



STATE OF BERLIN - INVESTOR PRESENTATION

Inaugural Sustainability Bond (2023)

BERLIN





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Executive Summary

01 State of Berlin - Economy, Budget and Capital Markets

- Core Political, cultural and tourist centre
- GDP (2021): EUR 162.9bn
- Budget surplus in 2022 of EUR 947mn (preliminary)
- Benchmark issuer with an excellent credit rating

02 Sustainability Policy in Berlin

- 2016: Berlin Climate Protection and Energy Transition Act
 - Reduction of CO₂ emissions by 95 percent by 2045
- 2023: Adoption of the 2nd Berlin Energy and Climate Protection Program 2030 for implementation by 2026

03 Sustainability Bond Framework - State of Berlin

- Alignment with market standards (ICMA GBP, SBP, SBG)
- Second Party Opinion provided by ISS ESG
- Publication of allocation and impact reports

04 State of Berlin - Inaugural Sustainability Bond

- Marketing at the end of January and expected issuance in February 2023 (anticipated size EUR 750mn)
- Eligible green assets 2020-2022: EUR 224mn
- Eligible social assets 2022: EUR 620mn
- Expected allocation: approx. 25% (green) & 75% (social)



01

STATE OF BERLIN - ECONOMY, BUDGET AND CAPITAL MARKETS

State of Berlin - Economy

Fact Sheet

Population (2021): 3.67mn

- Increase of 343,000 people since 2011
- Second youngest population of all Federal States

Area: 891 km²

Government: SPD, B'90/Grüne, Die Linke

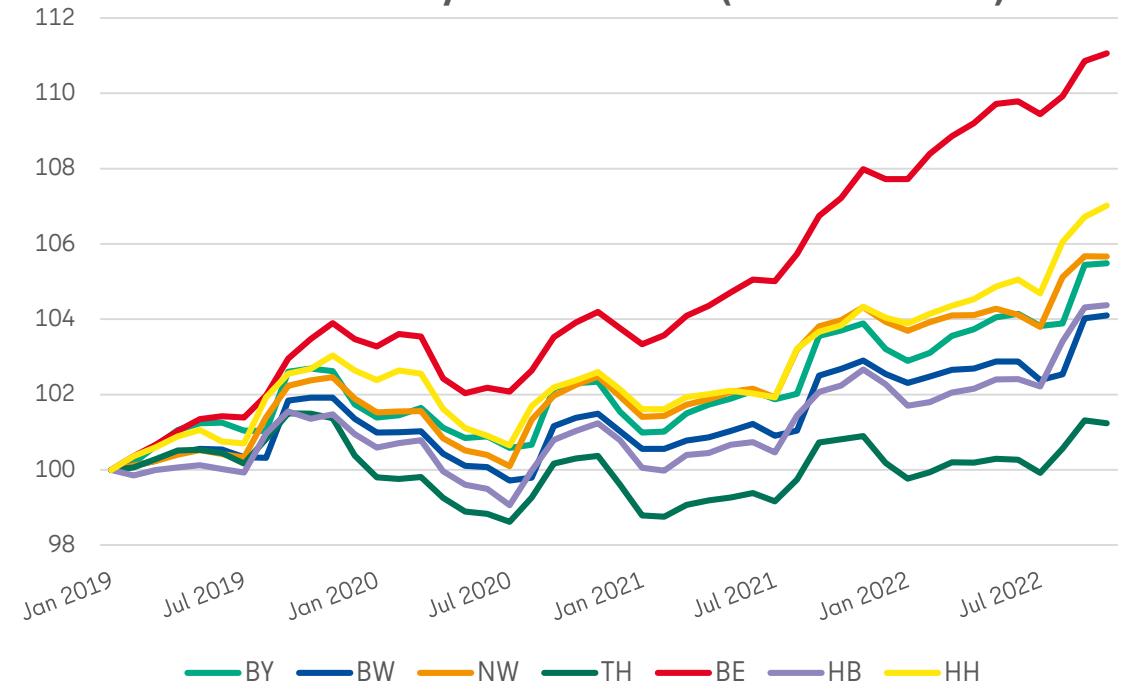
GDP (2021): EUR 162.9bn

- 2021 third strongest GDP growth rate in Germany
- 2021 4.6% share of German GDP

GDP per capita (2021): EUR 44,436

- Higher than the national average since 2019

Growth of the working population which is subject to social security contributions (Federal States)



State of Berlin - Economy

Economic Data

Dynamic location

- Average annual GDP growth of 2.6% from 2016 to 2021 (Germany: 0.9%)

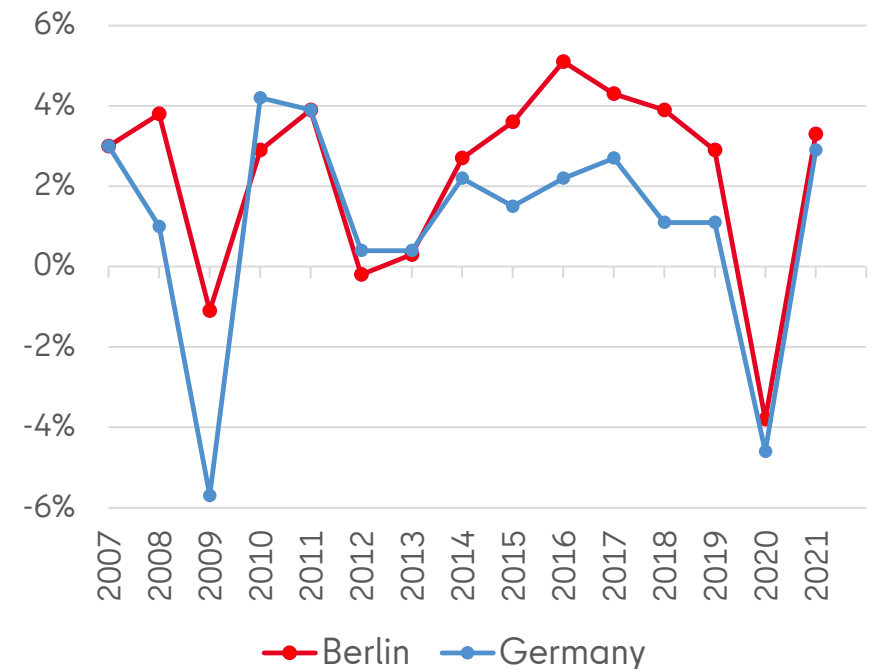
Excellent science and research landscape

- Science location Adlershof: Germany's largest science and technology park with approx. 1,000 companies

Start-ups in Berlin

- Berlin among the TOP 10 global locations for financing in 2021 ([volume 2022: EUR 4.9bn](#))
- Approx. 500 new start-ups founded in 2022

