

### April 28, 2023

### Green Bond Framework for the second Green Bond of the State of Hesse

Our planet is threatened by climate change, the loss of biodiversity and pollution. The preservation of creation and the preservation of our natural livelihoods for us and future generations is and will remain one of the most urgent challenges.

(Page 3 of the coalition agreement between CDU Hesse and BÜNDNIS90/DIE GRÜNEN Hesse for the 20th legislative period)

This framework represents a further development of the framework dated April 28, 2021 and applies exclusively to the second Green Bond of the State of Hesse. The framework dated April 28, 2021 continues to apply to the Green Bond issued in 2021.

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### 1 Climate protection targets of the State of Hesse

The State of Hesse (hereinafter "Hesse") regards climate protection to be an essential part of its policy. The principle of sustainability is anchored in the state's constitution as a central goal for the state's conduct (Staatsziel). With that, Hesse is pursuing its sustainable development with the ultimate goal for its preservation for current and future generations. Climate and environmental protection as well as sustainability are therefore the main criteria for the selection of Hesse's expenditures when it comes to assignment to its sustainable bonds.

In addition to creating an ecologically sustainable and energy-neutral working environment for its employees, Hesse has set itself the goal of making its policies ecologically sustainable for its citizens. By financing corresponding expenditures, Hesse wants to actively contribute to the reduction of greenhouse gases and CO<sub>2</sub> emissions and fulfil its responsibility towards its employees, citizens and society.

Since the issuance of the largest green benchmark bond of a German federal state to date in 2021, Hesse is taking a pioneering role among the German states in issuing Green Bonds. As one of the economically strongest federal states, Hesse is committed to its leadership in Europe, inspired by the EU-Strategy for sustainable growth (European Green Deal<sup>1</sup>) and the Green Twin Bonds issued by the Republic of Germany.

Climate change is one of the biggest challenges of this century. With the international treaty on climate change adopted on December 12, 2015 at the COP21 (21st Conference of the Parties) in Paris<sup>2</sup> and various regional initiatives, a total of 197 countries, led by the United Nations, the European Union and the Federal Republic of Germany, have taken decisive steps to fight climate change.

### 1.1 Hessian economy: Facts and figures

Hesse is one of the 16 German states with 6.3 million inhabitants. The gross domestic product (GDP) of the state amounts to around 302.5 billion euros (2021) and thus exceeds the GDP of Finland. With a GDP of 48,164 euros per inhabitant, Hesse ranks between Finland and the Netherlands in an EU comparison. Hesse receives 17.6 percent of all foreign direct investments (FDI) in Germany. Frankfurt am Main, the largest city in Hesse, is the financial centre of continental Europe with around 248 credit and insurance institutions, including the headquarter of the European Central Bank (ECB), the Single Supervisory Mechanism (SSM), Deutsche Bundesbank, Deutsche Börse, the European Exchange (EUREX) and the Leibnitz Institute for Financial Market Research.

Hesse is also a hub of European information and communication technology with 122,000 employees, 10,000 companies and a turnover of 40 billion euros (focus on corporate software, data centres and data security). The German Commercial Internet Exchange (DE-CIX) is an internet exchange point based in Frankfurt, which is the largest in the world in terms of data throughput. Additionally, the satellite control centre of the European Space Agency (ESA) is located in Darmstadt.

Hesse is also an important location for creative industries such as advertising and marketing, public relations, press and film (20,000 companies with around 117,000 employees and sales of 11.7 billion euros). Frankfurt is outstandingly rich in tradition as a trade fair location in Germany and one of the most important trade fair locations in the world. Messe Frankfurt

https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal\_de

https://unfccc.int/files/essential\_background/convention/application/pdf/english\_paris\_agreement.pdf

(Frankfurt Trade Fair) has one of the largest exhibition grounds in the world and usually hosts over 250 events (trade fairs, congresses / meetings, concerts, sporting events, etc.) every year.

### 1.2 Hesse's sustainability strategy

Hesse has had a sustainability strategy since 2008 and has been continuously developing its goals since then. The sustainability strategy of the state of Hesse is now firmly established under the motto "Hesse sustainable - learning and acting for our future". It organises dialogue-oriented processes with many people from business, science, administration, politics and society and initiates joint activities for a sustainable Hesse. In this context, the principle of sustainability must be taken into account in all decisions and actions of politics and administration in the city and state, thereby securing the future of the state ecologically, economically and socially. This has been stated in Article 26c of the Hessian Constitution since 2018.

