

Impact Report | April 2023

Impact Report 2022

NRW.BANK Social Bonds

Results of the social impact assessment for
EUR Social Bond #1-2022

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on behalf of



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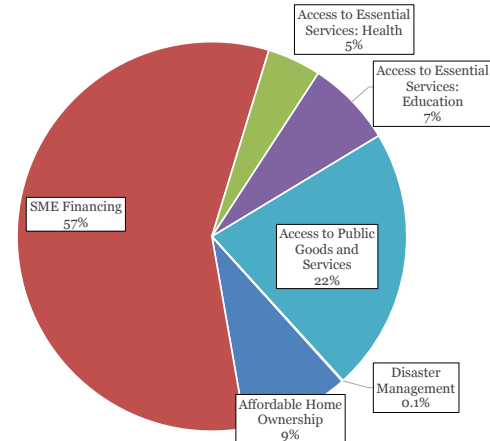


On behalf of NRW.BANK, Wuppertal Institute has analysed the impacts of the asset pool of the NRW.BANK Social Bonds from 2022. The analysed asset pool has a volume of EUR 6.7bn of which 100% could be assessed in this report (see figure below). This report analyses the social impacts of the pool over three years (2019-2021) following a Theory-of-Change (ToC) approach (see annex for further information).

The following asset pools are differentiated for that purpose:

- Affordable Home Ownership
- SME Financing and Employment Generation
- Access to Essential Services: Health
- Access to Essential Services: Education
- Access to Public Goods and Services
- Disaster Management

Share of Financing for assessed loans in this report (EUR 6.7bn)



All six categories are described in the issuers' framework¹ and have been positively evaluated in a SPO by ISS-ESG². The final use of proceeds is published on the issuers' website. This impact analysis complies with the recent recommendations of the "Harmonized Framework for Impact Reporting"³ (2021) by the International Capital Market Association (ICMA) as well as their most recent "Social Bond Principles"⁴. The report at hand is a verification of measured and estimated social impacts by an external reviewer. The underlying methods are described in a separate method paper for purposes of transparency, plausibility, and robustness of results. The most recent update (version 4) will be published within two months after this impact assessment. It can be found on the reviewers' website:

<https://wupperinst.org/en/p/wi/p/s/pd/1885>

The three impacts with the highest quality assessed and estimated, relate to intermediate-outcomes towards the Sustainable Development Goals: **1,800 housing units for vulnerable groups** (Affordable Home Ownership), **up to 39,000 jobs** (SME Financing) and a **4% increase in future graduates of the health & care workforce** (Access to Essential Services: Health) in the Federal State of North Rhine-Westphalia (NRW). Further outputs financed and quantified relate to **additional 2,300 places in child-care, 18,000 beneficiaries from the construction or acquisition of buildings for care providers,** and **additional capacities for at least 430 beds in clinics.** The more general investments in structural-weak communities (activity-indicator) amount to circa **EUR 100 per resident.**

The following sections discuss the rationale, risks, and results for each asset category.

¹ <https://www.nrwbank.de/.galleries/downloads/investor-relations/Social-Bond/NRW.BANK-Social-Bond-Framework-2022.pdf>