Annual growth rate of GDP



State of Berlin - Budget

Budget Surplus in 2022

Consolidation phase

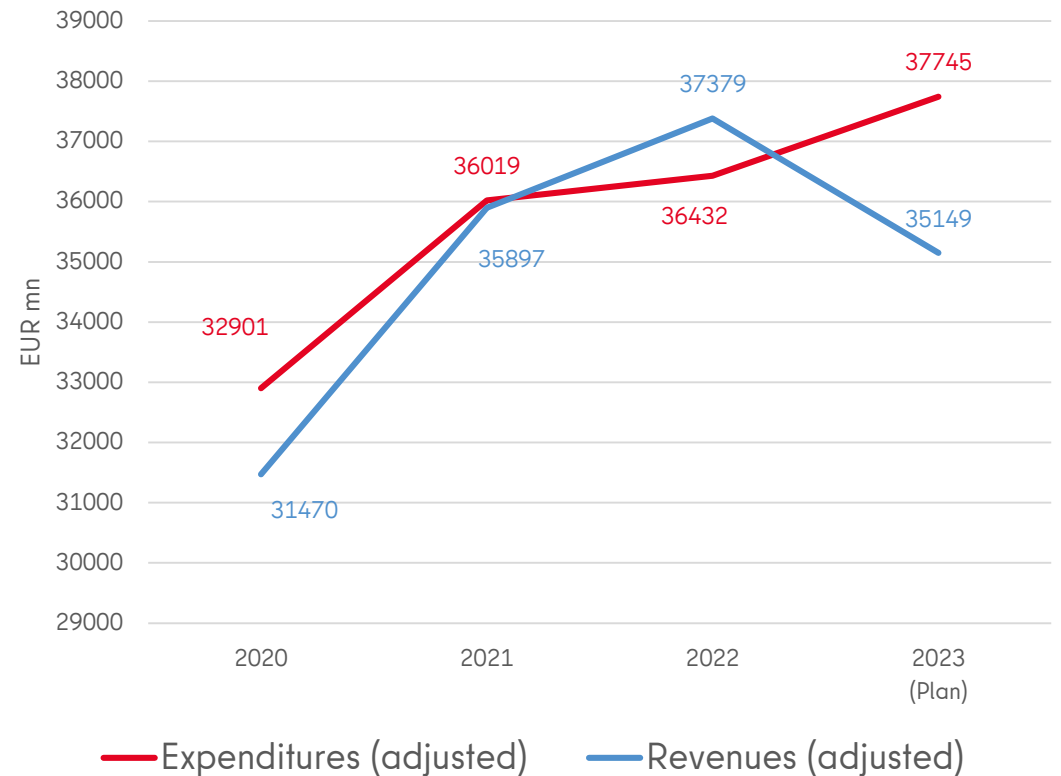
- Total financing surplus from 2012 to 2019: EUR 5,694mn

Stabilization policy

- Deficit totaling EUR 1,553mn during the 2020 and 2021 pandemic years

2022 - Year of many challenges

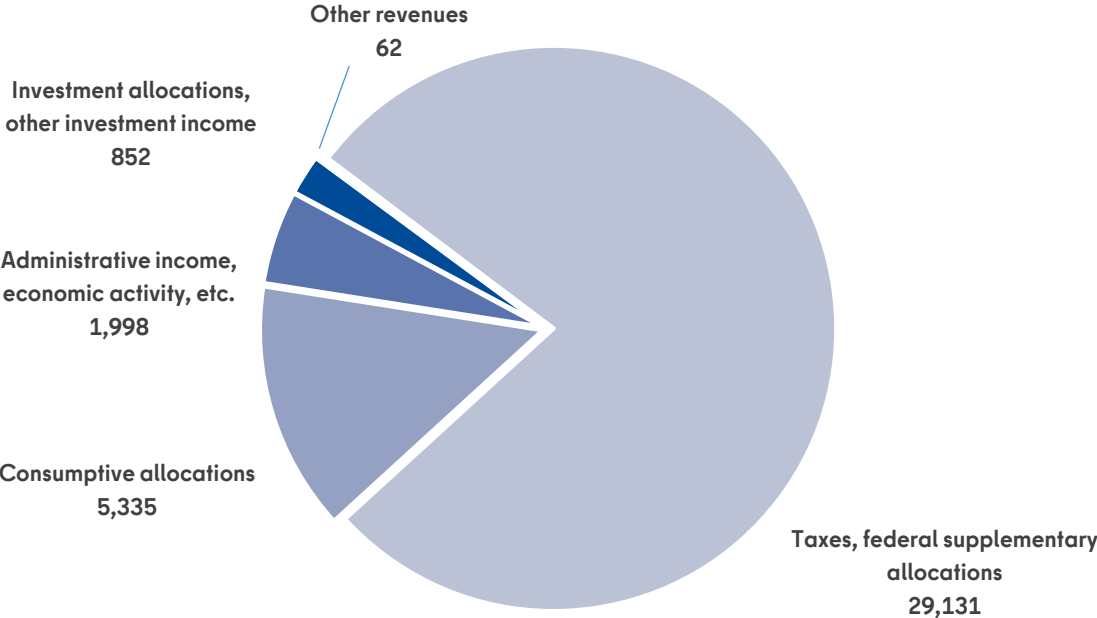
- Renewed financing surplus in 2022 (preliminary): EUR 947mn



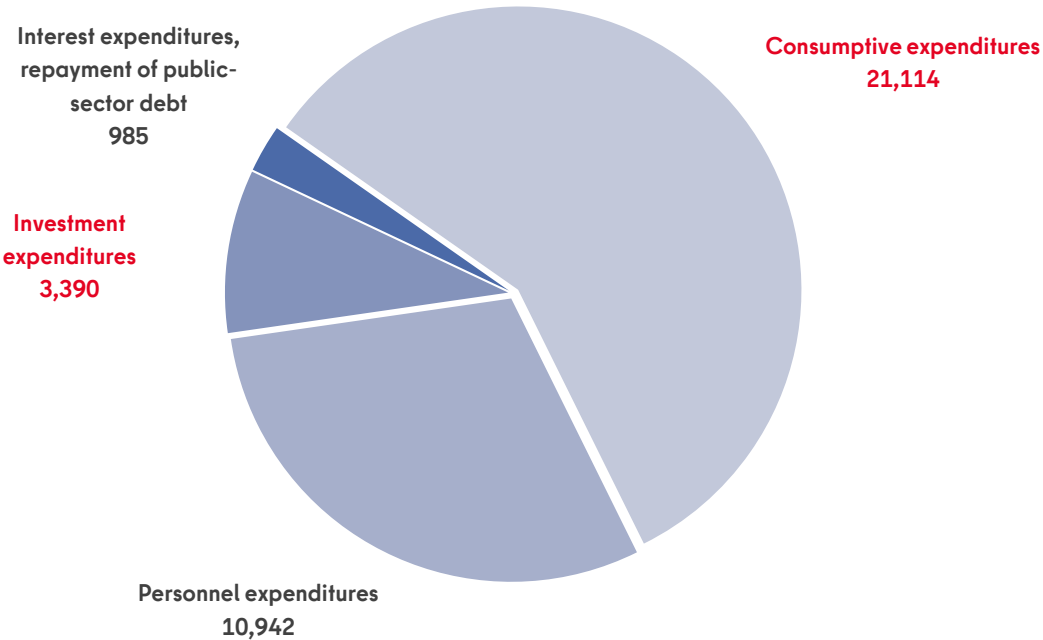
State of Berlin - Budget

Adjusted Revenues and Expenditures 2022 (EUR mn)

