



COMPETITIVENESS MIRROR



2022

'To see what everybody else has seen and to think what nobody else has thought.'

Albert Szent-Györgyi



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In addition to its primary mandate for achieving and maintaining price stability, the Magyar Nemzeti Bank (MNB) is required by law to use the instruments at its disposal to support the economic policy of the government, including the strengthening of competitiveness, a prerequisite for convergence. The Competitiveness Mirror aims to monitor how the targets and recommendations made by the MNB have been implemented so far, thus contributing to the necessary turnaround in competitiveness. The Competitiveness Mirror regularly assesses Hungary's progress in competitiveness, based on the 330 recommendations published in the MNB's Competitiveness Programme. The monitoring system uses both descriptive and analytical methods to measure the implementation of the central bank's recommendations.

The Competitiveness Mirror was prepared under the general guidance of Gergely Baksay, Executive Director for Economic Analysis and Competitiveness. The Competitiveness Mirror was completed with the help of staff from the Directorate for Fiscal and Competitiveness Analysis, the Directorate Economic Forecast and Analysis, the Directorate Financial System Analysis, the Digitalisation Directorate, the Insurance and Pension Funds Supervision Directorate, the Directorate Lending Incentives, the Directorate Financial Infrastructures, the Directorate Monetary Policy and Financial Market Analysis, the Directorate Structured Finance Strategy as well as the Budapest Stock Exchange.

The Competitiveness Mirror is based on information available for the period ending December 2021.

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Executive Summary

Hungary's successful economic convergence requires a turnaround in competitiveness, which is supported by the Magyar Nemzeti Bank by formulating competitiveness recommendations and regularly monitoring their implementation. The MNB published the areas and avenues of intervention necessary for implementing the turnaround in competitiveness in its 2019 report entitled '*Competitiveness Programme in 330 Points*'. The objective of the *Competitiveness Mirror* is to monitor the implementation of the outlined recommendations in a structured manner, thereby also contributing to the realising the turnaround in competitiveness. This publication presents the changes launched or implemented since the previous similar summary, i.e. between November 2020 and the end of 2021.

The implementation of the Magyar Nemzeti Bank's Competitiveness Programme in 330 Points has continued despite the coronavirus pandemic. Accordingly, as a result of the measures implemented and adopted by the government and the central bank in the past year the ratio of realised recommendations rose from 34 to 42 per cent. Overall, 253 of the recommendations have commenced, 19 of which have essentially been achieved in full. In addition to the crisis management measures necessitated by the coronavirus pandemic, progress has been achieved in improving competitiveness in all areas examined in the analysis. It is essential to continue the turnaround in competitiveness to achieve Hungary's sustainable convergence to the most advanced countries. It is worth highlighting the measures taken in the most important areas for the green and digital transformation. Sustainable and green economic growth is supported by the MNB's new sustainability mandate – the first in Europe – and the Green Home Programme adopted in the spirit of that. In addition, the government has adopted the National Clean Development Strategy and the Climate and Nature Protection Action Plan. In addition to the strategic goal of reaching full climate neutrality by 2050, these also contain operative measures, such as banning single-use plastic products for example. In addition to the wider penetration of electronic payments, the MNB's recommendation on digital transformation fosters financial digitalisation, expecting banks to develop a comprehensive digital transformation strategy and schedule. From the government's side, innovation and digitalisation are supported – among other things – by the standardisation of the central public administration IT systems, free patent protection in the first three years, and a plan to increase research and development expenses on a continuous basis. The 20 per cent minimum wage increase, effective from 2022, and the personal income tax exemption of employees below the age of 25 support a competitive labour market and foster employment. The rise in corporate wage costs is offset by a further 4 per cent cut in employer tax burdens. In addition, the introduction of the procedure to prevent corporate insolvency and the creation of the National Smart Specialisation Strategy supporting the enhancement of SME sector research/development and innovation performance, are of utmost importance. During the coronavirus pandemic, significant changes commenced in areas of key significance, including healthcare, through wage increases and the extension of general practice partnerships in primary care.