In 2015, the Hessian state government committed to achieving climate neutrality as a long-term climate protection goal. As part of Hesse's sustainability strategy, the state government decided to define climate protection and climate change adaptation as a priority topic in 2015. A committee, which includes experts from academia, business, society, municipalities, state government and administration was tasked to establish and to implement the Integrated Climate Protection Plan Hesse 2025 (ICPP 2025)<sup>3</sup>. The members of the committee provided procedural and substantive recommendations.<sup>4</sup> In March 2017, the ICPP 2025 was adopted by the cabinet and includes over 140 measures for climate protection and adaptation to the consequences resulting from climate change.

In 2019, it was decided to reduce Hesse's greenhouse gas emissions by 55 percent by 2030, and by at least 90 percent by 2050, compared to the 1990 baseline level. The Climate Plan Hesse supports the EU and federal government's climate policy with Hesse's legally available resources including various measures aimed at promoting the implementation of federal and EU climate protection requirements in Hesse. In 2021, the greenhouse gas neutrality target was brought forward from 2050 to 2045, being in line with the federal government's target. The Hessian Act on the Promotion of Climate Protection and Adaptation to the Consequences of Climate Change (Hessisches Klimagesetz - HKlimaG) of 2023 provides for Hesse's contribution to limiting the rise in the average global temperature to well below two degrees Celsius, if possible 1.5 degrees Celsius, compared to pre-industrial levels. The law also sets stricter targets for reducing greenhouse gas emissions compared to 1990 levels. By 2030, a 65 percent reduction compared to 1990 levels is envisioned, while a new target is to reduce greenhouse gases by at least 88 percent by 2040 compared to 1990. Net greenhouse gas neutrality is to be achieved by 2045 at the latest and negative greenhouse gas emissions are the target after 2050<sup>5</sup>.

In April 2019, the cabinet decided that the ICPP 2025 should be further developed based on a monitoring report. This was initiated and coordinated by the Hessian Ministry for Environment, Climate Protection, Agriculture and Consumer Protection. The enhancement process extended over two years with the participation of eight departments and started in January 2021 after publication of the monitoring report<sup>6</sup>. The new Climate Plan Hesse was adopted by

<sup>3</sup> https://umwelt.hessen.de/sites/default/files/media/hmuelv/integrierter\_klimaschutzplan\_web\_barrierefrei.pdf

<sup>4</sup> https://www.hessen-nachhaltig.de/klimaschutz-und-klimawandelanpassung.html

https://www.rv.hessenrecht.hessen.de/bshe/document/jlr-KlimaSchGHEpP7

https://www.klimaschutzplan-hessen.de/files/iksp/content/bilder/Monitoring\_Sofortp/Hessen\_MonitoringB\_1407.pdf

the Cabinet in January 2023 and, in accordance with § 4 of the HKlimaG, serves to achieve the climate policy goals in Hesse. The new Climate Plan sharpens climate protection and climate change adaptation measures and sets the necessary path towards greenhouse gas neutrality by 2045. The Climate Plan Hesse contains 57 new measures and addresses all relevant fields of action. These measures complement those already underway and, in some cases, already completed in the ICPP 2025, which is now being superseded. The Climate Plan Hesse will run until 2030. Every five years, a monitoring and projection report will evaluate the implementation success of the Climate Plan Hesse (§ 9 HKlimaG). In case of target deviations according to the HKlimaG, further measures for the necessary path correction will be implemented.

In 2020, the Hessian Alliance for Sustainability adopted a mission statement for the sustainability strategy. The mission statement comprises 22 guiding principles outlining how the global sustainability goals of the United Nations are applied to Hesse and its commitment to the target indicators of the sustainability strategy. Progress reports, which are published regularly, show where the State of Hesse stands on the path to sustainable development and which actions and measures contribute to achieving the goals. The latest progress report was published in December 2022<sup>7</sup>.

In addition to the overarching strategy, an ambitious environmental management system based on the EMAS (Eco Management and Audit Scheme) standard is being applied and continuously developed in four authorities within the Finance Department, including the Ministry of Finance as the first ministry in Hesse. It serves to improve environmental performance in general and thus also pays towards the goal of greenhouse gas neutrality. Through site-specific analysis of environmental data, quantifiable targets can be decided at site level and backed up with measures.