Adjusted Revenues: EUR 37,379mn

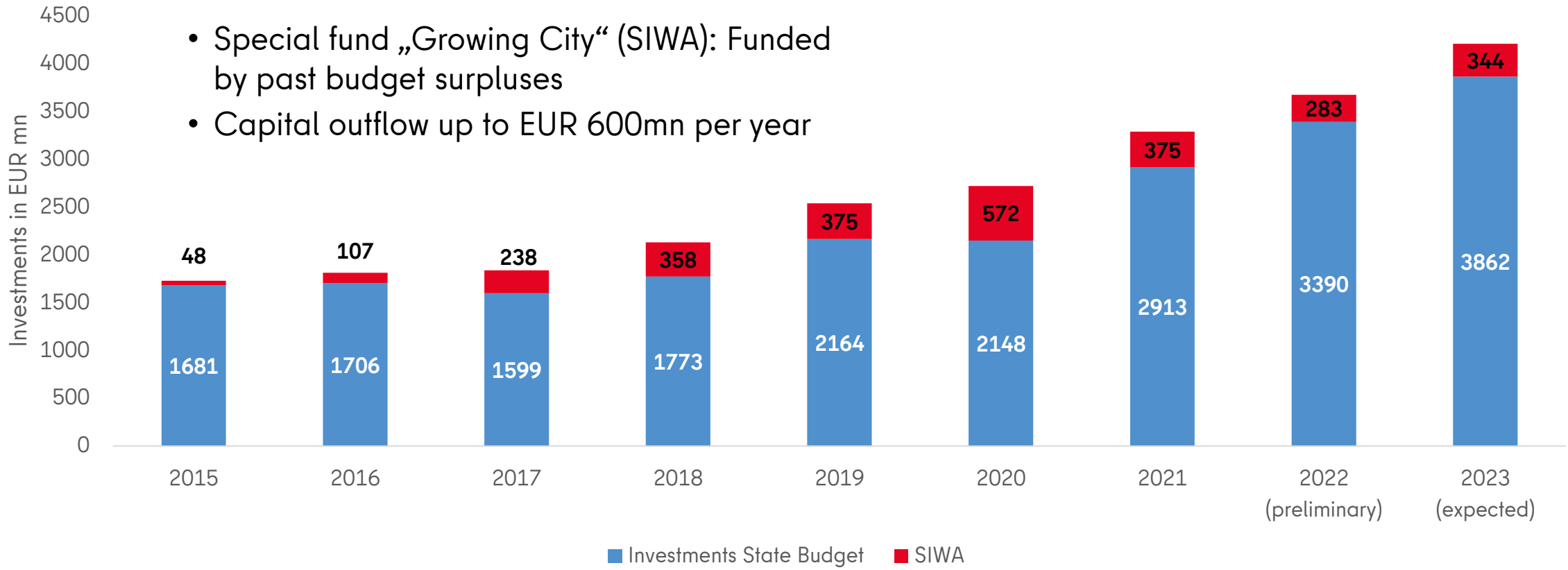


Adjusted Expenditures: EUR 36,432mn



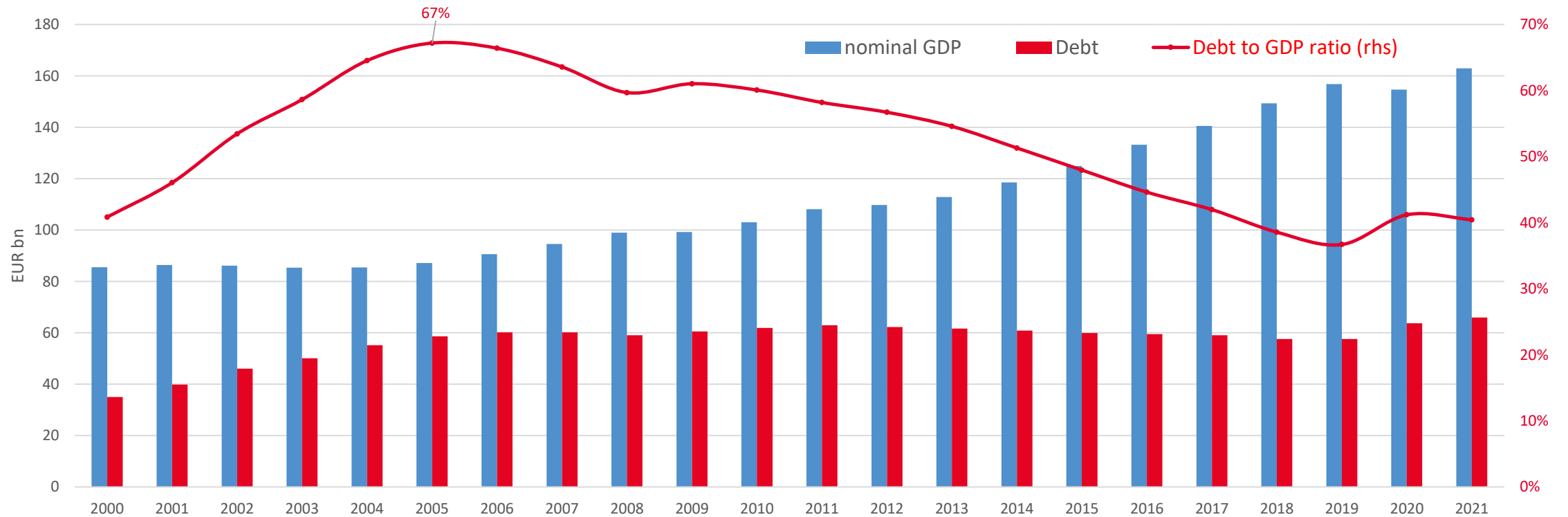
State of Berlin - Budget

Growth in Investment Expenditures



State of Berlin - Budget

GDP-Growth and Debt Development



State of Berlin - Capital Markets

Benchmark Issuer

Annual funding volumes - return to repayment path

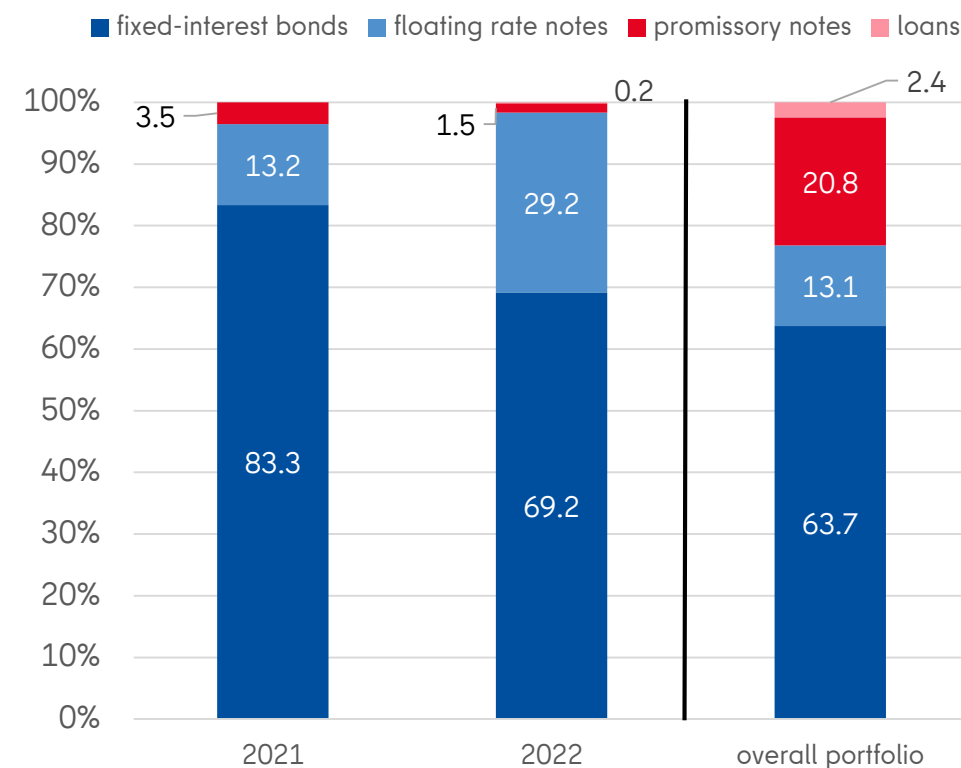
- 2021: EUR 5,700mn
- 2022: EUR 5,390mn
- 2023: EUR 5,490mn forecasted

Excellent credit rating - three issuer ratings with stable outlook

- [AAA from Fitch Ratings](#)
- [Aa1 from Moody's](#)
- [AAA from Scope Ratings](#)

