Providing for the Future

Act Today.
Together for Sustainable Development in North Rhine-Westphalia.

Sustainability Bond #6 State of North Rhine-Westphalia
The concept of sustainable development is a guiding principle for the State of NRW. It includes environmental, social and economic issues and is closely related to the principles of prevention and inclusion.

The NRW Sustainability Strategy has been approved by the State Government in 2016. It comprises 19 fields of action and 7 focal areas.

The Strategy is designed to implement the global Sustainable Development Goals (SDGs) at the regional level. It also serves as political reference for the bond.
NRW Sustainability Strategy
Aligning the State's Strategy with the National Approach

• Progress in the implementation of the State's Sustainability Strategy is measured against 60 specific indicators which relate to the 19 fields of action and to the 17 SDGs. The first Sustainability Indicator Report was published in 2016. Additional results are published on a dedicated website with regular updates (www.nachhaltigkeitsindikatoren.nrw.de/sdgs).

• The NRW Sustainability Strategy and the indicator report are currently under review in order to improve the interaction and comparability with the new German Sustainability Strategy of 2017 and the Sustainability Strategies of the 15 other German States.
2030 Agenda for Sustainable Development
Sustainable Development Goals (SDG)

https://sustainabledevelopment.un.org/sdgs
Use of Proceeds of NRW's Sustainability Bonds
Project Categories relate to 15 out of 17 SDGs

A. Education and Sustainability Research
B. Inclusion and Social Coherence
C. Public Transport and Local Mobility
D. Climate Protection and Energy Transition
E. Protection of Natural Resources
F. Sustainable Urban Development
G. Modernisation of Educational and Public Health Facilities
Sustainability Bond Guidelines
ICMA, June 2018

1. Use of Proceeds
2. Process for Project Evaluation and Selection
3. Management of Proceeds
4. Reporting
Sustainability Quality of the Bond
Verification and Evaluation

Framework
- Use of proceeds categories offering added social or environmental value
- Sustainability criteria for each project category

Second Party Opinion
- Evaluation of the sustainability performance of financed projects
- Verification of the alignment with Sustainability Bond Guidelines

Impact Assessment
- Annual reporting is provided by Wuppertal Institut gGmbH
- Assessment of environmental and social impacts
- Environmental analysis focuses on avoided greenhouse gas emissions and selected additional indicators
- Social analysis focuses on effects of education and broadband expansion as well as job creation
Process for Project Selection and Evaluation
Comprehensive Pre-Issuance Disclosure

• Projects are selected in accordance with the categories and criteria set out in the "Sustainability Bond Framework", based on ICMA Green/Social Bond Principles and Sustainability Bond Guidelines.

• The sustainability performance of all projects has been verified by ISS ESG. Second Party Opinion (of October 31, 2019) and Sustainability Bond Framework are available at www.sustainability-bond.nrw.de.

• All projects are part of the State's discretionary spending of the fiscal year 2019 and can be traced to the NRW 2019 Budget Plan (Haushaltsplan 2019). Only the State's own expenditures (net of EU grants, federal grants or other revenues earmarked for specific purposes) are taken into account. The State's personnel costs as well as projects prescribed by federal law are excluded.

• Prospective allocation of net proceeds is disclosed pre-issuance. A detailed list of projects is available at www.sustainability-bond.nrw.de.
Management of Proceeds
Funding the Public Sector

• An amount equivalent to the net issue proceeds of the State Treasury Notes will be used to cover expenditures for selected environmental and social projects of the fiscal year 2019.

• Some projects run for more than one year, but only the expenditures of the current year are taken into account.

• Figures shown are taken from the budget plan 2019. Final budget results and final allocation of proceeds will be set out in the impact reporting.
Management of Proceeds
Financing the Current Budget

- In the past, Sustainability Bonds issued by the State of North Rhine-Westphalia referred to a previous budgetary year (refinancing approach).
- The current issue refers to the current budgetary year and finances projects of the fiscal year 2019.
Reporting
Environmental and Social Impacts

• Impact reporting with regard to projects financed by the Sustainability Bonds is published on a regular basis and covers environmental and social impacts.