Since the presentation of the MNB's competitiveness programme, from the 12 areas the highest degree of implementation – weighted by priority – was achieved in the recommendations aimed at efficient governance (57 per cent), research, development and innovation (55 per cent) and the new financial model (49 per cent). Efficient governance is strengthened by the removal of red tape, e.g. by further improving e-administration and by the tax cuts introduced from January 2022. On the other hand, the 57 per cent implementation level in the area of efficient governance shows that there is still substantial room for improvement in this field as well. In the area of research, development and innovation the presentation of *Hungary's Research, Development and Innovation Strategy*, which sets the goal of R&D expenditure reaching 3 per cent of GDP by 2030, was a key measure. As part of the new strategy, it will be possible to distribute researcher training expenses among economic agents and to level up research workers' wages faster. The development of the financial system is significantly supported by the active work of the Magyar Nemzeti Bank, including its recommendation on credit institutions' digital transformation, which requires all institutions to develop a digital transformation strategy covering their entire operations with specific scheduling and plans, the penetration of electronic payment methods, the development of instant payment systems and the continuous development of certified consumer-friendly products. From 1 January 2021, all taxpayers using online cash registers are obliged to provide customers with

electronic payment facilities, which could also facilitate the acceptance of instant payments by merchants. The MNB's range of certified consumer-friendly products has been expanded and modified, with the introduction of Certified Consumer-Friendly Personal Loans from 2021, while new features of the Certified Consumer-Friendly Home Insurance include the possibility of changing insurer quarterly and a new comparison page developed by the MNB. Despite a number of measures to facilitate online contracting and borrowing, there is room for growth in this area. An important novelty for the Hungarian small and medium-sized enterprise sector is that a more flexible procedure than bankruptcy proceedings will be introduced from July 2022 for companies encountering financial difficulties to prevent corporate insolvency. It could be of utmost importance for the sector if the lead time for tenders encouraging investments decreases to 1.5-2 months – on a prolonged basis – from the previous 3-5 months. However, further efforts are also needed in the SME sector and in research and development to ensure productivity growth in the sector.

The green economic turnaround has commenced in Hungary, and the MNB, with its new environmental sustainability mandate, also plays a key role in fostering successful convergence. In June 2021, the Magyar Nemzeti Bank was the first in Europe to receive an environmental sustainability mandate. The new mandate was also followed by action. In July 2021 the central bank presented its strategy for a set of green monetary policy instruments, followed by the launch of the *MNB Green Home Programme* in October. The preferential credit scheme aims to help renew Hungary's housing stock by significantly improving the energy efficiency of properties. An important milestone in the implementation of the *Climate and Nature Protection Action Plan* adopted by the Government in 2020 was the ban on many single-use plastics from July 2021, and supporting companies affected by the ban in changing technology. The green economic transition is also supported by *Hungary's National Hydrogen Strategy* and the *National Clean Development Strategy*. The former sets the direction for the development of hydrogen-based energy and transport in Hungary, and for the production of the hydrogen needed to achieve this in the least polluting way possible. The objective of the latter is to ensure that Hungary achieves full climate neutrality by 2050 without jeopardising economic growth or welfare. As a result of the aforementioned measures, the priority-weighted implementation in the area of Modern Infrastructure and Efficient Energy Use is now ranked fourth (rising to 48 per cent) among the 12 areas.

