

## MNB GREEN FINANCE REPORT

# SUSTAINABILITY OF THE HUNGARIAN FINANCIAL SYSTEM





- 2. NATURAL ENVIRONMENT
- 3. ECONOMY
- 4. FINANCIAL SYSTEM
- 5. CONCLUSIONS



### 1. INTRODUCTION

#### MNB GREEN PROGRAMME



# I. Financial sector initiatives

Climate-related and environmental risk analysis

Greening the financial services sector, mobilizing green finance

Green bond market development

Incentivizing financial institution's greener operations

# II. Social and international relations

1.Enhanced cooperation with domestic partners

Active participation in international work on climate risks and green finance

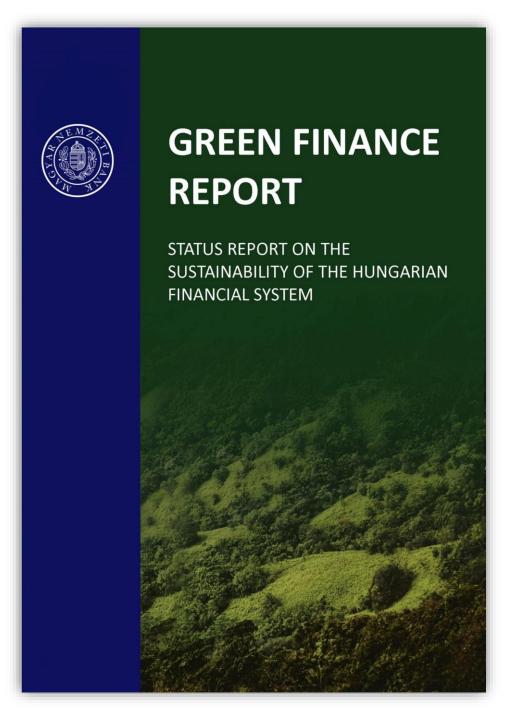
Education and capacity building on green finance and climate risks

# III. Greening MNB's own operations

Further reduction of MNB's own ecological footprint and introduction os emissions offsetting scheme

Acting as a role model in environmental disclosures







#### 2. NATURAL ENVIRONMENT

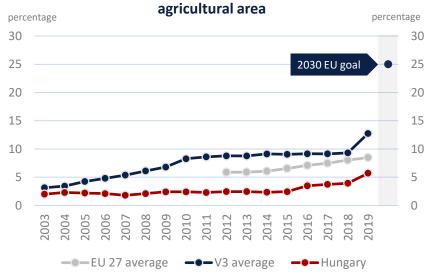
#### HUNGARY IS LAGGING BEHIND IN ACHIEVING THE SUSTAINABLE DEVELOPMENT GOALS, ESPECIALLY IN TERMS OF ENVIRONMENTAL GOALS





UN: Hungary, 2020. https://eu-dashboards.sdgindex.org/profiles/hungary

#### Shares of area under organic farming within the



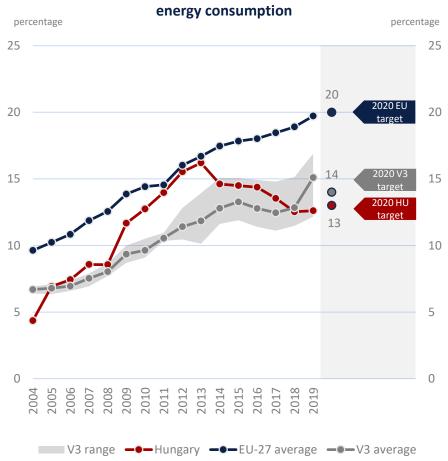


#### 3. ECONOMY

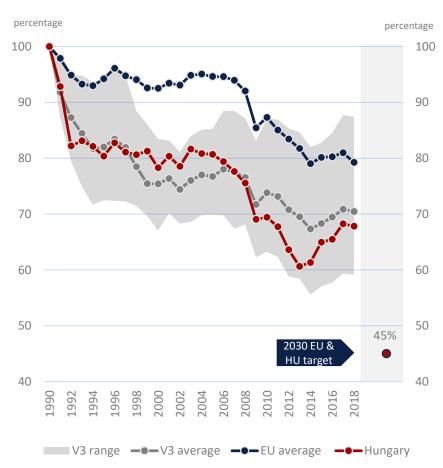
#### INDICATORS DESCRIBING THE ENVIRONMENTAL SUSTAINABILITY OF THE HUNGARIAN ECONOMY ALSO PAINT A RATHER UNFAVORABLE PICTURE



