HUNGARY
ÁKK – INVESTOR PRESENTATION

May 2024

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KEY FACTS AND FIGURES ON HUNGARY

Area: ~93,000 sq. kilometres

Capital: Budapest

Population: 9.6m (1 January 2024)

Life expectancy at birth: 76.6 years (2023)

Currency: Forint (HUF)

Exchange rate (2023): 381.95 HUF = 1.00 EUR[1]

Nominal GDP (2023*): HUF 74,992 billion

Real GDP growth (2023*): -0.9%

Public debt (2023*): HUF 50,865 billion

Public debt denominated in foreign currency (2023):
HUF 13,678 billion (approximately EUR 36 billion)

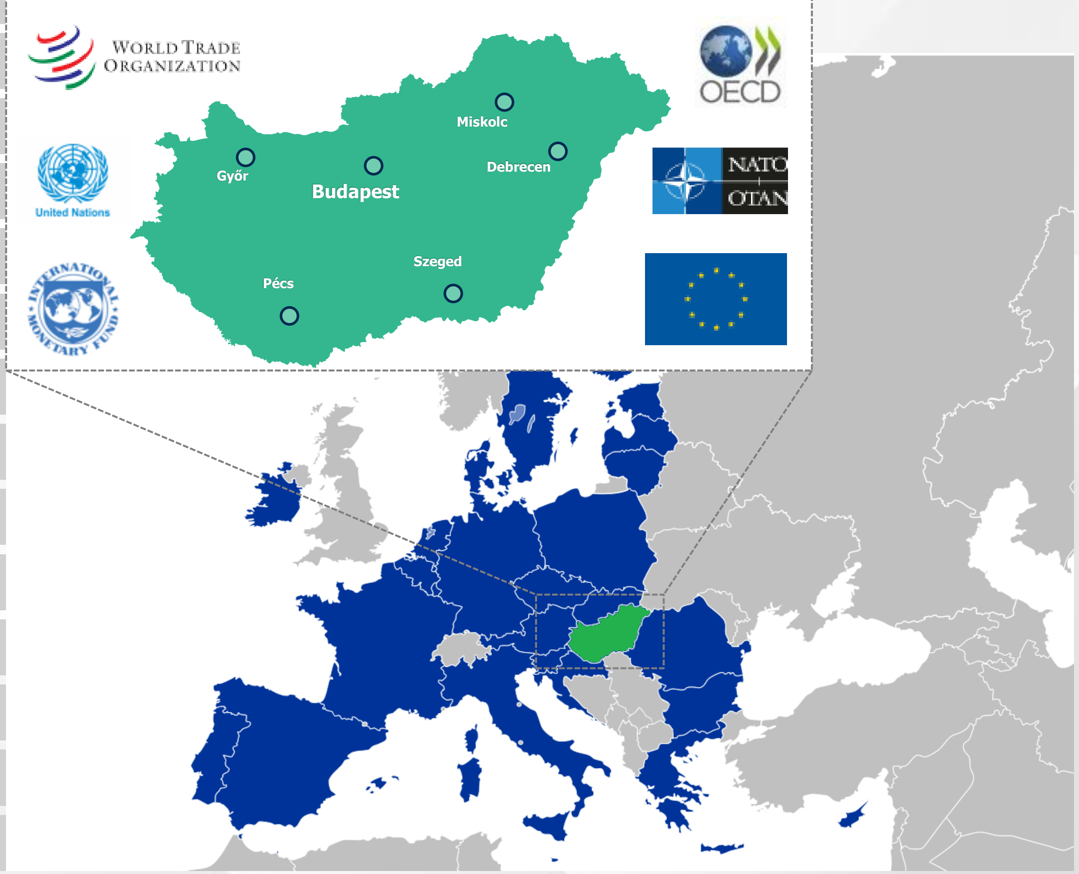
Sovereign ratings: A- (Stable) by JCRA;
Baa2 (Stable) by Moody's; BBB- (Stable) by S&P; BBB (Negative) by Fitch

Government: parliamentary republic

EU member country since: 2004

Schengen area member since: 2007

A high income economy with a strategic location at the centre of Europe and memberships in key international organisations



*Note: 1. Average exchange rate in 2023. /*Preliminary data*
Sources: Government Debt Management Agency of Hungary (AKK), Hungarian Central Statistics Office (HCSO), HIPA, Magyar Nemzeti Bank (the central bank of Hungary) (NBH), World Bank, Bloomberg, European Commission

HUNGARY REMAINS IN STRONG POSITION TO FACE CURRENT CHALLENGES

Resilient economy	▪ **GDP growth** of 4.6% in 2022 (vs. EU average of 3.4%); GDP decreased by 0.9% in 2023[1], with the latest 2024Q1 print showing a 0.8% quarter-over-quarter increase exceeding the growth rate of 0.3% in the EU and the Euro area ▪ Investments increased by 0.3% in 2022 and dropped by 14.9% in 2023 ▪ Unemployment remained low and amounted to 4.1% in 2023 and increased to 4.4% in March 2024 ▪ **Households net savings accelerated**, reaching 6.7% of GDP in 2023
Fiscal policies supporting growth and stability	▪ In response to COVID-19 the ESA deficit was 7.6% of GDP in 2020, 7.2% in 2021 and 6.2% in 2022 compared to below 3% levels prior to the pandemic; the Government is committed to fiscal prudence ▪ The ESA deficit-to-GDP ratio for 2023 was 6.7% mainly due to lower tax revenues, higher pensions, and interest expenditures and is expected to reach 4.5% in 2024, 3.7% in 2025, 2.9% in 2026, 2.4% in 2027 and 1.9% in 2028 ▪ After Covid-19 induced increase in the debt stock of 2020, debt-to-GDP gradually decreased to 73.5% in 2023
Monetary policy focused to curb inflation	▪ Interest rate on the one-day quick deposit tenders was cut from 18.00% at the beginning 2023 to 13.00% at the end of September 2023 equalling the central bank base rate ▪ In September 2023, the central bank base rate became the main monetary policy instrument ▪ Since September 2023, the central bank base rate was cut each month reaching 7.25% at the end of May 2024 ▪ HUF was relatively stable versus the euro during the course of the current year
Improving external position	▪ **Current account** posted a historic high deficit of EUR 14.1 billion in 2022 ▪ The current account **turned into a surplus of EUR 0.4 billion in 2023** driven by the improving terms of trade resulting from lower energy prices, increase in the value of exports, energy consumption adjustment of domestic sectors and decrease in import intensity ▪ **Net FDI remained strong** at EUR 2.5 billion in 2023 ▪ **International reserves** reached EUR 46.9 billion on 30 April 2024, comfortably covering short-term liabilities
Sustainability at the core of Hungary's economy	▪ **1st EU member to ratify the Paris Agreement in 2016** ▪ Climate neutrality target of 2050, intermediate target: 90% of carbon-free electricity production by 2030 ▪ Hungary is ranking **22nd** among all 193 UN Member States regarding the percentage of its SDG achievement ▪ Hungary has issued green bonds on several markets including the Samurai market (two times) ▪ **Allocation and Impact Reports published in 2021, Integrated Reports published in 2022 and in 2023** ▪ **Hungary's Green Bond Framework updated in 2023,** high share of EU Taxonomy alignment of assessed activities
Effective debt management	▪ **Debt management is well diversified** with local wholesale bonds, retail securities and international bonds. ▪ The share of FX debt was 29.1%[2] at the end of April 2024 ▪ The average time to maturity (ATM) of the total debt portfolio amounted to 6.2 years[2] at the end of April 2024 ▪ The share of retail debt reached 20.7%[2] at the end of April 2024 ▪ The maturity profile of FX debt is balanced, maturing FX debt is below EUR 2 billion each year until 2027

Note: 1. According HCSO (and Eurostat) preliminary data
2. 90-day moving average data.

I. RESILIENT ECONOMY

ECONOMY RETURNED TO GROWTH IN 2024Q1

Key highlights

- **Real GDP grew by 4.6% in 2022** compared to the previous year according to data of HCSO
  - GDP grew by 1.3% and 1.1% in the first and second quarter of 2022 according data adjusted for seasonal effects
  - In the third and fourth quarter of 2022, GDP decreased by 1.1% and 0.7% relative to the previous quarter
- During 2023, Q1 GDP showed a 0.4% decrease, Q2 GDP showed no change implying stagnation, **Q3 GDP grew by 0.9%, and Q4 GDP change of 0.0% implying stagnation** (quarter-over-quarter data)
- **In 2023, GDP decreased by 0.9%** relative to the previous year
- **Sectoral breakdown for 2023:**
  - The value added in case of agriculture increased by 68.7% partly as a result of the low base of the corresponding period of the previous year
  - The value added in case of industry (including mining and manufacturing), construction and services decreased by 5.1%, 5.6% and 1.5%, respectively
- **Expenditure approach for 2023:**
  - Consumption declined by 1.1%, gross capital formation fell by 14.9%, of which gross fixed capital formation dropped by 7.4%
  - As a result, domestic use contracted by 5.6%
  - The volume of exports increased by 0.9%, and the volume of imports decreased by 4.3%
  - The effect of net exports partly offset the effect of the 5.6% decrease of domestic use resulting in a GDP decline of 0.9%
- **In the first quarter of 2024, GDP grew by 0.8% relative to the previous quarter according to the flash estimate of HCSO**
  - Market services contributed to growth positively
  - Economic growth was lowered by a decrease in the value added of industry.

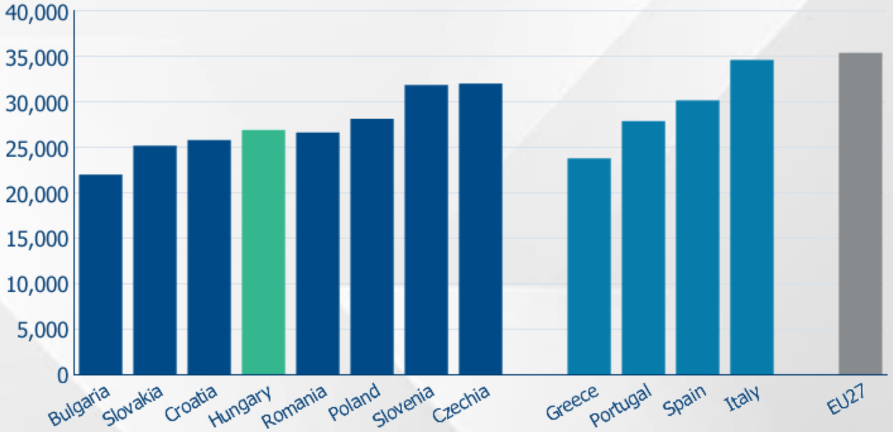
Real GDP growth - European Commission forecast

(YoY, %)

Sources: Eurostat, European Commission 2023 Winter Economic Forecast
*Note: Unadjusted data /*Preliminary data*

GDP per capita compared to several EU member states

(purchasing power standards, 2022)



Source: Eurostat

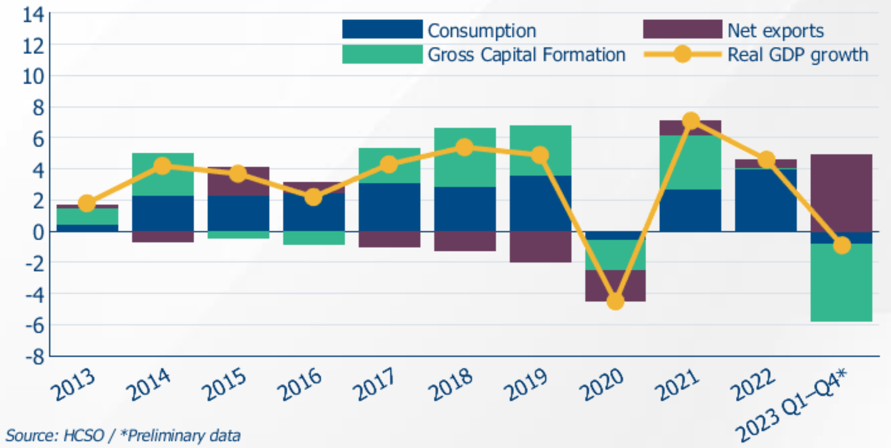
DIVERSIFIED GROWTH IN RECENT YEARS

Key highlights

- **All major sectors (except agriculture) increased in 2022**
  - In 2022, heavy drought contributed to the contraction in the agricultural sector
- **In 2022, the growth contribution was positive in the case of consumption, investments and net exports**
  - Broad-based growth in 2022
- **In 2023, the growth contribution was negative in the case of consumption and investments but positive in case of net exports**
  - Contraction of GDP driven mainly by declining domestic use
  - GDP growth supported by recovery in agricultural production among other factors

Contribution to GDP growth by expenditure

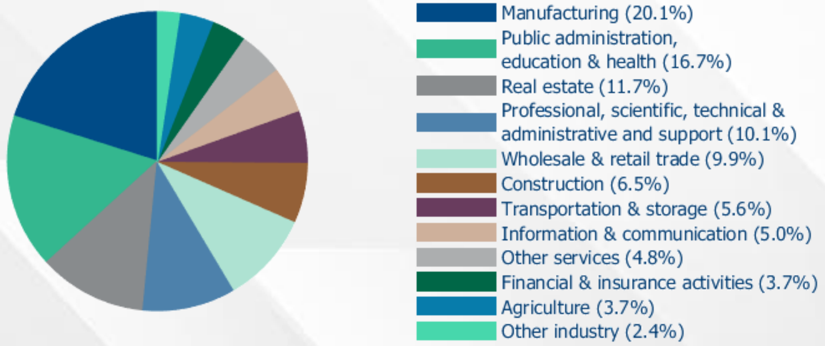
(percentage points)



*Source: HCSO / *Preliminary data*

Nominal GDP breakdown by sector

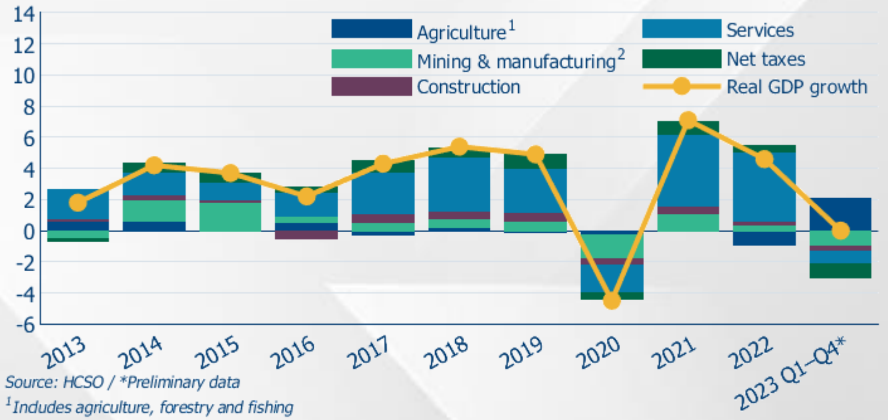
(2022, % of total GDP excluding taxes less subsidies on products)



Source: HCSO

Contribution to GDP growth by sector

(percentage points)



*Source: HCSO / *Preliminary data*

[1]Includes agriculture, forestry and fishing

[2]Includes mining and quarrying; manufacturing; electricity, gas, steam and air conditioning supply

