfolio\1.5 Script
Last update	Not applicable
Date of download	Not applicable
Link to webpage	Not applicable
Filters used to obtain the datafile	Not applicable
Internal location	Werkmap\2_Data\A_Loan portfolio\1.2 Origineel bronbestand Werkmap\2_Data\A_Loan portfolio\1.3 Bewerkt data
Data quality	1
Unit of measurement	Euro
Selections	SicCodeOmschrijving 0021000000 REGIONAL GOVERNMENTS
Data transformation	The institution code is added from the total balance sheet.
Data missing	Not applicable
Print screens	Not applicable

10.3 Total balance sheet provinces

Topic	Description
Data	Total balance sheet of provinces
Data file	Original file: Passiva_provincie_2018_2021_2022_2023.csv Edited file: The years 2021 and 2022 are already checked by an accountant for PCAF 2021 and 2022.
Data Source	CBS Statline
Calculation steps	Not applicable
Script name	iTotalbalancesheet_q241204.ipynb
Location script	Werkmap\2_Data\b_Total balance sheet\1.5 Script
Year	2023
Last update	23-09-2024
Date of download	23-09-2024
Link to webpage	https://iv3statline.cbs.nl/#/IV3/nl/dataset/45064NED/table?ts=1726648559817
Filters used to obtain the datafile	Provincies: allemaal Verslagsoort: Jaarrekening Categorie: Ultimo Onderwerp: 2 ^e plaatsing Taakveld/balanspost: passiva
Internal location	Werkmap\2_Data\b_Total balance sheet\Provincies\1.2 Origineel bronbestand
Data quality	Score 2 High quality data. The data is directly delivered to CBS by provinces from internal accounting systems. The data had not been edited by CBS.
Unit of measurement	Euro
Selections	Not applicable
Data transformation	Not applicable
Data missing	Not applicable
Print screens	Werkmap\Provincies\1. Printscreens 240923 passiva provincie 2023_1.png 240923 passiva provincie 2023_2.png

10.4 Factsheet per data source used per KPI

10.4.1 GHG emissions per province

Topic	Description												
Data	GHG emissions												
Calculation steps	No calculations have been done for the years 2022 and 2023. For the year 2021, the PCAF 2024 method has been applied to 2021 data.												
Script name	i_vGHG_q241209.ipynb												
Location script	Werkmap\2_Data\E1_Climate\GHG emissies\1.5 Script												
Limitations	No limitations												
CSRD	E1 - Climate												
Data quality estimate	3.9 <table border="1"> <thead> <tr> <th>Score</th><th>Quality requirement</th></tr> </thead> <tbody> <tr> <td>1</td><td>Audited data or actual primary data</td></tr> <tr> <td>2</td><td>Non-audited data, or other primary data</td></tr> <tr> <td>3</td><td>Average data that is peer/(sub)sector-specific</td></tr> <tr> <td>4</td><td>Proxy data on the basis of region or country</td></tr> <tr> <td>5</td><td>Estimated data with very limited support</td></tr> </tbody> </table>	Score	Quality requirement	1	Audited data or actual primary data	2	Non-audited data, or other primary data	3	Average data that is peer/(sub)sector-specific	4	Proxy data on the basis of region or country	5	Estimated data with very limited support
Score	Quality requirement												
1	Audited data or actual primary data												
2	Non-audited data, or other primary data												
3	Average data that is peer/(sub)sector-specific												
4	Proxy data on the basis of region or country												
5	Estimated data with very limited support												

Topic	Description
Data	GHG emissions
Data file	2022: 250109_pNWB.vProvincie_2022_IndividueleKlanten_versie2024.xlsx 2023: 250109_pNWB.vProvincie_2023_IndividueleKlanten_versie2024.xlsx
Data Source	PCAF report 2024 ⁴⁴
Year	2022, 2023
Last update	Not applicable
Date of download	Not applicable
Link to webpage	Not applicable
Filters used to obtain the datafile	Not applicable
Internal location	Werkmap\2_Data\E1_Climate\GHG emissies\1.2 Origineel bronbestand
Data quality estimate	3.9
Unit of measurement	tCO ₂ e
Selections	Not applicable
Data transformation	Not applicable
Data missing	Not applicable
Print screens	Not applicable