Hungary's most important resource is the availability of well-qualified human capital, which is essential for achieving successful convergence. One consequence of the 20 per cent increase in the minimum wage and guaranteed wage minimum implemented in 2021 and 2022 is that maximum monthly amount of childcare allowance, student childcare allowance and home nursing allowance for children have also increased. From July 2021, the amount of the infant care allowance increased from 70 per cent to 100 per cent of the mother's wage, which means that during the 24 weeks of maternity leave, the mother's income will be higher than her previous net salary. The necessary demographic turnaround is supported by the introduction of a one-off personal income tax refund for families with children and further increasing the capacity of nurseries. State support for workplace nurseries is gradually increasing, and in 2021 it was already 7 times higher than 4 years earlier. The pending expansion of Hungary's family support system encourages starting a family, but further measures are required to achieve the 2.1 fertility rate needed to maintain the population. In the area of highly-qualified human capital, the reform of the vocational education and training system was an important step forward, greatly improving flexible switches between various forms of education. Companies participating in dual training receive substantial tax benefits in respect of the students they train. The *National Smart Specialisation Strategy*, adopted by the government and which designates the priority sectors for research and development in the next EU programming cycle, is helping to improve the efficiency of the Hungarian corporate sector. One important measure is that employers engaging research and development workers must pay 50 per cent of the social contribution tax on research and development activities. Healthcare is closely linked to ensuring the availability of highly-qualified human capital. One of the measures with the biggest impact in this area is that the system of performance volume limits will be replaced by annual framework management from 1 January 2022. Another significant change in the health sector is that a new employment legal status has been developed, which is accompanied by a significant 2-2.5-fold wage increase in three stages between 2021 and 2023. Despite all these measures, there are still considerable efficiency reserves in the system, which could be released, for example, by strengthening prevention and primary care and by channelling private health spending into institutionalised forms.

Following the shock caused by the coronavirus pandemic, a number of measures were introduced to support both economic recovery and the long-term competitiveness of Hungary. Below we provide a list of the more significant measures that are also included in this publication, i.e. those that contributed to the implementation of certain

recommendations and are closely linked to the coronavirus pandemic. The credit facilities – linked to projects, capital investments abroad and green financing – provided through Eximbank are aimed at improving the **competitiveness of corporations**. Business development considerations have become more important in the announcement of EU tenders. In the summer of 2021, tenders were launched totalling several hundred billion forints for research and development, innovation, corporate in-house training and targeted business development. One measure to increase research and development activity was the abolition of patent maintenance fees for the first three years of newly filed patents. In **the labour market**, wage convergence continues with a significant – 20 per cent – increase in the minimum wage and the guaranteed wage minimum in 2022, which the government facilitates further by reducing social contribution taxes and eliminating the vocational training contribution. Another benefit for employees is that from 2022, those under 25 are exempted from paying personal income tax. To mitigate the negative effects of the coronavirus pandemic, several wage subsidy schemes continued in 2021, where companies benefited from various wage, social contribution tax and training subsidies. Among other things, the new programmes include the Work Experience Acquisition Subsidy, which provides employers with a 100 per cent wage expense subsidy for 90 days if they employ young persons under 30 or low-qualified jobseekers. The most significant measure to support the income situation of **families with children** is that, depending on economic growth, nearly 2 million parents become entitled to a lump-sum personal income tax refund in February 2022. Several measures improved **housing** conditions for families in 2021, including – among other things – the easing of the conditions for using home purchase subsidies and the 0 per cent HPS loan linked to the *MNB's Green Home Programme*. Measures to increase the efficiency of **healthcare** include the sector's ongoing wage convergence, while building on the experience of the coronavirus pandemic, significant EU funds will be made available for IT developments in the healthcare sector in the next programming cycle.

Competitiveness Mirror – Measuring the implementation of the Competitiveness Programme

The *Competitiveness Mirror* assesses progress in the competitiveness turnaround based on the implementation of the MNB's 330 points. In February 2019 in its Competitiveness Programme, the central bank formulated 330 recommendations in 12 areas to improve Hungary's competitiveness and ensure successful and sustainable convergence. This publication assesses the implementation of the recommendations for the 3rd time after autumn 2019 and 2020.

The current version of the *Competitiveness Mirror* covers the effects of measures implemented between November 2020 and December 2021. The revised publication includes the 179 recommendations that have changed in any form since the previous publication. The majority of the measures related to the recommendations (104) did not reach a level that would change the status of the recommendation, while in 75 cases the respective measure also improved the implementation status of the recommendation.