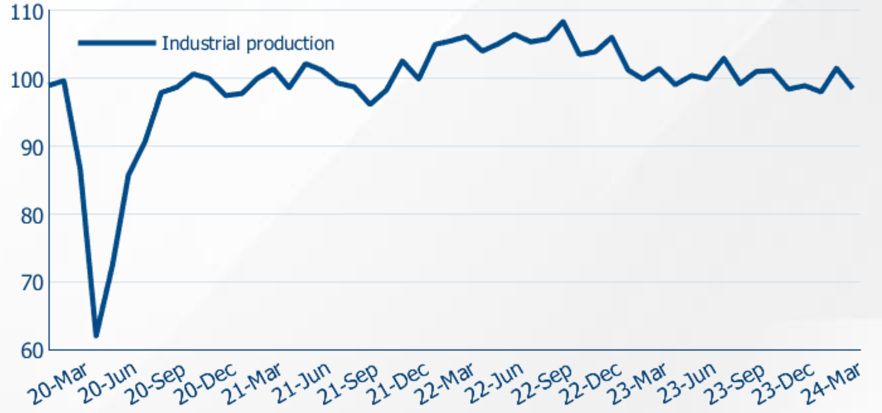
SHORT-TERM ECONOMIC INDICATORS IMPLY THE ECONOMY HAS AVOIDED A LARGE-SCALE SETBACK

Key highlights

- **Industrial production**
  - According to seasonally adjusted data, production decreased by 0.9% in January 2024, grew by 3.6% in February 2024 and decreased by 3.0% in March 2024 (the latest data) relative to the previous month
- **Retail sales**
  - The volume increased by 0.2% in January 2024, decreased by 0.3% in February 2024 and grew by 2.0% in March 2024 (the latest data) compared to the previous month
- **Unemployment rate contained**
  - The unemployment rate amounted to 4.4% in March 2024 (the latest available data); activity rate reached a new historic high of 68.0%

Industrial production

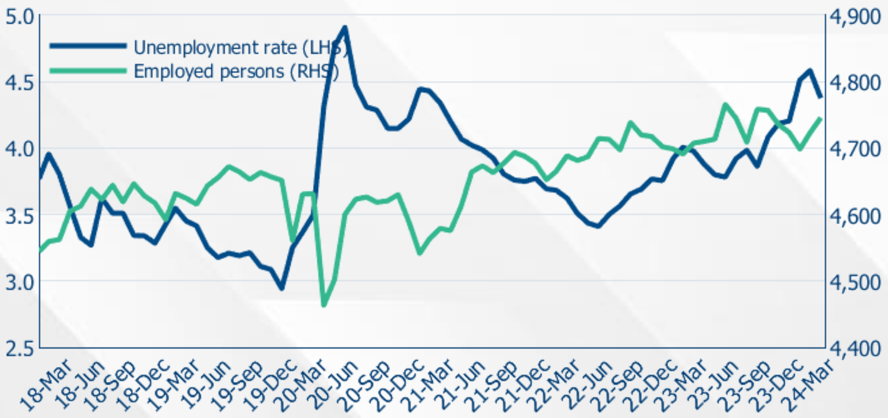
(seasonally and working-day adjusted volume indices, average month of 2015 = 100)



Source: HCSO

Unemployment rate and employed persons

(%, population aged 15-74, thousand persons)



Source: HCSO

Retail sales

(volume indices adjusted for calendar and seasonal effects, average month of 2015 = 100)

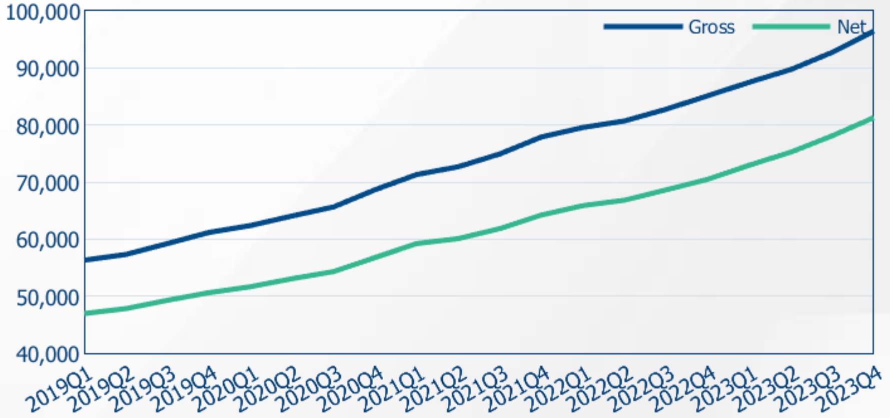
Source: HCSO

HOUSEHOLDS' SAVINGS ACCELERATED

Key highlights

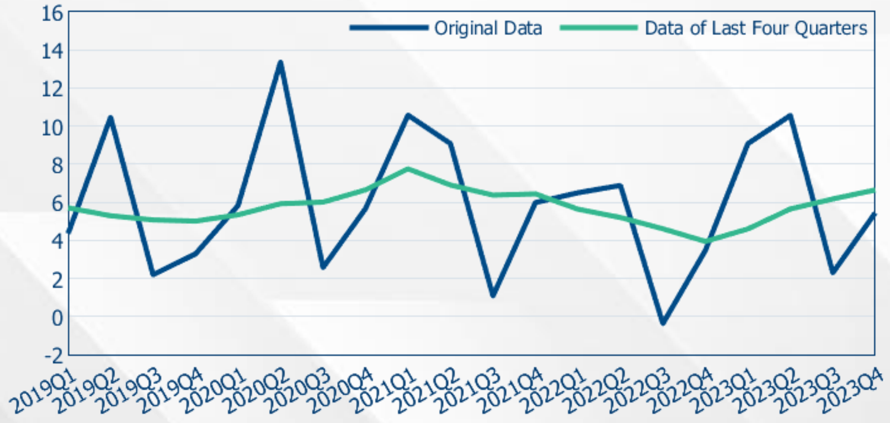
- **Financial assets of households are growing consistently**
  - Gross and net assets of households are growing steadily indicating households' precautionary savings activity, moderate borrowing and a healthy balance sheet of households
- **Net savings of households exceeded HUF 5,000 billion in 2023** (the latest data)
  - Of the HUF 5,023 billion net savings, net buying of financial assets amounted to HUF 5,618 billion
- **Households' net savings amounted to 6.7% of GDP in 2023** (the latest data)
  - Net households' savings relative to GDP accelerated from 4.0% in 2022
- Savings dynamics have been supported by **growth in real earnings**
  - Real earnings rose by 9.9% in February (the latest data) relative to the corresponding period of the previous year

Financial assets of households
(HUF Billions)



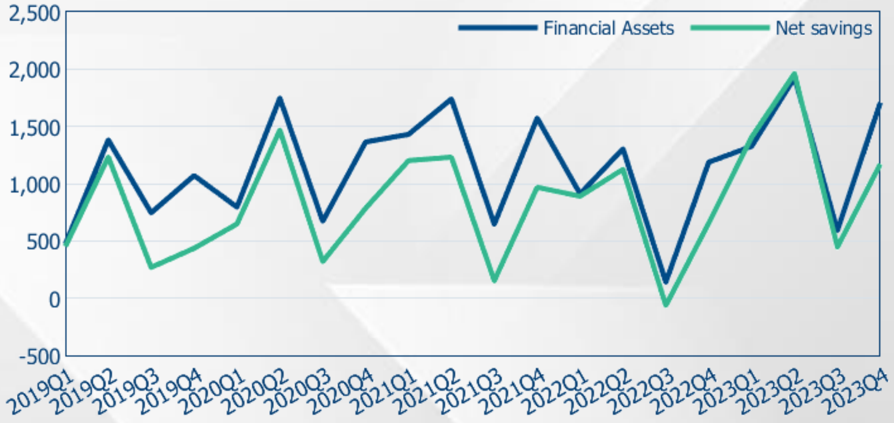
Source: NBH

Net savings of households
(Percent of GDP)



Source: NBH, HCSO

Net savings of households
(HUF Billion)



Source: NBH

II. ECONOMIC POLICIES SUPPORTING GROWTH AND STABILITY

FISCAL PRUDENCE REMAINS A KEY PRIORITY

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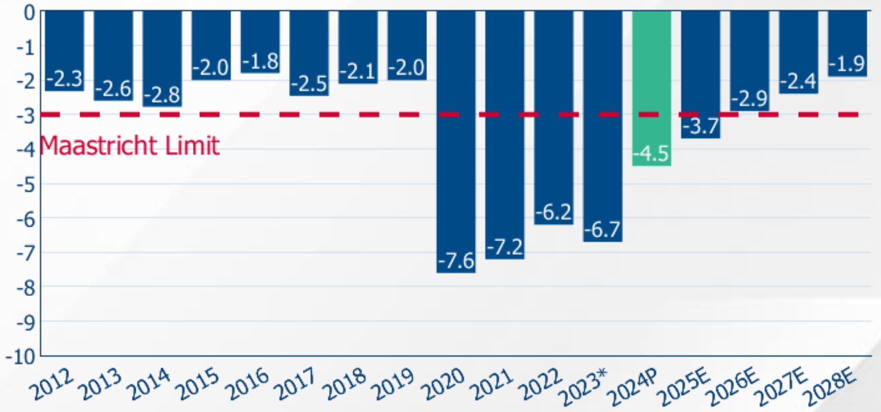
GOVERNMENT DEBT MANAGEMENT AGENCY PTE LTD.

Key highlights

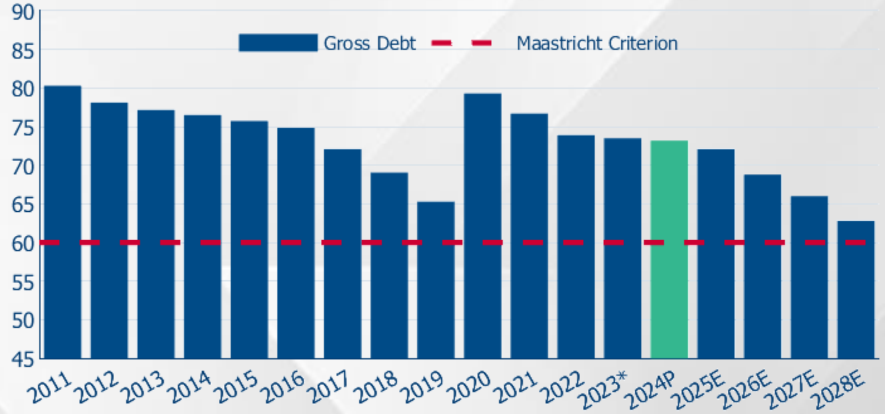
- Budget deficit was below the 3% Maastricht threshold between 2012-2019
- **Consolidation efforts after the Covid pandemic**: the fiscal deficit was reduced to 6.2%, with several measures to enhance fiscal resilience from 2022 onwards
- **Budget deficit reached 6.7% in 2023 in a difficult economic context, with projections of 4.5% for 2024, 3.7% for 2025 and 2.9% for 2026.**
  - In 2023 real GDP contracted, especially real consumption fell significantly while inflation was higher than planned due to unfavourable external circumstances. Consequently, deficit was higher due to lower tax revenues (1.9% of GDP), higher pensions (0.3%), and interest expenditures (0.3%)
- **Fiscal consolidation efforts are supported by an effective institutional set-up, which supports continued debt reduction**
  - Under Hungary's Fundamental Law, only budgets which provide for a reduction of the government debt-to-GDP ratio can be adopted as long as government debt exceeds 50% of GDP
  - Following the Covid-19 induced increase in the debt stock of 2020, **debt-to-GDP decreased to 76.7% in 2021, 74.1% in 2022 and 73.5% in 2023**, while the Government expects ratios of 73.2% in 2024 and further decrease in 2025 to 72.1%
- **Several measures have already been implemented to achieve a lower fiscal deficit for 2024**
  - HUF 675 billion of 2024 investments are postponed to the following years to meet the 4.5% deficit target
  - The submission of the 2025 budget was postponed by the Government to autumn 2024 in order to better apprehend external risks and benefit from the latest macroeconomic projections available
- **In line with the EU legislation, the Government remains committed to a deficit below 3% by 2026**

Evolution of Hungary's fiscal deficit
(% of GDP)



*Source: HCSO, MoF; Note: Latest (January 2024) forecast / *Preliminary figure*

Evolution of Hungary's general government debt
(% of GDP)



*Source: NBH, MoF / *Preliminary figure*

ACCESS TO EU FUNDS – POSITIVE DEVELOPMENTS OVER THE PAST FEW MONTHS

Timeline of discussions with the EU

15 December 2022

The **Council of the European Union adopted Hungary's RRP** and **lowered the rate of funding suspension** of three operative programmes **from 65% to 55%** (**EUR 6.3 billion** instead of the EUR 7.5bn previously proposed) as part of the conditionality procedure

22 December 2022

The European Commission adopted the Partnership Agreement for EU cohesion funds with Hungary, worth almost EUR 22 billion for the period 2021-2027. For the implementation and release of the funds, Hungary must comply with enabling conditions

1 June 2023

The justice reform package agreed upon with the Commission entered into force, implementing enabling conditions and super milestones on judicial independence

8 December 2023

The Council approved the amended Hungarian RRP. With the additional funding requested via the amendment, total approved RRF funding for Hungary amounts to **EUR 10.4 billion**

13 December 2023

The Commission concluded that the enabling condition has been fulfilled as regards judicial independence, unlocking **EUR 10.2 billion** of suspended Cohesion Policy funding

28 December 2023

The Commission disbursed the first instalment of pre-financing available to Hungary under REPowerEU, amounting to **EUR 779.5 million** in RRF loans

January 2024

The Commission disbursed from the 2021-2027 Cohesion Policy envelope EUR 445 million on 2 January 2024 and EUR 140 million in grants as part of pre-financing relating to the REPowerEU funds under the RRF on 15 January 2024

February 2024

The Commission accepted two thematic enabling conditions. Consequently, an additional EUR 2.03 billion of the EUR 21.73 billion Cohesion Policy Envelope became accessible

Source: https://abouthungary.hu/news-in-brief/investor-information-sheet-regarding-the-availability-of-eu-funding-to-hungary

ACCESS TO EU FUNDS – UNLOCKING OF EUR10 BILLION AS OF DECEMBER 2023 & FUNDS PARTLY FLOWING

Breakdown of remedial measures

- **Funds available for Hungary in the 2021-2027 programming period amount to almost EUR 48.5 billion, with approximately 60% available to Hungary**
  - Out of those, Common Agricultural Policy funds amount to EUR 10.7 billion and are not affected by suspensions
  - Suspensions affect part of the Cohesion Operational Programmes and the Recovery and Resilience Plans (Recovery and Resilience Facility and RepowerEU funds) for a total amount of around EUR 19 billion
  - More than EUR 29 billion of the total EU funds are available for Hungary
- **Significant progress on the 27 „super milestones"** has been achieved, with the unlocking of EUR 10 billion in December 2023**
  - 21 relate to remedial measures undertaken in the EU conditionality procedure – Hungary considers all commitments to be implemented, with the European Commission considering 16 super milestones as fulfilled. The fulfilment of these super milestones can be concluded in the coming months
  - 4 relate to judicial reforms – these commitments correspond to the horizontal enabling conditions related to Cohesion funds, with the European Commission approving their fulfilment in December, unlocking approx. EUR 10 billion of suspended Cohesion Policy funding
  - 2 relate to proper audit and control mechanism in the implementation of the RRP. The relevant audit procedure of the Audit Authority (EUTAF) is completed.
- **Summary of procedures affecting the remaining suspended EU funds**
  - Conditionality procedure (blocking 55% of 3 operative programmes in the Cohesion Policy envelope)
  - 27 „super milestones" (blocking the RRF and RePowerEU)
  - Some thematic enabling conditions (affecting certain priorities of some programmes in the Cohesion Policy envelope)

EU funds affected by suspensions

(EUR millions)

	Allocation	Currently available	Already received
Cohesion Policy Funding	21,730	12,770	1,141
RRF Funding	5,811	0	0
RePower EU grants+	701	0	140
RePower EU loan*	3,918	0	780

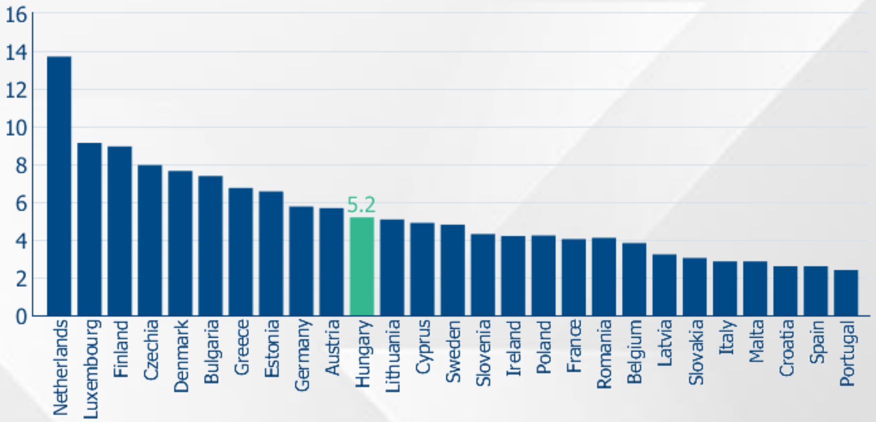
Source: MoF

+ Note: The EUR 0.14 billion provided in January 2024 was a grant advance payment.

