



# **Opportunities for jump-starting the green bond market in Hungary**

**Budapest, 5 August 2020**





## EXECUTIVE SUMMARY

*Under the Green Programme the MNB is constantly searching for development possibilities to support the money and the capital markets in managing environmental risks and to improve the financing conditions of green investments. In order to achieve this goal, in addition to the measures already taken and in progress in the banking sector, the MNB will also start introducing green finance in capital markets in co-operation with the relevant authorities and market players.*

*In this attempt, green bonds could be flagship instruments, as their segment has shown impressive growth over the past few years in foreign advanced markets, but, with some exceptions, it is still at an early stage in Hungary – and in Eastern Europe in general. The promotion of green bond issuances in Hungary could contribute to the financing of the country's climate, sustainability, and energy strategy objectives, and could support the general competitiveness turn advocated by the MNB.*

*In our view, however, the issuance of green bonds by companies, banks and municipalities will not proceed to the desired extent at the beginning without incentives and supporting actions by the MNB and other regulators. Similarly to other countries, Hungary may also need to introduce developing and facilitating measures, and the related preliminary concepts are also discussed below.*





## 1. INTRODUCTION

Under the Green Programme, the MNB attempts to mitigate risks stemming from climate change and other environmental anomalies, and in this context encourages banks and other financial institutions to enforce sustainability considerations in their strategies and business policies as much as possible.

So far, the MNB's green financial measures have primarily focused on the banking sector, but the central bank also wishes to place more emphasis on the capital markets in the coming period. A number of "green" EU regulations related to capital markets are expected to come into force in the near future, and they will primarily affect investment service providers, insurance companies and funds. Another important capital market segment is represented by issuers, among which green bonds mean the most important breakout point and development possibility for the MNB and the whole country, in close connection with climate protection efforts.

The climate protection act passed recently by the Parliament<sup>1</sup> confirms some of the already identified objectives, and sets new objectives, too, for Hungary:

- reduce greenhouse gas emissions by at least 40% until 2030 compared to 1990;
- in case final energy demand exceeds the level of 2005 after 2030, agree to use only carbon-neutral energy sources to satisfy extra demand;
- increase the share of renewable energy sources to at least 21% in the gross final energy consumption by 2030;
- achieve complete climate neutrality by 2050, i.e. make sure that the remaining domestic greenhouse gas emission and its absorption will be in balance by 2050.

Some of these objectives also generate significant demand for investments; therefore it is necessary to create the best possible financing background. In addition to credit based financing by banks, it is worth examining the potentials of green bonds as well.

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<sup>1</sup> Act XLIV of 2020 on climate protection