• Evaluation of environmental impacts focuses on avoided greenhouse gas emissions and selected other indicators.

• Evaluation of social impacts focuses on education and broadband expansion as well as job creation.

• The reports are furnished by Wuppertal Institut für Klima, Umwelt, Energie gGmbH.
Sustainability Bonds by NRW
A History of Successful EUR Issuances

<table>
<thead>
<tr>
<th>Issuance</th>
<th>Settlement</th>
<th>Maturity</th>
<th>Coupon [%]</th>
<th>Volume [bn]</th>
<th>Reoffer Spread [bps]</th>
<th>Budget Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainability Bond #1</td>
<td>March 2015</td>
<td>March 2025</td>
<td>0.50</td>
<td>0.750</td>
<td>-11</td>
<td>2014</td>
</tr>
<tr>
<td>Sustainability Bond #2</td>
<td>March 2016</td>
<td>March 2023</td>
<td>0.125</td>
<td>1.585</td>
<td>-2</td>
<td>2015</td>
</tr>
<tr>
<td>Sustainability Bond #3</td>
<td>March 2017</td>
<td>February 2027</td>
<td>0.50</td>
<td>1.825</td>
<td>-14</td>
<td>2016</td>
</tr>
<tr>
<td>Sustainability Bond #4</td>
<td>March 2018</td>
<td>March 2028</td>
<td>0.95</td>
<td>2.025</td>
<td>-14</td>
<td>2017</td>
</tr>
<tr>
<td>Sustainability Bond #5</td>
<td>March 2019</td>
<td>March 2034</td>
<td>1.10</td>
<td>2.250</td>
<td>10</td>
<td>2018</td>
</tr>
</tbody>
</table>
## Sustainability Bond #6 NRW

### Prospective Allocation of Proceeds

<table>
<thead>
<tr>
<th>Project Category</th>
<th>Budget Plan [EUR m]</th>
<th>Eligible for Bond [EUR m]</th>
<th>Share of Asset Pool</th>
<th>Use of Proceeds</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Education and Sustainability Research</strong></td>
<td>969.3</td>
<td>968.4</td>
<td>33.4%</td>
<td>968.4</td>
</tr>
<tr>
<td><strong>B. Inclusion and Social Coherence</strong></td>
<td>556.9</td>
<td>556.9</td>
<td>19.2%</td>
<td>556.9</td>
</tr>
<tr>
<td><strong>C. Public Transport and Local Mobility</strong></td>
<td>214.2</td>
<td>214.2</td>
<td>7.4%</td>
<td>40.0 174.2</td>
</tr>
<tr>
<td><strong>D. Climate Protection and Energy Transition</strong></td>
<td>96.1</td>
<td>96.1</td>
<td>3.3%</td>
<td>96.1</td>
</tr>
<tr>
<td><strong>E. Protection of Natural Resources</strong></td>
<td>153.4</td>
<td>153.4</td>
<td>5.3%</td>
<td>153.4</td>
</tr>
<tr>
<td><strong>F. Sustainable Urban Development</strong></td>
<td>430.4</td>
<td>430.4</td>
<td>14.9%</td>
<td>215.2 215.2</td>
</tr>
<tr>
<td><strong>G. Modernisation of Educational and Public Health Buildings</strong></td>
<td>478.1</td>
<td>478.1</td>
<td>16.5%</td>
<td>478.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2,898.4</td>
<td>2,897.5</td>
<td>100%</td>
<td>1,780.5 1,117.0</td>
</tr>
<tr>
<td><strong>Proportions</strong></td>
<td>100%</td>
<td></td>
<td>61.5% 38.5%</td>
<td></td>
</tr>
</tbody>
</table>
Category A comprises projects financing the enlargement and improvement of universities and the creation of additional training facilities at public universities, universities of applied science and professional schools. Additionally, consumer protection measures as well as foundational research are funded.

- Enlargement of Universities, Additional Training Facilities 860.2m
- Support for Best-in-Class-Universities 32.0m
- Innovation and Sustainable Development 57.4m
- Consumer Protection 18.8m
Excellence in Research
Support for Best-in-Class-Universities

Excellence Strategy
Activities grouped into Category B support the inclusion of immigrants and people with disabilities. Additionally, projects addressing early childhood development and successful school careers are funded.