** Note: The EUR 0.8 billion provided in December 2023 was a loan advance payment.*

2021-2027: Cohesion Policy EU payments by country

(as of 2 May 2024, % of net prefinancing and net interim payments relative to total EU allocation)



Source: European Commission

*** The 27 "super milestones" were included in Hungary's recovery plan and must be fulfilled before Hungary is deemed eligible to submit its first payment request under the RRF*

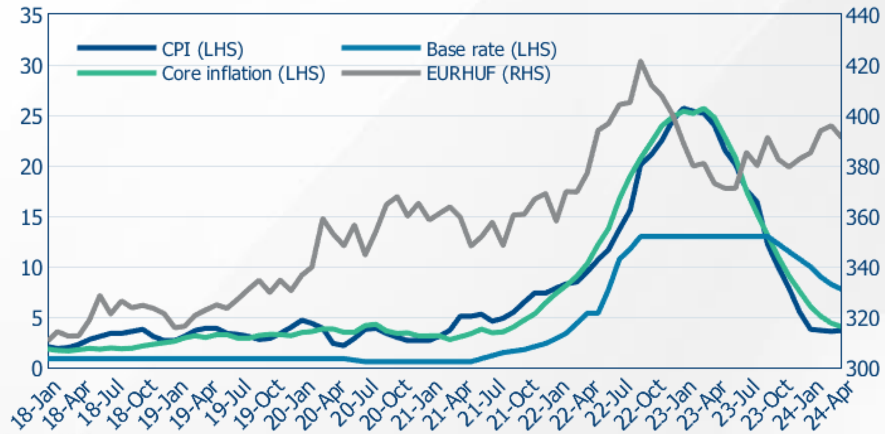
IN SPITE OF LOOSENING, MONETARY POLICY CONDITIONS ARE STILL TIGHT, THE BANKING SECTOR IS RESILIENT

Key highlights

- **The NBH's primary statutory objective is to maintain price stability**
  - The central bank base rate was increased to 13.00% in September 2022, and the central bank announced overnight deposit quick tenders yielding 18.00% from 14 October 2022 onwards
  - HUF strengthened versus the euro during the course of 2023
- Overnight deposit quick tenders yield was gradually reduced to 13.00% until September 2023
- Since September 2023, the central bank base rate became the main monetary policy instrument and it was reduced each month reaching 7.25% by end-May 2024
- **12-months inflation rate decreased from 25.7% in January 2023 to 5.5% in December 2023, and to 3.7% in April 2024**
- **Quarterly average inflation amounted to 3.7% in Q1 2024**

Central bank base rate, inflation rates, foreign exchange rate

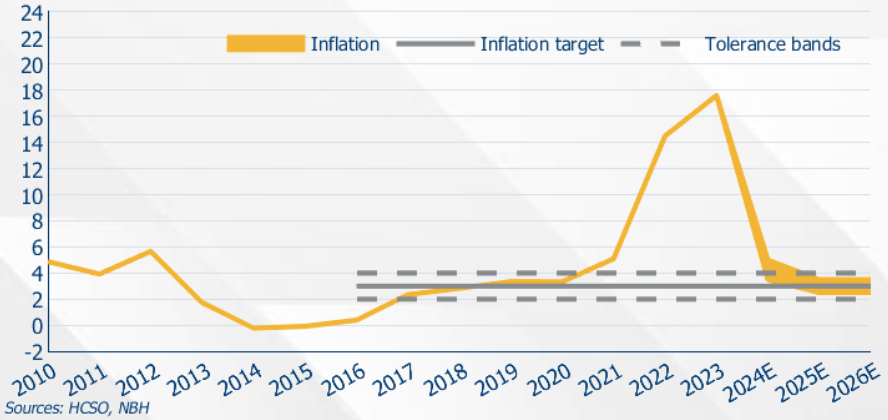
(end-of-month data, foreign exchange rate: HUF / 1 EUR; core and headline inflation: %)



Source: NBH

Inflation vs inflation targets

(yearly average data, %)

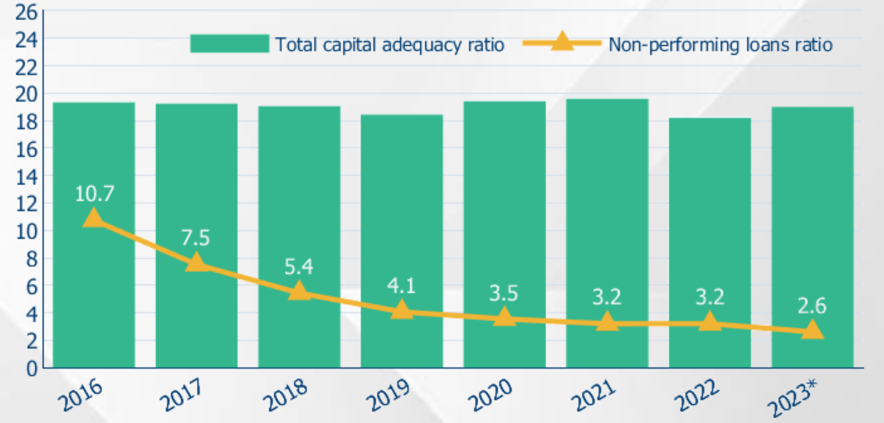


Sources: HCSO, NBH

Note: Based on seasonally unadjusted data, compared to the corresponding period of the previous year; forecasts after 2023

Total capital adequacy and non-performing loans ratios

(end of period, %)

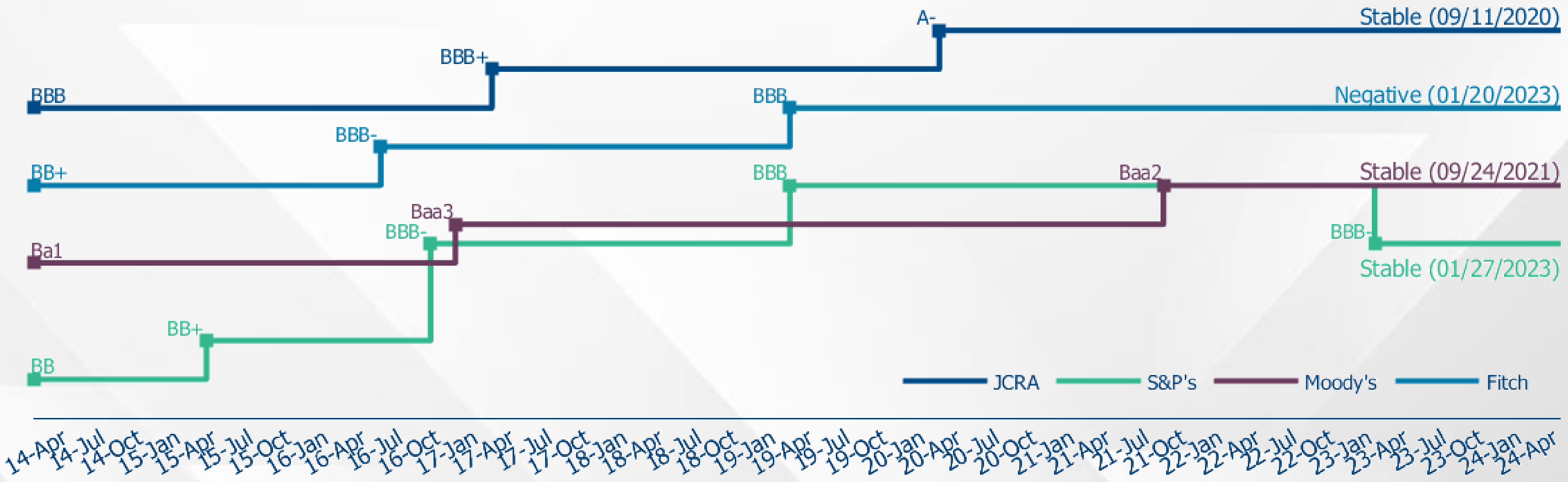


*Source: NBH / *Preliminary data / Note: NPLs are loans at least 90 days overdue*

STRONG FUNDAMENTALS HAVE ALLOWED HUNGARY TO NAVIGATE CHALLENGING GLOBAL BACKDROP

Evolution of Hungary's ratings [1]

- **Hungary's credit ratings have improved overall relative to 2014 thanks to improving fundamentals,** evidenced by several rating upgrades across 3 agencies in the last 8 years
- **Those strong fundamentals have allowed Hungary to remain an investment grade country** throughout the Covid-19 crisis and current difficult macroeconomic conditions linked to the war between Russia and Ukraine
- Hungary is currently rated Baa2 (stable) by Moody's, BBB (negative) by Fitch, BBB- (stable) by S&P and A- (stable) by Japan Credit Rating Agency



Source: NBH

Note: 1. A rating is not a recommendation to buy, sell or hold securities and may be subject to revision, suspension or withdrawal at any time by the assigning rating organisation. Similar ratings for different types of issuers and on different types of securities do not necessarily mean the same thing. The significance of each rating should be analysed independently from any other rating.

III. EXTERNAL POSITION

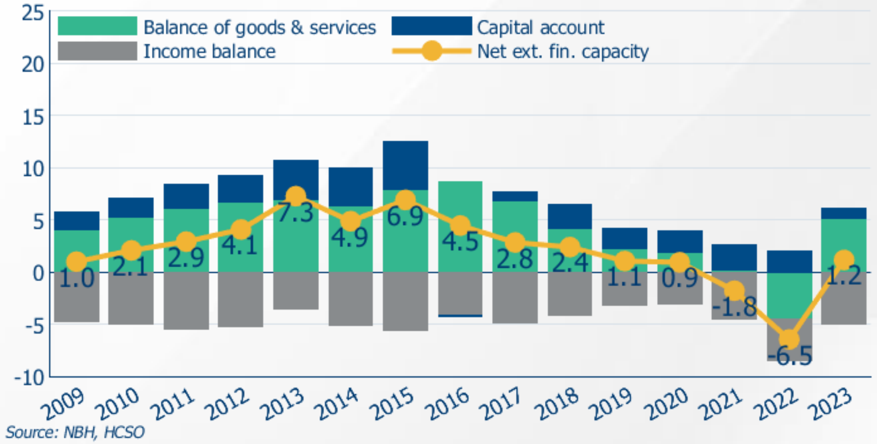
HUNGARY'S EXTERNAL ACCOUNTS – RAPID IMPROVEMENT IN EXTERNAL BALANCE AMID RESILITENT FDI FLOWS

Key highlights

- **In 2022, the current account deficit amounted to EUR 14.1 billion**
  - Energy trade balance accounted for EUR 16.8 billion deficit
- **The current account deficit turned into a surplus of EUR 0.4 billion in 2023**
  - Energy trade deficit decreased to EUR 8.7 billion in 2023
  - The improvement in the external balance position has been driven by significantly lower energy prices compared 2022, the adjustment of energy consumption, declining import intensity and growing value of exports

Net external lending components and position

(% of GDP, four quarter rolling data)

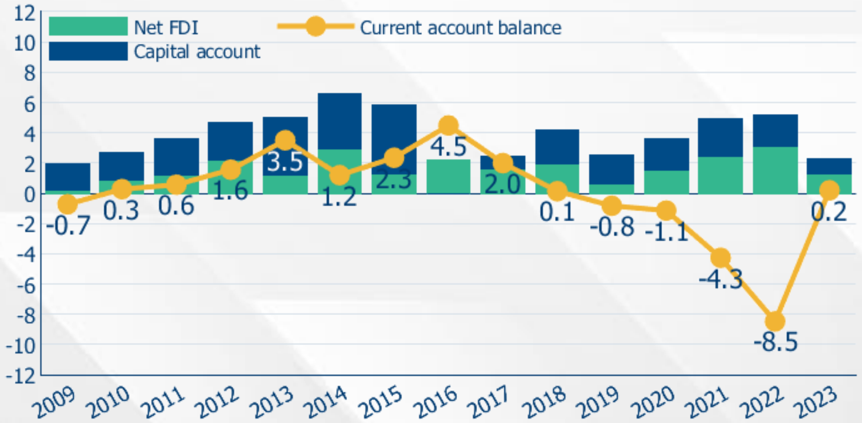


Source: NBH, HCSO

Source: NBH, HCSO

Net external lending position

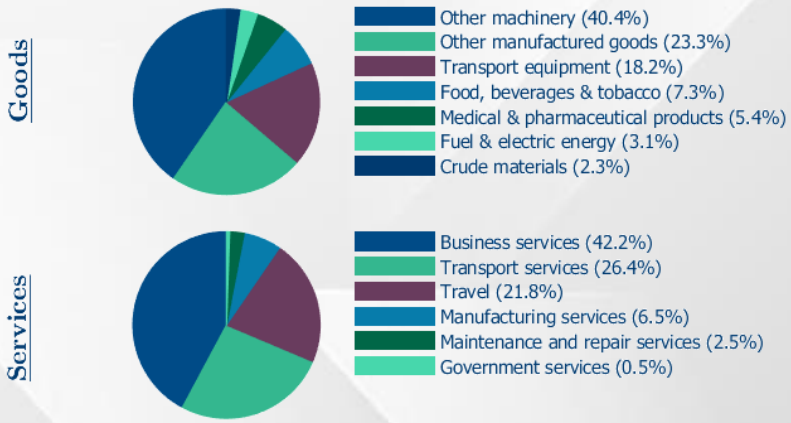
(% of GDP, four quarter rolling data)



Source: NBH, HCSO

2023 export - structural breakdown

(EUR millions)