There are 10 measures worth highlighting as they had an impact on the implementation of the recommendations. Under the challenges posed by the coronavirus pandemic, a number of long-term measures were taken that have the potential to support Hungary's sustainable convergence:

1. In March 2021, the MNB's recommendation on the digital transformation of credit institutions,
2. Amendment of the Government Decree on the detailed rules of financing health services from the Health Insurance Fund (abolition of the performance volume limit), effective from April 2021,
3. Hungary's National Hydrogen Strategy was adopted in May 2021.
4. The government decree on restricting the marketing of certain single-use plastic products and certain other plastic products was promulgated in June 2021.
5. The Act on the Magyar Nemzeti Bank was amended (to include the sustainability mandate) in June 2021.
6. The Act on Restructuring and on Amending Certain Acts for the Harmonisation of Laws (amendment of Bankruptcy Procedure) Act was promulgated in June 2021.
7. Hungary's Research, Development and Innovation Strategy was adopted in July 2021.
8. Adopting the National Smart Specialisation Strategy in July 2021.
9. Presentation of the National Clean Development Strategy in September 2021.
10. The MNB's Green Home Programme was launched in October 2021.

The *Competitiveness Mirror* evaluates the degree of progress achieved in the implementation of the recommendations on a 4-step scale ('not started', 'started', 'partly implemented', and 'fully implemented'). In terms of what is to be considered as implementation, the recommendations in the 330 points fall into two groups. One part of the recommendations requires the approval of a specific measure, the introduction of new regulations or adjustments to those in place. By contrast, recommendations in the other group set directions for development, where the objectives can be accomplished by implementing programmes involving a series of coordinated actions. Obviously, a recommendation of the former type may be deemed implemented when the competent institution has approved the regulatory adjustments, and one of the latter type when the programme has started. In assessing the degree of implementation, another aspect to be taken into account is whether the approved regulation or initiated programme is fully aligned with the recommendation made in the 330 points. A recommendation may be considered partly implemented when the measure taken is similar in direction, but still different or smaller in volume, whereas a point may be deemed fully implemented when the same

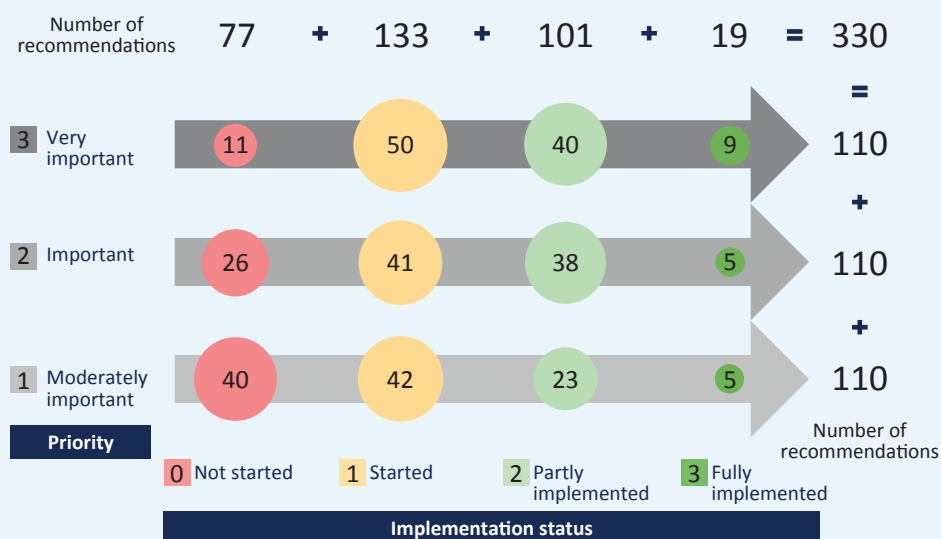
goal has been achieved by a different method. Taking these aspects into account, the categories indicating the degree of implementation are applied with reference to the following criteria:

- A recommendation is **‘fully implemented’** when the corresponding regulatory adjustments (including amendments) have taken place. If the recommendation was of a more comprehensive nature, then if the programme to achieve the objective has started and is running efficiently. A recommendation may also be considered fully implemented when the same goal has been met by different but equally effective and efficient means.
- The **‘partly implemented’** category comprises programmes which have been organised and are set to be launched, as well as measures about to be approved. Additionally, it may also comprise approved measures or ongoing programmes that do not fully cover the corresponding recommendations in the 330 points or are more limited in scope. In such cases, implementing the initial recommendation requires changes to the programme or measure, or the adoption of a new measure.
- A recommendation may be considered **‘started’** when a specific plan or strategy has been adopted to implement a measure proposed as part of the 330 points. The ‘started’ category also comprises recommendations that partly involve an approved measure or initiated programme, but its key elements have not been implemented.
- The **‘not started’** category comprises recommendations in respect of which no measure has been approved or no specific notification has been made, or no programme involving the recommendation has been initiated.