- Inclusion, Integration and Qualification 184.8m
- Language Skills in Early Childhood, Family Centres and Non-contributory Day Care 324.4m
- School Social Work 47.7m
Working towards an Inclusive Society
Good Development Opportunities from the Beginning for All

Action Plan NRW – One society for all
Projects in Category C include subsidised public transport for pupils, students and low-income citizens. Other projects strive to improve the infrastructure for cyclists and pedestrians, particularly on short-haul routes (local mobility).

- Public Transportation for Low-Income Citizens 40.0m
- Public Transportation for Pupils and Students 135.0m
- Transportation Infrastructure for Cyclists and Pedestrians 39.2m
Local Mobility in North Rhine-Westphalia
Finding New Ways for Mobility

Action Plan Local Mobility
Projects in category D support research and development related to climate protection and energy transition, including funding for the State's Efficiency Agency (EFA), which gives advice to municipalities and companies on how to enhance their resource efficiency and energy efficiency.

- Climate Protection and Renewable Energies 90.2m
- Resource Efficiency 5.9m
From Grey to Blue Skies
Climate Protection in an Industrial State

Action Plan Climate Protection NRW
Projects in category E fund either measures to avoid loss of biodiversity and to increase population of endangered species or provide financial support for flood protection projects and the restoration of the original state of watercourses.

- **Protection of Nature, Landscape and Biodiversity** 40.6m
- **Flood Protection and River Restoration** 66.7m
- **Responsible Agriculture and Rural Development** 46.1m
Protecting Endangered Species
Wildlife in an Industrial State

Biodiversity Strategy NRW
Projects in Category F focus on urban and rural areas with significant structural difficulties such as a shrinking population and a stagnating economy. The State also sponsors the development of a fibre optic-based telecommunications infrastructure.

- Urban Reconstruction in the West 50.1m
- Social City 55.2m
- Geriatric Care and Demographic Change 16.3m
- Broadband Expansion 308.9m
Preparing for the Future
Urban Development in North Rhine-Westphalia

Broadband Expansion
G. Modernisation of Educational and Public Health Facilities EUR 478.1m

Category G encompasses projects to modernise educational and public health facilities. A focus is on the modernisation and extension of university medical clinics. Additional funds are targeted at the modernisation of general university buildings.

- Modernisation of University Buildings 164.2m
- Modernisation of University Medical Clinics 313.9m
Caring for Society
Modernisation of University Buildings

Programme for the Modernisation of University Buildings
Overall evaluation of Sustainability Bond #6

The issuer has defined a formal concept for its Sustainability Bond regarding use of proceeds, processes for project evaluation and selection, management of proceeds and reporting. This concept is in line with the ICMA SBGs [Sustainability Bond Guidelines].

The overall sustainability quality of the asset pool in terms of sustainability benefits, risk avoidance and minimisation is good [...].

Germany, the country in which NRW is located in, shows a good sustainability performance and has been classified as ‘Prime’ [...].

ISS ESG finds that Management of Proceeds proposed by NRW is well aligned with the SBGs, as all the proceeds are to be directly allocated to the 2019 budget.

ISS ESG finds that the allocation reporting proposed by NRW is in line with industry best practices and with the SBGs.
State of North Rhine-Westphalia
Capital Markets Presentation

November 2019
Bund and Länder
Cooperative Federalism

Federal System
Germany is a Federal Republic, with two concurrent levels of government: Federation ("Bund") and States ("Länder").

Responsibilities of the Länder
The Länder have their own legislative, judicial and executive powers. They are independent with regard to their budgets and play an active role in the federal legislative process.

Zero Borrowing Rule ("Debt Brake")
The German Constitution sets out that the Länder must eliminate structural budget deficits by 2020. Since 2016, the Bund must limit structural budget deficits to 0.35% of GDP.

Federal Equalisation System
Federal law provides that tax revenues must be shared between Bund and Länder in an equitable fashion in order to provide equal standards of living throughout the country.