Source: HCSO

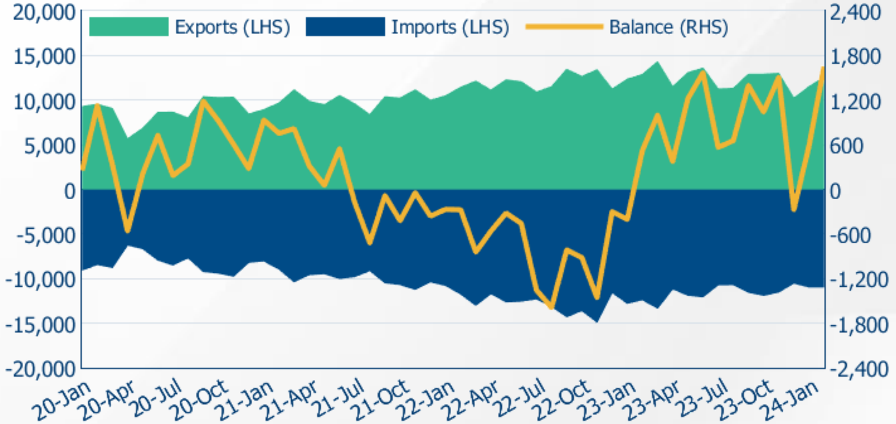
EXTERNAL TRADE POSTING A SIGNIFICANT SURPLUS

Key highlights

- **According to final data of HCSO, external trade deficit amounted to EUR 9.1 billion in 2022**
  - External trade deficit in case of fuels and electric energy amounted to EUR 16.8 billion in 2022
- **In 2023, external trade posted a surplus**
  - External trade posted a surplus of EUR 9.2 billion during 2023; the deficit in case of fuels and electric energy amounted to EUR 8.7 billion
- **The external trade surplus amounted to EUR 0.6 billion in January 2024, EUR 1.7 billion in February 2024 and EUR 1.5 billion in March 2024 (the latest available data)**

External trade balance

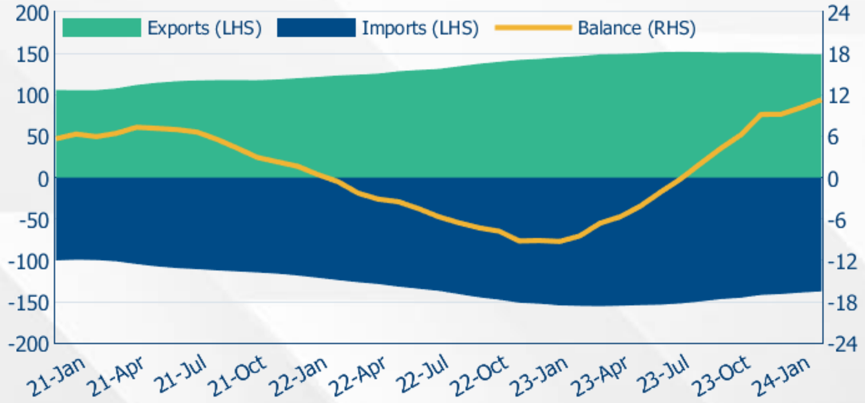
(Monthly data, EUR millions)



Source: HCSO

External trade

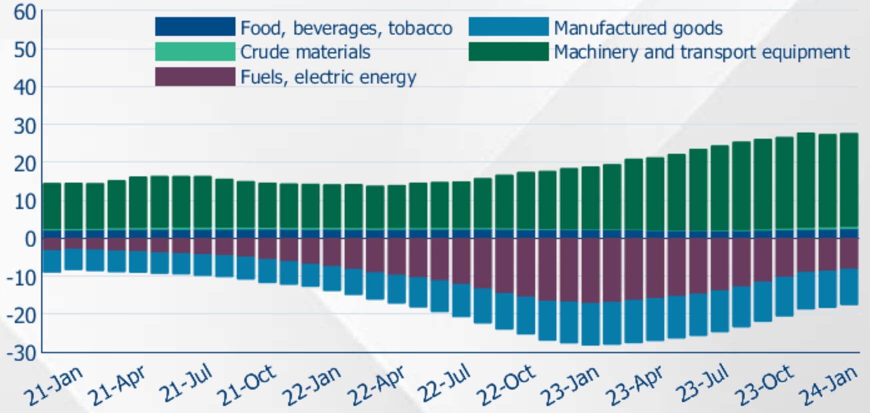
(Twelve-month rolling data, EUR billions)



Source: HCSO

External trade balance breakdown

(Twelve-month rolling data, EUR billions)



Source: HCSO

EXTERNAL DEBT AND FX RESERVES

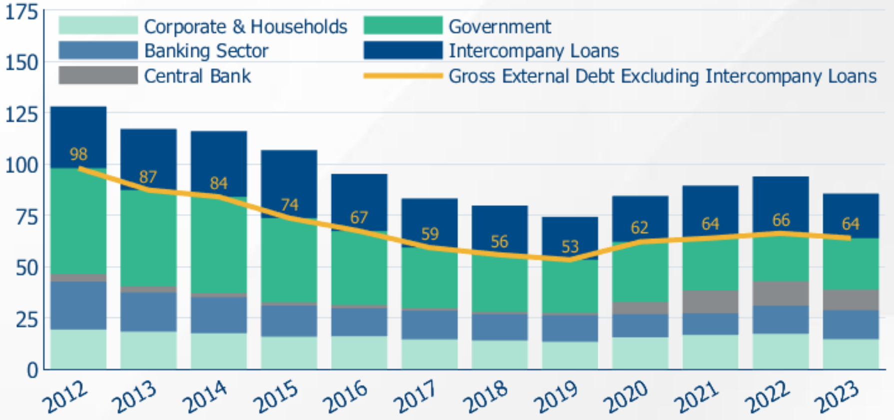
Key highlights

- **External debt indicators improved significantly compared to 2012**
  - Hungary's gross external debt decreased substantially between 2012 and 2019, notably on the back of active public debt management
  - The external debt has increased since 2019 mainly as a result of the pandemic and high energy prices
  - The net external debt of Hungary also improved between 2012 and 2019 and has deteriorated since then
- **International reserves remain high and continue to considerably exceed the level considered safe under the Guidotti-Greenspan rule***
  - Hungary's FX reserves to short-term debt ratio has been above 1.0x since 2012
  - FX reserves amounted to EUR 46.9 billion on 30 April 2024

Source: NBH

Gross external debt

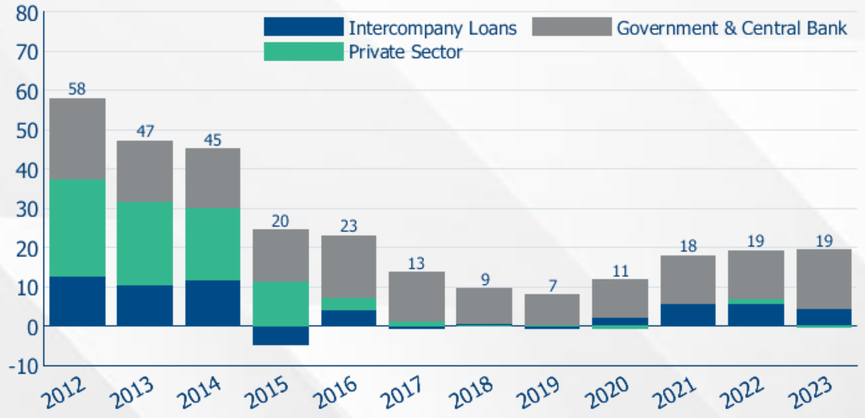
(% of GDP, excluding special purpose entities four quarter rolling data)



Source: NBH, HCSO

Net external debt

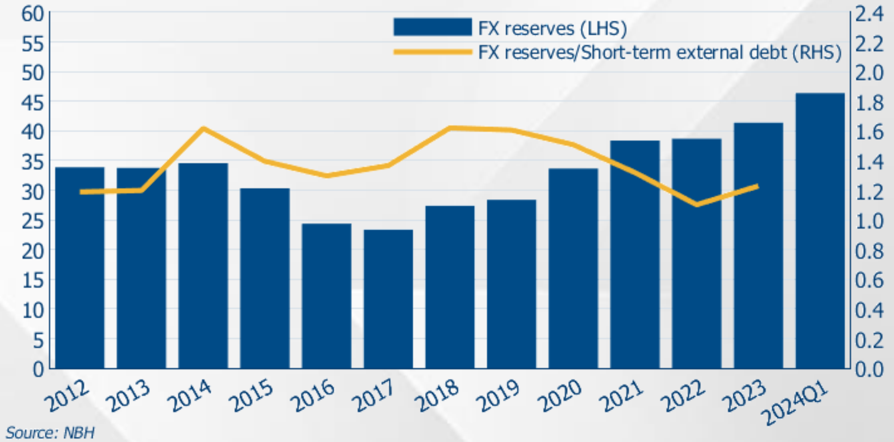
(% of GDP, excluding special purpose entities, four quarter rolling data)



Source: NBH, HCSO

International reserves level

(EUR billions)

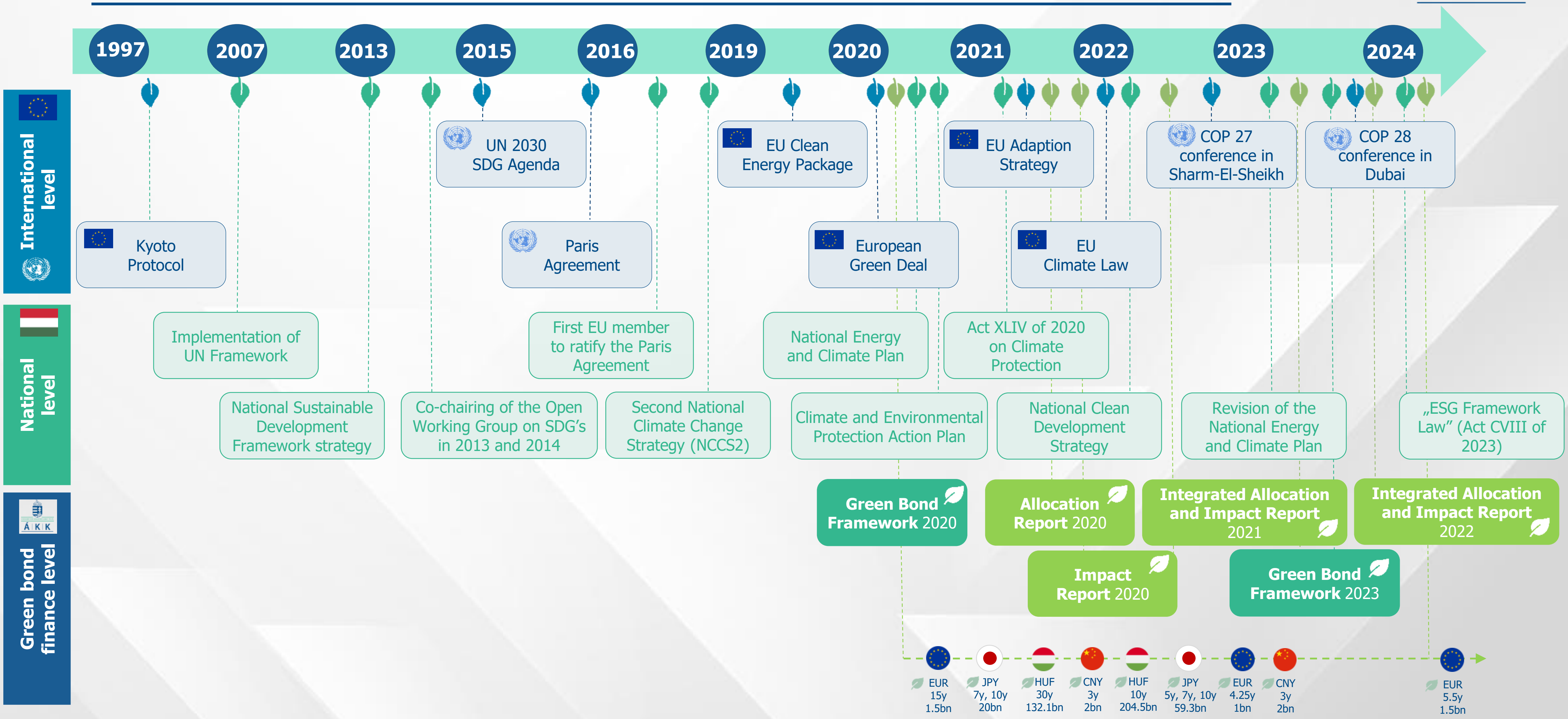


Source: NBH

**Note: The Guidotti–Greenspan rule states that a country's reserves should equal short-term external debt (one-year or less maturity), implying a ratio of reserves-to-short term debt of 1*

IV. ESG

PROTECTING THE ENVIRONMENT IN ACCORDANCE WITH INTERNATIONAL AND NATIONAL REGULATIONS



Note: Hungary ESG profile: https://akk.hu/download?path=5da68682-3856-411d-a5aa-95e4024f7bbc.pdf

COMMITMENT TO REACH THE EU AND INTERNATIONAL TARGETS

Á K K

National Clean Development Strategy

Long term goal

- 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)

National Climate Change Strategy (NCCS2)

Near term goal

- 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

Four key pillars	
Decarbonisation	▪ Replacement of fossil fuel energy carriers ▪ Increase in energy efficiency ▪ Reducing natural resources consumption
Analysis of climate vulnerability	▪ Development of vulnerability methodologies ▪ Promoting climate-related research projects
Adaptation	▪ Preservation of natural resources ▪ Adaptation of vulnerable regions and sectors
Partnership for climate	▪ Horizontal integration in public administration ▪ Awareness-raising in the Education

Other relevant strategies

- **National Energy and Climate Plan**
- **National Energy Strategy 2030**
- **Climate and Environmental Protection Action Plan**
- **Long Term Renovation Strategy**
- **National Hydrogen Strategy**
- **National Forest Strategy**
- **National Biodiversity Strategy**
- **National Water Strategy**
- **5th National Environmental Protection Program**

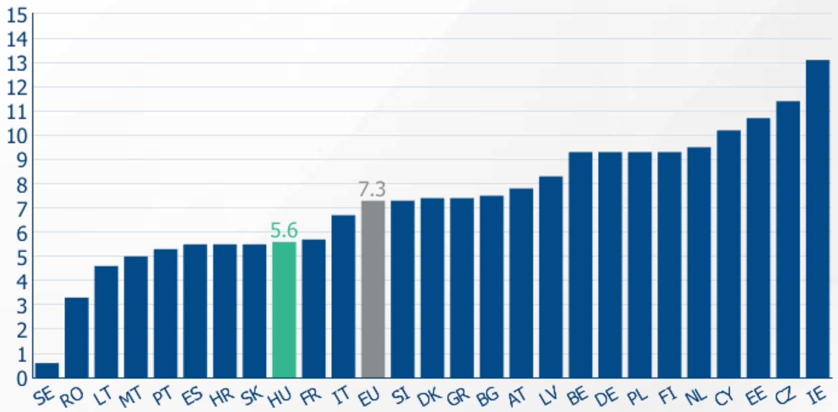
HUNGARY'S PATHWAY TO CLIMATE NEUTRALITY

Key highlights

- Hungary was **among the first countries globally to turn its 2050 emissions target into a legal commitment** with the adoption of the Climate Protection Law in 2020
- As part of the EU's 2030 Climate and Energy Framework, by 2030, **Hungary's plans to reduce its overall GHG emissions by 50%**
- Hungary is currently **below the EU average GHG emission rate** (t/capita) and **9th lowest** net GHG emitter in the EU
- Hungary **reduced** its **greenhouse gas emissions** (t/capita) by **33%**[1] between 1990 and 2021 and based on preliminary data by **37%**[2] between 1990 and 2022
- In 2022, the highest contribution to net GHG emissions in Hungary came from **transport sector**, followed by the **building sector**, and the **energy sector**