#### Share of renewable energy sources in total final energy consumption



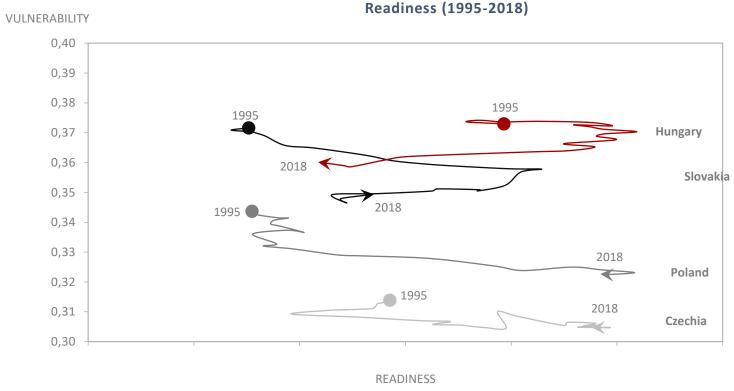
#### Change in greenhouse gas emissions since 1990



## ALTHOUGH SOME PROGRESS HAS BEEN MADE, MANY COMPOSITE INDICATORS POINT TO A NEGATIVE TENDENCY IN SUSTAINABLE DEVELOPMENT AND CLIMATE CHANGE READINESS



#### Notre Dame Global Adaptation Initiative Index - Climate Change Vulnerability and Readiness (1995-2018)



ALL THIS UNDERLINE THE URGENT NEED FOR ECONOMIC TRANSFORMATION, IN WHICH THE FINANCIAL SYSTEM THAT ALLOWS FINANCING TO HAPPEN CAN PLAY A KEY ROLE ALSO IN HUNGARY

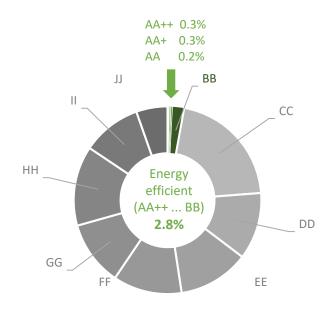


#### 4. FINANCIAL SYSTEM

#### UNTIL NOW, THE FINANCIAL SYSTEM HAS ONLY MARGINALLY INTEGRATED **ENVIRONMENTAL SUSTAINABILITY ASPECTS INTO ITS OPERATION...**



| Indicator   | Unit | Hungary | EU    |
|---|------|---------|-------|
| Ratio of green bonds – central government - stock   | %    | 1.90    | 0.95  |
| Ratio of green bonds – central government - 2020    | %    | 3.90    | n/a   |
| Ratio of green bonds – corporate - stock            | %    | 5.60    | 5.00  |
| Ratio of green bonds – corporate - 2020             | %    | 11.40   | n/a   |
| Ratio of green bonds – MNB FX reserve - stock       | %    | 1.00    | n/a   |
| Ratio of green corporate loans (solar PV only)      | %    | 2.50    | n/a   |
| Ratio of energy efficient residential buildings     | %    | 3.00    | 9.80  |
| Green/ESG based investment funds – stock            | %    | 0.50    | 15.10 |
| Insurance sector – ratio of green unit-linked funds | %    | 1.70    | n/a   |
| Green/ESG based voluntary pension funds             | %    | 0.90    | n/a   |



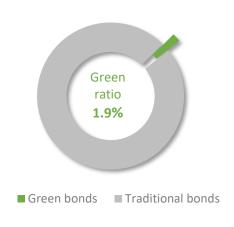


...WHICH ALSO MEANS THAT WE STILL HAVE LITTLE DATA ON "GREEN FINANCE" TODAY.