Hessian universities also create scientific, economic, social, and cultural innovations and knowledge that support sustainable social development. By the end of the term of the Hessian University Pact 2021-2025, the universities have set themselves the goal, among others, of achieving a real and sustainable reduction in greenhouse gas and CO<sub>2</sub> emissions (CO<sub>2</sub> equivalents) of at least 2 percent per year or at least 10 percent through operational and organizational measures alone, totalling at least 10,000 tons of CO<sub>2</sub>.

Moreover, the federal state works together with municipalities in form of the alliance "Hessen aktiv: Die Klima-Kommunen" ("Hesse active: The climate municipalities"). Climate protection can only be achieved by taking action on all political levels, especially since municipalities represent the most important partner for the federal state in terms of implementation of local measures. Meanwhile, over 367 municipalities are represented in the alliance<sup>8</sup>.

In fall 2022, the Hessian Energy Act (HEG) was amended and updated with the aim of advancing the energy turnaround and thus further reducing emissions. Accordingly, renewable energies are given special status and, according to Section 1 (5) HEG, are "in the overriding public interest and serve public safety". This facilitates approval and enforceability in court proceedings. Above certain usable areas, photovoltaic systems must be installed on state-owned properties, but also in new parking lots. The Energy Act also requires cities and municipalities with 20,000 or more inhabitants to draw up municipal heating plans. This is

https://statistik.hessen.de/sites/statistik.hessen.de/files/2022-12/Hessen\_nachhaltig\_2022.pdf

<sup>8</sup> https://www.klima-kommunen-hessen.de/startseite.html

intended to secure the energy supply and enable a more efficient and climate-neutral heat supply in the long term.<sup>9</sup>

The Centre for Climate Change and Adaptation of the Hessian State Agency for Nature Conservation, Environment and Geology investigates climate change and its consequences for Hesse in numerous projects and provides suitable information and advisory service on measures for climate change adaptation to different target groups. The State Energy Agency takes over central tasks in the implementation of the energy transition and climate protection on behalf of the Hessian state government. The state's climate support directive<sup>10</sup> supports municipalities in implementing their climate protection and adaptation measures. With the CO2-neutral state administration project, the state government has set itself the goal to become climate-neutral by 2030.<sup>11</sup> This goal is also enshrined in law with the Hessian Climate Act.

In summer 2022, in response to the energy crisis resulting from Russia's war of aggression on Ukraine, violating international law, the state government presented an energy-saving package for the state administration, which aims to save up to 15 percent heating energy and 5 percent electricity from October to April. The comprehensive catalogue of measures to reduce energy consumption in the state administration's properties includes short- and medium-term measures and complements the state's energy-saving programs already underway (with the goal of becoming climate-neutral by 2030).

The Hessian state government is a member of "Under2 Memorandum of Understanding"<sup>12</sup>. The signatories, including regions and municipalities, work together on solutions for climate protection. The Hessian Minister for Environment and Climate Protection Priska Hinz signed the Memorandum of Understanding for Hesse on December 9, 2015 at the Climate Change Conference in Paris.

The coalition agreement between CDU Hesse and BÜNDNIS90/DIE GRÜNEN Hesse for the 20th legislative period says:

"Our planet is threatened by climate change, the loss of biodiversity and pollution. The preservation of creation and the preservation of our natural livelihoods for us and future generations is and will remain one of the most urgent challenges." <sup>13</sup>

### 1.3 Green and Sustainable Finance

Hesse considers green and sustainable finance as a key driver in the transition towards a more sustainable economy. The Hessian state government wants to support that capital flow from the private sector towards climate-friendly and sustainable economic activities. Therefore, Hesse is engaged in the Green and Sustainable Finance Cluster Germany e.V., the central financial market initiative in the field of green and sustainable finance, which Hesse launched in 2017 together with actors from academia and the financial industry and is supported by leading financial market participants.