⁴⁴ Greenhouse Gas Emissions of NWB Bank's Loan Portfolio. The GHG footprint of 2023

Topic	Description
Data	GHG emissions
Data file	Original files: <ul style="list-style-type: none"> - Conversion guidance 1224.xlsx - Provincies_2021_onbewerkte_lv3_data_26112024_082622.csv Edited file: 251114_prov_2021.xlsx
Data Source	PCAF report 2024 ⁴⁵
Year	2021
Last update	Not applicable
Date of download	Not applicable
Link to webpage	Not applicable
Filters used to obtain the datafile	Not applicable
Internal location	Original files: Werkmap\2_Data\E1_Climate\GHG emissies\1.2 Origineel bronbestand Edited file: Werkmap\2_Data\E1_Climate\GHG emissies\1.3 Bewerkt data
Data quality estimate	3.9
Unit of measurement	tCO ₂ e
Selections	Not applicable
Data transformation	Not applicable
Data missing	Not applicable
Print screens	Not applicable

⁴⁵ [Greenhouse Gas Emissions of NWB Bank's Loan Portfolio. The GHG footprint of 2023](#)

11 Factsheets educational institutions

By Sanne Paenen, Anne van der Heijden & Fenna Bijster
Het PON & Telos

11.1 General factsheet

Topic	Description
Portfolio covered	87.5 % of NWB Bank's portfolio is covered for this customer group. This percentage is an indication of the completeness of the dataset. It is calculated by looking at the collected data for the customers in the loan portfolio of NWB Bank. The percentage is lower than 100% if there are missing data. The missing data are either not available or it was not possible to collect or calculate these data correctly.
KPIs	- GHG emission
Limitations	None

11.2 Loan portfolio educational institutions

Topic	Description
Data	Loan portfolio
Data files	Original files: Leningportefeuille NWB 2021.xlsx Leningportefeuille NWB 2022.xlsx 240626 leningportefeuille NWB 2023.xlsx Edited file: 241204_Leningportefeuille.xlsx
Data Source	NWB
Year	2021, 2022, 2023
Calculation steps	Not applicable
Script name	iLoanportfolio_q241204.ipynb
Location script	Werkmap\2_Data\A_Loan portfolio\1.5 Script
Last update	Not applicable
Date of download	Not applicable
Link to webpage	Not applicable
Filters used to obtain the datafile	Not applicable
Internal location	Werkmap\2_Data\A_Loan portfolio\1.2 Origineel bronbestand Werkmap\2_Data\A_Loan portfolio\1.3 Bewerkt data
Data quality	1
Unit of measurement	Euro
Selections	SicCodeOmschrijving 0033000000 EDUCATIONAL INSTITUTIONS
Data transformation	Not applicable
Data missing	Not applicable
Print screens	Not applicable

11.3 Total balance sheet educational institutions

Topic	Description
Data	Total balance sheet per educational institution
Data files	Original file: 241028_Passiva NWB Bank.xlsx
Data Source	PCAF report 2024 ⁴⁶
Calculation steps	Not applicable
Script name	iTotalbalancesheet_q241204.ipynb
Location script	Werkmap\2_Data\b_Total balance sheet\1.5 Script
Year	2018-2021-2022-2023
Last update	Not applicable
Date of download	Not applicable
Link to webpage	Not applicable
Filters used to obtain the datafile	Not applicable
Internal location	Werkmap\2_Data\b_Total balance sheet\Educational institutions\1.2 Origineel bronbestand
Unit of measurement	Euro
Selections	Not applicable
Data transformation	Not applicable
Data missing	Not applicable
Unit of measurement	Euro
Print screens	Not applicable