Every recommendation is categorised depending on to what degree implementing the measure contributes to improving competitiveness in the central bank’s opinion. The 330 points have been elaborated in the spirit that all the parts should substantially promote the improvement of Hungary’s competitiveness. Nevertheless, not all of the recommendations may be considered equally important; some of them are key elements. The greatest importance is attached to recommendations that make the largest contribution to competitiveness, have the strongest multiplier effect, and are prerequisites for additional actions. Based on the level of contribution to improving competitiveness, three categories (‘moderately important’, ‘important’ and ‘very important’) have been established. In all of the 12 key areas, the recommendations are classified into these groups in equal proportions, i.e. each of the three categories comprise 110 recommendations.

From the 330 recommendations in the *Competitiveness Programme*, progress has been made in 253 cases since the introduction of the programme in February 2019 (Chart 1). Within that, implementation is underway in the case of 133 recommendations, 101 are partly implemented, while the objective has been fully reached with respect to 19 recommendations. Overall, implementation is underway in some form in 77 per cent of the recommendations. On a positive note, the biggest progress has been made in the case of the recommendations with a ‘very important’ priority. In this category, 99 of the 110 recommendations are already being implemented, of which 40 have been partly completed and 9 have been fully implemented. In parallel with this, the implementation of 84 out of 110 recommendations prioritised as ‘important’ and 70 out of 110 deemed ‘moderately important’ have started or have been implemented.

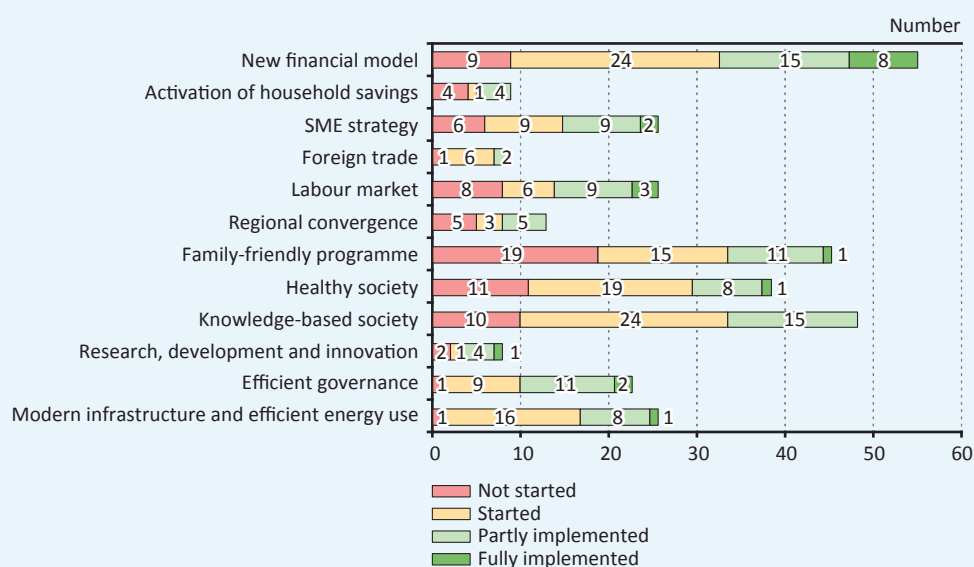
Chart 1
Implementation status of the competitiveness recommendations by priority
(2021)



Source: MNB.

The *New Financial Model* chapter has the most fully implemented recommendations (8), while the other 11 fully implemented recommendations are found in 7 different chapters (Chart 2). The *New Financial Model* and *Knowledge-Based Society* chapters also comprise the most 'partly implemented' recommendations (15). More than 40 per cent of the recommendations acquired the status of 'started', of which 24-24 proposals were also connected to the *New Financial Model* and the *Knowledge-Based Society* areas. Each of the 12 areas has recommendations with a status of 'not started', 19 of which are identified in the *Family-friendly Programme*.