Net greenhouse gas emission

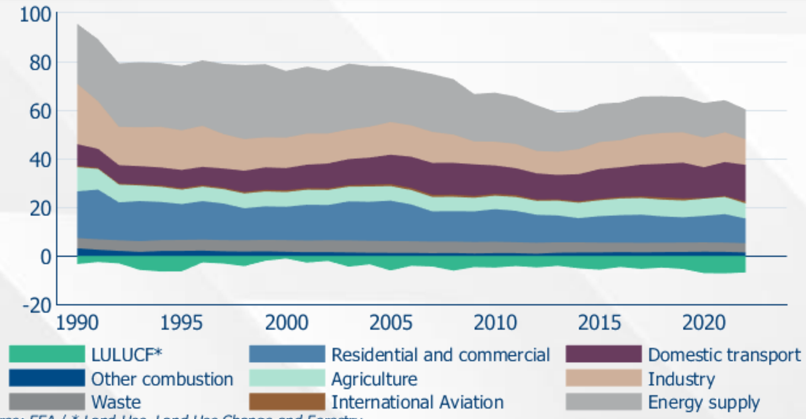
(t/capita), 2022



Source: Eurostat

GHG emission by sector

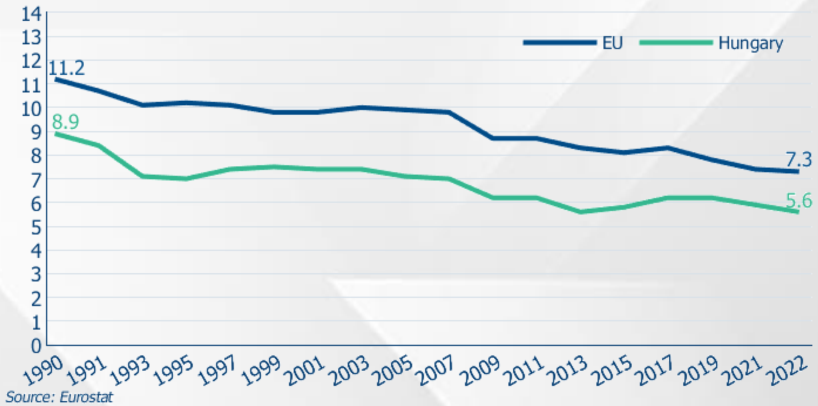
(Million tonnes, CO_2 equivalent), 1990-2022



*Source: EEA / * Land-Use, Land-Use Change and Forestry*

Historical net greenhouse gas emission

(t/capita), 1990-2022



Source: Eurostat

Source: *1: Climate Action Progress Report 2022, 2: Climate Action Progress Report 2023*

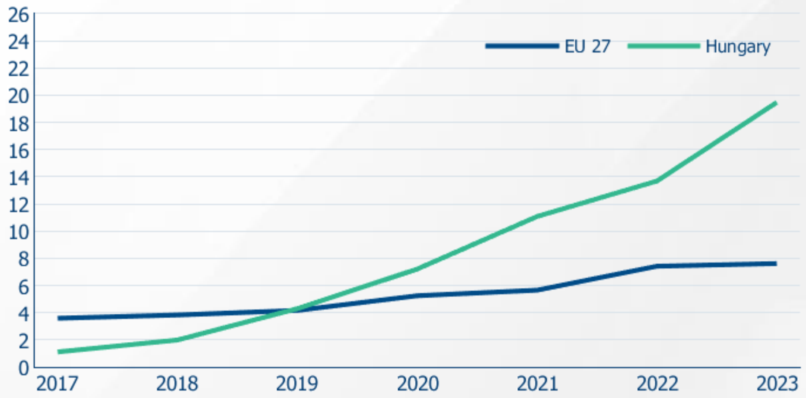
AMBITIOUS PLANS AND ACHIEVEMENTS IN THE ENERGY SECTOR TO REACH CLIMATE NEUTRALITY

Key highlights of energy sector

- The National Energy Strategy 2030 with an outlook to 2040 and The National Energy and Climate Plan aims to:
  - Reduce the **import of fossil fuels**
  - Primary objective is to **strengthen Hungary's energy independency**
- Since 2015, **solar energy has increased significantly** in terms of relative share in gross renewable electricity generation resulting in Hungary's leadership in the EU regarding **solar PV share in electricity output**
- Since 2000, **the share of renewables in primary energy consumption has increased significantly**
- The change in the energy mix represents the **first results of the Government's ambitions to** increase the share of renewables in power and heat generation and to decrease natural gas consumption

Solar PV share of net total electricity generation

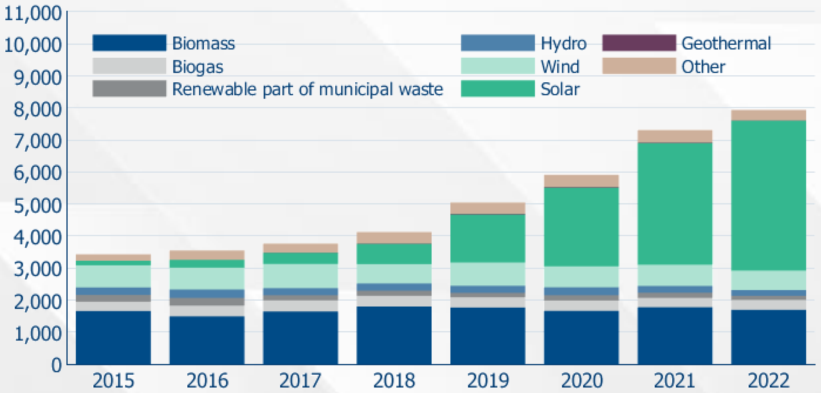
(gigawatt-hour), 2017-2023



Source: Eurostat

Gross renewable electricity production

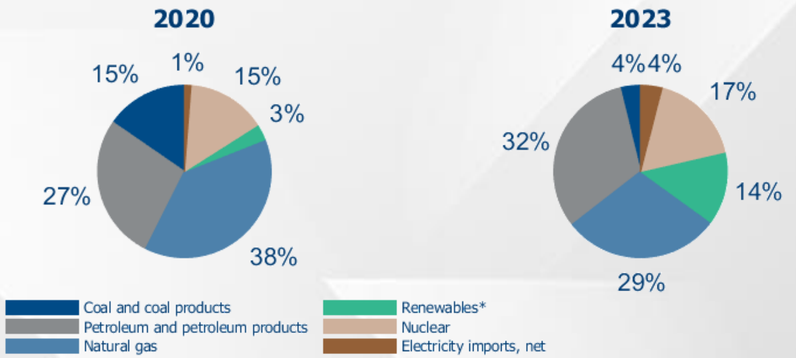
(gigawatt-hour), 2015-2022



Source: HCSO / Note: Preliminary data for 2022

Structure of primary energy consumption

(percentage)



Source: The Hungarian Energy and Public Utility Regulatory Authority (MEKH)
**Incl. combustible and non-combustible renewables, wastes, wind and hydro. Note: Provisional data for 2023*

Source: *National Energy and Climate Plan, Ministry of Energy*

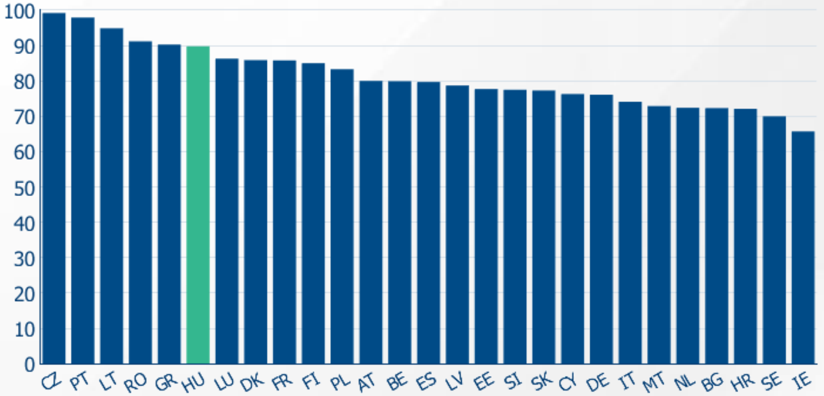
GREENING THE TRANSPORT SECTOR IN ORDER TO CONTRIBUTE TO A GREENER FUTURE

Key highlights of transport sector

- Further **modal shift from passenger cars and freight transport to public transport is encouraged**, which underpins high share of spending from proceeds obtained by issuing Green Bonds
- The country plans **to increase biofuel use** and to promote the use of **alternative** (e.g. electric) **vehicles**
- The volume of passenger transport relative to Hungary's GDP is **one of the highest** in Europe
- According to the **National Energy and Climate Plan**: „To reduce increasing energy consumption in transport, it is essential to develop and increase the use of public transportation"
- The **Green Bus Program** aims to integrate electric buses into local transport with the implementation of Pilot Projects
- **42.6% of the railway network was electrified in 2022,** it is expected to increase

Volume of passenger transport relative to GDP

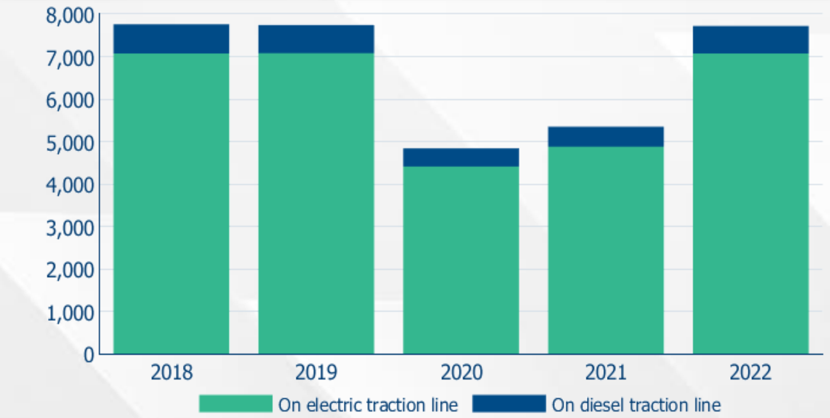
(percentage, index 2015=100), 2021



Source: Eurostat

Passenger-kilometre on the operated rail network

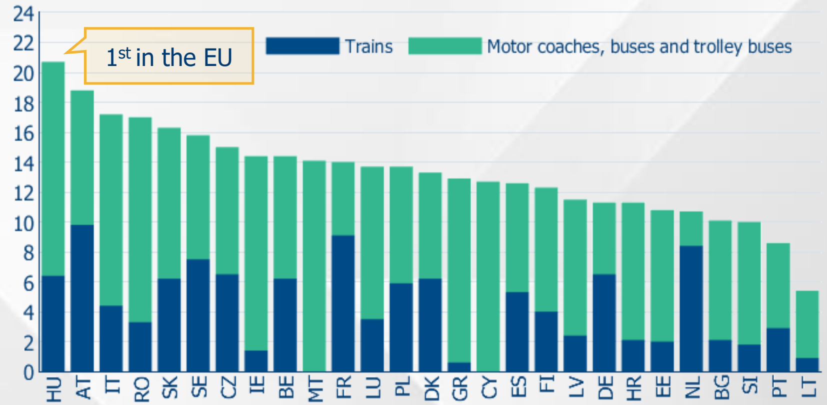
(million kilometres), 2018-2022



Source: MÁV Zrt., GYSEV Zrt.

Modal split of inland passenger transport

(percentage), 2021



Source: Eurostat

Source: *HCSO, National Energy and Climate Plan*

FOSTERING SUSTAINABILITY IN INDUSTRY AND IN RESIDENTIAL AND COMMERCIAL SECTOR

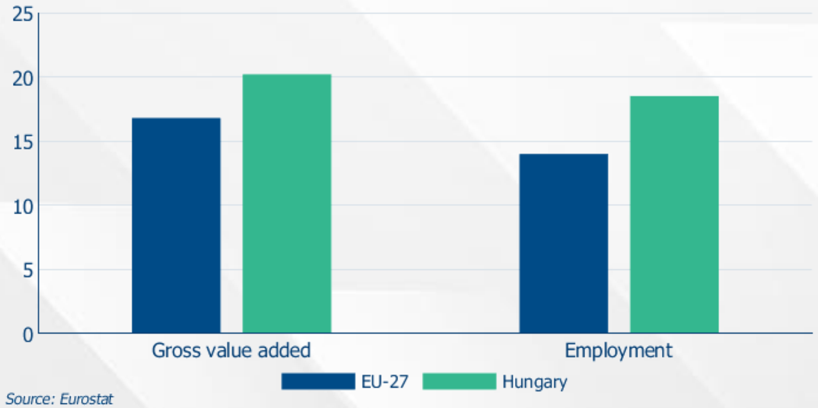
Key highlights of industry sector

- Total industrial sales are dominated by manufacturing
- Approaches to reduce GHG emission include:
  - Primarily **energy efficiency investments** and technological shift (to electric power)
  - Application of **low-carbon** or **green hydrogen** in energy-intensive sectors, where electrification is challenging (e.g. chemical, steel)
  - Additionally Hungary plans to adopt technologies focusing on **carbon capture storage (CCS)** in the future
- The **Baross Gábor Capital Program** or the **Factory Rescue Program** provides support for industrial companies to improve **energy efficiency** and **green developments and resilience towards excessive energy prices increases**
- The **Just Transition Fund** supports regions and **carbon-intensive industries** in transitioning to climate neutrality

Key highlights of residential and commercial sector

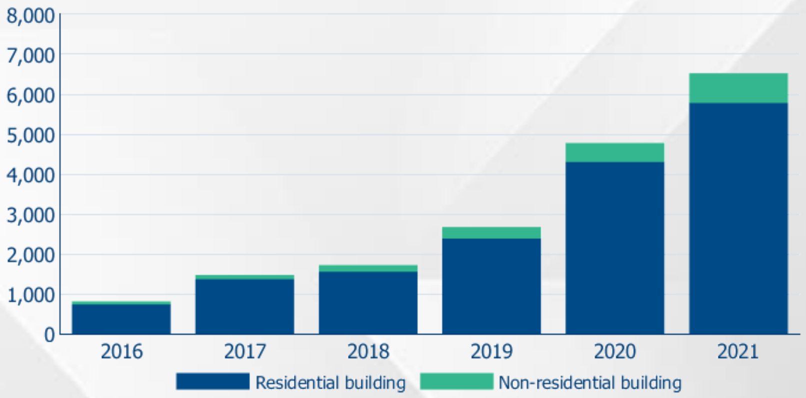
- Approximately **2.6 million** residential properties require some level of energy modernization
- About **42%** of **primary energy consumption** derives from buildings according to National Building Energy Strategy (NÉeS)
- **Three-quarters of the energy** used in Hungarian households is related to heating, which is primarily produced by **natural gas**
- With modernization and alternative heating methods, about **2 billion m^3 natural gas consumption** could be avoided annually
- The **Long Term Renovation Strategy** (HTFS) aims to achieve **20% reduction** in energy consumption of domestic residential buildings by 2030, a **60% decrease** in CO_2 emission related to the energy use of buildings by 2040 compared to the average between 2018-2020 and **90%** of **buildings meeting** the nearly-zero energy building performance **(NZEB)** by 2050