The Green and Sustainable Finance Cluster Germany is intended to drive the transformation process towards a "green and sustainable economy" by bringing together the various players

<sup>9</sup> https://www.rv.hessenrecht.hessen.de/bshe/document/jlr-EnGHE2012rahmen

<sup>&</sup>lt;sup>10</sup> https://umwelt.hessen.de/sites/default/files/media/hmuelv/klima-richtlinie barrierefrei 0.pdf

<sup>11</sup> https://co2.hessen-nachhaltig.de/

<sup>12</sup> https://www.under2coalition.org/under2-mou

<sup>&</sup>lt;sup>13</sup> Page 3 of the coalition agreement between CDU Hesse and BÜNDNIS90/DIE GRÜNEN Hesse for the 20th legislative period

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in Frankfurt's financial centre and providing targeted support on sustainability and climaterelated issues. This will also further the urgently needed transformation of the real economy.<sup>14</sup>

On a national level, the management of the cluster is an active member of the advisory board of the federal government and advises it on the development and implementation of Germany's Sustainable Finance Strategy. At the European level, the cluster participated through the Technical Expert Group in the drafting of recommendations provided to the EU Commission on the design of the EU taxonomy, an EU-wide classification system to clearly categorise economic activities as environmentally sustainable. At the international level, the cluster is a member of the international network of Financial Centres for Sustainability.

In addition, the cluster does important practice-relevant work to support companies in their transformation. It is worth to highlight the guidance on TCFD<sup>15</sup> provided by the cluster, which supports financial institutions in designing their business models to become more future-oriented and crisis-resilient by taking climate risks and opportunities into account.<sup>16</sup> It also acts as a platform for the implementation of the climate protection commitment<sup>17</sup>, helping players of the German financial sector to align their product and service portfolio with targets on climate change. In addition, the cluster focuses on the development of the infrastructure for sustainable finance data and foster the dialogue with the real economy.

Another success of the state government in building a successful ecosystem for sustainable finance was the recent establishment of the International Sustainability Standards Board (ISSB) in Frankfurt. With the support of the G20 countries, the ISSB has set itself the task of developing uniform, global basic standards for corporate sustainability reporting. In the future, companies will be able to report on the sustainability aspects of their activities on the basis of these standards. The location of the ISSB's key site in Frankfurt will further strengthen the international importance of the financial centre.

In order to meet the increasing pension obligation for its civil servants in the future, Hesse established a special investment fund, the Hesse's civil servants' pension reserve, as early as 1999. Since 2005, in addition to the statutory provision, Hesse has made voluntary provision from the state budget to gradually build up a civil servants' pension partially following the redistributive model. Hesse also follows a sustainable investment approach for the state's civil servants' pension reserve. Since 2012, the composition of the share portfolio has been based on a sustainable equity index. In 2019, the equity index was further tightened resulting in exclusion criteria for the extraction of fossil fuels, among others. In the process, the proportionate CO<sub>2</sub> footprint of the equity investments was reduced by 75 percent compared to 2012. The equity index is currently being revised with the aim of also meeting the strict requirements of a Paris Aligned Benchmark in the future. In 2019, Hesse was the first German state to join the UN Principles for Responsible Investment (UN PRI) with regard to the investments of civil servants' pension reserve. 18 Since then, sustainability criteria have been successively developed for all asset classes (equities, real estate, government and corporate bonds). Investments in government bonds are only done if the issuer has committed to comply with the requirements of the Paris Agreement on climate protection.

<sup>14</sup> See motion of the parliamentary groups CDU and BÜNDNIS 90/DIE GRÜNEN in the Hessian state parliament, printed matter 20/8532 of May 24, 2022.

<sup>&</sup>lt;sup>15</sup> Task Force on Climate-related Financial Disclosures

<sup>16</sup> https://gsfc-germany.com/tcfd/

<sup>&</sup>lt;sup>17</sup> https://www.klima-selbstverpflichtung-finanzsektor.de/

See coalition agreement between CDU Hesse and BÜNDNIS90/DIE GRÜNEN Hesse for the 20th legislative period, page 168

### 1.4 Ecologically sustainable funding of Hesse

In addition, Hesse will continue to contribute to making its refinancing also ecologically sustainable. By issuing the second Green Bond, Hesse wants to meet the growing need of investors to invest financial resources in an ecologically sustainable way again. After all, investors have increasingly recognised risks resulting from environmental pollution and climate change and are increasingly taking this into account when making investment decisions. By issuing Green Bonds, Hesse tries to meet its policy goal of reducing global warming.