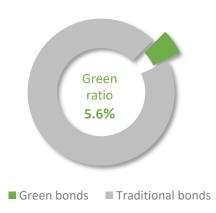
## IN THE CAPITAL MARKETS, THE 2020 LAUNCH OF THE GREEN BOND MARKET IN HUNGARY IS AN IMPORTANT MILESTONE, WHICH MAY BE ACCOMPANIED BY THE MARKET PENETRATION OF ESG-BASED INVESTMENT PRODUCTS



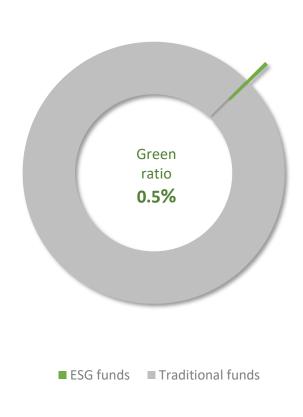
Stock of debt securities issued by the **central government** at market value on 31 December 2020



Stock of debt securities issued by **non-financial corporations** at market value on 31 December 2020



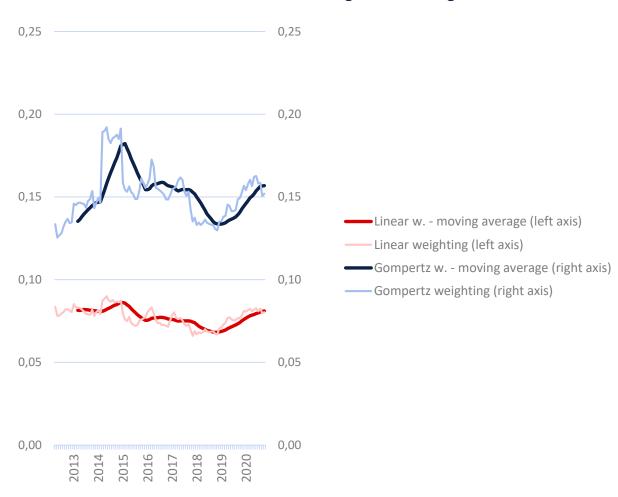
Share of assets managed as **ESG** funds in Hungary



### CLIMATE-RELATED AND ENVIRONMENTAL RISKS POSE A SERIOUS CHALLENGE TO THE FINANCIAL SYSTEM IN HUNGARY TOO



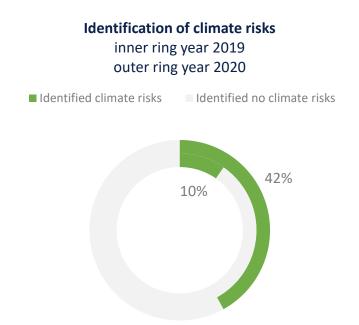
#### Bank Carbon Risk Index – Hungarian banking sector

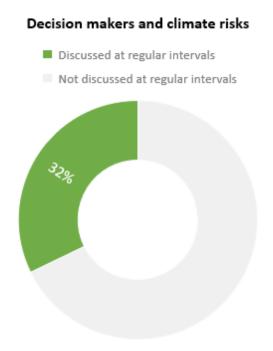


## THE GREEN ASPECTS HAVE CLEARLY STRENGTHENED IN CASE OF BANKS LAST YEAR, THE HUNGARIAN BANKING SECTOR IS STILL AT A SERIOUS DISADVANTAGE COMPARED TO EURO AREA INSTITUTIONS



| Indicator  | Unit | Hungary | EU    |
|--|------|---------|-------|
| Ratio of banks where the highest decision making body does not discuss climate risks.    | %    | 68.00   | 25.00 |
| Ratio of banks with no person or team dedicated to climate risks.                        | %    | 58.00   | n/a   |
| Ratio of banks where the probability and effect of climate risks have not been analysed. | %    | 81.00   | 48.00 |
| Ratio of banks where no information is disclosed on sustanability.                       | %    | 45.00   | 14.00 |
| Ratio of banks where no metrics on sustanability are disclosed.                          | %    | 68.00   | 50.00 |
| Ratio of banks where disclosures are fully in line with the TCFD recommendations.        | %    | -       | 3.00  |
| Ratio of banks joining global initiatives on sustainability.                             | %    | 35.00   | n/a   |