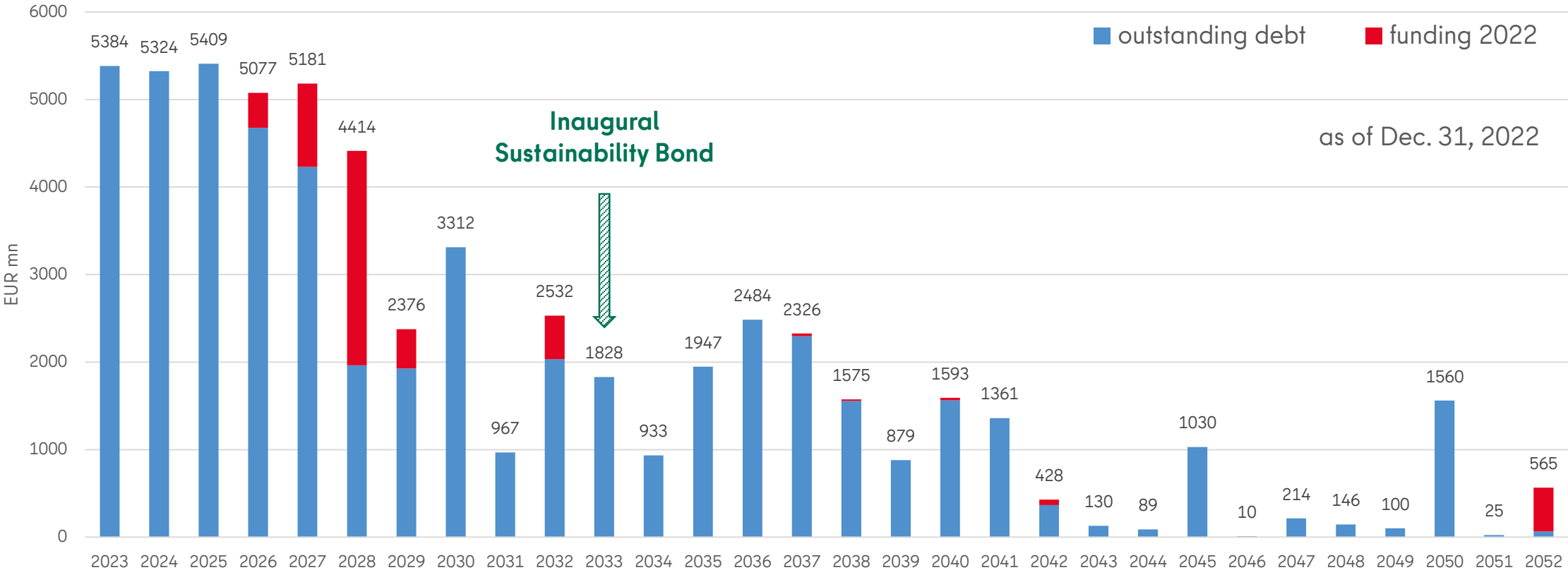
0% risk weighting in most European countries

Bonds qualify as a Level 1 asset for the Liquidity Coverage Ratio (LCR)



State of Berlin - Capital Markets

Maturity Profile



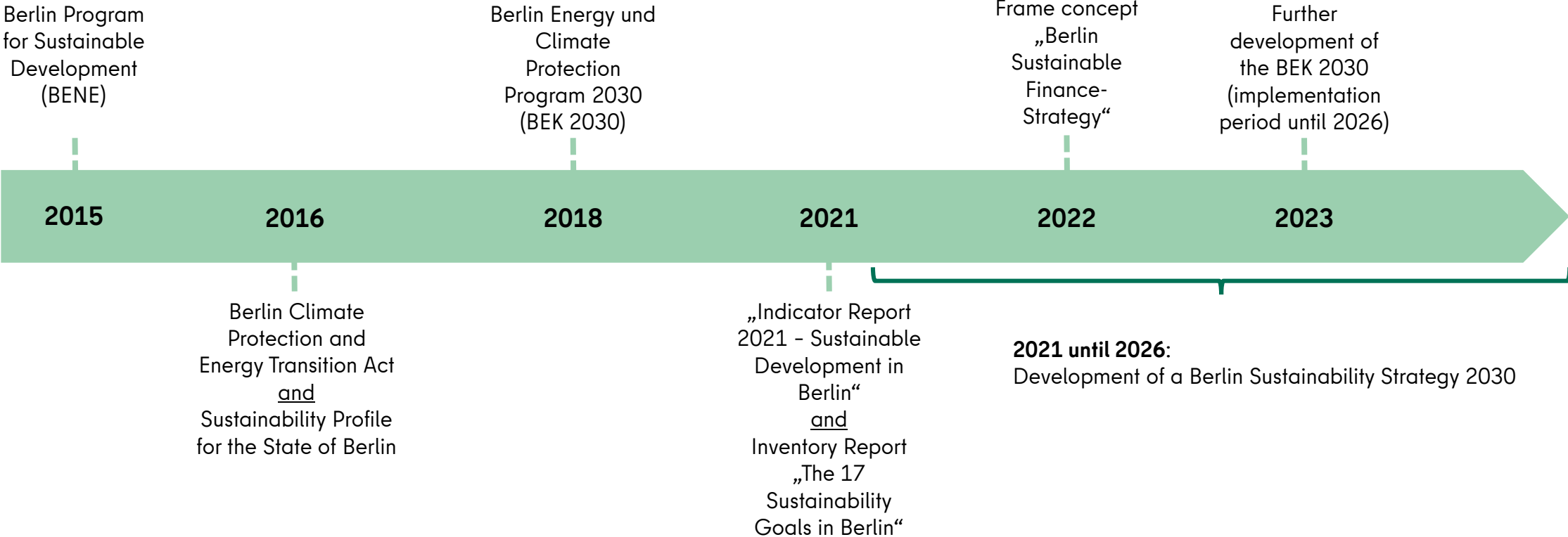


02

SUSTAINABILITY POLICY IN BERLIN

Sustainability Policy in Berlin

Timeline



Sustainability Policy in Berlin

Sustainability Strategy

17 United Nations Sustainable Development Goals (UN SDGs) firmly anchored in Berlin's actions

Overview of the State's initiatives:

- [BerlinStrategy 3.0](#)
- [Berlin Program for Sustainable Development - BENE](#)
- [Indicator Report 2021 - Sustainable Development in Berlin](#)
- [Inventory Report „The 17 Sustainability Goals in Berlin“](#)
- [Framework 2022 for the Berlin Sustainable Finance-Strategy](#)
- [Further Development of the BEK 2030 - Implementation until 2026](#)