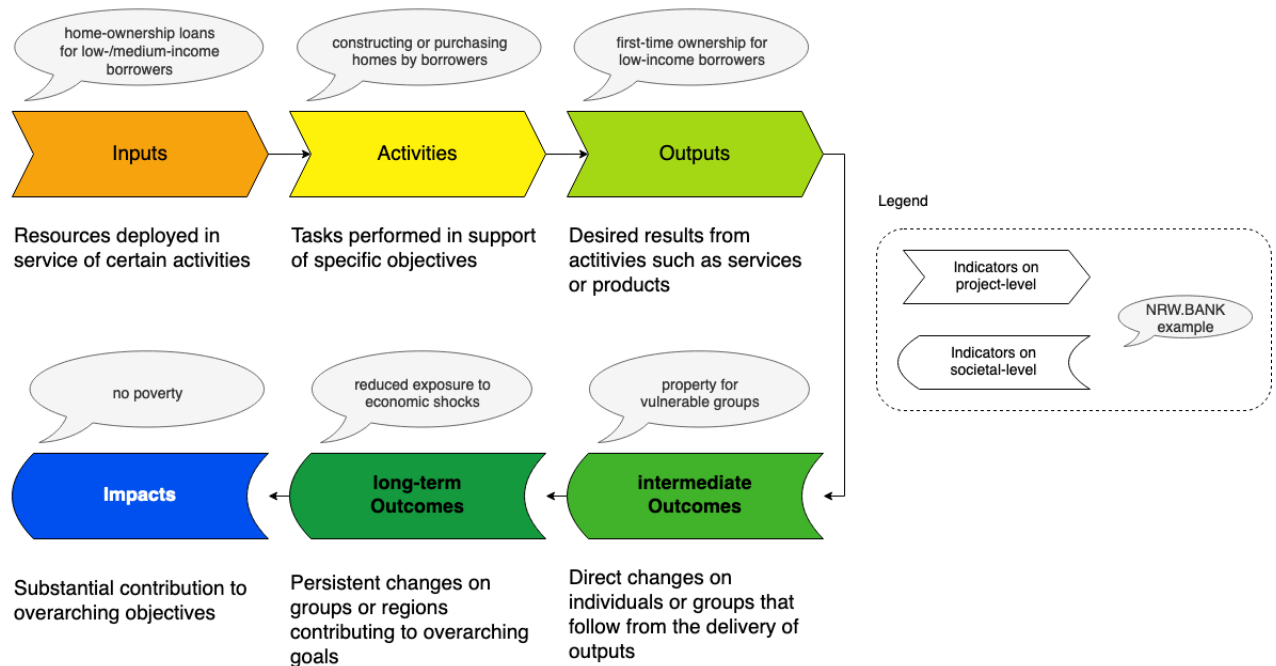
² https://www.nrwbank.de/.galleries/downloads/investor-relations/Social-Bond/Second-Party-Opinion-SPO-Sustainability-Quality-of-the-Issuer-and-Social-Bond-Framework-of-NRW.BANK_.pdf

³ <https://www.icmagroup.org/assets/documents/Sustainable-finance/2021-updates/Handbook-Harmonised-Framework-for-Impact-Reporting-June-2021-100621.pdf>

⁴ <https://www.icmagroup.org/assets/documents/Sustainable-finance/2021-updates/Social-Bond-Principles-June-2021-140621.pdf>

Starting point of the assessment are the *desired outcomes* by the NRW.BANK that are associated with Sustainable Development Goals for each category and described in the issuer's framework. These impacts are mapped with help of a *Theory of Change* that identifies potential indicators and quantifies effects where possible. Figure 1 shows the logic of that mapping process and the associated indicators.

Figure 1: Cause-effect chain of social impacts in the NRW.BANK Social Bonds



Affordable Home Ownership

The two home ownership loan categories by the NRW.BANK⁵ aim to construct or acquire owner-occupied residential properties for households with small or medium incomes. Out of a total of EUR 600m, 28% could be attributed for new homes in specific locations in NRW.

Rationale

Housing loans can help to ensure access to adequate and affordable housing for the recipients. They contribute to more sustainable cities and communities (SDG 11) if high rents can be stabilized, and vulnerable groups acquire first-time ownership of living space. Additional benefits for target groups can be achieved if the disposable income of the low- and medium income borrowers is increased during the process. This in turn reduces their exposure to economic, social, and environmental shocks and therefore poverty (SDG 1). A recent study by the authors⁶ also investigated these claims and came to the conclusion that not all borrowers benefit in this way. However, the conservative estimate in this impact assessment regarding the number of beneficiaries is well within the range of borrowers that are expected to benefit according to the study.

⁵ NRW.BANK *Wohneigentum* loans go directly to borrowers and *Globaldarlehen Wohneigentum* to other financial institutions for onward lending.

⁶ <https://www.mdpi.com/2071-1050/14/19/12633>

Risks

The desired outcomes can be reduced if some borrowers end up with higher monthly expenditures than before for a longer period of time. The effects on rents on the other hand depend on the original living situation of the borrowers. The loans can only contribute to a rent stabilization if additional rental space becomes available as a consequence of borrowers acquiring new homes.

Results

Loans with a value of EUR 598m were assessed in this category, of which circa 45% or EUR 269.9m target households with an annual income of less than EUR 50k (defined as low-income households for that purpose)⁷. Based on lump expenditures for housing development in NRW, it can be estimated that this leads to approximately 1,800 built or acquired housing units for vulnerable groups (intermediate-outcome). In terms of direct outputs, it is estimated that EUR 16.3m (2.7% of the overall financing in this category) is used to provide circa 100 housing units in the ten cities with the highest rents. In addition, circa 1,000 borrowers (EUR 195.4m or 32.6% of loans) live in regions where living expenses are likely to be decreased as a consequence of home ownership loans. For these recipients, disposable income increases by circa 450 EUR per month.

Based purely on induced activities, it is assumed that all assessed 3,184 loans lead to circa 1,700 housing units that are built (EUR 260.3m) and 2,200 housing units that are purchased (EUR 339.5m)⁸.