Share of manufacturing in GDP and employment
(percent), 2022



Source: Eurostat

Number of near to zero-energy buildings in use
(pcs), 2016-2021



Source: HCSO

Source: *National Building Energy Strategy (NÉeS), National Energy and Climate Plan*

IMPLEMENTING ENVIRONMENTAL PRACTICES IN AGRICULTURE, LULUCF AND WASTE SECTOR

Key highlights of agriculture and LULUCF[1] sector

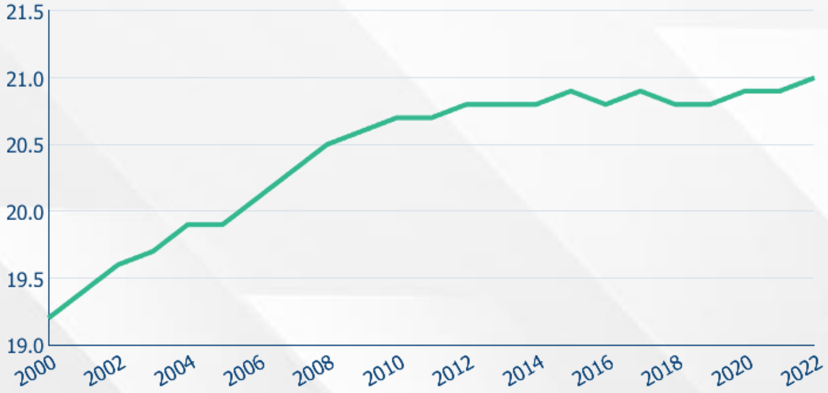
- The Hungarian **CAP Strategic Plan** 2023-2027 aims to:
  - Cut GHG emissions in agriculture, boost **carbon sequestration** the LULUCF sector by reducing GHG and ammonia emission in the livestock sector, using **forestry measures** to decrease GHG and gases, investing in **renewable energy** production and improve **soil** and **ecosystem carbon sequestration**
- The **Agroecology Program** (AÖP) offers an optional annual support for producers who voluntarily adopt climate-friendly farming practices
- The **Soil Protection Action Plan** will ensure the attitude formation and training of farmers in order to implement sustainable agricultural land use
- According to the **National Forest Strategy**, the continuous increase of forest areas is planned – fostered by the **National Afforestation Program (NEtP) -** in order to increase **CO_2 absorption capacity**

Key highlights of waste sector

- The **National Waste Management Plan 2021-2027** (with the **National Prevention Program** and **Action Program** being its integral component) sets ambitious objectives including:
  - The quantity of **municipal waste** recycled and prepared for reuse must reach **55%** by 2025 (with a derogation 50%)
  - Regarding packaging waste, the **minimally required recycling rate** should increase to **70%** without derogation by 2030
- The government introduced the **Deposit Return System** and a new **concession-based system** where the **waste management responsibilities**, including municipal waste collection and pre-treatment will be delegated to the concessionaire
- Additionally, various programs, such as the **nationwide asbestos removal program** support legal waste disposal and eradicate illegally dumped waste

Forest area coverage of the country's total land area

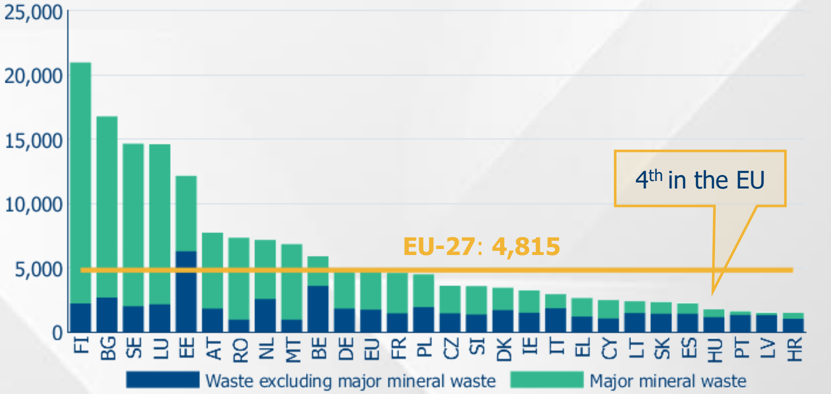
(percentage), 2000-2022



Source: HCSO

Waste generation

(kg per capita), 2020



Source: Eurostat

Note: *1: Land-Use, Land-Use Change and Forestry*

Source: *National Energy and Climate Plan, Waste Management Program, Hungary 2023 National Annual Reform Program*

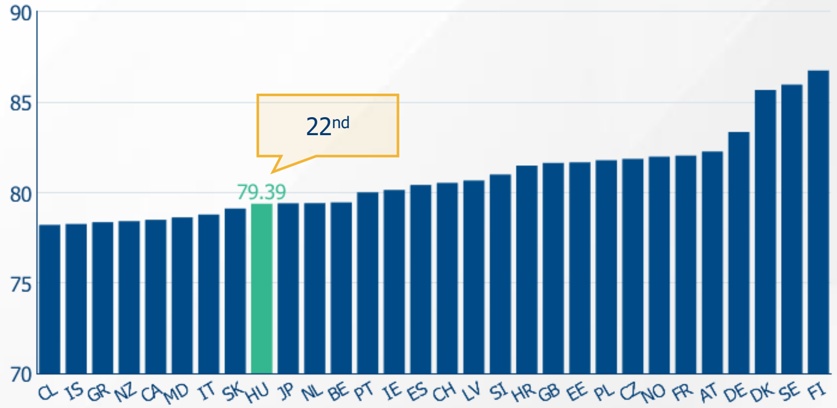
HUNGARY’S ESG POSITION

Key highlights

- **Overall:**
  - Hungary is ranking **22nd** among all 193 UN Member States regarding the percentage of its **SDG achievement**
  - Largest Central Eastern European green bond issuer
  - Hungary intends to issue more green bonds in the future and **continue it’s path on sustainable finance**

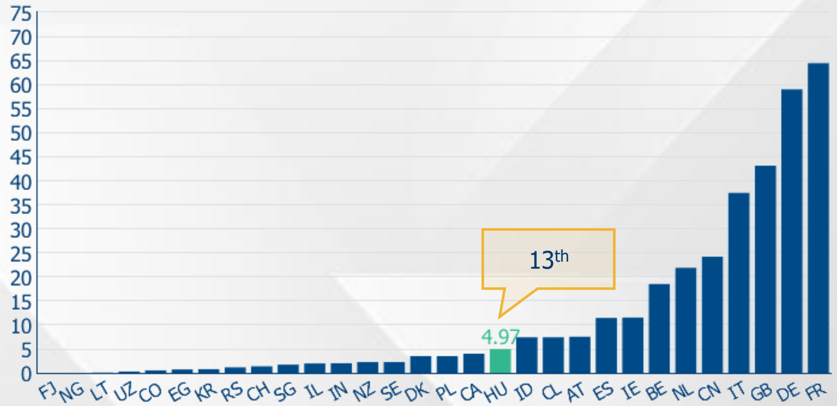
- **Green Bond finance:**
  - Hungary successfully issued Green Bonds on the domestic (HUF) and international (EUR, JPY, CNY) markets for a total amount of **2,359 billion HUF** (as of December 2023) between 2020 and 2023
  - In **2023 July**, Hungary published its **renewed Green Bond Framework**
  - **EU Taxonomy assessment** was part of the new Framework
  - **37 activities** were assessed for **Substantial contribution** and **Minimum Safeguards** criteria
  - **20 activities** were assessed for **DNSH** criteria including the Clean Transportation, Energy efficiency (incl. Green buildings), Renewable energy

Hungary’s SDG ranking globally (top 30 countries), 2023



Source: Sustainable Development Report 2023

Hungary’s green bond issuance compared to sovereign issuers* (Amount issued USD bn.), 2024



Source: ICMA Group, based on their own calculation

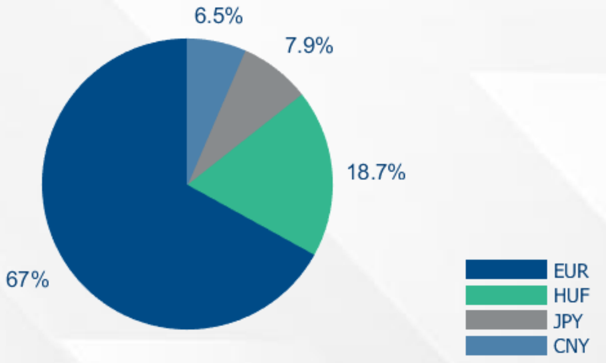
***Source:** ICMA Group’s methodology and database of bonds that are published in the LGX DataHub and declared by the issuer and/or an external reviewer to be aligned with the Green Bond Principles*

GREEN BOND ISSUANCES 2020-2024

Key highlights

- Hungary issued its **first Green Bond** in May 2020
- Between 2020 and 2024 Hungary successfully issued Green Bonds on the domestic (HUF) and international (EUR, JPY, CNY) markets
- Hungary's current (as of 30 April 2024) green outstanding debt amounts to **2,335 billion HUF** which is **4.4 %** of the total debt
- Average term to maturity is **7.7 year**
- **EUR bonds** take the **highest share** of the issued green bonds

Share of green instruments based on currency
(%)



Source: AKK

Note: *As of 30/04/2024*

Total Green Hungarian outstanding debt

ISIN	Currency	Issue Date	Tenor (year)	Total outstanding debt (billion HUF)
XS2181689659	EUR	05/06/2020	15	586.6
XS2558594391	EUR	21/11/2022	4	391.0
XS2753429047	EUR	25/01/2024	5	586.6
				1,564.2
HU0000404991	HUF	28/04/2021	30	151.0
HU0000405535	HUF	26/01/2022	10	284.5
				435.6
JP534800CL92	JPY	18/09/2020	7	36.1
JP534800DL91	JPY	18/09/2020	10	10.5
JP534800BN26	JPY	25/02/2022	5	108.9
JP534800DN24	JPY	25/02/2022	7	10.9
JP534800CN25	JPY	25/02/2022	10	18.1
				184.4
CND10004QFJ7	CNY	16/12/2021	3	50.3
CND10005WTB0	CNY	17/11/2022	3	100.7
				151.0

Note: *Date of first issuance, tap issuances of HUF bonds are not showcased*
As of 30/04/2024

GREEN BOND ACHIEVEMENTS UNDER THE GREEN BOND FRAMEWORK 2020

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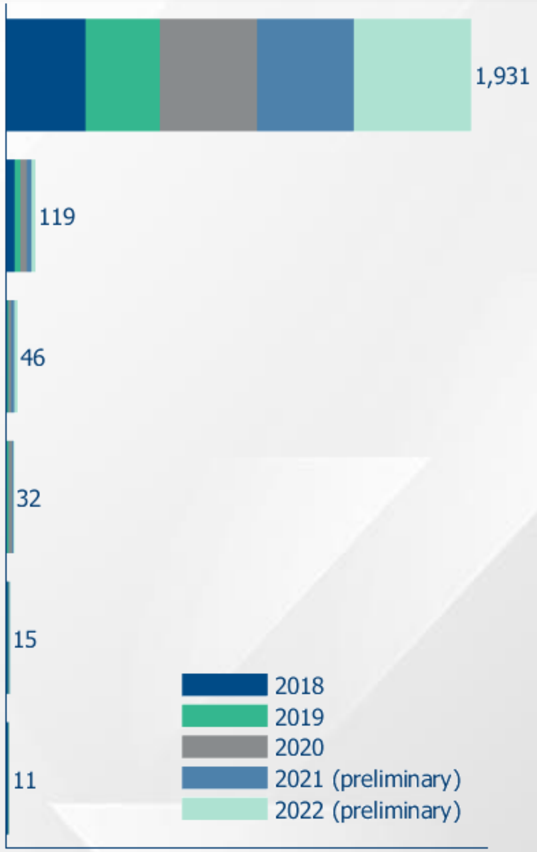
UN SDGs		Positive impacts of each green category	
13 Climate Action; 11 Sustainable Cities and Communities	**Clean Transportation**	3,103	**Kilotons of CO_2eq** saved
15 Life on Land	**Land Use and Living Natural Resources**	1.3m	**Hectares** of forest and agricultural areas under Natura 2000 supported by compensation payments
7 Affordable and Clean Energy	**Energy Efficiency**	365	**Kilotons of CO_2eq** saved
6 Clean Water and Sanitation; 13 Climate Action	**Adaptation**	11	**Developments** supported the **implementation of the Water Framework Directive**
6 Clean Water and Sanitation; 11 Sustainable Cities and Communities	**Waste and Water Management**	787	**Metres per kilometres increase in length of sewage system** of drinking water system
7 Affordable and Clean Energy	**Renewable Energy**	10.5	**Kilotons of CO_2eq** saved

Eligible green expenditures (HUF billions)



Source: Ministry of Finance

Note: *Based on 2020 , 2021 and January 2022 – May 2023 issuances. The results of energy savings, renewable energy production and emission avoided are cumulated since as per the projects baseline. The baseline is determined as the year of financing granted and investments occurred. In case of the tax exemption projects, data is summarized based on the year that beneficiaries use the tax exemptions. Where the ratio of the green bond support was clearly determined, the impact results were adjusted as per their share.*

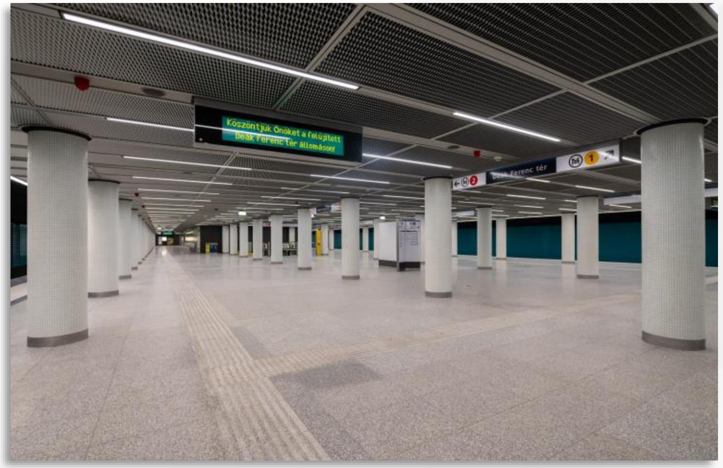
Source: *Integrated Report on the Allocation and Environmental Impact of Hungary's Green Bond Proceeds, 2022: https://www.akk.hu/content/path=integrated_report_2022 ; Integrated Report on the Allocation and Environmental Impact of Hungary's Green Bond Proceeds, 2021: https://www.akk.hu/content/path=integrated-report ; Allocation report 2020: https://www.akk.hu/content/path=Allocation-report*

CASE STUDY I – THE UPGRADE OF M3

Project objective description

- **Upgrading the Metro Line M3** is a multi-year public transport development project
- M3 is **the busiest public transport line** of Budapest
- By developing and strengthening its capacity, more travellers will be able to use it with improved accessibility and with a higher level of comfort
- The project **encourages the modal shift for environmentally friendly transport modes**
- During the upgrade:
  - ✓ the **stops and metro carriages are modernized**;
  - ✓ **cables** and **rails are replaced**;
  - ✓ **safety features**, such as cameras **are installed** with an emphasis on passenger safety and accessibility

17.3 km total length of upgraded metro line supporting the travel over 500,000 passengers daily