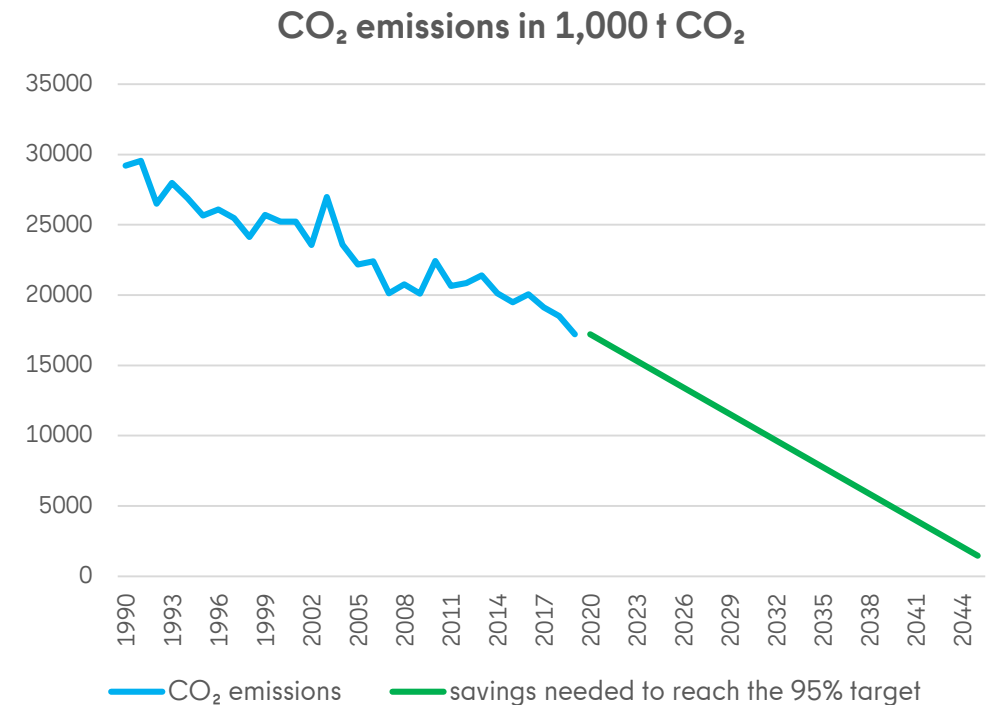
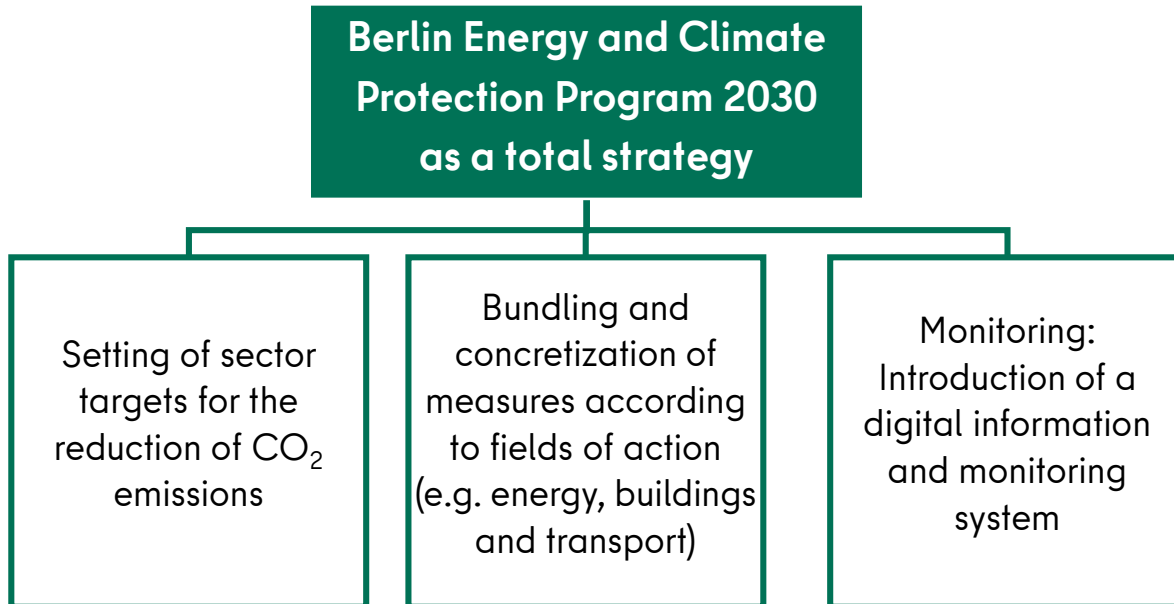


Sustainability Policy in Berlin

Ecological Sustainability

Goal of Berlin's Energy Transition Act: Reduction of CO₂ emissions by 95 percent by 2045

- Continuous further development with the involvement of a scientific expert consortium and the public



Sustainability Policy in Berlin

Social Sustainability

Goal: Acting for the benefit of Berlin's population in order to

- **enable broad social and cultural participation in the growing city and**
- **ensure equal rights for all in terms of social standards, health and work**

Selected Key Areas	Sample Measures
Poverty reduction	Berlin relief package to cushion high energy prices
Healthy diet	Canteen Future Berlin
Health promotion	Sports participation program
Educational support for social participation	Youth Culture Card Berlin
Equal opportunities	Promotion of women in public institutions in accordance with the State Equal Opportunity Act
Fighting unemployment	Integration of long-term unemployed into the labor market through the solidary basic income
Wage setting and compliance with labor laws	EUR 13 Berlin minimum wage and minimum standards of ILO core labor standards for public procurement

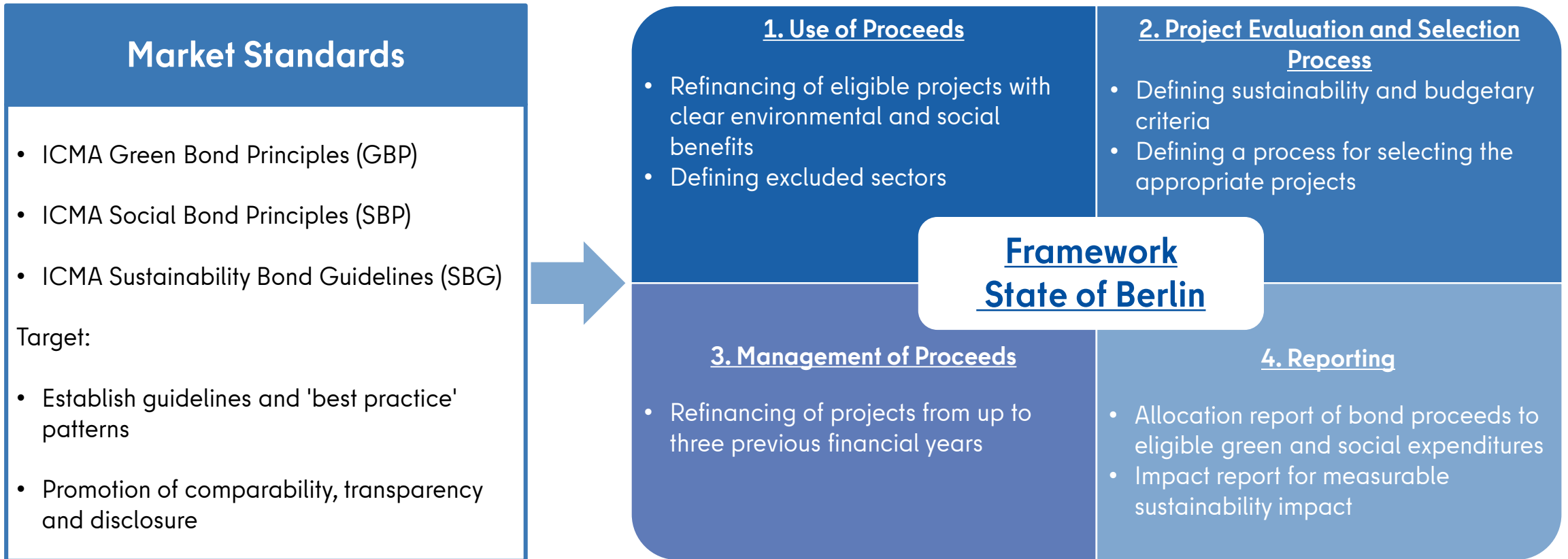


03

SUSTAINABILITY BOND FRAMEWORK - STATE OF BERLIN

Sustainability Bond Framework

Market Standards and Key Components



Sustainability Bond Framework

External Verification by Second Party Opinion Provider

I. Alignment with the ICMA GBP, SBP and SBG

ISS ESG confirms, that the Framework is in line with the ICMA GBP, SBP and SBG

Use of Proceeds



Project Evaluation and Selection Process



Management of Proceeds



Reporting



II. Sustainability Quality of the Eligibility Criteria

ISS ESG confirms positive sustainability contributions and a well managed process to avoid social and environmental risks