SME Financing and Employment Generation

This category comprises of loans to small and medium enterprise with the purpose of creating and safeguarding jobs or to help with their digitalization efforts.

Rationale

All loan types (global loans, universal loans, innovation loans, efficiency loans, digitalization loans) can help to achieve SDG 8 (Decent Work and Economic Growth). Universal loans can be used to fulfil needs of the employees (higher wages, safety and health measures, education). If used in that manner, they can help to increase the share, inclusiveness and quality of employment but also contribute to a more sustainable economic growth. The universal loan can be used to cushion financial needs in crises (preventing job loss) or to increase the economic output (e.g., through expansion). This is also where the second type of loans, loans for innovation, can contribute to additional economic activity, in particular for the least developed regions in NRW.

The digitalization loan empowers SMEs to invest in their digital infrastructure. These investments can be used to develop new digital tools that help employees to handle their workload in a better way or increase their innovation potential. It can also help a company to

⁷ Previous reports used a share of 46.5% of so-called "low-income borrowers". We decided to decrease this value to a more conservative estimate, given that the original value stemmed from an older survey and a small sample of borrowers.

⁸ The estimate for housing units built or purchased is based on NRW.BANKs' housing market monitoring report 2021 (<https://www.nrwbank.de/export/gallerys/downloads/Presse/publikationen-wohnungsmarktbeobachtung/aktuelle-ergebnisse/Wohnraumforderung-2021.pdf>)

develop its online commerce opportunities. Both can lead to more productive employment, inclusive and sustainable economic growth.

While the report at hand focuses on effects in the targeted regions, it is expected that other regions benefit from economic stimuli as well (e.g., via commuting from nearby municipalities).

Risks

The desired outcomes can be reduced if universal and innovation loans do not focus on structural weak areas as disadvantaged regions benefit the most from the additional capital. Digitalization loans on the other hand bear the risk of job loss for low-educated workers as well as a shift of added value via online commerce to regions with less needs.

Results

The issuer's loans for SME financing are mostly processed (and approved) by the local banks. This restricts the amount and detail of data that is available for the assessment. The main outcome on potential new jobs is therefore based on an approximation. We used a recent study⁹ that evaluated (among other effect) the regional employment growth in regions with GRW funding (state funding in structural weak regions) for that purpose. However, the conditions for some loans also entail a partial (50% or 80%) sharing of reliability for the local banks (EUR 82.2m or 2.1% of total volume). This in turn either ensures the approval of the loans in the first place, but will also lead to favourable conditions for the companies, as the risk of default is considerably lower. We consider this a criterion of "Additionality of Financing" otherwise not covered by the impact assessment.

From EUR 3,863.3m over three years for loans assessed in the report at hand, 49.8% or EUR 1,922.3m could be allocated to so-called structural weak regions (see category [Access to Public Goods and Services](#)). It is estimated that up to 39,000 additional jobs could be created in North Rhine-Westphalia, which is based on ca. 29 EUR additional funding per employee in the region on average¹⁰.

Related to all 9,163 loans by the NRW.BANK (inputs), 9.0% or EUR 346.7m stem from global loans for large investments, 6.7% or EUR 258.1m were used for digitalization loans, 4.7% or EUR 180.4m for innovation loans, and 79.7% or EUR 3,078.0m for universal loans.

Access to Essential Services: Health

The *NRW.BANK.KommInvestPlus*, *NRW.BANK.Infrastruktur*, and *NRW.BANK.EnergieInfrastruktur* loans provide financing to communities and providers for health & care infrastructures as well as for shelters for refugees and other vulnerable groups.

Rationale

The loans by the NRW.BANK can contribute to SDG3 (Good-health & Well-being) as well as SDG 11 (Sustainable Cities & Communities). They help to ensure universal access to quality health &

⁹ https://www.bmwi.de/Redaktion/DE/Downloads/E/evaluierung-der-gemeinschaftsaufgabe-verbesserung-der-regionalen-wirtschaftsstruktur-durch-einzelbetriebliche-erfolgskontrolle-endbericht.pdf?__blob=publicationFile&v=10

¹⁰ The number of jobs ranges between 1,000 (only accounting for communities above a 10 EUR threshold) and 12,000 (using the additional funds per loan and socially-secured employee in region of the beneficiary).

care services and facilitate increased recruitment and training of the health & care workforce. They also provide safe and inclusive spaces for vulnerable groups.

This can be achieved with investments into the purchase, construction or modernisation of health & care and educational buildings as well as shelters. Some health & care services are also directly promoted.

Risks

The desired outcomes can be reduced if the measures lead to an over-supply of capacities and thus higher operating costs in some regions or if increased investment requirements also increase the costs for these services.