Allegiance to the Federation ("Bundestreue")
Bund and Länder are under an obligation to share the administrative tasks and provide mutual assistance, including financial assistance in cases of extreme budgetary hardship.
Länder (all), EUR 355bn

- Education: 27%
- Social welfare: 11%
- Regional public transport: 10%
- General purpose grants to municipalities: 14%
- Law enforcement, police: 14%
- Other: 16%
- Interest: 8%

Bund, EUR 298bn

- Social security: 46%
- Defence etc.: 11%
- General purpose grants to states: 7%
- Transport: 6%
- Other: 17%
- Interest: 13%

Percentages shown are estimates based on an analysis of budgets for the fiscal year 2011.

- Länder budgets reflect their responsibilities for education, law enforcement and infrastructure. The federal budget is dominated by expenditures for social security – health, unemployment and retirement insurance.

- While the expenditures of Länder are higher than the expenditures of the Bund, their capital markets debt (EUR 548bn) is just over a third of the total debt of Bund and Länder (EUR 1,617bn, as of 31.12.2018).
One of the Top 20 Economies Worldwide

GDP 2018 [EUR bn]

*USA, China, Japan, India, United Kingdom, France

Sources: IMF April 2019, Statistical Office NRW
## State of North Rhine-Westphalia

Largest German State in Terms of Population and GDP

<table>
<thead>
<tr>
<th><strong>NRW 2018</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Area</strong></td>
<td>34,110 km²</td>
</tr>
<tr>
<td><strong>Population</strong></td>
<td>17.9mn</td>
</tr>
<tr>
<td><strong>Unemployment Rate</strong></td>
<td>6.4% (Oct. 19)</td>
</tr>
<tr>
<td><strong>GDP</strong></td>
<td>EUR 705.1bn</td>
</tr>
<tr>
<td><strong>GDP per capita</strong></td>
<td>EUR 39,358</td>
</tr>
<tr>
<td><strong>Real Growth</strong></td>
<td>+0.9%</td>
</tr>
</tbody>
</table>

20 of the largest 50 German companies are headquartered in NRW. The regional economy has a focus on technology and services, media and health care. It features more than 750,000 small and medium-sized companies.
Taxation in Germany
Distribution of Revenues 2018 [EUR bn]

Taxation in Germany is based on federal law. Administration is carried out by the States through their regional tax offices.

Revenues from Value Added Tax, Income Tax and Corporate Tax (together, joint taxes) are split between Bund, Länder and municipalities (e.g. Income Tax: Bund 42.5%, Länder 42.5%, municipalities 15%).

Bund, Länder and municipalities also have exclusive revenue claims in specific areas (e.g. Bund: energy tax, Länder: inheritance tax, municipalities: commercial tax).
Assignment of Joint Taxes between Bund and Länder

Article 106 (3) Basic Law

The Federation and the Länder shall share equally the revenues from income taxes and corporation taxes.

The respective shares of the Federation and the Länder in the revenue from the turnover tax shall be determined by a federal law requiring the consent of the Bundesrat. Such determination shall be based on the following principles:

1. The Federation and the Länder shall have an equal claim against current revenues to cover their necessary expenditures. The extent of such expenditures shall be determined with due regard to multi-year financial planning.

2. The financial requirements of the Federation and of the Länder shall be coordinated in such a way as to establish a fair balance, avoid excessive burdens on taxpayers, and ensure uniformity of living standards throughout the federal territory.

Distribution of VAT 2019: Federation approx. 49.0%, Länder 47.6%, Municipalities 3.4% (according to Financial Equalisation Act)
Federal Equalisation System
Horizontal equalisation worth EUR 20.5bn in 2018

Constitutional Law demands equal standards of living for all citizens in Germany. In a four-step process, the federal equalisation scheme provides the necessary adjustments with regard to the financial capability of the states.

Horizontal Equalisation ("Länderfinanzausgleich")

As a starting point, tax revenues accrue to the Länder who collect them (local revenue). VAT revenues are distributed on a per capita basis.

Before horizontal equalisation, relative financial capacity of the states ranges from 54.3% to 157.2% of average (2018).