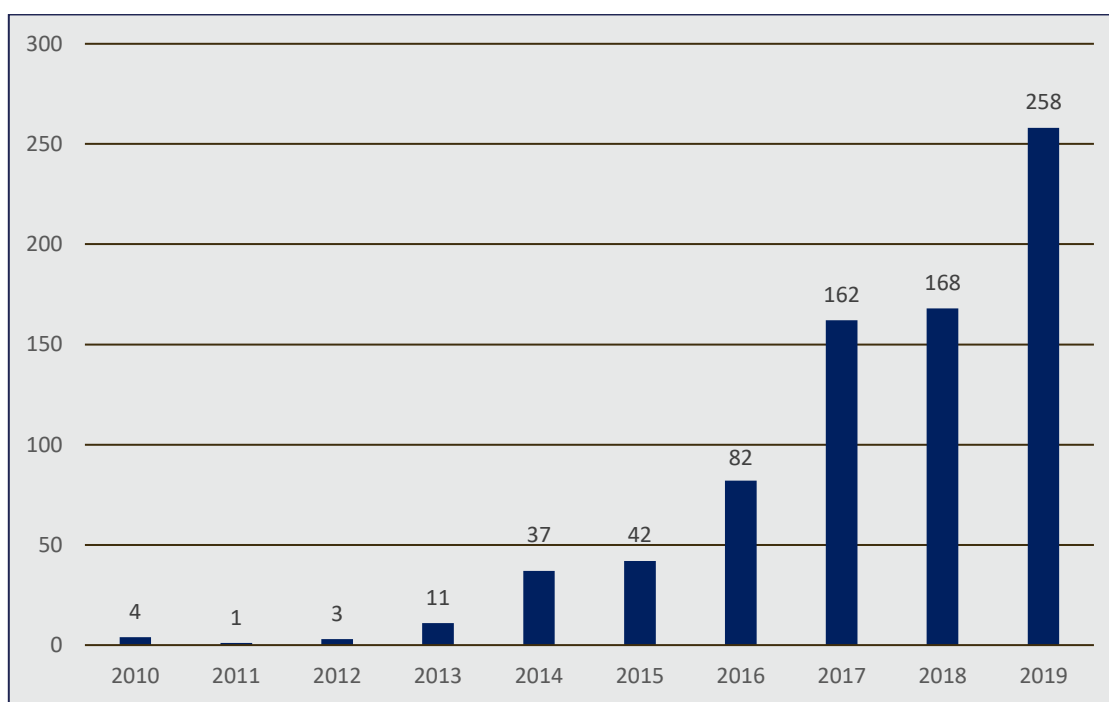


## 2. THE GLOBAL GREEN BOND MARKET<sup>2</sup>

Green bonds are securities for which the issuer agrees to use the proceeds collected on “green” investments and projects that serve environmental protection and sustainability. The first green bonds in history were issued by multilateral development banks: the first bank was the European Investment Bank in 2007, followed by the World Bank already in the following year.

The range of issuers increased strongly in the 2010s, more and more companies joined the group of green bond issuers, and later cities or provincial or member state governments and their public utility companies, and even commercial banks followed this example. In the meantime, the issued amounts have also grown at an increasing pace: the USD 42 billion issued in 2015 was quadrupled within two years, and in 2019 green bonds in the value of USD 258 billion were issued to the market (Chart 1).

*Chart 1: Annual global green bond issuance (billion USD)*



Source: based on World Economic Forum (2017) and Climate Bonds Initiative (2020)

This value still seems low compared to the market of traditional bonds, but the charts clearly indicate that green bonds represent an extremely fast growing and therefore promising instrument from an environmental perspective.

Therefore, the key difference between “traditional” and green bonds is that in case of green bonds, the issuer openly declares that the proceeds will be used to finance environmentally sustainable projects, assets

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<sup>2</sup> The section is based on the upcoming study of Gyura, G. (2020): *The examination of additionality in the case of green bonds*.



or activities. Such green bonds are referred to as “labelled” green bonds in the international literature, although non-labelled bonds can also be green in a sense that the proceeds may serve environmental purposes. (This, however, is not declared openly for nonlabelled green bonds, or the commitment is not based on a generally accepted standard, and the fulfilment is not audited.) In reality, the portfolio of non-labelled but *de facto* green bonds is probably much larger than that of labelled green bonds – according to some estimates, it might as well be four times bigger.

The green bond standard used by most parties globally is the International Capital Markets Association (ICMA) “Green Bond Principles” (ICMA 2017). ICMA is a capital market organisation set up by market players; therefore, the Green Bond Principles are voluntary standards, basically without any legal binding force. Issuers are free to decide whether or not they agree to observe the Green Bond Principles, and even if they do not, they are still free to call their securities green bonds.

On the other hand, if they do comply with the Green Bond Principles (“GBP”), they have to indicate it in the bond issuance documentation, and they have to satisfy the requirements set out in the standard. These requirements are of rather general nature, they are more of principles than exact and specific provisions. The provisions are illustrated by the following chart (Chart 2):

Chart 2: Key Elements of the Green Bond Principles

<b>Criteria for the Use of Proceeds</b>
•The documentation of the bond shall specify the "green" categories accepted by the GBP for which the issuer wishes to use the proceeds.
<b>Process for Project Evaluation and Selection</b>
•The issuer shall specify the process to be used to decide on the acceptance of individual projects.
<b>Management of Proceeds</b>
•Present how the proceeds will be actually used, and how the already collected funds that are not allocated to projects yet will be invested.
<b>Reporting on Actual Use of funds</b>
•A report shall be published at least annually on the actual allocation of the funds collected with the bond, including the quantitative and qualitative description of the environmental effects of projects.