Results

About 86% out of a total of EUR 300.4m could be attributed to loans with a specified purpose and thus further assessed. The majority of total loans (61.3% or EUR 184.0m) is dedicated to investments for or into health & care buildings (76 out of 142 projects).

Some of these loans (41.4% or EUR 124.3m) can directly be associated with increased capacities in care system (e.g., care for elderly). Assuming the typical costs of providing additional places in care-homes (19.18 EUR per day and person¹¹), this is equivalent to circa 18.000 beneficiaries. Another relevant portion of the loans went into clinics and their infrastructures to provide additional capacities (11.5% or EUR 34.4m). Given that the costs of an additional bed in intensive-care (80.000 EUR¹²) are the most expensive and thus provide a conservative estimate, this is equivalent to 430 additional beds.

Loans for investing into the training of health & care staff can directly be compared to the overall number of graduates in NRW in these jobs. The investments that directly increase capacities in educational buildings for e.g., training of nurses (3.7% or EUR 11.1m) is equivalent to 500 additional trainees or an 4% increase in future graduates.

The smallest share is associated into investments into purchasing, constructing, or modernizing shelters and social spaces (2.1% or EUR 6.2m). Here, four out of 6 projects (1.5% or EUR 4.5m) lead to 4 additional shelters for women, refugees and homeless persons.

Access to Essential Services: Quality Education

The *NRW.BANK.GuteSchule2020* loans, as well as selected loans from the programmes *NRW.BANK.KommInvestPlus* and *NRW.BANK.Infrastruktur* provide financing to schools for construction, refurbishment, acquisition, or renovation of buildings as well as for new equipment and to increase digital access. A small portion of these loans are also dedicated to e.g., planning of renovations, the purchase of building ground and other consumptive measures to improve educational outcomes.

¹¹ see https://www.lvr.de/media/wwwlvrde/soziales/alten_und_pflegeeinrichtungen/dokumente_42/investitionskosten/1_erlass_mags_vo_m_03082022_-_werte_2023.pdf

¹² see <https://www.dkgv.de/dkg/presse/details/78-milliarden-euro-angebliche-zusatzfinanzierung-der-kliniken-haelt-einem-faktencheck-nicht-stand/>

Rationale

The loans by the NRW.BANK can contribute to SDG4 (quality education). They facilitate healthier and more equitable learning environments by improving the accessibility of school buildings and their capacities for re-creational and physical student activities (including additional capacities for children, students or trainees). They also help to improve learning outcomes by improving the digital qualification of students and teachers alike and decreasing the digital divide between students from different backgrounds.

This can either be achieved by direct construction and renovation measures (such as new buildings or new IT infrastructures) or by purchasing equipment, hardware as well as learning software and tools.

Risks

The desired outcomes can be reduced if the investments result in considerable higher costs that decrease the capabilities for operating the schools or future investments.

Results

A relevant share of the loans (circa 16% or EUR 75m) is dedicated to the construction or acquisition of space for child-care facilities (both kindergartens and day-care centres). Using a current funding factor for child-care grants in the State of NRW¹³ (EUR 33,000 maximum per place), an output-indicator can be estimated. According to this ex-ante estimate, the loans helped to enable circa 2,300 new places for day-care and early childhood education (potentially induced, conservative estimate).

On an activity level, a loan value of EUR 482m was assessed in this category, of which 74.9% could be directly associated with explicit measures. EUR 328m was used to provide capital for construction, acquisition, equipment, or renovation of educational buildings (EUR 1,230k per project on average) – not considering an additional EUR 15m for the construction, equipment or renovation of sport facilities (EUR 580k per project). The remaining (attributed) EUR 19m was used to provide capital for IT equipment and infrastructure (EUR 230k per project).

Related to the inputs by the NRW.BANK (EUR 482m), 89 out of 339 loans were attributed to multiple or other purposes. Of these loans, EUR 94m out of EUR 188m could be associated with at least one of the above activity-categories (some loans addressed more than one of these categories).

Access to Public Goods and Services

The direct lending programme for municipalities aims to provide capital for infrastructure investments and services for communities in structural-weak regions in NRW.

Rationale

Direct municipal loans for self-governed tasks contribute to reducing poverty by ensuring equal access to basic services. These services, in addition to additional capacity for participatory, integrated and sustainable settlements, are also in line with SDG 11 on sustainable communities.

¹³ see 2.6.1.1 to 2.6.1.5 and 4.4.1.1 in "Richtlinie über die Gewährung von Zuwendungen für Investitionen für zusätzliche Plätze in Kindertageseinrichtungen und Kindertagespflege" (

These long-term goals are achieved by reducing the financial burden of municipalities as well as loans for non-mandatory investments into public goods and services (providing new services or sustaining and reducing the end-user costs of services).