After horizontal equalisation, relative financial capacity ranges from 90.9% to 106.7% of average (in 2018).
Federal Equalisation System
2018 - Equalisation via Value Added Tax [EUR bn]
Federal Equalisation System
2018 - Inter-State Equalisation [EUR bn]
Federal Equalisation System
2018 - Aggregation of Horizontal Equalisation [EUR bn]
In addition to horizontal equalisation, federal grants provide additional financial support to create a level playing field among all States.

States with a financial capacity of less than 99.5% of average after horizontal equalisation are entitled to supplementary federal grants. Relative financial capacity of all States falls within a range of 97.6% to 106.7% of average afterwards.

Special purpose federal grants are not related to financial capacity and will be phased out by 2020.
Key Aspects of the New Federal Equalisation System
Effective from 1 January, 2020

• Horizontal Equalisation
  – Top-ups of tax revenue for Länder whose revenue falls short of average
  – Contributions from Länder whose revenue is above average
  – Weight of municipal tax capacity included in the calculation of States' financial capacity increases from 64% to 75%
  – Equalisation rate 63%
  – Top-ups and contributions executed through restatement of VAT (no longer capped at 25% of revenue)
  – No direct payments between the Länder

• Vertical Equalisation
  – Federal grants for States whose financial capacity after restatement of VAT is lower than 99.75% of average (equalisation rate 80%)
  – Supplementary grants for States with special needs
Every State a Winner
Estimated effects of the reform of the equalisation system on 2020 budgets


Keeping with the constitutional goal of equal standards of living, the system maintains a high level of equalisation, but the technical approach is different.

Under the new rules, horizontal equalisation will be carried out by a restatement of revenues according to the relative financial strengths of Länder and their respective municipalities on a per capita basis.

Due to additional federal grants of around 10.2bn, all States stand to benefit. Bremen and Saarland will receive extraordinary financial support of EUR 400m each (included in figures shown).
**Striking a Balance**

Budget Plans, Budget Results and Medium Term Outlook [EUR bn]

- **Budget Size 2019**: EUR 77.9bn
- **Debt Outstanding (30 September 2019)**: EUR 143.1bn

![Graph showing budget plans and results from 2009 to 2022]
With a growing number of retired civil servants, pension expenditures will continue to rise. A pension fund has been set up to mitigate the fiscal impact. As of 31 December 2018, the Fund had a size of EUR 11.9bn.

Pension expenditures of the State of NRW (forecast IT.NRW, in K€)
Over the last 10 years the State’s expenditures for retirement benefits have grown faster than the budget. Interest expenditures have fallen during the same time, notwithstanding rising debt levels. In total, the share of the budget earmarked for these expenditures has sunk from 20% to 15%, enhancing budgetary flexibility.
Debt Portfolio
Focus on duration

Debt Outstanding as of 30 September 2019 143.1bn
Weighted Average Maturity 13.3 years
Median Maturity (fixed/floating) 7.5y/2.1y

Funding Programme 2019 23.2bn
Funded as of 31 October 2019 20.6bn

Maturity profile
• Bonds
• Certificates of Indebtedness (Schuldscheine)
Active across the curve
Breakdown of issuances across tenors [EUR bn]

Plan 2020 (bonds only, indicative figures)

<table>
<thead>
<tr>
<th>Tenor</th>
<th>EUR bn Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-4y</td>
<td>3-4</td>
</tr>
<tr>
<td>5-15y</td>
<td>3-4</td>
</tr>
<tr>
<td>16-30y</td>
<td>3-4</td>
</tr>
<tr>
<td>&gt;30y</td>
<td>3-4</td>
</tr>
</tbody>
</table>
Debt Issuance Programme
Active in 18 different currencies

DIP issuances (since October 2002)
• 544 trades
• EUR (equivalent) 95.1bn raised

Debt outstanding (as of 30 Sept 2019): 143.1 bn EUR
• EUR 50.0bn with DIP documentation, including 9.6bn foreign currency transactions (EUR equivalent)
• EUR 93.1bn with stand alone documentation (thereof certificates of indebtedness EUR 36.5bn)