The applicable Green Bond Framework forms the basis for issuing the Green Bond in compliance with international climate standards. The updated Green Bond Framework for the second Green Bond intends to provide the desired and necessary transparency for this type of financial product to investors.

Based on this framework, Hesse is about to issue its second Green Bond. The bond proceeds will be allocated to eligible green expenditures, which comply with internationally recognised climate standards and address environmental issues. Details on eligible green expenditures and the Second Party Opinion are available on Hesse's website (https://finanzen.hessen.de).

Hesse has identified seven focus areas and ascribed strategic priorities to each of them (see figure 2 in Appendix 1 for more details):

- Eco-friendly public transport
- Measures concerning forests
- CO<sub>2</sub>-neutral state administration / energy efficiency of public buildings
- Organic farming and nature conservation
- Climate Plan
- Sustainable (waste) water management
- Further climate and environmental protection measures

## 2 Presentation of the refinancing concept

By issuing the second Green Bond Hesse refinances itself retrospectively; the funds raised contribute to the financing of two budget years immediately preceding the respective issuance of (green) state treasury bills (currently expenditures from 2021 to 2022). The proceeds from the issuance of the state treasury bills will be used within the framework of the state's central debt management system, and the proceeds from the issue of the state treasury bills will contribute to the financing of the state budget as a whole. There is only a non-material assignment to eligible green expenditures corresponding to the amount of proceeds. This is in line with recognised market standards. For 2021, no funds for the dissolved special fund "Hessens gute Zukunft sichern" ("Securing Hesse's Good Future") will be included in the Green Bond, but exclusively funds for the general state budget.

All state treasury bills issued as Green Bonds rank pari passu with any other conventional instrument of the respective asset class; These issued liabilities correspond to a sufficient volume of eligible green expenditures. Refinancing through the second Green Bond may only occur to the extent that the state has made eligible green expenditures.

### 3 Hesse's second Green Bond 2023

#### 3.1 Use of Proceeds

#### 3.1.1 Possible uses

Eligible green expenditures are expenditures out of Hesse's state budget which are considered ecologically sustainable ("green") due to their environmental or climate relevance in the seven focus areas (eco-friendly public transport, measures concerning forests, CO<sub>2</sub>-neutral state administration / energy efficiency of public buildings, organic farming and nature conservation, Climate Plan, sustainable (waste) water management, further climate and environmental protection measures). Expenditures for armaments, oil and coal as fossil fuels, shale gas / fracking, nuclear energy (e.g. production, transport, storage and power generation) or tobacco were and are excluded from being eligible.

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### 3.1.2 Implementation of and orientation towards internationally recognised market standards

This Green Bond Framework is aligned with the internationally recognised market standards (Green Bond Principles [ICMA<sup>19</sup> GBP, 2021]<sup>20</sup>) and includes the following four core components:

- (i) Use of Proceeds
- (ii) Process for Project Evaluation and Selection
- (iii) Management of Proceeds
- (iv) Reporting

In addition, the following key recommendations for heightened transparency are considered:

- (i) Green Bond Frameworks
- (ii) External Reviews

Hesse supports the European Union's efforts in strengthening the foundations for sustainable investments. Key points of the EU Green Bond Standard<sup>21</sup> as well as the EU taxonomy for sustainable finance<sup>22</sup> have been considered when formulating this framework in order to also reflect the environmental goals of the EU taxonomy. Hesse will closely monitor further developments of the Green Bond Principles, the EU Green Bond Standard and the EU taxonomy for sustainable finance intensively and will take them into adequate consideration in future developments of the Green Bond Framework.

#### 3.1.3 Mapping of eligible green expenditures

The following list of categories of expenditure is based on Hesse's strategic priorities of the seven focus areas. In addition, the Green Bond Framework takes into account the categories of the ICMA GBP, the United Nations Sustainability Development Goals (UN SDGs) as well as the EU Environmental Objectives:

<sup>&</sup>lt;sup>19</sup> International Capital Market Association

https://www.icmagroup.org/assets/documents/Sustainable-finance/2022-updates/Green-Bond-Principles\_June-2022-280622.pdf (with June 2022 Appendix)

<sup>21</sup> https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/eu-green-bond-standard\_en

<sup>&</sup>lt;sup>22</sup> https://ec.europa.eu/commission/presscorner/detail/de/ip\_19\_6793