Risks

The targeted regions might recover financially in the future (becoming regions with less needs) or focus more on their mandatory tasks. This comes with a risk of reduced desired outcomes.

Results

As of yet, direct outputs of the loan programme such as the amount or type of additional services could not be quantified. Future impact assessments aim to work on the underlying data issues preventing such a quantification and provide monitoring approaches to measure long-term changes in the regions (e.g., on the increase in fulfilment of basic personal needs).

On an activity level, loans with a value of EUR 1,423m were assessed in this category, of which EUR 1.294m or 87.9% could be attributed to specific communities in NRW. Loans over EUR 606.8m (41.2% of total volume) were assumed to reduce the financial burden (loan repayments as well as loans by the communities to other entities in that region). It is estimated that this reduction amounts to EUR 89 per resident in these communities. Similarly, EUR 687.4m or 46.7% led to an increase of investments in these communities of 100 EUR per resident¹⁴.

Related to the total of 114 loans by the NRW.BANK, it could be measured that EUR 621.9m (or 42.2%) target 11 communities in the GRW¹⁵ funding area D and EUR 672.m (or 45.6%) target 11 communities in funding areas C. All of these areas are considered structural weak regions in Germany representing state funding for local companies of 10-20% (D) and 10-30% (C) respectively.

Disaster Management

The *NRW.BANK.Infrastruktur* and *NRW.BANK.KommInvestPlus* loans can help communities to invest in their capabilities to manage disasters such as fires or floods. In the current pool, the loans are solely used to purchase new vehicles and to invest in infrastructures for Disaster Managements such as buildings for the *Federal Agency for Technical Relief (THW)*.

Rationale

The loans by the NRW.BANK can contribute to SDG 11 (Sustainable Cities and Communities). They facilitate shorter response-times and improved overall capabilities to manage disasters in the targeted communities. They can also help to reduce safety risks for both professional and volunteer first-responders. This can be achieved by investments of these communities into new or upgraded infrastructures, specialised vehicles, and personal equipment.

¹⁴ Allocation to the two categories as well as estimates for additional capital in communities is based on community finance data for NRW in 2019-2020 with results for 2021 estimated on the basis of 2021 (see also <https://www.it.nrw/statistik/gesellschaft-und-staat/oeffentliche-finanzen-und-steuern/oeffentliche-finanzen>).

¹⁵ GRW is a joint funding programme for "Improving the Regional Economic Structure" which was recently reformed to provide a unified funding structure (see also <https://www.bmwi.de/Redaktion/EN/Dossier/regional-policy.html>).

Risks

The desired outcomes can be reduced if the targeted communities do not plan for future disaster risks (e.g., from climate change) and do not provide sufficient funding for both future investment needs and appropriate training for first-responders.

Results

The category of loans to communities and providers for disaster management is the smallest category in the pool with a total of EUR 4.6m. 5 loans were assessed, of which 4 loans (EUR 4.5m or 96.5%) were used for the construction or modernisation of buildings for first-responders and 1 loan (EUR 0.2m or 3.5%) aimed at the acquisition, maintenance or equipment of first-responder vehicles. While the loans in the first category can be converted to an average funding of EUR 1.1m per project, the latter results in the acquisition of one additional emergency command vehicle.

Outlook

The current report included two new categories (Health and Disaster Management) for which indicators could be assessed and reported based on a high granularity and quality of data. The data quality also improved for the category of Education, which in turn allowed for the development of new indicators that show a strong cause-effect relationship between the loans and the desired societal outcomes.

The Theory-of-Change models were further adapted and improved, which resulted in a set of testable hypotheses for each category. This will facilitate the search for new indicators and enable validations of the claims in the future or by third parties.

Future impact assessment will focus on using additional sources of data regarding social conditions in NRW to supplement and support the quantification of new indicators. The data availability has already improved greatly in this regard and many state-wide sustainability indicators show a close relationship to the societal outcomes depicted in this report. We hope that, by combining this information with the data provided by the issuer, more indicators on the level of intermediate or even long-term outcomes can be developed.

Annex

Methodology

All results shown here are based on the accompanying method paper authored by the Wuppertal Institut. In this scheme, indicators are classified according to their position in the cause-effect-chain of a Theory-of-Change (inputs, activities, outputs, intermediate & long-term outcomes) as shown in Figure 2.