Others: CHF, NOK, JPY, AUD, MXN, SEK, CAD, TRL, HUF, PLN, ZAR, ISK, HKD, BRL, NZD
# Recent Benchmark Issues

USD

<table>
<thead>
<tr>
<th>Emittent</th>
<th>State of North Rhine-Westphalia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issue Rating</td>
<td>Aa1 by Moody’s (stable), AA- by S&amp;P (positive), AAA by Fitch (stable)</td>
</tr>
<tr>
<td>Issue Size</td>
<td>USD 1.5bn (equivalent EUR 1.33bn)</td>
</tr>
<tr>
<td>Status and Format</td>
<td>Global Bearer Note, Reg S</td>
</tr>
<tr>
<td>Maturity Date</td>
<td>25 July 2022</td>
</tr>
<tr>
<td>Settlement Date</td>
<td>25 July 2019</td>
</tr>
<tr>
<td>Coupon</td>
<td>1.875% annually, 30/360</td>
</tr>
<tr>
<td>Reoffer Spread</td>
<td>+10 bps vs. US Treasury</td>
</tr>
<tr>
<td>ISIN</td>
<td>XS2031318103</td>
</tr>
<tr>
<td>Lead Managers</td>
<td>BMO Capital Markets, Commerzbank, JP Morgan, Scotiabank, TD</td>
</tr>
</tbody>
</table>

**Geographical Distribution**
- Asia: 56%
- Americas: 7%
- EMEA: 37%

**Investor Distribution**
- Central Banks/OI: 58%
- Banks: 38%
- Asset Managers: 4%
**Recent Benchmark Issues**

**USD**

<table>
<thead>
<tr>
<th>Emittent</th>
<th>State of North Rhine-Westphalia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issue Rating</td>
<td>Aa1 by Moody’s (stable), AA- by S&amp;P (positive), AAA by Fitch (stable)</td>
</tr>
<tr>
<td>Issue Size</td>
<td>USD 1.0bn (equivalent EUR 0.9bn)</td>
</tr>
<tr>
<td>Status and Format</td>
<td>Global Bearer Note, Reg S</td>
</tr>
<tr>
<td>Maturity Date</td>
<td>27 August 2021</td>
</tr>
<tr>
<td>Settlement Date</td>
<td>28 August 2019</td>
</tr>
<tr>
<td>Coupon</td>
<td>3M USD LIBOR + 0.11%, 30/360</td>
</tr>
<tr>
<td>Reoffer Spread</td>
<td>+12.5 bps vs. US Treasury</td>
</tr>
<tr>
<td>ISIN</td>
<td>XS2045886863</td>
</tr>
<tr>
<td>Lead Managers</td>
<td>Daiwa Capital Markets Europe, Scotiabank, TD</td>
</tr>
</tbody>
</table>

**Geographical Distribution**

- EMEA: 90%
- Americas: 8%
- Asia: 2%

**Investor Distribution**

- Central Banks/OI: 64%
- Banks: 25%
- Asset Managers: 11%
Recent Benchmark Issues
EUR

<table>
<thead>
<tr>
<th>Emittent</th>
<th>State of North Rhine-Westphalia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issue Rating</td>
<td>Aa1 by Moody’s (stable), AA- by S&amp;P (positive), AAA by Fitch (stable)</td>
</tr>
<tr>
<td>Issue Size</td>
<td>EUR 1bn</td>
</tr>
<tr>
<td>Status and Format</td>
<td>Collective Debt Register Claim</td>
</tr>
<tr>
<td>Maturity Date</td>
<td>15 November 2028</td>
</tr>
<tr>
<td>Settlement Date</td>
<td>15 November 2018</td>
</tr>
<tr>
<td>Coupon</td>
<td>0.90% annually act/act ICMA</td>
</tr>
<tr>
<td>Reoffer Spread</td>
<td>+47.4 bps vs. DBR 0.25% DE0001102457</td>
</tr>
<tr>
<td>ISIN</td>
<td>DE000NRW0LF2</td>
</tr>
<tr>
<td>Lead Managers</td>
<td>Bank of America Merrill Lynch, BNP Paribas, J.P. Morgan, TD Securities, UniCredit</td>
</tr>
</tbody>
</table>