## IN ADDITION TO THE MEASURES OF MNB TO PROMOTE GREEN FINANCE, EU AND GLOBAL INITIATIVES CAN ALSO QUICKLY TRANSFORM THE HUNGARIAN AND EUROPEAN FINANCIAL MARKETS.



| 1 | Ħ  | NGFS recommendation   | MNB measures  |
|---|--|---|---|
| í | 1  | Integrating climate-related risks into financial stability monitoring and micro-supervision             | Issued the Guide on climate-related and environmental risks that is aimed at laying the groundwork for integrating climate-related and environmental risks into micro-prudential supervision.  Launched green preferential capital treatment programmes that will contribute to the mitigation of |
|   |  |   | transition risks.   |
| 2 | ,  | Integrating sustainability factors into own-portfolio management  | Constructed a dedicated green portfolio.  |
|   |  |   | Initiated the Green Mortgage Purchase Programme (under implementation).   |
| 3 | As part of the green preferential capital treatment programmes, data reporting on green exposing required. |   | As part of the green preferential capital treatment programmes, data reporting on green exposures is required.  |
| 4 |  | Building awareness and intellectual capacity and encouraging technical assistance and knowledge sharing | Signed the UN Principles for Responsible Banking.   |
|   |  |   | Launched university education and research programs, banking and capital markets courses.   |
|   | 4  |   | Publication of reports on green finance, articles and studies.  |
|   |  |   | Organisation of international green conferences.  |
|   |  |   | Organisation of green finance workshop for central banks and supervisory authorities in Central and Eastern Europe.   |
| 5 |  | Achieving robust and internationally consistent climate and environment-related disclosure              | Issued the Guide on climate-related and environmental risks, in which a chapter entirely focuses on disclosures.  |
|   | 5  |   | Supported disclosure obligations under the SFDR by means of a MNB management circular.  |
| ( | õ  | Supporting the development of a taxonomy of economic activities   | Simplified application of EU green taxonomy under preferential capital treatment programmes.  |



#### 5. CONCLUSIONS

#### **CONCLUSIONS**



- Enhanced transparency for broad set of stakeholders
- Green transition of the economy is required and the financial system must play a role
- Potentially large risk exposure combined with insufficient preparedness in Hungarian banking sector
- No need for perfect and complete data to act
- Evidence-based green regulatory policies
  - Expansion of green preferential capital treatment programme
  - Inclusion of physical risks in climate stress testing
  - Refined climate risk disclosure requirements roadmap for banks
  - Development of MNB TCFD report
  - ...

"The MNB is committed to taking the necessary actions, even through the introduction of innovative measures, to enable the Hungarian economic and financial systems to contribute to Hungary's environmental sustainability and climate neutrality."