Chart 2
Implementation status of competitiveness recommendations by key areas
(2021)



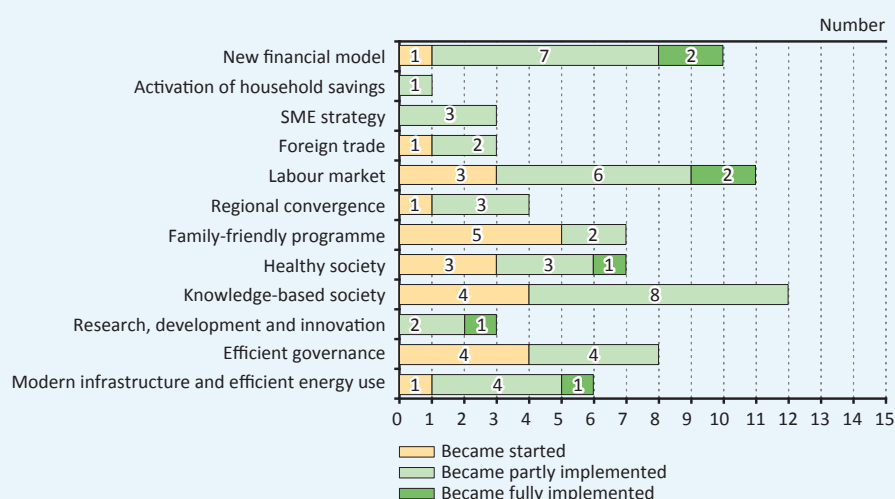
Source: MNB.

Compared to November 2020, progress has been achieved in all areas, with the largest increase registered in the *Knowledge-Based Society*, *Labour Market* and *New Financial Model* chapters (Chart 3). In the *Knowledge-Based Society* chapter, the status of 12 recommendations has changed, of which 4 are started and 8 partly implemented. In the *Labour*

Market chapter the status of 11 recommendations has changed, with 3, 6 and 2 recommendations having acquired the status of started, partly implemented and fully implemented, respectively. In the *New Financial Model* chapter, the implementation of 1 measure has started, while 7 measures acquired the status of partly implemented and 2 measures are fully implemented.

Chart 3

Change in the status of the competitiveness recommendations between November 2020 and December 2021 by key areas

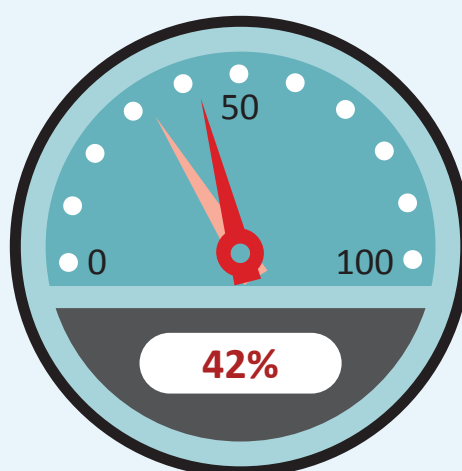


Source: MNB.

The methodology used in the publication is suitable for presenting the degree to which the recommendations have been implemented, concentrated into a single figure both by area and on aggregate. Recommendations are scored 0–3 according to the status of their implementation, where 0 stands for ‘not started’ and 3 for ‘fully implemented’. The score obtained is then weighted by the priority of the recommendation concerned (a number between 1 and 3, where 3 stands for recommendations rated ‘very important’). The resulting implementation scores are aggregated for each key area, as well as for all recommendations collectively. The aggregate implementation status is a percentage that shows the level of implementation, weighted by priority, compared to the full implementation of the recommendations.