Strategic priorities of the focus areas	Description of eligible green expenditures	ICMA GBP Categories	EU Environ- mental
of the locus areas		UN SDGs	Objectives
Eco-friendly public transport	Expenditures to promote and to improve sustainable and environmentally friendly transportation systems  Examples of eligible green expenditures:  - Financing of public transport associations to ensure comprehensive passenger transport in Hesse	Clean transportation	Climate
	<ul> <li>Financing of specific public transport projects (e.g., station modernization, rail network expansion)</li> <li>Expenditures to promote more climate-friendly means of transport and its usage (e.g., job tickets, student tickets)</li> <li>Funding and promotion of municipal measures to improve infrastructure for pedestrian and bicycle traffic</li> </ul>	11 accessored 13 and 2 a	change mitigation
Measures concerning forests	Expenditures promoting reforestation and restoration of forest damage in order to strengthen the climate resilience of Hessian forests  Examples of eligible green expenditures:  Expenditures to finance the 12-point plan for the reforestation of Hessian forests and	Environmentally sustainable management of living natural resources and land use	Protection and restoration of
	to restore forest damage  - Expenditures for environmental protection in the state forest (e.g., for the preservation of species and development of biotopes)  - Expenditures for nature conservation and landscape management in the national park	15 in the second	biodiversity and ecosystems
CO <sub>2</sub> -neutral state administration / energy efficiency of public buildings	Expenditures to reduce energy consumption and emissions from public buildings  Examples of eligible green expenditures:  - Expenditures to increase energy efficiency and to promote the use of renewable energy, as well as to promote energetic renovation of public buildings  - Investment program to implement the goals of the Hessian Energy Act	Clean transportation Energy efficiency Green buildings	
	Energy-efficient refurbishments of university buildings should at least comply with the statutory standards for new buildings in accordance with the building energy act (GEG 2020). Funding is also provided for the energetic modernization of municipal nonresidential buildings that are in an energetically unsatisfactory condition, as well as for replacement new buildings and new buildings as model projects with particularly high energy standards (e.g., for existing buildings complying to the KfW Efficiency Building 100 standard or new building standard according to the GEG, or for new buildings, e.g., complying to the passive house standard). In addition, investment measures to increase energy efficiency and innovative pilot and demonstration projects with particularly high energy standards are funded.	7 SHOWNER OF CHARACTER MONITOR CHARACTER MONITOR OF	Climate change mitigation

#### **Organic farming** and nature conservation



Expenditures to promote organic farming land

Examples of eligible green expenditures:

- Expenditures to promote low-carbon farming and climate-friendly and organic practices
- Expenditures to finance advisory and information events for low-emission farming and horticultural businesses

Environmentally sustainable management of living natural resources and land use



Protection and restoration of biodiversity and ecosystems

#### **Climate Plan**



Expenditures to finance the Integrated Climate Protection Plan Hesse (ICPP 2025) and Climate Plan Hesse (2030) to achieve the climate targets and adapt to the consequences of climate change

Examples of eligible green expenditures:

- Projects for the development and ramp-up of electric drives in public transport
- Expenditures for the creation of concepts and strategies in the field of sustainability and biodiversity
- Projects to implement the local mobility strategy to strengthen pedestrian and bicycle traffic
- Expenditures for ecological flood protection and floodplain restoration
- Measures to preserve and further develop biotope network systems

Clean transportation

Energy efficiency

Environmentally sustainable management of living natural resources and land use

Climate change mitigation

Protection and restoration of biodiversity and ecosystems







#### Sustainable (waste) water management



Expenditures for the preservation and restoration of natural waters, improvement of the water quality and the development of flood protection

Examples of eligible green expenditures:

- Measures to preserve and restore natural waters
- Expenditures for the development of flood risk management plans and the construction of appropriate protection systems

Climate change adaptation

Sustainable water and wastewater management

Climate change adaptation

Sustainable use and protection of water and marine resources

### Further climate and environmental protection



measures

Other expenditures related to environmental and climate protection in Hesse

Examples of eligible green expenditures:

- Establishment of the State Energy Agency with the tasks of consulting, education and public relations on the topics of energy efficiency, renewable energies and climate protection
- Expenditures related to climate protection (e.g. implementation of climate protection projects, promotion of climate analyses and studies)
- Acquisition of electric vehicles at the Hessian police departments

Clean transportation

Climate change adaptation

Energy efficiency

Climate change mitigation

Climate change adaptation





Figure 1: Strategic priorities of the focus areas

### 3.2 Process for project evaluation and selection

In connection with the Hessian Green Bond, a so-called Interministerial Working Group (IMWG) has been established.