MNB Green Finance Report



#### THANK YOU FOR YOUR ATTENTION!

#### APPENDIX 1/2 - KEY INDICATORS IN THE GREEN FINANCE REPORT



| Category     | Indicator  | Unit                             | Hungary | EU       |
|--------------|--|----------------------------------|---------|----------|
|              | Share of area under organic farming within the agricultural area                         | %                                | 5.71    | 8.49     |
|              | Share of the protected land areas  | %                                | 22.24   | 26.00    |
|              | Internal renewable water resources per capita  | m³/inhab./year                   | 617.20  | 3 065.00 |
|              | Share of renewable energy sources in total final energy consumption                      | %                                | 12.61   | 19.73    |
|              | Energy intensity of the economy  | Oil equivalent (kg)/€ thousand   | 206.09  | 119.64   |
|              | Net energy import  | %                                | 69.70   | 60.60    |
|              | Percentage of newly registered plug-in electric vehicles                                 | %                                | 0.11    | 0.75     |
|              | Recycling rate of municipal waste  | %                                | 35.94   | 47.60    |
| Real economy | Change in greenhouse gas emissions since 1990  | %                                | - 32.18 | - 20.74  |
|              | CO <sub>2</sub> emissions per unit of production   | Thousand tons CO2/\$ million     | 0.17    | 0.16     |
|              | Share of GHG emissions under the scope of EU ETS in Hungary                              | %                                | 29.04   | 40.00    |
|              | EU ETS CO₂ market price  | EUR/tCO2e                        | 32.71   | 32.71    |
|              | Fossil fuel subsidies  | GDP %                            | 0.19    | 0.40     |
|              | Environmental tax revenues   | GDP %                            | 2.37    | 2.40     |
|              | Environmental Performance Index (EPI)  | index                            | 63.70   | 70.67    |
|              | Adjusted net savings (ANS)   | GNI %                            | 14.53   | 11.50    |
|              | Adjusted national net income (ANNI) growth rate (2009-2018 average)                      | %                                | 1.75    | 1.00     |
|              | Natural resources rents  | GDP %                            | 0.38    | 0.20     |
|              | ND-GAIN vulnerability  | index                            | 0.36    | 0.34     |
|              | ND-GAIN change in vulnerability between 1995 and 2018                                    | %                                | - 3.43  | - 2.57   |
|              | ND-GAIN readiness  | index                            | 0.50    | 0.61     |
|              | ND-GAIN change in readiness between 1995 and 2018  | %                                | - 8.01  | 7.44     |
| Risk         | Ecological deficit (biocapacity – ecological footprint)                                  | Million global hectares / capita | 1.16    | 2.53     |
|              | Ratio of banks where the highest decision making body does not discuss climate risks.    | %                                | 68.00   | 25.00    |
|              | Ratio of banks with no person or team dedicated to climate risks.                        | %                                | 58.00   | n/a      |
|              | Ratio of banks where the probability and effect of climate risks have not been analysed. | %                                | 81.00   | 48.00    |
|              | Bank Carbon Risk Index (Linear)  | index                            | 0.08    | n/a      |
|              | Bank Carbon Risk Index (Gompertz)  | index                            | 0.15    | n/a      |

#### APPENDIX 2/2 - KEY INDICATORS IN THE GREEN FINANCE REPORT



| Category                  | Indicator   | Unit | Hungary | EU    |
|---------------------------|---|------|---------|-------|
|                           | Ratio of green bonds – central government - stock                                 | %    | 1.90    | 0.95  |
|                           | Ratio of green bonds – central government - 2020                                  | %    | 3.90    | n/a   |
|                           | Ratio of green bonds – companies - stock  | %    | 5.60    | 5.00  |
|                           | Ratio of green bonds – companies - 2020   | %    | 11.40   | n/a   |
| A de la Ulea de la co     | Ratio of green bonds – MNB FX reserve - stock                                     | %    | 1.00    | n/a   |
| Mobilisation              | Ratio of green corporate loans (solar PV only)                                    | %    | 2.50    | n/a   |
|                           | Ratio of energy efficient residential buildings                                   | %    | 3.00    | 9.80  |
|                           | Green/ESG based investment funds – stock  | %    | 0.50    | 15.10 |
|                           | Insurance sector – ratio of green unit-linked funds                               | %    | 1.70    | n/a   |
|                           | Green/ESG based voluntary pension funds   | %    | 0.90    | n/a   |
|                           | Ratio of banks where no information is disclosed on sustanability.                | %    | 45.00   | 14.00 |
| Reporting                 | Ratio of banks where no metrics on sustanability are disclosed.                   | %    | 68.00   | 50.00 |
|                           | Ratio of banks where disclosures are fully in line with the TCFD recommendations. | %    | -       | 3.00  |
| <b>Global Initiatives</b> | Ratio of banks joining global initiatives on sustainability.                      | %    | 35.00   | n/a   |