THE ROLE OF GREEN BONDS IN THE ENERGY
Session II: government bonds issuance to support national green programmes

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HUNGARY’S ENVIRONMENTAL COMMITMENTS AND INITIATIVES

1994
UN Framework Convention on Climate Change

2002
Ratification of the Kyoto Protocol
- Implementation in Hungary’s national law in 2007

2015
UN 2030 SDG Agenda

2016
Paris Agreement
- First EU member state to ratify the Paris Agreement in 2016

2019
EU Clean Energy Package
- Target of 20% of renewable energies in Hungary’s energy mix by 2030

2019
European Green Deal
- Recipient of the EU modernization fund for lower income countries (c. €1bn over 2021 - 2030)

2020
Adoption of a draft National Clean Development Strategy
First Climate Change Action Plan
- Legally binding target: climate neutrality by 2050
- Act on Climate Protection

2021
National Clean Development Strategy
Long-term Renovation Strategy
National Hydrogen Strategy
- Climate Change Conference in Glasgow (COP 26)

Sources: European Union; Government of Hungary; UN Treaties; UNFCCC
NATIONAL STRATEGY TO ACHIEVE CLIMATE NEUTRALITY AND THE SDG

Hungary’s strategies to mitigate climate change

Long term

National Clean Development Strategy
- This strategy aims to achieve climate neutrality by 2050
- To achieve this target, the additional annual investment need accounts for 4.8% of the GDP (early action scenario)

Milestones and achievements – Climate change

32% GHG reduction
- Hungary reduced its greenhouse gas emissions by 32%\(^1\) between 1990 and 2019

EU top-10 emissions reduction
- Hungary is in the EU top-10 for greenhouse gas emissions reductions between 1990 and 2019 (10\(^{th}\) place\(^1\))

Low emissions per capita
- The Hungarian GHG emission per capita is 82% of the EU average\(^1\); the 7\(^{th}\) lowest value in the EU (2019)

Ambitious GHG reduction target
- The Government targets at least 40% GHG emissions reduction by 2030\(^2\) (compared to the 1990 level)

Short term

2nd National Climate Change Strategy
- This strategy consists in a comprehensive framework of targets and policies on climate and green economy development
- Focuses on 4 pillars for the 2018 – 2030 period

2nd National Climate Change Strategy: Four key pillars

Decarbonisation:
- Replacement of fossil fuel energy carriers
- Increase in energy efficiency
- Reducing natural resources consumption

Adaptation:
- Preservation of natural resources
- Adaptation of vulnerable regions and sectors

Analysis of climate vulnerability:
- Development of vulnerability methodologies
- Promoting climate-related research projects

Partnership for climate:
- Horizontal integration in public administration
- Awareness-raising through Education

Achievements of the SDGs

SDG Index Score (2021)
- 78.8%\(^3\)
- % of SDG achievement measuring progress towards the 17 SDGs

SDG index rank (2021)
- 25 / 165\(^3\)
- Country ranking relative to SDG achievements

Notes

## OVERVIEW OF FLAGSHIP ESG PROJECTS

<table>
<thead>
<tr>
<th>Project</th>
<th>Category</th>
<th>Objective</th>
<th>Description</th>
<th>UN SDGs</th>
<th>ICMA / EU Taxonomy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development of electric cars</td>
<td>Green</td>
<td>Support the development and rapid adoption of electric cars in Hungary harnessing <strong>sustainable and modern energy</strong></td>
<td>Government subsidies and registration tax credit to incentivize the shift to electric cars</td>
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<tr>
<td>Electrification of railway network</td>
<td>Green</td>
<td>Limit the environmental impact of Hungary’s railway network improving <strong>sustainability of transport and settlements</strong></td>
<td>Electrification of not yet electrified railway network lines</td>
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<td>Support to families</td>
<td>Social</td>
<td>Provide financial support to large families promoting <strong>inclusive economic growth and social protection</strong></td>
<td>Various subsidies and tax incentives supporting families with children</td>
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<tr>
<td>Women / mothers employment</td>
<td>Social</td>
<td>Enable and incentivize the employment of women / mothers <strong>enhancing gender equality</strong></td>
<td>Tax incentives and social benefits supporting full-time or part-time employment of women with children</td>
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<tr>
<td>MAP Plus bond program</td>
<td>Governance</td>
<td>Enhance <strong>financial inclusion</strong> through the development of a retail domestic bond market</td>
<td>Retail bond issuance program giving access to citizens to HUF denominated instruments with attractive rates and easy access (sold via banks, post office, Treasury...)</td>
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</table>