The IMWG combines expertise of multiple ministries and, chaired by the Hessian Ministry of Finance, consists of representatives from the debt management office as well as appointed ministerial representatives from the departments responsible for the respective relevant budget titles:

- economics / energy / transport / housing
- environment / climate protection / agriculture / consumer protection
- interior / sports
- science / art
- construction and finance

The IMWG makes relevant decisions including, among others, the validation of the Green Bond Framework for the second Green Bond of the State of Hesse, the assessment of the eligibility criteria as well as the selection of eligible green expenditures and the validation of the corresponding allocation and impact reports. The IMWG reviews eligible green expenditures in principle on an annual basis.

Employees of the debt management office record all necessary input on projects that were subject of the first Green Bond as well as on new projects with a particular scale of environmental expenditures received from the respective ministries and pre-screen past expenditures to determine their eligibility for the portfolio of eligible green expenditures in coordination with the IMWG. On that basis, the employees of the debt management office establish an initial list of potential eligible green expenditures. This list of green expenditures is reviewed by the IMWG and eligible green expenditures are selected based on the eligibility criteria defined for the use of proceeds in section 3.1 of this framework. In addition, the eligible green expenditures should be assignable to one of the ICMA GBP categories and the funded projects should contribute to at least one of the UN SDGs. The qualification of the use of proceeds as eligible green expenditures as well as the allocation to the respective sustainability field are recorded and managed by the State in an internal tabular overview. Apart from this, reference is made to the state budget.

It should be emphasised that Hesse is bound by the legal obligation of the administration (Art. 20 Basic Law for the Federal Republic of Germany) to comply with national legislation as well as international standards and conventions, which require a minimum standard of environmental protection and social norms. These principles are taken into account when making budget expenditures. By doing so, the State of Hesse considers and manages potential environmental risks associated with the eligible green expenditures. The IMWG will also consider - if necessary - ESG controversies that could call into question the quality of the corresponding past-related Green Bond expenditures. In addition, the international labour standards of the International Labour Organization (ILO) are an integral part of the EU legal system. Therefore, by complying with this EU legislative requirement, the eligible green expenditures of the State of Hesse also meet requirements for minimum social standards. The State of Hesse monitors the state's expenditures to ensure that they comply with existing laws and regulations and that they can achieve the intended environmental impacts.

### 3.3 Management of proceeds

The Hessian Ministry of Finance is responsible for the issuance of the Green Bond. The allocation and monitoring of the proceeds is based on the state budget planning adhering to the principle of non-committed total coverage. This means that by virtue of the statutory principles all state income is used to cover all state expenditures and that all cash inflow is used to cover all cash outflow. The virtual allocation of the proceeds from the green state treasury bills to the eligible green expenditure is carried out by IMWG and recorded in an internal tabular overview. All net proceeds raised through the second Green Bond of the State of Hesse will be allocated towards eligible green expenditures made in 2021 and 2022, as shown in the appendix of the framework. The total amount of eligible green expenditures will exceed the total amount of net proceeds raised from the green issuance. A bond-by-bond approach is followed in managing the proceeds. Hesse intends to fully allocate the proceeds within one year after the issuance of the respective Green Bond. Unallocated proceeds will be managed according to the general liquidity guideline until full allocation. Eligible green expenditures can be added, revised, or replaced to the extent necessary as part of the allocation process.

Financing or funds from the EU and federal government are excluded from this framework and there is no double counting of Hesse's green expenditures.

### 3.4 Reporting

Hesse will provide a Green Bond Report on its website (https://finanzen.hessen.de), which will be published annually no later than during the year following the issue until the bond proceeds have been fully allocated. The Hessian Ministry of Finance is responsible for the reporting provided to investors.

Hesse is committed to provide a transparent reporting on the allocation regarding eligible green expenditures (allocation report). The allocation report will include details regarding the allocation of the Green Bond proceeds to the eligible green expenditures at project category level. The following information will be provided within the reporting: Allocated proceeds, unallocated proceeds, outstanding amount of green bond, and the contribution to the EU Environmental Objectives and UN SDGs.