Figure 2: Indicator types, direction, context, qualifiability and quantifiability in the current impact report

Class	Indicator-Type	Direction	Context	Interpretation for Reader
A	long-term outcome	positive	regions	best-needed
B	intermediate outcome	positive	communities	best-in-class
C	output	positive	target population	best-practice
D	activity	positive	beneficiaries	high-standard
E	input	neutral	beneficiaries	minimum-requirement
F	hazard	negative	target population	best-practice (if applicable)
G	rebound	negative	communities	best-needed (if applicable)

A **best-practice** in this regard is to provide (measured) outputs for all six categories in the NRW.BANK Social Bond. This has not been achieved yet. However, the following **best-in-class-indicators** could be estimated: *additional property for vulnerable groups* (Affordable Home Ownership), *increase of graduates for health & care workforce* (Access to Essential Services: Health) and *employment growth in structural-weak regions* (SME Financing).

For **best-practice-indicators** the following indicators could be estimated: *home ownership in Top-ten cities with the highest rents*, *borrowers with decreased living expenses in cities*, *additional capacities for education of health & care personnel*, *additional capacities or improved conditions for care of elderly and other vulnerable persons*, *additional shelters for women, children and homeless persons*, *additional capacities for health care in clinics*, *enabled new capacities for childhood education*.

Results

The following tables specify all inputs and indicators. They are based on but not entirely aligned with the ICMA recommendations for Social Bond reporting as this analysis focuses on the qualification as well as the quantification of indicators.

Indicator Grades: A (long-term outcome) | B (intermediate outcome) | C (output) | D (activity) | E (input) | ha (hazard) | re (rebound); Indices indicate estimates (0) or measurements (+)

Affordable Housing - Indicators	SBP Category	Indicator Type	Grade (Indicator)	SDG Addressed	Target Group	Signed amount (2019-2021)	Share of Total Financing	Eligibility of Social Bond	Portfolio lifetime	Value
property for vulnerable groups ^{a)}		intermediate outcome	B ₀	1 & 11	low-income households	EUR 269.9m	45% ^{b)}	100%		1,800 housing units
home ownership in top-ten cities in NRW with highest rents ^{b)}		output	C ₀	1 & 11	all recipients	EUR 16.3m	2.7%	100%		100 housing units
borrowers with decreased living expenses in cities ^{c), d)}		output	C ₀	1	all recipients	EUR 195.4m	32.6%	100%		1,000 borrowers
homes built ^{d)}		activity	D ₀	11 & 1	all recipients	EUR 260.3m	43.4%	100%		1,700 housing units
homes purchased ^{d)}		activity	D ₀	11 & 1	all recipients	EUR 339.5m	56.6%	100%		2,200 housing units
Total Loans (Wohneigentum & Globaldarlehen Wohneigentum)	affordable housing	input	E	11 & 1	all recipients	EUR 599.8m	100%	100%	20/25/30 years	3,184 loans

- a) It is assumed that all households in this category are poor and therefore vulnerable.
- b) High rents refer to the ten cities in the State of NRW that have the highest gross rents that range from 7.70 to 12.98 EUR per m² (see also: <https://www.firmishedinside.com/mcin-nrw/micpreise-nrw>)
- c) Assumption based on allocation of loans in regions with high population density to different income groups and a flat income saving effect of 9% (ca. 450 EUR per month).
- d) Definition of high and low population density is drawn from statistics and based on area-code or name of community. Where data was lacking, the share of loans into high-density areas was used (circa 33% of loans without specific location).
- e) The number of new and purchased homes is unknown. Instead, data on other NRW Bank loans for housing subsidies is used to estimate the shares and impact (housing units per million EUR) in both categories.
- f) This value is based on the results of earlier surveys but decreased to a lower estimate due to year of sampling and sampling size. Previous reports used a share of 46.5% here.

Indicator Grades: A (long-term outcome) | B (intermediate outcome) | C (output) | D (activity) | E (input) | ha (hazard) | re (rebound); Indices indicate estimates (0) or measurements (+)

SME Financing - Indicators	SBP Category	Indicator Type	Grade (Indicator)	SDG Addressed	Target Group	Signed amount (2019-2021)	Share of Total Financing	Eligibility of Social Bond	Portfolio lifetime	Value
employment growth in structural weak regions ^{a)}		intermediate outcome	B ₀	8	company sites located in C or D areas	1,922.3 mEUR	49.8%	100%		3k to 39k additional employees in the region
Additional funding per employee in structural weak regions ^{a)}		activity	D ₀	8	all employees in C or D areas	1,922.3 mEUR	49.8%	100%		29 EUR per employee in targeted region
SME global loans for large investments		input	E ₀	8	all beneficiaries	346.7 mEUR	9.0%	100%		23 loans
other Digitalization Loans		input	E ₀	8	all beneficiaries	246.1 mEUR	6.4%	100%		864 loans
other Innovation Loans		input	E ₀	8	all beneficiaries	174.5 mEUR	4.5%	100%		265 loans
other Universal Loans		input	E ₀	8	all beneficiaries	3,013.7 mEUR	76.0%	100%		7,863 loans
Loans with partial release from reliability for housebanks		input	E ₀	8	eligible beneficiaries or purposes	82.2 mEUR	2.1%	100%		148 loans
NRW BANK Loans (Globaldarlehen, Digitalisierung, Innovativ, Universalkredit)	SME Financing	input	E	8	all beneficiaries	3,863.3 mEUR	100%	100%	variable	9,163 loans