Contribution to 12 UN SDGs



III. Green, Social and Sustainability Bonds' Link to issuer's Sustainability Strategy

ISS ESG confirms that project categories are consistent with Berlin's sustainability goals

[Second Party Opinion](#)

Sustainability Bond Framework

Use of Proceeds for Eligible Green Projects

Project Category (ICMA GBP)	Description
Renewable Energy	Promoting the use and generation of renewable energy
Energy Efficiency	Installation of energy efficient technologies
Pollution prevention and control	Reduction of air pollution and greenhouse gas control
Environmentally sustainable management of living natural resources and land use	Sustainable redesign of public sealed open spaces and parks, stormwater management in public places, and forest conversion to increase resilience to climate change
Clean Transportation (technical screening criteria of the EU taxonomy for 6.3, 6.13, 6.14 and 6.15 fulfilled)	Improvement of the bicycle infrastructure, Conversion of the bus fleet to e-mobility, New construction, expansion, repair and maintenance of public transport, Establishment and operation of publicly accessible charging infrastructure for electric vehicles
Climate change adaptation	Measures to promote green roofs and facades
Green buildings	New construction and renovation of public buildings according to efficiency standards

➔ **7 out of 10 ICMA GBP Project Categories in the Framework**

Sustainability Bond Framework

Use of Proceeds for Eligible Social Projects

Projektkategorie (ICMA SBP)	Description
Affordable basic infrastructure	Ensuring social participation, e.g. access to public transport for citizens at risk of poverty
Access to essential services	Measures to prevent health problems and to create equal education and opportunities for children and adolescents
Employment generation, and programs designed to prevent and/or alleviate unemployment stemming from socioeconomic crises	Combating (long-term) unemployment and underemployment, as well as economic development, taking into account economic, social and environmental sustainability
Food security and sustainable food systems	Enabling access to healthy, regional and sustainable food (e.g. free school lunches for all pupils in grades 1-6) and avoiding food waste
Socioeconomic advancement and empowerment	Promotion of neighborhood cohesion, family assistance and reduction of discrimination

➔ 5 out of 6 ICMA SBP Project Categories in the Framework

Sustainability Bond Framework

SPO: Contribution to 12 UN SDGs

Significant Contribution



Example project
Free school lunch
(grade 1-6)



Example project
Rapid covid tests
for Berlin schools
and daycare
centers



Example project
Conversion of
Gas-powered
Street Lighting



Example project
Special Olympics
World Games
Berlin 2023



Example project
VBB Bus & Rail
accompanying
service



Example project
Battery Storage
for Renewable
Energies



Example project
Forest Conversion
to Increase
Resilience

Limited Contribution



Example project
Construction,
operation and
maintenance of
refugee shelters



Example project
Nursery and
playground
renovation
program



Example project
Promotion of
women in
research and
teaching



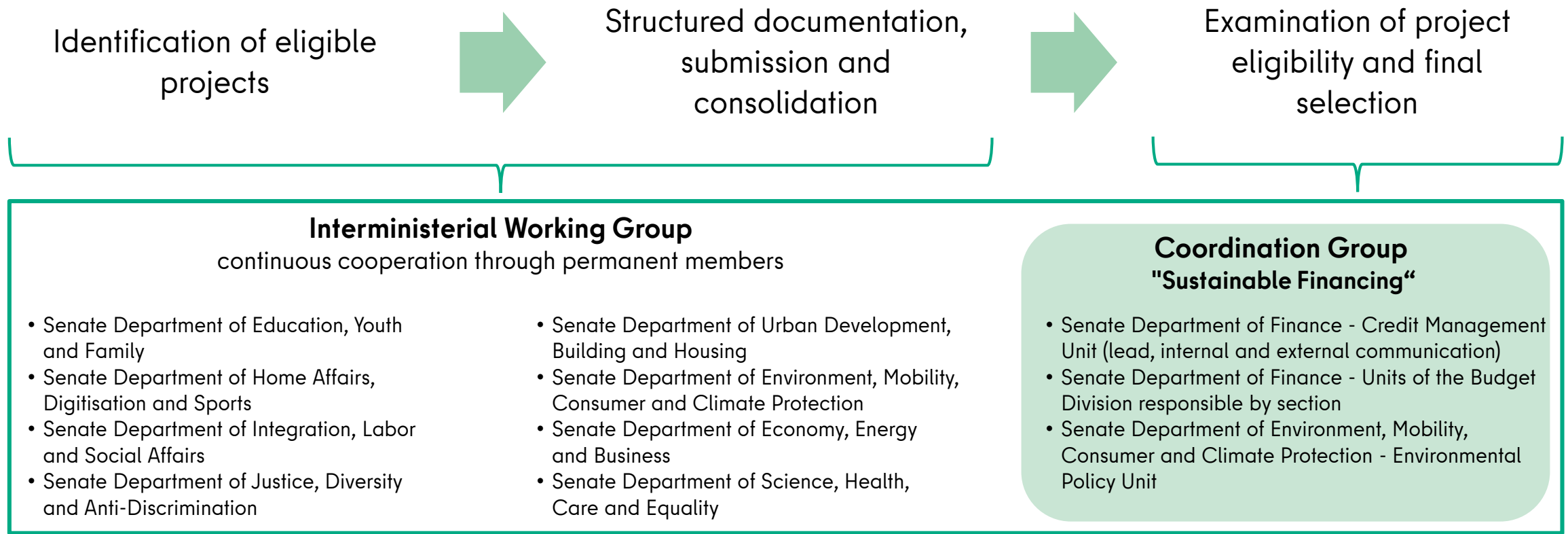
Example project
Solidary basic
income program



Example project
Berlin Food
Strategy

Sustainability Bond Framework

Project Evaluation and Selection Process



Sustainability Bond Framework

Project Evaluation and Selection Process

Sustainability Criteria

- Sustainable expenditures must be attributable to one of the ICMA project categories
- Projects contribute to at least one of the UN SDGs
- Sustainability impact of the projects can be described qualitatively and quantitatively