Source: based on ICMA (2017), edited by MNB



As the above chart illustrates, the GBP contain certain preliminarily approved project categories, which look for answers to major environmental anomalies (climate change, exhausting natural resources, loss of biodiversity, environmental pollution). The list of accepted categories is indicative and not taxative – it presents the project types that should be supported by the green bond market in the views of the producers of the standard (Chart 1):

*Table 1: Eligible project categories of Green Bond Principles (extract)*

Category	Example, description
Renewable energy	Production and transmission of renewable energy, related appliances, products
Energy efficiency	Energy efficiency developments carried out for buildings and plants (insulation, energy storage, modernisation of district heating etc.)
Pollution prevention and control	Sewage treatment, reduction of GHG emission, soil remediation, waste recycling, environmental protection monitoring
Environmentally sustainable management of living natural resources and land use	Sustainable agriculture, fishery, forestry
Terrestrial and aquatic biodiversity conservation	Activities that facilitate the preservation of the diversity of species in terrestrial or marine environment
“Eco-efficient” products, production technologies	Production of environmentally sustainable and certified products, resource efficient packaging and distribution
Clean transportation	Electric or other vehicles with low/zero emissions, public transport, other infrastructure related to clean transportation
Sustainable water management	Sustainable infrastructure for drinking water, sewage treatment, sustainable flood control, utilisation of rainwater
Climate change adaptation	This includes information support systems, such as climate and weather observation, or early warning systems indicating extreme weather events
Green buildings	If they satisfy regional, national or international standards and qualification systems

Source: ICMA (2018)

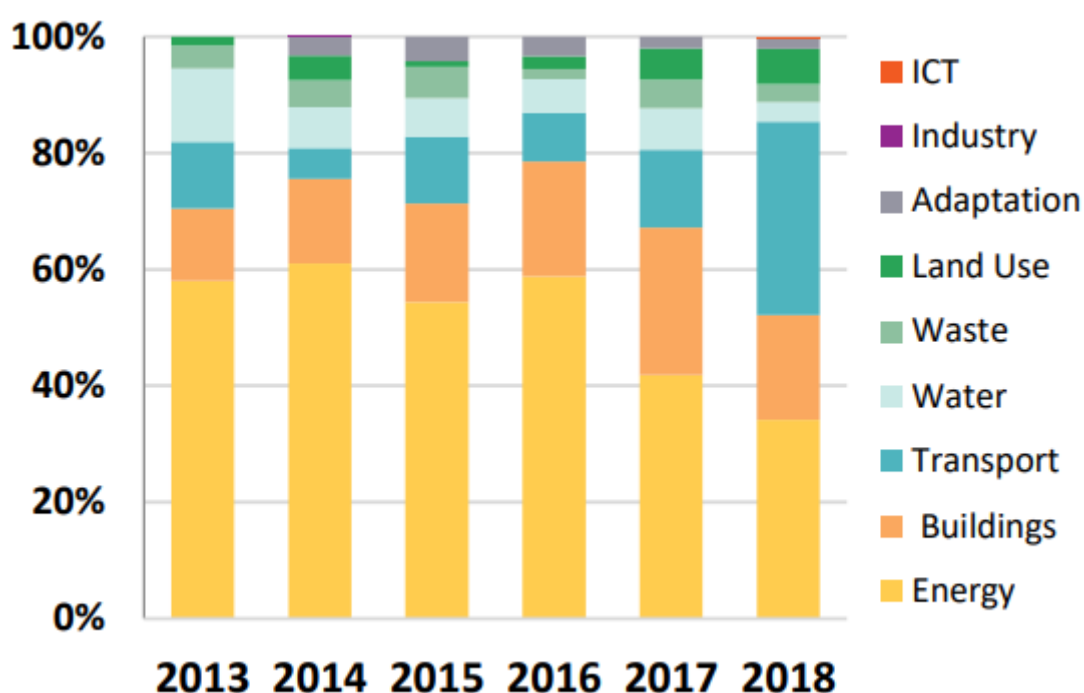


As we have already mentioned, the GBP standard lays down rather general, in fact, loose principles of “lowest common multiple” type, the interpretation of which leaves significant room for manoeuvre. The green bond standard called Climate Bonds Standard (“CBS”) established by the Climate Bonds Initiative that brings market players together, too, is much stricter and more specific than the GBP.

Bonds which qualify as green by the CBS will all satisfy the terms of the GBP, as well as additional conditions. As opposed to the GBP, the CBS is coupled with a certificate which is awarded to green bonds that pass a formal procedure. Another significant difference is that the definition of acceptable project categories under the CBS is based on a scientific framework. In addition, there are also national green bond standards, and more and more countries are planning to establish such standards, including the European Union as a legal authority.

The majority of green bonds issued on our continent financed projects in the energy sector (solar, wind, geothermal and water power plants, provision of network infrastructure etc.), but green (energy-efficient) real estate investments (construction and modernisation of commercial and public institutions and residential properties), as well as transportation (development and production of zero emission cars, public transport etc.) also play important roles (Chart 3).