11.4 Factsheet per data source used per KPI

11.4.1 GHG emissions per educational institution

Topic	Description												
Data	GHG emissions												
Calculation steps	No calculations have been done, but the information from various original files is combined into one file.												
Script name	i_vGHG_q241209.ipynb												
Location script	Werkmap\2_Data\E1_Climate\GHG emissies\1.5 Script												
Limitations	No limitations												
CSRD	E1 - Climate												
Data quality estimate	<p>3</p> <table> <tr> <th>Score</th><th>Quality requirement</th></tr> <tr> <td>1</td><td>Audited data or actual primary data</td></tr> <tr> <td>2</td><td>Non-audited data, or other primary data</td></tr> <tr> <td>3</td><td>Average data that is peer/(sub)sector-specific</td></tr> <tr> <td>4</td><td>Proxy data on the basis of region or country</td></tr> <tr> <td>5</td><td>Estimated data with very limited support</td></tr> </table>	Score	Quality requirement	1	Audited data or actual primary data	2	Non-audited data, or other primary data	3	Average data that is peer/(sub)sector-specific	4	Proxy data on the basis of region or country	5	Estimated data with very limited support
Score	Quality requirement												
1	Audited data or actual primary data												
2	Non-audited data, or other primary data												
3	Average data that is peer/(sub)sector-specific												
4	Proxy data on the basis of region or country												
5	Estimated data with very limited support												

⁴⁶ Greenhouse Gas Emissions of NWB Bank's Loan Portfolio. The GHG footprint of 2023

Topic	Description
Data	GHG emissions
Data file	Original files: 2021, 2022: 240122 nulmeting eenmeting CO2 voetafdruk onderwijsinstellingen 2023: 241101_pNWB.vOnderwijs_2023_IndividueleKlanten_versie2024 Edited file: 241127_Education202120222023
Data Source	2021, 2022: Impact report NWB Bank 2023 ⁴⁷ 2023: PCAF report 2024 ⁴⁸
Year	2021, 2022, 2023
Last update	Not applicable
Date of download	Not applicable
Link to webpage	Not applicable
Filters used to obtain the datafile	Not applicable
Internal location	Original files: Werkmap\2_Data\E1_Climate\GHG emissies\1.2 Origineel bronbestand Edited file: Werkmap\2_Data\E1_Climate\GHG emissies\1.3 Bewerkt data
Data quality estimate	3
Unit of measurement	tCO ₂ e
Selections	Not applicable
Data transformation	Not applicable
Data missing	Data for some educational institutions is missing. The portfolio covered is 87.5%
Print screens	Not applicable

⁴⁷ Sustainable Development Goals. Impact of NWB Bank's loan portfolio. Accountability report: Reporting year 2023

⁴⁸ Greenhouse Gas Emissions of NWB Bank's Loan Portfolio. The GHG footprint of 2023

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About Het PON & Telos

Improving social decision-making

Het PON & Telos is a social knowledge organization at the heart of society. We consider it our mission to improve social decision-making. We do this by linking scientific knowledge to practical knowledge. In this process every voice counts! We collect, investigate, analyze, and interpret opinions and facts using stimulating approaches and innovative methods. In doing so, we are always focused on sustainable development: the harmonious connection between social, environmental and economic objectives. In this way we contribute to the quality of society at large, now and in the future.

With a multidisciplinary and creative team of nearly 30 research consultants, we work mainly for local and regional authorities in the Netherlands, but also for corporate bodies, banks, care and welfare institutions, funds, and social organizations. We work closely with civic organizations and other knowledge institutions and are an official partner of Tilburg University. We use our knowledge and insights to advise initiators, policy-makers and managers. This enables them to make informed choices and give a positive impulse to the society of tomorrow.

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