**Sources:** AKK, Government of Hungary
# GREEN FINANCE IN HUNGARY

<table>
<thead>
<tr>
<th>Key stakeholders</th>
<th>Initiatives</th>
<th>Achievements</th>
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</thead>
<tbody>
<tr>
<td>The Hungarian Government Debt Management Agency (AKK)</td>
<td><strong>Hungary has adopted a green financing framework in May 2020</strong>, which includes 6 green expenditure categories:  - Renewable Energy  - Energy Efficiency  - Land Use and Living Natural Resources  - Waste water Management  - Clean Transportation  - Adaptation</td>
<td>Since then, <strong>the country has issued several green bonds in both local and foreign currencies</strong>:  - June 2020: issuance of a €1.5bn Eurobond  - September 2020: issuance of 2 Samurai bonds for a total of JPY 20bn  - April 2021: debut issuance of a HUF 41.2bn green bond with a 30 years maturity with the intent of developing the local green bond market  - December 2021: issuance of a Panda bonds for a total of CNY 1bn  - February 2022: issuance of 3 Samurai bonds for a total of JPY 59bn</td>
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<td>The Hungarian Central Bank (NBH)</td>
<td><strong>The NBH announced its Green Program in February 2019</strong> aiming to reduce the risks associated with climate change and expand the financing of the green economy  - In July 2021, the NBH revamped its strategy through a <strong>“Green Monetary Policy Toolkit Strategy”</strong></td>
<td>The NBH was <strong>among the first Central Banks worldwide to set up of a dedicated Green Bond portfolio in June 2019</strong>  - Under its newly adopted strategy, the NBH will continuously examine how monetary policy can achieve price stability and environmental sustainability objectives</td>
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<td>The Hungarian corporate sector</td>
<td><strong>An increasing number of corporates are considering green issues</strong> on the back of AKK and NBH efforts to help the sector grow</td>
<td><strong>Corporate Green Bonds first issuance took place in August 2020</strong>  - 16 Hungarian corporates issued Green Bonds in both local and foreign currency</td>
</tr>
</tbody>
</table>

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Source: AKK, NBH

Note: * Including non-competitive issuance
In March 2021, Hungary published the Green Bond Allocation Report 2020

- Hungary strives to achieve climate neutrality by 2050
  - Green Bond Framework
  - Act XLIV of 2020 on Climate Action
  - Foreign-currency Green Bonds issuance in 2020
  - Local-currency Green Bonds issuance in 2021
- Hungary committed to annual reporting on the allocation and the impact of its Green Bonds
- Green Bond Allocation Report 2020 was compiled in March 2021
- Total green bonds proceeds amounted to HUF 573,68 billion; total eligible expenditures amounted to HUF 1,204.52 billion

Green Budget Expenditures (HUF billions)

<table>
<thead>
<tr>
<th>Sectors</th>
<th>2018 Fact</th>
<th>2019 Fact</th>
<th>2020 Plan</th>
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<tr>
<td>Renewable Energy</td>
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<td>Energy Efficiency</td>
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<tr>
<td>Land Use and Living Natural Resources</td>
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<tr>
<td>Waste and Water Management</td>
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<td>Clean Transportation</td>
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<td>Adaptation</td>
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<tr>
<td>Eligible Green Expenditures</td>
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<td>Allocated Amount</td>
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- Hungary selected projects according to the eligibility criteria defined in the Green Bond Framework, best market practices and the second party opinion provider CICERO
  - Eligible green expenditures include investment expenditures, intervention expenditures, tax expenditures and selected operating expenditures
  - Budget expenditures which obtained dedicated funding were excluded
  - Nuclear power, armament and defence sector, fossil fuel production and power generation related projects were excluded
  - None of the expenditures harms significantly any environmental objective of the EU
In November 2021, Hungary published the Green Bond Impact Report 2020

- Hungary committed to annual reporting on the allocation and the impact of its Green Bonds
- Green Bond Impact Report 2020 was compiled in November 2021
- The report covers the allocations for the budget years 2018 and 2019 and the key environmental and social impacts resulting in budget years 2018, 2019 and 2020
- The assessment of the environmental impacts was based on the ICMA Harmonized Framework for Impact Reporting Handbook (June 2021 edition)
- The report summarizes the indicators on a project-by-project basis

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<th>Category</th>
<th>Impact</th>
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<tbody>
<tr>
<td>Renewable Energy</td>
<td>8.2kt CO2 equivalent GHG was avoided</td>
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<tr>
<td>Energy Efficiency</td>
<td>49.5kt CO2 equivalent GHG was avoided</td>
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<tr>
<td>Land Use and Living Natural Resources</td>
<td>More than 120 thousand projects supporting sustainable agricultural areas covering 794,438 hectares</td>
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<td>Waste and Water Management</td>
<td>Length of sewage system per kilometres of drinking water system increased to 761 meters</td>
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<tr>
<td>Clean Transportation</td>
<td>1,106.3kt CO2 equivalent GHG was avoided</td>
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<tr>
<td>Adaptation</td>
<td>1.8% decrease in air pollutant particular matter (PM10) between 2018 and 2019</td>
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</tbody>
</table>

Source: AKK
THANK YOU FOR YOUR ATTENTION!