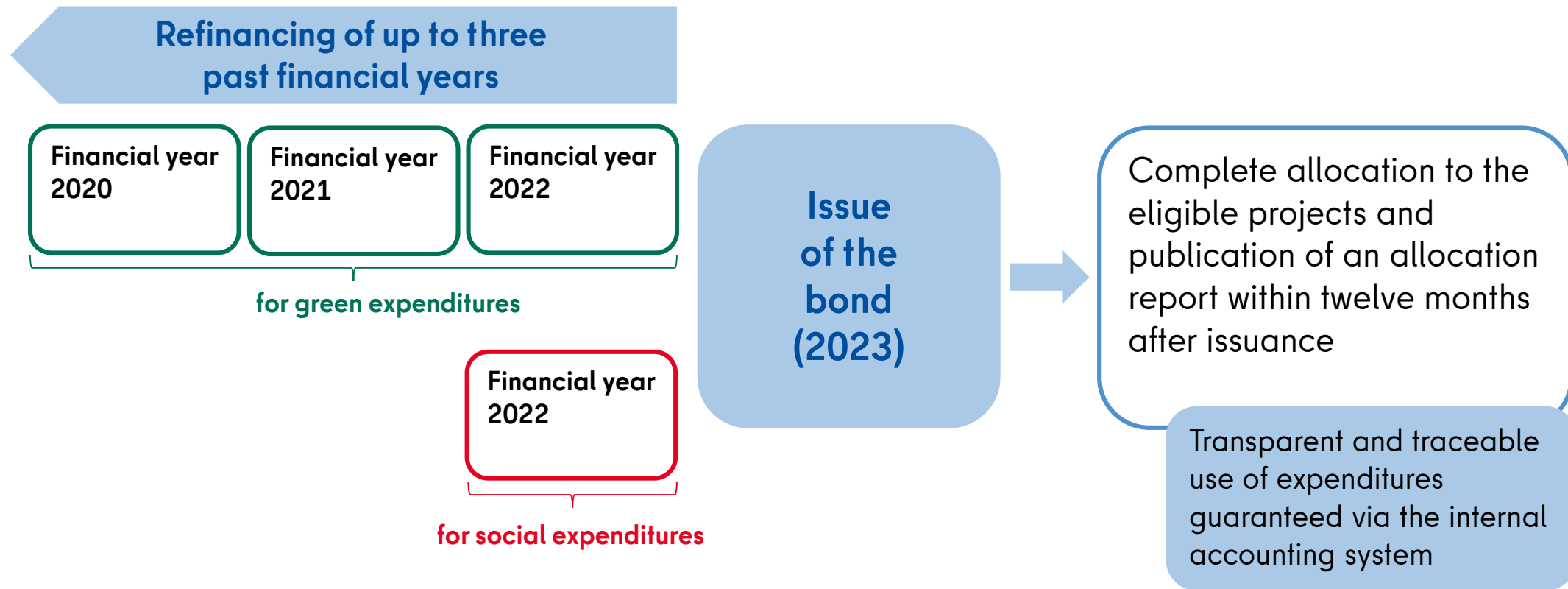
- Submission of a total of **51 projects** by the interministerial working group
- Selection of **36 eligible projects** for the inaugural sustainability bond by the coordination group

Budget Criteria

- Cash outflow can be quantified and clearly allocated to projects within the final budgetary statement
- Personnel expenses are excluded (main group 4)
- Only net expenditures of the State of Berlin (i.e., no consideration of third-party funds, e.g., allocations from the federal government, EU funding or complementary funding by promotional banks)
- Exclusion of expenditures made on the basis of federal laws or EU regulations

Sustainability Bond Framework

Management of Proceeds and Allocation Report



Sustainability Bond Framework

Impact Reporting

**Reporting on measurable sustainability impacts of eligible projects using indicators, if available:
Published no later than one year after issuance of the Sustainability Bond**

→ Examples of potential impact indicators in the Sustainability Bond Framework

Project categorie	Impact indicator (example)
Renewable energies	Number and output of subsidised photovoltaic systems
Energy efficiency	Reduction of CO ₂ emissions
Access to essential services	Number of daycare centre and playground renovations
Socioeconomic advancement and empowerment	Number of persons advised within the framework of the Integrated Social Program

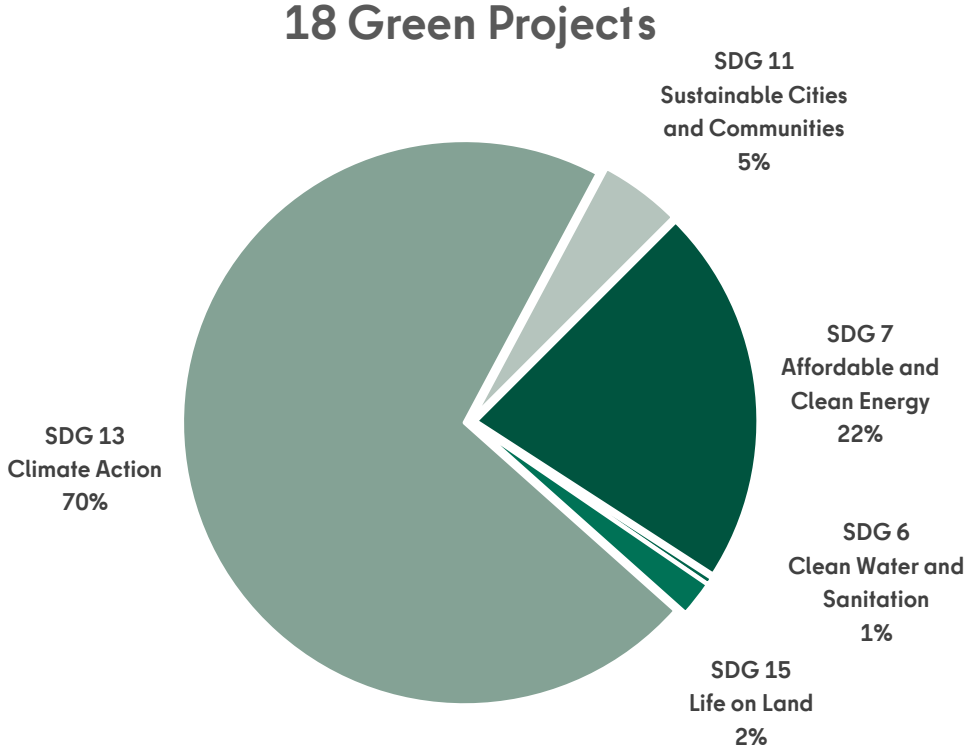
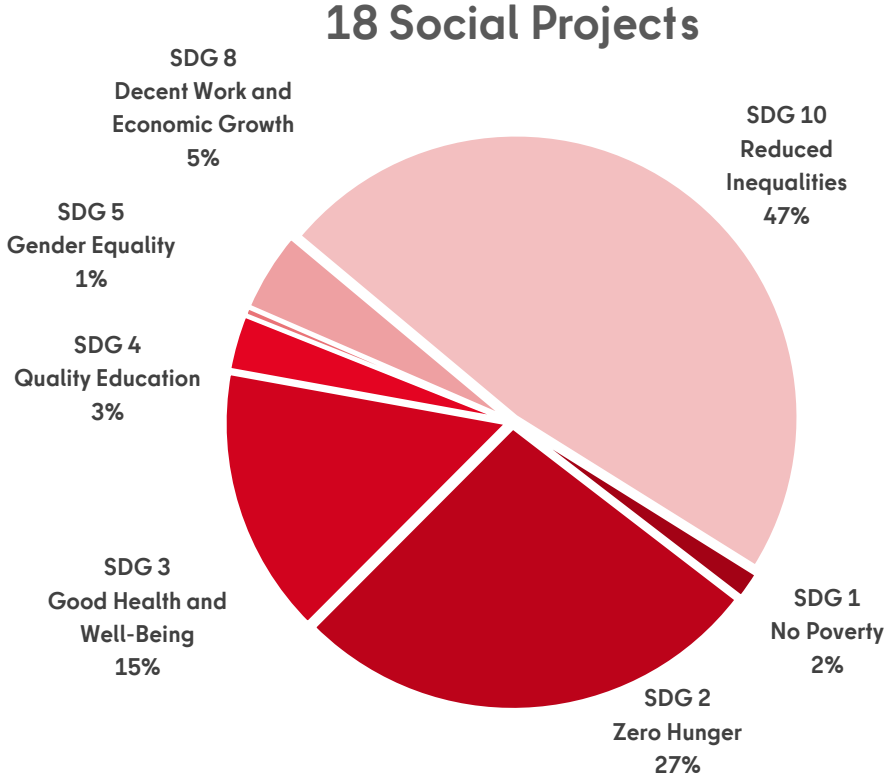