*Chart 3: Sectoral composition of projects financed by green bonds issued in Europe*



Source: based on Climate Bonds Initiative (2019b), edited by MNB



The Hungarian Government issued green government bonds in June 2020, which primarily collected dedicated funds for government investments related to climate and environmental objectives defined in Hungary's *Clean Development Strategy*. Apart from that, no other green bonds have been issued until the production of this analysis, although, as far as the MNB knows, several companies and credit institutions are examining the possibility of issuing such bonds. At the same time, certain countries in our region (e.g. Poland, Slovenia and the Baltic states) have already done pioneering work and issued green bonds that were successful on the market and generated interest among investors.

Map of Europe showing the percentage of the population aged 65 and over in 2019. The map uses a color scale from light blue (low percentage) to dark blue (high percentage). The data is as follows:

Country	Percentage (%)
Iceland	0,2
Ireland	0,01
United Kingdom	3,4
Portugal	9,8
France	37,8
Spain	13
Italy	22,6
Germany	22,6
Poland	1,9
Czech Republic	0,8
Slovakia	0,65
Hungary	0,3
Romania	0,1
Bulgaria	0,05
Greece	5,1
Turkey	2,3
Norway	3,8
Sweden	10,9
Finland	1,1

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As to foreign countries, it is worth pointing out that the launch of the market was also facilitated by the involvement of regulators and the state in several markets. A number of countries published regulatory guidelines, recommendations, and introduced tax or other financial benefits, and – for example in Eastern Europe – state-owned companies were the first to issue green bonds – building the market and showing the way to private players, too.

In relation to Hungary, it is important to see that among domestic companies, even those companies whose activities would have easily allowed them to qualify their bonds as green did not ask for this qualification. Apart from companies, banks may also be potential issuers, which may issue both “normal” green bonds and green mortgage bonds, partly because they need to raise long-term funds to satisfy the MREL<sup>3</sup> or the MCCI<sup>4</sup> regulations.

The decision to issue green bonds is obviously influenced by the potential benefits and costs they present to the issuers. However, from the perspective of the MNB as an authority, it is worth pointing out that some of the possible benefits of issuing green bonds may also be realised at macro level. In other words, individual decisions on issuing green bonds will not necessarily bring optimal results at the level of the whole economy and the society (Table 2).

*Table 2: Potential benefits and costs of green bonds*

Potential benefits to issuers	Potential systemic benefits	Costs, question marks
Reputation benefit for the issuer	Market building effect	Costs of setting up internal processes, reporting and external certification
Development of corporate governance and process management		The lower costs of funds benefit is questionable
Extension of investor base with investors having ESG mandates who persist in crises		
Possibility of green premium	Domestic“responsible” savings may serve domestic sustainability	
Extension of average maturity of financing mix		

Source: MNB

<sup>3</sup> MREL: Minimum Requirement for own funds and Eligible Liabilities

<sup>4</sup> Mortgage covering financing indicator



Green bonds would have the strongest effect on the national economy and the environment if they facilitated the realisation of investments that are useful for the environment and the society but could not be realised under normal financing (additionality). In the cost-benefit analysis of investors, the net present value could be made positive primarily by reducing the costs of funds; therefore, green bonds would offer the most benefits if they allowed for raising cheaper funds compared to normal bonds or borrowing. Based on international experiences, this is not always the case but green bonds still have tangible benefits.

From the perspective of the country and the MNB, stepping up green bond issuance would serve the advancement of at least four **economic policy priorities** at the same time:

- 1. Mobilisation of additional funds and new foreign investors for investments that serve the country's sustainability, climate and energy policies.** Although green bonds do not necessarily facilitate the achievement of lower costs of funds compared to traditional bonds, international experience shows that they are definitely suitable for the diversification of investors, as they give access to ESG managed funds or to funds with the purpose of achieving positive environmental impacts, which could be an important advantage especially for corporate green bonds.
- 2. Development of the capital and, within that, the bond market, as a supplement to bank financing.** Compared to normal bonds, the issuance of green bonds require additional corporate governance, process management and reporting requirements, i.e. in this sense they are more advanced and sophisticated instruments than normal bonds. This way the promotion of green bond issuances in Hungary would also facilitate the development of the domestic bond market.
- 3. Extension of the range of green financial products, establishment of a green investment universe.** At the moment, domestic "responsible" (having sustainability concepts, managed on ESG basis, etc.) investment funds and other funds are typically able to purchase foreign green instruments into their portfolios; therefore, a significant portion of retail green investments also flows abroad. The introduction of domestic green bonds could improve this situation in a way that would also contribute to the development of investment funds.
- 4. In addition to the Green Programme, there would be a mutually strengthening and positive relation with other MNB programmes.** It is mainly the Bond Funding for Growth Scheme and the MNB initiatives related to the development of the mortgage bond market where the introduction of corporate green bonds and green mortgage bonds would generate synergies.