- a) Employment growth effects are based on a 2020 evaluation of GRW funding by IWH (https://www.bmwi.de/Redaktion/DE/Downloads/E/waehrung-der-gemeinschafts-aufgabe-verbesserung-der-regionale-wirtschaftsstruktur-durch-einzelbetriebliche-erfolgs-kontrolle-endbericht.pdf?__blob=publicationFile&v=10). The authors estimate that 10 EUR additional funding per employee leads to a growth of 0.01% (which constitutes the lower rate held for additional jobs).
- b) Structural weak regions as defined by GRW funding areas C, D or variations of that (2022-2027). The value of the indicators refers to all employees in the region that are subject to social insurance contributions (not only employees of loan receiving companies).

Indicator Grades: A (long-term outcome) | B (intermediate outcome) | C (output) | D (activity) | E (input) | ha (hazard) | re (rebound); Indices indicate estimates (0) or measurements (+)

Access to Essential Services: Health - Indicators	SBP Category	Indicator Type	Grade (Indicator)	SDG Addressed	Target Group	Signed amount (2019-2021)	Share of Total Financing	Eligibility of Social Bond	Portfolio lifetime ^{a)}	Value ^{b)}
increase of graduates from health & care workforce		intermediate outcome	B ₀	3	society	11.1 mEUR	3.7%	100%		circa 4% increase in future graduates
additional capacities for education of health & care personnel		output	C ₀	3	health & care workforce	EUR 11.1m	3.7%	100%		equivalent to 500 potential trainees
additional capacities or improved conditions for care of elderly and other vulnerable persons		output	C ₀	3	vulnerable persons	EUR 124.3m	41.4%	100%		equivalent to 18k potential beneficiaries
additional shelters for women, children and homeless persons		output	C ₀	11	vulnerable persons	EUR 4.5m	1.5%	100%		4 additional buildings/units
additional capacities for health care in clinics		output	C ₀	3	targeted communities	EUR 34.4m	11.5%	100%		equivalent to 430 beds in intensive-care
constructing, purchasing or modernizing educational buildings for health & care workforce		activity	D ₀	3	targeted communities	EUR 11.1m	3.7%	100%		3
constructing, purchasing or modernizing health & care buildings		activity	D ₀	3	targeted communities	EUR 184.0m	61.3%	100%		76
constructing, purchasing or modernizing shelters & social spaces for vulnerable persons		activity	D ₀	11	targeted communities	EUR 8.2m	2.7%	100%		6 projects
ensuring or expanding health & care services		activity	D ₀	3	targeted communities	EUR 6.2m	2.1%	100%		6 projects
Loans with specified health & care related purposes		input	E ₀	11	communities & providers in NRW	259.3 mEUR	86.3%	100%		119 loans
NRW BANK Loans (KominvestPlus, Infrastruktur, Energieinfrastruktur)	Health	input	E	11	communities & providers in NRW	300.4 mEUR	100%	100%	19 years	142 loans

- a) Weighted average (loan quantity) from start to end of loan period.
- b) Relative values refer to the State of NRW.

Indicator Grades: A (long-term outcome) | B (intermediate outcome) | C (output) | D (activity) | E (input) | ha (hazard) | re (rebound); Indices indicate estimates (0) or measurements (+)