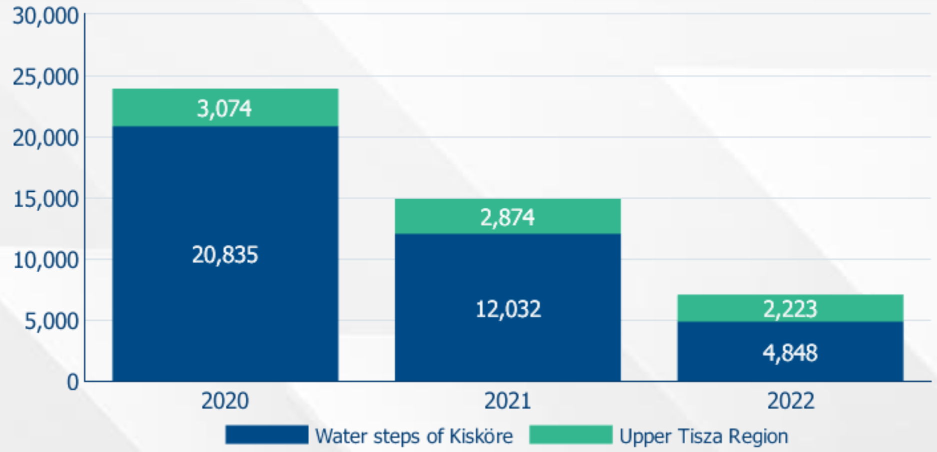
Source: *Integrated Report on the Allocation and Environmental Impact of Hungary's Green Bond Proceeds, 2022:* [*https://www.akk.hu/content/path=integrated_report_2022*](https://www.akk.hu/content/path=integrated_report_2022)

CASE STUDY II – WASTE MANAGEMENT IN THE UPPER TISZA REGION AND AT THE WATER STEPS OF KISKÖRE

Project objective description

- In the Upper Tisza region, large quantities of floating waste mixed with municipal waste and **PET bottles are regularly discharged from areas bordering the country during the formation of tidal waves**
- Due to the flatter terrain of Hungary, **this waste partially spreads into the floodplain after crossing the border** and/or accumulates at the first barrier **at the Water Steps of Kisköre** on the major watercourses.
- In the Upper Tisza debris **removal sites have been set up** to remove the accumulated waste
- The project is supported by the **Plastic Cup (PET Kupa)** in sorting and recycling plastic waste
- Depending on its form, the organic, **degradable waste is recycled or sold in an unchanged form or processed as a soil amendment material**

Annual gross amount of waste collected and treated or disposed of
(in m^3)



Source: OVF

Source: *Integrated Report on the Allocation and Environmental Impact of Hungary's Green Bond Proceeds, 2022:* https://www.akk.hu/content/path=integrated_report_2022

THE GREEN BOND FRAMEWORK 2023

Principles, standards	▪ **ICMA Green Bond Principles** version **2021** (with June 2022 Appendix 1) ▪ **The Climate Delegated Act of the EU Taxonomy** and the upcoming **EU Green Bond Standard** to the extent possible ▪ 2022 version of **Japan's Green Bond Guidelines** and the **China's Green Bond Principles**
1. Use of Proceeds	▪ Investment expenditures, intervention expenditures, tax expenditures and selected operating expenditures, expenditures towards government agencies and other public sector entities, provided that these entities do not raise any Green funding themselves ▪ Budget expenditures, which already obtain dedicated funding (e.g. EU funding, EU ETS allowances) have been excluded ▪ **8 eligible green categories** defined based on ICMA Green Bond Principles, **including 2 new categories:** ➢ **Pollution prevention & control category** (the Sustainable water & wastewater management category was split) and **Research, innovation & awareness raising** ▪ **3 exclusion criteria:** nuclear power, armament and defence sector, fossil fuel production and power generation
2. Project Evaluation and Selection	▪ **Ministry of Finance with ÁKK is in charge of coordinating the process** ➢ Inter-Governmental Working Group (IWG) evaluates potential green expenditures ➢ Steering Committee approves Eligible Green Expenditure
3. Management of Proceeds	▪ **Ministry of Finance is in charge of Green Bonds proceeds management** ▪ IWG monitors the level of Eligible Green Expenditures ▪ Steering Committee approves the proceeds allocation Eligible Green Expenditures can include expenditures from the **2 previous year** (prioritizing **n-1** year), the **current year** and **2 future years** (prioritizing **n+1** year)
4. Reporting	▪ **Integrated Report** including an Allocation and Impact chapter
External review	▪ Second-Party Opinion by **Morningstar Sustainalytics** on Hungary's Green Bond Framework ▪ **Mandatory review on Integrated report** (including Allocation and Impact)

Source: *Green Bond Framework Hungary 2023: https://akk.hu/content/path=green-bond-framework-2023-item-en*

USE OF PROCEEDS (1/2)

Green Category	Eligible Green Expenditures Overview	SDG goals	EU objectives
Clean Transportation	**Eligible expenditures aimed at reducing dependence** ▪ Railway and road passenger transportation ▪ Light-duty vehicles ▪ Infrastructure	7 Affordable and clean energy; 11 Sustainable cities and communities; 13 Climate action	**I.** Climate change mitigation
Land use & living natural resources	**Eligible expenditures for sustainable land use and protection, as well as promotion of biological diversity** ▪ Sustainable agriculture according to national legislation or EU legislation ▪ Sustainable forest management according to national legislation ▪ Protection and restoration of biodiversity and ecosystems	13 Climate action; 14 Life below water; 15 Life on land	**I.** Climate change mitigation **II.** Climate change adaptation **VI.** The protection and restoration of biodiversity and ecosystems
Energy efficiency (incl. Green buildings)	**Eligible expenditures to promote the development of energy efficient buildings and projects that increase energy savings and energy efficiency** ▪ Energy efficient buildings ▪ Energy efficiency measures	7 Affordable and clean energy; 11 Sustainable cities and communities; 13 Climate action	**I.** Climate change mitigation
Renewable energy	**Eligible expenditures to accelerate the development of renewable energies** ▪ Renewable energy infrastructure for electricity generation and production of heating/cooling, ▪ Enabling assets promoting the deployment of renewable energy technologies	7 Affordable and clean energy; 13 Climate action	**I.** Climate change mitigation

Note: *Abstract of the Use of Proceeds. Hungary's Green Bond Framework 2023 contains the complete and detailed Eligible Green Expenditure description and examples.*

Source: *Green Bond Framework Hungary 2023: https://akk.hu/content/path=green-bond-framework-2023-item-en*

USE OF PROCEEDS (2/2)

Green Category	Eligible Green Expenditures Overview	SDG goals	EU objectives
Pollution prevention & control	**Eligible expenditures related to fostering of pollution reduction and the development of a circular economy** ▪ Waste Management ▪ Remediation and restoration of contaminated land	12 RESPONSIBLE CONSUMPTION AND PRODUCTION	**I.** Climate change mitigation **IV.** Pollution, prevention and control
Sustainable water & wastewater management	**Eligible expenditures related to the promotion of sustainable management of water and wastewater** ▪ Infrastructure and technologies for clean and wastewater treatment ▪ Construction or maintenance of water collection and urban drainage infrastructure including storm water management and sewer separation	6 CLEAN WATER AND SANITATION	**I.** Climate change mitigation **IV.** Sustainable use and protection of water and marine resources
Climate adaptation	**Eligible expenditures aimed to enhance adaptation and foster climate resilience** ▪ Measures supporting enhancing resiliency and managing risks ▪ Measures supporting the monitoring and prediction ▪ Measures supporting community monitoring of climate change	13 CLIMATE ACTION	**II.** Climate change adaption **IV.** Sustainable use and protection of water and marine resources
Research, innovation and awareness raising	**Eligible expenditures aimed at enhancing and facilitating knowledge and innovation about climate and environmental topics** ▪ Sustainable agriculture ▪ Sustainable forestry ▪ Promotion of the use of renewable energy and energy efficiency	7 AFFORDABLE AND CLEAN ENERGY 13 CLIMATE ACTION 15 LIFE ON LAND	**I.** Climate change mitigation **II.** Climate change adaptation

Note: *Abstract of the Use of Proceeds. Hungary's Green Bond Framework 2023 contains the complete and detailed Eligible Green Expenditure description and examples.*

Source: *Green Bond Framework Hungary 2023: https://akk.hu/content/path=green-bond-framework-2023-item-en*

EU TAXONOMY ASSESSMENT BY A THIRD PARTY

Key highlights

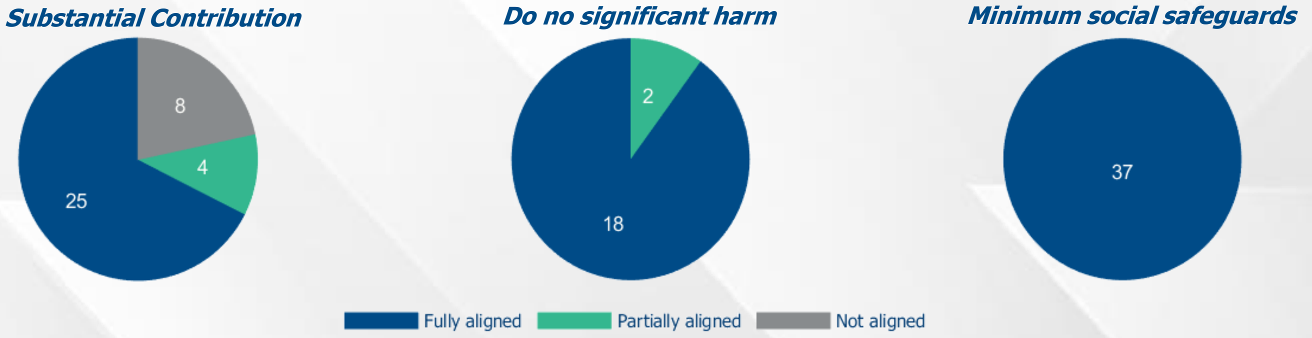
- **EU Taxonomy** and **Climate Delegated Act assessment** within the **I. Climate Mitigation** objective:
  - **6 categories** involved with **37 Taxonomy eligible** activities
  - **37 activities** assessed for **Substantial contribution** and **Minimum Safeguards** criteria
  - **20 activities** assessed for **DNSH criteria** including Clean Transportation, Energy efficiency (incl. Green buildings), Renewable energy category
  - The activities included in **Climate adaptation** and **Research, innovation and awareness raising** categories were not Taxonomy-eligible, therefore could not be assessed

Alignment with the EU Taxonomy *(green categories)*

Green Category	**SC criteria** (37 assessed activities)	**DNSH criteria** (20 assessed activities)	**MS criteria** (37 assessed activities)
Clean Transportation			
Land use and living natural resources		*Not assessed*	
Energy efficiency (incl. Green buildings)			
Renewable energy			
Pollution prevention & control		*Not assessed*	
Sustainable water & wastewater management		*Not assessed*	

Fully aligned Partially aligned Not aligned

Activity alignment with the EU Taxonomy *(activities)*



Source: *Second-Party Opinion Hungary Green Bond Framework: https://www.akk.hu/content/path=second-party-opinion-2023-en*

GREEN BOND AWARDS

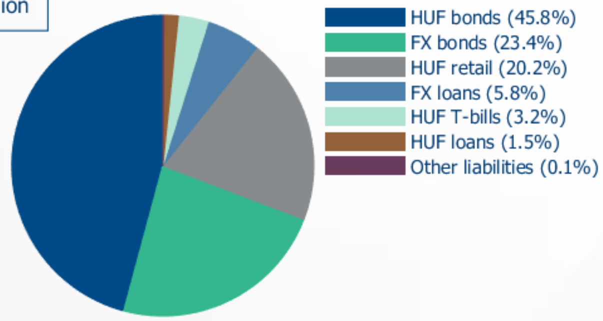
- **2024** — **Impact report of the year (for issuers only)** for the green bond integrated report, 2022
- **2023** — **Most Impressive ESG Bond Issuer in CEEMEA** category **III. place**, based on the votes of market participants
- **2023** — **Largest Sovereign Green Bond 2023 winner** for 30-year institutional HUF government bond, called the Green Hungarian Government Bond
- **2022** — Most **impressive CEE issuer winner** for low interest, long-term dollar, euro and green bonds
- **2021** — Sovereign **Green Market Pioneer Award** recognizing Hungary's issuance of a EUR 1.5 billion sovereign green bond in June 2020
- **2021** — **Capital Eye Special Award** recognizing the Hungarian sovereign was recognized by the Special Award for its successful Green Samurai bond series issued in 2020
- **2021** — **Sustainable Finance award** for 2020 Japanese Green Samurai Bond issuance
- **2021** — **Nikkei Veritas Award** for recognising the Hungarian Green Samurai Issue by the Japanese economic press

V. EFFECTIVE DEBT MANAGEMENT

HUNGARY BENEFITS FROM A FAVOURABLE DEBT PROFILE

Hungary's central government debt breakdown
(30 April 2024, % of total)

Total debt:
HUF 54,136 billion



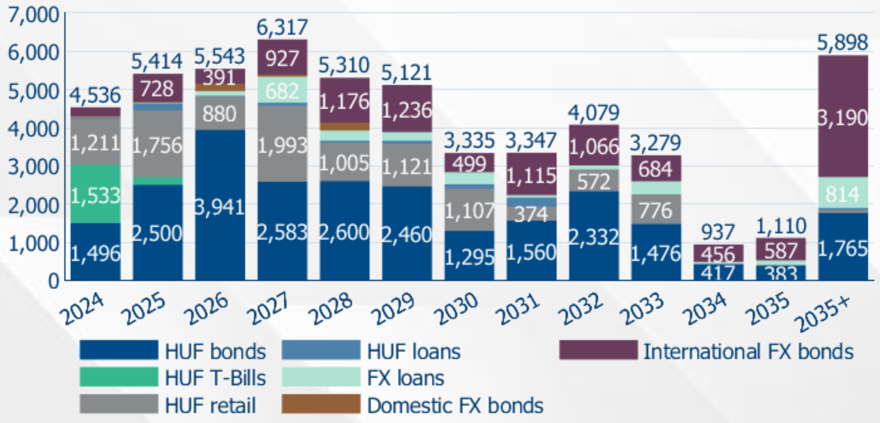
Source: AKK; Note: Central government debt, including MTM and Repo deals

Key targets and characteristics of Hungary's government debt

	2024 benchmark targets		30 April, 2024 figures
Share of FX debt	Maximum 30%	✓	29.1%
Currency mix of the FX debt (after swaps)	100% in EUR (with a 5% deviation allowed)	✓	100.0%
Average time to maturity	Minimum 5.5 years	✓	6.2 years
Average time to re-fixing	Minimum 4 years	✓	5.0 years
Share of debt with a fixed coupon	Between 60% and 80%	✓	68.6%
Share of retail debt	Between 20% and 25%	✓	20.7%
Share of green bonds			4.3%