04

**BERLIN'S INAUGURAL
SUSTAINABILITY BOND**

Berlin's Inaugural Sustainability Bond

Distribution of 36 Eligible Projects to Leading SDG



Berlin's Inaugural Sustainability Bond

Volume and Pre-allocation by Project Category

Project Category (ICMA SBP)	Share	Volume 2022 (EUR mn)	Pre-Allocation (EUR mn)	Project Category (ICMA GBP)	Share	Volume 2020-22 (EUR mn)	Pre-Allocation (EUR mn)
Affordable basic infrastructure	6%	52.7	46.8	Renewable Energy	1%	5.6	5.0
Access to essential services	12%	102.7	91.2	Energy Efficiency	5%	43.0	38.1
Employment generation, and programs designed to prevent and/or alleviate unemployment stemming from socioeconomic crises	3%	28.3	25.2	Environmentally sustainable management of living natural resources and land use	2%	15.3	13.6
Food security and sustainable food systems	20%	167.7	148.9	Climate change adaptation	0%	0.7	0.6
Socioeconomic advancement and empowerment	32%	268.6	238.6	Clean Transportation	19%	159.8	142.0
18 Social Projects	73%	620.0	550.7	18 Green Projects	27%	224.4	199.3





Example 1: Ramp-up Phase of E-mobility Bus Fleet

Description:

- Conversion of Germany's largest public bus fleet from diesel to electric engines (already 138 electric buses in operation, 90 more to be delivered shortly)
- Goal: By the end of 2030, all buses will be electrically powered. Additionally, parallel conversion or new construction of the necessary infrastructure.

Impact:

- Around 1 million users every working day in more than 1,500 vehicles
- Reduction of noise pollution
- Reduction of CO₂ and NO_x emissions

UN SDG



ICMA Green Bond Project Category
Clean Transportation

Expenditures 2020-2022(e)
38,517,751 €

Budget chapter / Budget title (2022)
0730 / 54045 und 89113





Example 2: Conversion of Gas-powered Street Lighting

Description:

- Electrification of previously gas-powered street lights
- Energy- and CO₂-saving retrofitting while preserving the historic townscape and the traditional appearance of the street luminaires

UN SDG



ICMA Green Bond Project Category
Energy Efficiency

Impact:

- CO₂ savings of approx. 9,200 tons per year after conversion of all 8,400 gas luminaires (Decrease of approx. 91 percent - without taking into account the use of electricity generated from renewable energy sources)

Expenditures 2020-2022(e)
19.836.464 €

Budget chapter / Budget title (2022)
0740 / 54049 und 72014
0710 / 88304



Example 3: Battery Storage for Renewable Energies

Description:

- Support for the purchase and installation of grid-serving, secondary electricity storage systems, provided that a photovoltaic system is purchased and commissioned at the same time

UN SDG



7
AFFORDABLE AND
CLEAN ENERGY



13
CLIMATE
ACTION

ICMA Green Bond Project Category
Renewable Energy

Impact:

- Incentive to generate climate-friendly electricity and increase the share of renewable energies even in times of low sun and wind
- Electricity storage relieves the electricity grid through higher on-site consumption

Expenditures 2020-2022(e)
4.373.328 €

Budget chapter / Budget title (2022)
0750 / 89336



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Example 4: Construction of a New Tram Line (Adlershof II)

Description:

- Closing a gap in the tram network between Schöneweide and Adlershof
- Improved connection to the rapid transit and regional rail system as well as central access to the Science City Adlershof
- All five new stops are barrier-free

UN SDG



ICMA Green Bond Project Category
Clean Transportation

Impact:

- Fast, direct connections between Johannisthal and Köpenick and the north-south tangent route
- Decrease of individual transport
- Measurement of CO₂ avoidance in t/p.a.

Expenditures 2020-2022(e)
13.551.841 €

Budget chapter / Budget title (2022)
0730 / 89102

Example 5: Forest Conversion to Increase Resilience

Description:

- Conversion of unnatural, unstable pine stands into stable mixed leaf forests on approx. 10,000 ha of Berlin's forests
- Forest conversion through the principle of natural regeneration (Self-seeding of deciduous trees with supportive care)

Impact:

- Adaptation of forests to climate change
- Reduction of forest damage
- Converted forest area in ha

UN SDG



ICMA Green Bond Project Category

Environmentally sustainable management of living natural resources

Expenditures 2020-2022(e)

4.576.825 €

Budget chapter / Budget title (2022)

0751 / 54109



© Robert Kneschke

Example 6: Free School Lunch

Description:

- Free, warm and healthy school lunch for schoolchildren (1st-6th grade), independent of the socio-economic status of the family
- Simultaneous introduction of binding standards with regard to organic quality, seasonality, sustainability as well as ecological and fair trade

Impact:

- Healthy and nutritious diet as an important prerequisite for good school performance and equal opportunities in education
- Take-up rate is 85% to 95% (Ratio of portions distributed to the number of pupils)

UN SDG



ICMA Social Bond Project Category

Food security and sustainable food systems

Expenditures 2022(e)

165.434.067€

Budget chapter / Budget title (2022)

2710 / 67180; 1010 / 67180;
1024 / 51420; 3700-3705 / 51420



© Saras66

Example 7: Integrated Social Program

Description:

- Promotion and further development of social care in Berlin together with the welfare associations
- Visiting and accompanying services, social services for migrants, services for people with disabilities, help for the homeless and offenders, debt counselling

Impact:

- Variety of the individual offers promoted: Impact is measured by means of individual target agreements and performance reviews
- Overarching indicator: Total number of people reached by the offers (2020: 121,912)

UN SDG



ICMA Social Bond Project Category

Socioeconomic advancement and empowerment

Expenditures 2022(e)

27.620.461€

Budget chapter / Budget title (2022)

1150 / 68431



© 4masik

Example 8: Baby Guides

Description:

- Voluntary and free support and counselling for families before and after birth by trained professionals
- Trustworthy and professional contact persons for mothers and fathers through 45 baby guides in all 18 Berlin maternity wards

Impact:

- Systemic advisory and guidance function
- Proportion of so-called “Baby Guides” cases in all 18 Berlin maternity wards at 31% in 2021
- External scientific evaluation and impact analysis in 2023

UN SDG



ICMA Social Bond Project Category

Access to essential services

Expenditures 2022(e)

1.470.576 €

Budget chapter / Budget title (2022)

0920 / 67101



© Elda Carin

Example 9: Free public transport for pupils

Description:

- Free student ticket for all Berlin students at general-education schools and vocational secondary schools with full-time classes
- Free use of all buses, trams, underground and suburban trains and ferries in the Berlin AB fare zone

Impact:

- Before introduction: Use by approx. 17.5% of all pupils due to their entitlement to subsidies from the education and participation package
- After introduction: Use of the school ticket by approx. 97% of eligible pupils

UN SDG



ICMA Social Bond Project Category
Affordable basic infrastructure

Expenditures 2022(e)
51.897.285 €

Budget chapter / Budget title (2022)
0730 / 54045 und 54081



Example 10: Special Olympics World Games Berlin 2023

Description:

- Support for the world's largest inclusive sporting event for around 7,000 athletes with intellectual and multiple disabilities
- Simultaneous establishment of long-term structures in Berlin that enable the participation of people with intellectual disabilities in sport and society

UN SDG



ICMA Social Bond Project Category

Socioeconomic advancement and empowerment

Impact:

- Increasing the level of organisation of people with disabilities in sports clubs
- Evaluation of the event according to the criteria of the urban return on investment, which also takes into account the social impact in addition to key business figures

Expenditures 2022(e)

17.301.339 €

Budget chapter / Budget title (2022)

0510 / 54113 und 68426



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