Chart 4

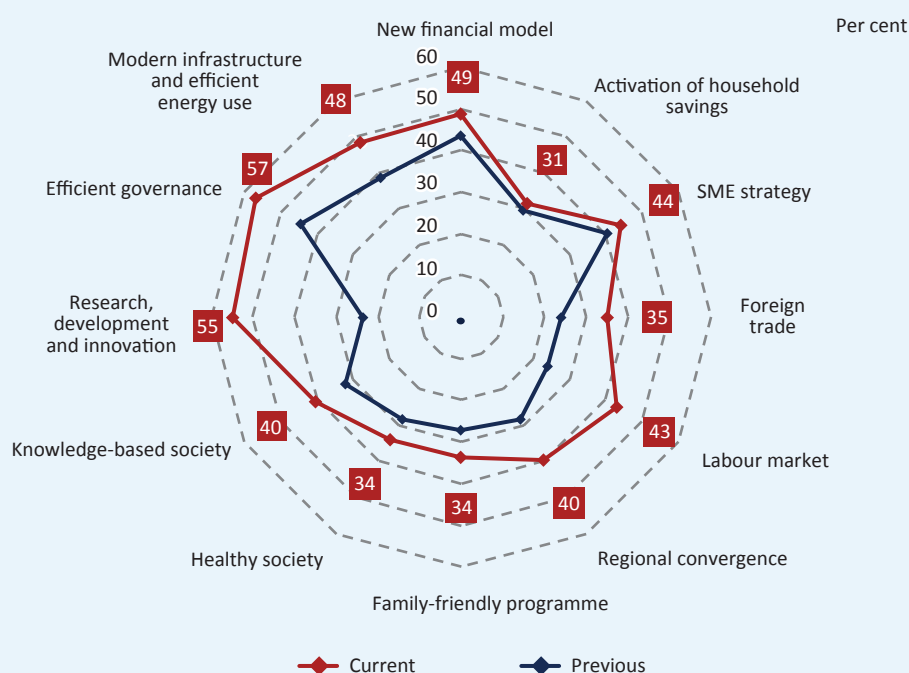
Aggregate implementation status – weighted by priority – of the competitiveness recommendations in 2021



Note: In November 2020, the aggregate implementation status was 34 percent (pink pointer) and in December 2021 it was 42 percent (red pointer).
Source: MNB.

Based on the measures and announcements by December 2021, 42 per cent of the *Competitiveness Programme*, weighted by priority, has already been implemented, which exceeds the implementation status of 34 per cent measured in the autumn of 2020 by 8 percentage points (Chart 4). The highest degree of implementation is achieved for the recommendations in the *Efficient governance* (57 per cent), *Research, development and innovation* (55 per cent), and the *New Financial Model* (49 per cent) chapters, followed by the *Modern Infrastructure and efficient energy use* (48 per cent), *SME Strategy* (44 per cent) and *Labour Market* (43 per cent) chapters (Chart 5). Since November 2020, the largest increase in aggregate implementation was achieved in the *Research, development and innovation* (31 percentage points), *Labour Market* (19 percentage points) and *Efficient governance* (13 percentage points) chapters.

Chart 5
Aggregate implementation status of competitiveness recommendations by key areas in 2020 and 2021



Source: MNB.

In this publication, the implementation phase of the recommendations is indicated by four different colours and the change in the implementation phase by coloured arrows corresponding to the new status. A recommendation is shown in the 12 chapters if there is any new development in the implementation relative to the comparison performed in November 2020. If this new development also results in a step forward in the implementation phase of the recommendation, the progress is indicated – in addition to the change in the background colour of the recommendation – by an arrow of the colour of the new status at the description showing the implementation of the recommendations. Red, yellow, light green and dark green indicate recommendations of ‘not started’, ‘started’, ‘partly implemented’ and ‘fully implemented’ recommendations, respectively. Recommendations with ‘not started’ status are also included in the publication if relevant information about the recommendation has been published, but so far this has not caused a status change. A summary table is included at the end of the publication to provide an up-to-date overview of the implementation of all recommendations. The priorities belonging to the recommendations depend on whether the recommendation has been classified as moderately important (1), important (2) or very important (3). For example, the ‘Make online contracting and signatures simpler and faster’ recommendation moved from the started phase to the partly implemented phase, and

thus its background has changed from yellow to light green. The change in the status is also indicated by a light green arrow. The priority for the recommendation is 2, i.e. this recommendation has been classified as important. For easier orientation, the table below provides an overview at the end of each section and also at the end of the summary table concluding the publication.