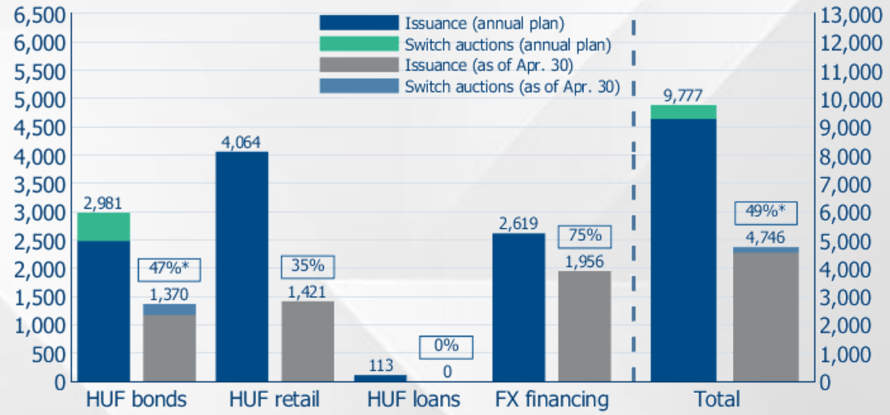
Source: AKK; Note: Central government debt; Benchmark values are 90-day moving averages

Hungary's government debt redemption profile
(30 April 2024, HUF billion)



Source: AKK; Note: Central government debt, excluding MtM, swap and Repo deals

2024 issuance vs current 2024 financing plan
(30 April 2024, HUF billion)



*Source: AKK / Note: Excluding T-bills and ECP. * Excluding switches*

STRONG MARKET DEMAND ON THE LOCAL WHOLESALE MARKET

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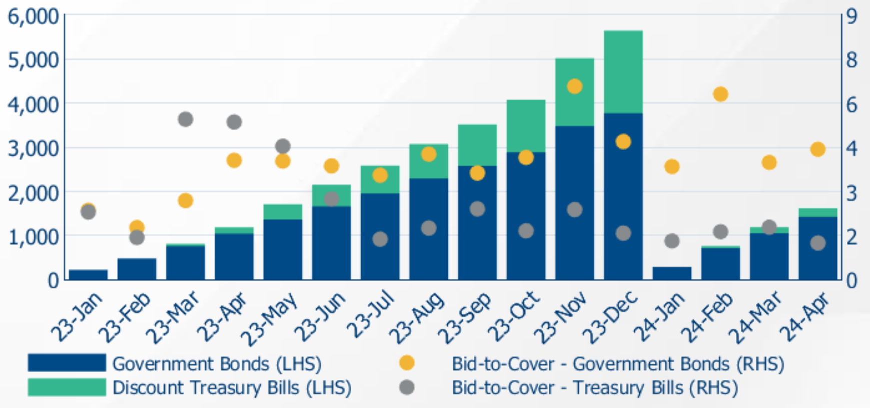
Key highlights

- **To ensure simplicity and transparency, AKK issues standard debt instruments according to a fixed annual calendar published in advance**
- **Primary auctions, as well as switch and buyback operations, help support a balanced bond issuance pattern,** manage the redemption profile and reduce refinancing risk
  - HUF 500 billion switch auction program with the goal of reducing maturity peaks of 2025-2026
- **Reform of Discount T-bills auction system**
  - Reducing the number of outstanding series of T-bills by reopening the existing series during the 3-month auctions since January 2024
  - Switch auctions for T-bills starting mid-May 2024
- **Reduction of the number of outstanding series of HUF denominated wholesale securities**

Source: AKK, NBH

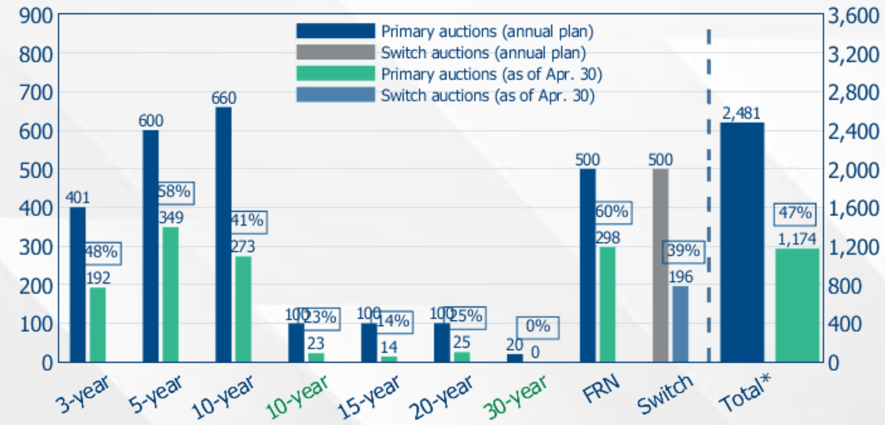
Cumulative monthly debt securities issuance and the ratio relative to the planned amount (left-hand scale: HUF billion)



Source: AKK; Note: Government Bonds excluding repo transactions, Discount Treasury Bills according to OECD methodology

Government bond issuance on auctions by tenor

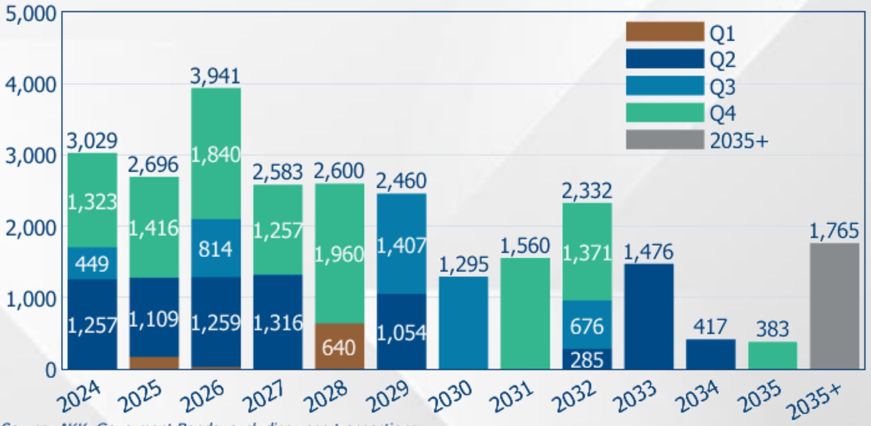
(2024 issuance vs current 2024 financing plan excluding municipal bond sales, HUF billion)



*Source: AKK; *Total primary auction issuance*

Redemption profile of wholesale government securities

(as of 30 April 2024, HUF billion)



Source: AKK; Goverment Bonds, excluding repo transactions

LOCAL RETAIL MARKET IS AN IMPORTANT DIVERSIFICATION TOOL

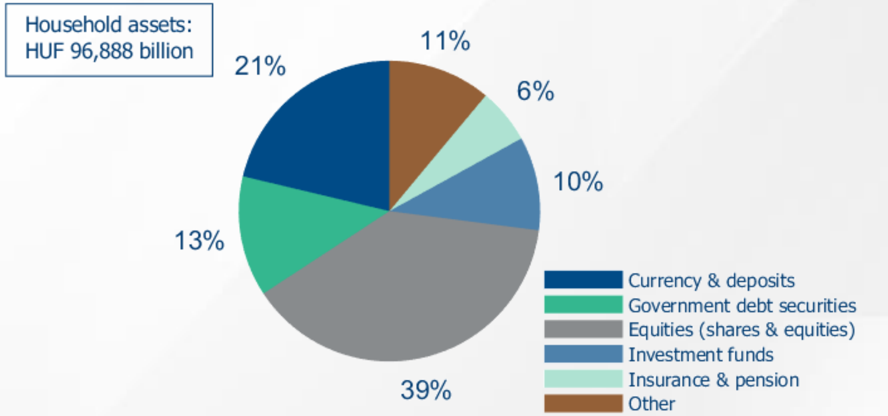
Key highlights

- **The retail debt programme is an important financing channel for the Government,** with an outstanding amount of HUF retail securities at HUF 10,909 billion as of 30 April 2024, and a share of 20.2% of total debt
- **PMÁP** (inflation-linked retail security) has **played a significant role in the stock increase over 2023**
  - AKK experienced high demand due elevated inflation rates in 2023
- **The new 3 year maturity FixMÁP** (fixed coupon retail security) **complements the retail securities portfolio with an easy to understand, 3 month interest-bearing product**
  - FixMÁP is the most popular retail security in 2024 so far
- **AKK continuously monitors market conditions and takes them into account when pricing retail securities**
- **Continued increase in retail investors and reduced concentration are key objectives going forward**
  - Sales caps are being applied to most retail securities since January 2023

Source: AKK

Households asset structure

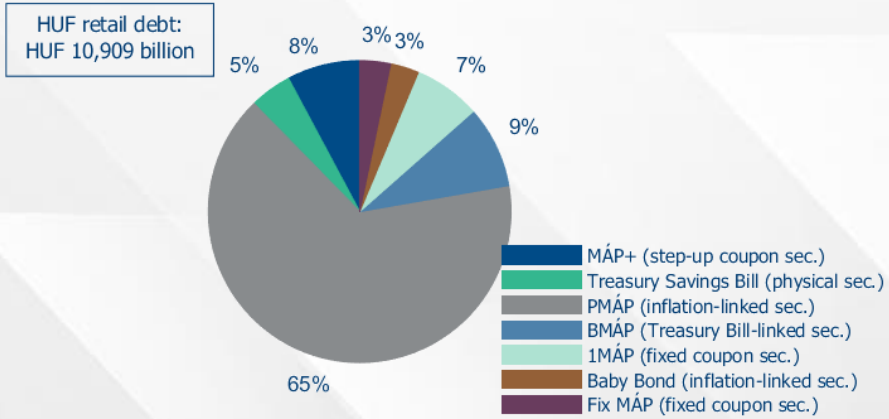
(Q4, 2023, % of total)



Source: NBH

HUF retail portfolio by instrument

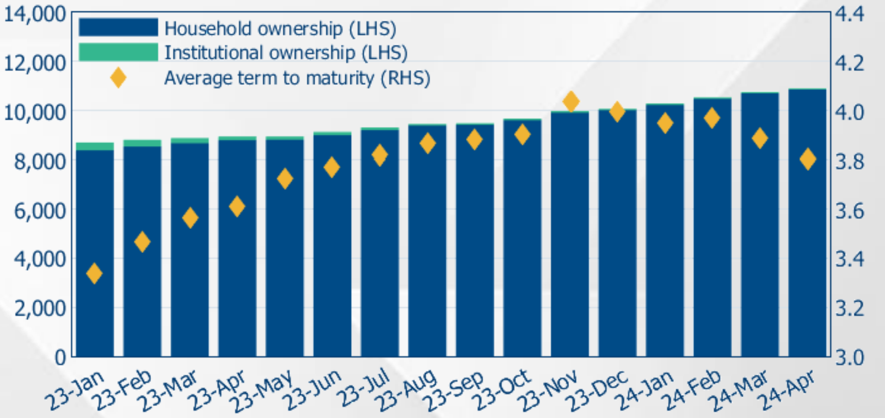
(30 April 2024, % of total)



Source: AKK

HUF retail securities

(HUF billion and years)



Source: AKK

HUNGARY'S EXPOSURE TO INTERNATIONAL MARKETS IS CAREFULLY MANAGED

Key highlights

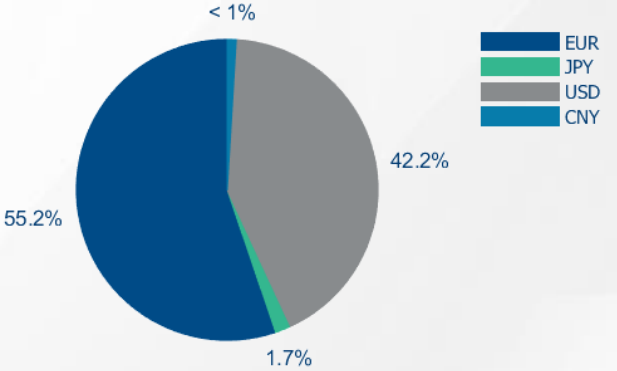
- **The share of Hungary's government debt in foreign currency remains contained.** Hungary intends to maintain its presence on international capital markets to ensure diversification of funding sources
- **FX debt is mainly denominated in EUR and USD,** and all non-EUR proceeds are swapped into EUR, resulting in a 100% EUR FX debt portfolio
- **Effective debt management has led to record low amounts of FX bonds maturing over 2024-2026** partially thanks to buybacks of short-term USD bonds through tenders and OTC transactions
- **Hungary issued FX green bonds in key foreign currencies, including EUR** (in June 2020, November 2022 and January 2024), **JPY** (in September 2020 and February 2022) and **CNY** (in December 2021 and November 2022)
- **Besides project finance and revolving facilities, Hungary established a Euro Commercial Paper Programme** in July 2023 to manage short term FX liquidity

Source: AKK

FX debt composition by currency before swaps

(30 April 2024, % of total)

Total FX debt[1]: EUR 40.8 billion

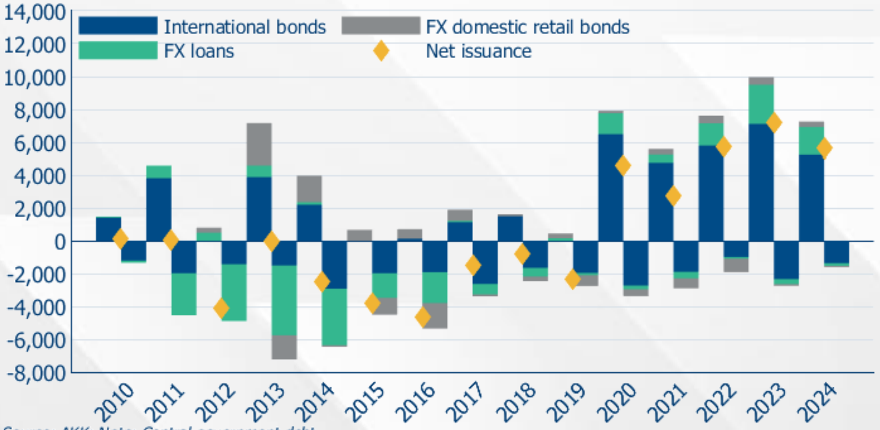


Source: AKK; Note: composition of the FX central government debt portfolio before swaps

[1] Excluding CCIR swaps; total FX debt including CCIR swaps amounted to EUR 40.4 billion

FX redemption, issuance & net issuance

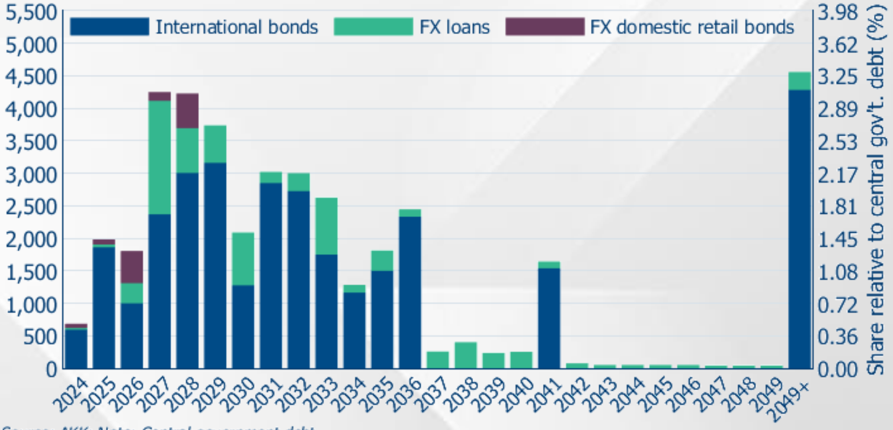
(EUR million)



Source: AKK; Note: Central government debt

Maturity profile of FX debt

(30 April 2024, EUR million)



Source: AKK; Note: Central government debt

THANK YOU FOR YOUR ATTENTION!

GOVERNMENT DEBT MANAGEMENT AGENCY PTE LTD.

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