Geographical Distribution:
- Germany: 28%
- France: 27%
- Asia: 11%
- other Europe: 6%
- others: 6%

Investor Distribution:
- Banks: 44%
- CB/OI: 29%
- Asset Manager: 24%
- Others: 3%
## Recent Benchmark Issues
### Sustainability Bond #5

<table>
<thead>
<tr>
<th>Emittent</th>
<th>State of North Rhine-Westphalia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issue Rating</td>
<td>Aa1 by Moody’s (stable), AA- by S&amp;P (positive), AAA by Fitch (stable)</td>
</tr>
<tr>
<td>Issue Size</td>
<td>EUR 2.250bn</td>
</tr>
<tr>
<td>Status and Format</td>
<td>Collective Debt Register Claim</td>
</tr>
<tr>
<td>Maturity Date</td>
<td>13 March 2034</td>
</tr>
<tr>
<td>Settlement Date</td>
<td>13 March 2019</td>
</tr>
<tr>
<td>Coupon</td>
<td>1.10 % annually act/act ICMA</td>
</tr>
<tr>
<td>Reoffer Spread</td>
<td>+73.0 bps vs. DBR (DE0001135226)</td>
</tr>
<tr>
<td>ISIN</td>
<td>DE000NRW0LM8</td>
</tr>
<tr>
<td>Lead Managers</td>
<td>DekaBank, DZ Bank, HSBC, ING, Nomura, Société Générale</td>
</tr>
</tbody>
</table>

### Investor Distribution
- German: 31%
- French: 24%
- UK: 12%
- Benelux: 12%
- Nordics: 9%
- Asia: 5%
- Others: 4%

### Geographical Distribution
- Germany: 54%
- France: 33%
- UK: 24%
- Benelux: 12%
- Nordics: 10%
- Asia: 9%
- Others: 5%
Stability During the Crisis
Swap Spreads of European Sovereigns vs. German Federal States

Source: iBoxx indices + Commerzbank Research calculation, based on iBoxx data
Part of a well-positioned and strong economy, with a reliable and supportive fiscal and institutional framework

Excellent alternative to Bunds
  - Comparable credit risk
  - Attractive yield pick-up
  - Greater variety of products on offer

Strong credit ratings
  - Fitch: AAA (stable)
  - Moody's: Aa1 (stable)
  - S & P: AA (stable)

The most recent Rating Reports are available at https://www.finanzverwaltung.nrw.de/de/kapitalmarktzugang-des-landes

Sustainability rating (vigeo Eiris and imug)
  - Highest score of all German Länder, #3 of 29 rated entities
  - Score „robust" in 2019

0% risk weighting in most countries

German Federal States issuances qualify as level 1 assets under the EU Commission's Delegate Regulation on the liquidity coverage ratio (LCR)
Axel Bendiek  
Treasurer  
Phone: +49 - (0)211- 4972 - 2315  
E-Mail: axel.bendiek@fm.nrw.de

Dr. Kirsten Häger  
Head of Sustainable Finance  
Phone: +49 - (0)211- 4972 - 2295  
E-Mail: kirsten.haeger@fm.nrw.de

Ursula Kluck  
Senior Funding Manager  
Phone: +49 - (0)211- 4972 - 2800  
E-Mail: ursula.kluck@fm.nrw.de

Johannes Jehmiller  
Senior Funding Manager  
Phone: +49 - (0)211- 4972 - 2800  
E-Mail: johannes.jehmiller@fm.nrw.de

Stefan Wegner  
Senior Funding Manager  
Phone: +49 - (0)211- 4972 - 2800  
E-Mail: stefan.wegner@fm.nrw.de
This document contains neither an offer to sell securities nor an invitation to submit an offer to buy securities. The information contained herein may be completed and supplemented at any time; it does not constitute an investment recommendation nor should it serve as a basis for investment decisions. The State of North Rhine-Westphalia assumes no responsibility or liability for the completeness or correctness of the information contained herein.