The reporting will also contain a separate impact report, which will provide quantified assessed and published environmental impact metrics. The impact report may be valid for several years and may be updated if appropriate. It contains the allocation of the expenditures and impact metrics (CO<sub>2</sub> savings or other climate-relevant impact figures) on an aggregated basis for each expenditure category. The impact report may include the following information: quantitative information on environmental impacts or relevant performance indicators (as exemplified in the following table), analytical reports on the environmental performance of the selected expenditure and the presentation of expenditures.

Strategic priorities of the focus areas	Impact and performance indicator (examples)	
Eco-friendly public transport	<ul> <li>Train-km performance in local rail passenger transport</li> <li>Number of measures funded per year</li> <li>Number of issued state tickets per year</li> <li>Number of tickets sold per year</li> </ul>	
Measures concerning forests	<ul> <li>Number of disbursed applications forest owners and timber marketing organizations (HVO) per year</li> <li>Amount allocated in EUR per ha operational area state forest</li> <li>Amount allocated in EUR per ha national park area</li> </ul>	
CO <sub>2</sub> -neutral state administration / energy efficiency of public buildings	<ul> <li>CO₂ savings in tons per year</li> <li>Number of measures funded per year</li> <li>Capacity in planning in kWp</li> </ul>	
Organic farming and nature conservation	<ul> <li>Number of customer contacts per year</li> <li>Hectares of diverse arable crops (approved area)</li> <li>Hectares of extensive grassland management per year (commitment area)</li> </ul>	
Climate Plan	<ul> <li>Number of measures funded per year</li> </ul>	
Sustainable (waste) water management	<ul><li>Number of measures funded per year</li><li>Length of developed waters in km</li></ul>	
Further climate and environmental protection measures	<ul> <li>Number of consultations per year</li> <li>Number of measures funded per year</li> <li>Number of electric vehicles procured per year (CO<sub>2</sub> emission limit &lt; 50 g CO<sub>2</sub>/km according to the EU-wide WLTP measurement procedure)</li> </ul>	

#### 3.5 External review

For the second Green Bond issuance, Hesse has again engaged an independent provider to prepare an external review on its Green Bond Framework prior to the issuance. This Second Party Opinion (SPO) is published on the website of the State of Hesse (https://finanzen.hessen.de).

### 4 Conclusion

Hesse is aware of the influence of its actions on the environment and climate protection as well as its responsibility for society and its future. The issuance of the Green Bond is a manifestation of this responsibility. By financing eligible green expenditures in the focus areas of eco-friendly public transport, measures concerning forests, CO<sub>2</sub>-neutral state administration/ energy efficiency of public buildings, organic farming and nature conservation, Climate Plan, sustainable (waste) water management, further climate and environmental protection measures through the issuance of Green Bonds, Hesse acts as multiplier and provides support at all levels of governmental and societal dimensions. Hesse measurably promotes the reduction of CO<sub>2</sub> emissions and promotes public awareness for environmentally supportive behaviour in society. The Green Bond Framework provides the required level of transparency required by investors.

# Appendix 1: Breakdown

The following breakdown of eligible green expenditure is based on the strategic priorities of the focus areas:

in €m	2021	2022
Description	Expenditures	Expenditures
Eco-friendly public transport	352.80	483.46
Measures concerning forests	60.28	55.22
CO <sub>2</sub> -neutral state administration / energy efficiency of public buildings	17.54	30.62
Organic farming and nature conservation	17.35	8.66
Climate Plan	8.64	13.66
Sustainable (waste) water management	8.91	9.60
Further climate and environmental protection measures	17.43	23.52
Eligible green expenditures made	482.95	624.74
Total		1,107.69

Figure 2: Breakdown by strategic priorities of the focus areas

### Appendix 2: Disclaimer

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### **Publisher**

Hessian Ministry of Finance Friedrich-Ebert-Allee 8 65185 Wiesbaden Phone: 0611/32 13-0

Website: finanzen.hessen.de

Responsible according to the German press law

Press officer Ralph-Nicolas Pietzonka

### **Editor**

Dr. Alexander Labermeier, Bettina Menk, Anna Beil

As of April 28, 2023

The State of Hesse publishes this document as part of its public relations effort.