### **3.2. Potential key areas**

In Hungary, green bonds could work and be beneficial in basically any project category described in section 2 and for any group of potential bond issuers. Below is a list of areas where the spread of green bonds would have the highest potential from environmental sustainability aspects.



- **Solar energy** (issuances by corporations, banks, perhaps local governments)

In the promotion of renewable energy capacities, the National Energy Strategy places special emphasis on solar energy, and most of the related investments have so far been financed from bank loans. Compared to the capacities built in so far, the target values defined in the Strategy for 2030 and 2040 necessitate fairly dynamic growth which will require the involvement of new financing sources, too, in addition to the stable support system. One option would be the introduction of green bonds to finance solar energy investments which would allow for the aggregation and financing of power plants of smaller sizes, the provision of additional funds for network development, the extension of technological research, or even the development of energy storage capacities.

- **Transition bonds** (issuances by corporations)

The vast majority of domestic large companies are not “green” in themselves, although it is a positive development that an increasing number of companies realise the importance of environmental sustainability. In their case, the transformation of a higher portion of their activities to environmentally sustainable operation might as well be a specific objective. In this case it is possible to raise dedicated funds with the so-called transition bonds – instead of green bonds - to make their activities greener.

- **Green mortgage bonds, green bonds issued by banks**

Since the beginning of this year, the MNB has been encouraging green housing lending with an innovative Green Preferential Capital Requirement Programme.<sup>5</sup> On the liabilities side, the equivalent of this action could be the facilitation and promotion of the issuance of green mortgage bonds by banks, related to green mortgage lending. A possible instrument for that could be the “green” preference/supporting factor to be introduced in the mortgage coverage financing indicator which is regulated by the MNB.

Banks may also issue simple green bonds, to comply with the MREL requirements, for which they definitely have to obtain long-term funds.

- **Municipality green bonds**

In foreign countries, local and county municipalities are among the most important issuers of green bonds. It means extra motivation for the population to know that the funds collected with the green bond are utilised “locally”, in their own living environment in the form of environment-friendly developments. In Hungary, the Stability Act defined strict limitations regarding the indebtedness and bond issues of domestic municipalities – which is correct from a professional point of view.

At the same time, local governments would be able to realise plenty of local green developments through the issuance of bonds (development of public transportation, waste management, water management, renovation of municipality buildings, production of renewable energy, etc.), and some

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<sup>5</sup><https://www.mnb.hu/sajtoszoba/sajtokozlemenye/2020-evi-sajtokozlemenye/konnyites-hatarido-hosszabbitas-a-lakascelu-zold-tokekoveletmeny-kedvezmeny-programnal>



of these developments could even reduce their expenses, and it would be easy to calculate the returns. Therefore, it would be worth considering the potentials of green bonds issued by municipalities, which may require the targeted revision of indebtedness rules.

- **“Blue” bonds** (issuances by corporations or municipalities)

One of the major challenges generated by climate change in Hungary will be water management. The distribution of rainwater will become less even, periods of drought will be longer, and therefore climate change will make water as a resource more valuable already in the short term, while most of our water catchment areas are located outside of our borders. On the other hand, domestic water management has no advanced technology, the operation of our water utility companies is uneconomical, and bonds could play an important role in the necessary investments.

- **Retail Green Government Bonds**

Similarly to local government green bonds, retail green government securities were successfully introduced in a number of countries. These foreign cases also hold relevant lessons for Hungary. After the wholesale foreign currency green government bonds issued to institutional investors, it would be useful to issue a forint-based green government bond based on the existing retail government bonds (possibly with identical financial terms).

It could even be explored to issue Green Baby Bonds connected to the so called Start Security Accounts. In this case, parents with their regular savings could not only contribute financially to their childrens’ future, but also to ensure that their children enter adulthood in ecologically more livable circumstances.





## 4. PLANNED ACTIONS TO BE EXAMINED

Co-operation and harmonised action is required to launch the market by a number of authorities and market players alongside the MNB.