Access to Essential Services: Education - Indicators	SBP Category	Indicator Type	Grade (Indicator)	SDG Addressed	Target Group	Signed amount (2019-2021)	Share of Total Financing	Eligibility of Social Bond	Portfolio lifetime ^{a)}	Value
enabled new capacities for childhood education ^{b)}		output	C ₀	4	children	EUR 75.2m	15.6%	100%		2.3k additional child care places
provided capital for purchasing IT equipment & infrastructure		activity 3	D ₀	4	targeted communities	EUR 18.5m	3.8%	100%		EUR 230k on average per project
provided capital for constructing, equipment or modernization of other educational buildings		activity 3	D ₀	4	targeted communities	EUR 328.2m	68.1%	100%		EUR 1230k on average per project
provided capital for construction, equipment or modernization of sport facilities		activity 3	D ₀	4	targeted communities	EUR 14.5m	3.0%	100%		EUR 580k on average per project
number of loans dedicated to IT infrastructure and equipment or media education		input	E+	4	targeted communities	EUR 15.3m	3.2%	100%		30 loans
number of loans dedicated to construction, equipment or modernization of educational buildings		input	E+	4	targeted communities	EUR 264.5m	54.9%	100%		205 loans
number of loans dedicated to construction, equipment or modernization of sport facilities		input	E+	4	targeted communities	EUR 14.3m	3.0%	100%		15 loans
number of loans for mixed purposes or without further information ^{c)}		input	E+	4	targeted communities	EUR 187.6m	39.0%	100%		89 loans
NRW BANK Loans (Gute Schule, KominvestPlus, Infrastruktur)	Quality Education	input	E	4	communities in NRW	EUR 481.7m	100%	100%	19 years	339 loans

- a) Estimation based on maximum State funding for child-care buildings (EUR 33,000 per additional care-place) and limited to loans with sufficient information regarding the explicit purpose of building such facilities or purchasing buildings for this purpose.
- b) Weighted average (loan quantity) from start to end of loan period.
- c) The allocated capital relates to loans solely attributed to each purpose plus a conservative estimate for the capital share of "mixed purposes" loans that are explicitly (also) dedicated to this purpose. This ratio accounts for the fact that some loans will also be used for other purposes than classified here.

Indicator Grades: A (long-term outcome) | B (intermediate outcome) | C (output) | D (activity) | E (input) | ha (hazard) | re (rebound); Indices indicate estimates (0) or measurements (+)

Access to Public Goods - Indicators	SBP Category	Indicator Type	Grade (Indicator)	SDG Addressed	Target Group	Signed amount (2017-2019)	Share of Total Financing	Eligibility of Social Bond	Portfolio lifetime	Value
decrease of financial burden per resident ⁴⁾		activity	D ₀	11 & 1	all recipients	606.8 mEUR	41.2%	100%		88.7 EUR/cap p.a.
increase of investment per resident ⁴⁾		activity	D ₀	11 & 1	all recipients	687.4 mEUR	46.7%	100%		99.8 EUR/cap p.a.
communities in GRW funding area C ⁵⁾		input	E ₊	11 & 1	C communities	672.2 mEUR	45.6%	100%		11 communities
communities in GRW funding area D ⁵⁾		input	E ₊	11 & 1	D communities	621.9 mEUR	42.2%	100%		11 communities
loans to communities without specified location		input	E ₊	11 & 1	C or D communities	178.6 mEUR	12.1%	100%		21 loans
NRW.BANK Loans	access to public goods & services	input	E	11 & 1	all recipients	1,472.8 mEUR	100%	100%	up to 50 years	114 loans

a) Based on the overall annual investments loans in targeted communities in the years 2019-2021 as well as share for differently types of expenses by all communities in Germany (2021 expenses on the basis of 2020). The value is a weighted average of all loans by the NRW.Bank over three years.

b) GRW refers to a federal programme for structural weak regions (for 2014-2021) that aims to help investments in local economies and/or increase competitiveness. Two general types of funding areas are differentiated. Area C comes with maximum funding of 10-30% (depending on company size) and area D with 10-20% funding.

Indicator Grades: A (long-term outcome) | B (intermediate outcome) | C (output) | D (activity) | E (input) | ha (hazard) | re (rebound); Indices indicate estimates (0) or measurements (+)

Disaster Management - Indicators	SBP Category	Indicator Type	Grade (Indicator)	SDG Addressed	Target Group	Signed amount (2019-2021)	Share of Total Financing	Eligibility of Social Bond	Portfolio lifetime ⁴⁾	Value
number of additional response vehicles		activity	D ₊	11	targeted communities	EUR 0.2m	3.47%	100%		1 additional response vehicles
provided capital for disaster management buildings & building equipment		activity	D ₊	11	targeted communities	EUR 4.5m	96.5%	100%		EUR 1110k on average per project
number of loans for acquisition, maintenance, equipment or upgrade of DM vehicles		input	E ₊	11	targeted communities	EUR 0.2m	3.5%	100%		1 loans
number of loans for construction, acquisition, modernisation or equipment of DM buildings		input	E ₊	11	targeted communities	EUR 4.5m	96.5%	100%		4 loans
NRW.BANK Loans KomInvestPlus, Infrastruktur	Disaster Management	input	E	11	communities in NRW	EUR 4.6m	100%	100%	17 years	5 loans

a) Weighted average (loan quantity) from start to end of loan period.