### 4.1. Possibilities in the competence of the MNB

- **Providing incentives through banks' capital requirements**

Banks are among the most important potential investors for green bonds, and their purchases are influenced by the capital requirements. In principle, green bonds would be eligible for support in the capital requirement, but the calibration of this would require thorough research to make sure that the framework is well-founded and consistent. This process takes time, and as neither historical data (to prove that these bonds perform better than “normal” corporate bonds), nor benchmarks (preferential capital treatment used by other supervisory authorities) are available, thorough analyses are required which will be carried out by the MNB in the coming period.

- **Incentive for the issue of green mortgage bonds through the MCCI**

Pursuant to the decision made by the Financial Stability Council in December 2019, in 2020 the MNB will examine whether it is possible to grant a green supporting factor for green mortgage bonds in the mortgage coverage financing indicator (MCCI). Therefore, as opposed to the above mentioned capital requirements, this would be an incentive on the supply side.

- **Corporate green bond issue in the framework of the BGS**

In the framework of the Bond Funding for Growth Scheme (BGS), the MNB is already able to buy corporate green bonds that satisfy the terms specified in the product information, as the BGS contains no restrictions about the purpose of using the proceeds raised from bonds. In this sense, the existence of the BGS itself is a general supporting element on the demand side, provided by the MNB.

However, it is important to see that as Table 2 mentions, one of the disadvantages of green bonds to normal bonds is that their issuance entails additional costs (costs of setting up internal processes, reporting and external certification). In certain countries (for instance, in the Republic of Singapore), these costs are borne by the authorities. Such options are worth examining also in the Hungarian context.

- **„Leading by Example” – adapting sustainability principles in reserve management**

MNB – globally among the first central banks – started to build up an EUR-denominated, dedicated green bond portfolio. The main goal of this decision was to act as a role model for other central banks and also for domestic market players. Besides, the creation of the dedicated green bond portfolio is in line with the Central Bank of Hungary's corporate responsibility and environmental strategic goals, and supports the green bond market's development in general. MNB – similarly to other elements of its reserves – applies a conservative approach, and exclusively buys and holds only assets of high credit quality, and strives to mimic the green bond market segment's structure as closely as possible.



The creation of the green bond portfolio was the first time to have sustainability principles reflected in reserve management.

- **Conferences, awareness-raising events**

The MNB wishes to facilitate the issue of green bonds at professional events organised by it or with its involvement by presenting the best foreign practices and the Hungarian regulatory concepts. One of these events will be for instance the International Green Financial Conference<sup>6</sup> on 12 October (where the CEO of the Climate Bonds Initiative is expected to give a presentation). Another important awareness-raising possibility will be the training held by the Budapest Institute of Banking and the London Stock Exchange Group Academy in October 2020 for investor relations managers<sup>7</sup>, with the professional support of the MNB.

#### **4.2. Possibilities outside the competence of the MNB**

- **On the side of domestic investors**, apart from the MNB (as a potential buyer) and possible direct retail purchases, it would be necessary to stimulate and encourage institutional investors (investment funds, other funds, insurance companies, etc.).
- **Tax benefits and fiscal incentives** could play an important role on both the issuers' and the investors' side.
- The revision of rules related to the **issue of bonds by municipalities** is also in the competence of the government.

The thorough examination of the above points will offer a proper framework for the planning of **Hungary's Sustainable Capital Market Strategy**<sup>8</sup>. The objective of this comprehensive initiative lasting 14 months is to make sure that the capital market is able to finance more investments that serve environmental sustainability, and "green" companies could have access to funds at more favourable terms. In this concept, green bonds obviously deserve special focus. The project will be carried out with the support of the European Commission's Service for Structural Reform Support and with the involvement of the European Bank for Restructuring and Development (EBRD), and will start in August 2020.

MNB is going to publish from time to time the most important developments in relation to the above steps and possibilities on its website.

The MNB expects comments and questions about the contents of this study at the [zold.penzugyek@mnb.hu](mailto:zold.penzugyek@mnb.hu) address. Documents related to the Green Programme are available on [www.greenfinance.hu](http://www.greenfinance.hu).

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<sup>6</sup> See this site for more details: <https://www.mnb.hu/greenfinance/green-finance-conference>

<sup>7</sup> [https://www.bib-edu.hu/kurzusok/banki\\_penzugyi\\_tanfolyamok/embedding\\_esg\\_frameworks](https://www.bib-edu.hu/kurzusok/banki_penzugyi_tanfolyamok/embedding_esg_frameworks)

<sup>8</sup> <https://www.mnb.hu/sajtoszoba/sajtokozlemenyek/2020-evi-sajtokozlemenyek/hamarosan-elindul-hazank-fenntarthato-tokepiaci-strategiajanak-tervezese>