Legend

<i>Not started</i>	<i>Started</i>	<i>Partly implemented</i>	<i>Fully implemented</i>
<i>Changed to Started</i> 	<i>Changed to Partly implemented</i> 	<i>Changed to Fully implemented</i> 	

28. Simpler and faster online contracting and e-signature

 **2**

1 New financial model

The implementation status, weighted by priority, of the recommendations in the New financial model chapter rose to 49 per cent from the 44 per cent registered in November 2020, while progress has been made in 84 per cent of the recommendations specified in this area since 2019. From the 56 recommendations in this chapter, progress could be identified in 24 cases, resulting in 47 proposals already having at least a started status. In addition, the positive trend observed in this chapter affected several sub-areas and the status of 10 recommendations improved. Since the last review, 2 out of 10 status changes resulted in full implementation. However, the priority-weighted implementation rate of 49 per cent indicates that there is still room for improvement, especially in the area of increasing banks' operational efficiency and digitalisation.

Recently, the decision of Garantiqa Hitelgarancia Zrt. (GHG) to launch the "Garantiqa Direct" application, available on the internet and on mobile devices, was an important step for improving the efficiency of the guarantee scheme. The Rural Credit Guarantee Foundation (AVHGA) also provides companies with a reverse suretyship procedure, which allows for faster and more efficient administration in electronic form. Both GHG and AVHGA decided to ease their KO criteria in order to increase their business activity, and meanwhile they have strengthened their marketing activities to promote their products. Simpler and faster online contracting was supported by the entry into force of the Act on the Prevention and Combating of Money Laundering and Terrorist Financing and the amendment of the Act on Credit Institutions and Financial Enterprises, which permit concluding contracts online. Among other things, the customer due diligence and identification possibilities are expanded by the option of using the Central Client Authentication Agent (KAÜ) from 2022. In the case of unsecured loans, the legislative changes simplified the electronic enquiry on wages among other things, which contributed to a gradual increase in the proportion of personal loans disbursed online.

To encourage innovation in the financial system and reduce barriers to market entry for new actors, the Magyar Nemzeti Bank consulted the Hungarian FinTech Association and the competent ministries. Upon the anticipated revision of the regulatory requirements and risk management methodologies, competitive conditions may become more balanced for the market participants. The European Parliament's crowdfunding regulation, which entered into force in November 2021, aims to improve the accessibility of digital platforms. This will allow for the penetration of innovative, online platform-based services under proper investor protection rules. A similarly important development since November 2020 was that the MNB is trying to make it easier for customers to switch insurers by means of a variety of instruments. One element of this was the revision of the Certified Consumer-Friendly Home Insurance (CCHI) and providing the option to switch insurer quarterly, while it provides technical assistance to customers that they can compare CCHI products through a site developed by the MNB. The sector's digital transformation is supported by the MNB's blockchain development project, which offers a solution for decades-long data exchange problems between banks and insurers in the case of mortgage-related insurance.

#	Recommendation	Priority
1.1.	Improve the efficiency of the guarantee scheme	
1.	Develop a 'reverse' suretyship procedure	↑ 2
<p>In accordance with its objective, in November 2020 Garantiqa Hitelgarancia Zrt. (GHG) launched its new online application under the name of 'Garantiqa Direct', which is also available as a mobile app from the third quarter of 2021. Enterprises with publicly available accounting reports filed with the Company Information Service of the Ministry of Justice may obtain information through these channels on their eligibility for guarantees, the limits thereof and after identifying themselves through the e-Government customer portal they may download the promissory note of the guarantee organisation.</p> <p>The Rural Credit Guarantee Foundation (AVHGA) also provides enterprises with the reverse surety procedure (on a broader scale than the GHG, also providing sole traders, primary producers and family farms with the option to apply for a surety bond). Economic agents may submit the signed and scanned application form electronically to the Foundation. Upon granting the application, AVHGA will send the surety bond to the applicants electronically within five working days.</p>		
2.	Ease exclusion ('KO') criteria in a targeted manner	↑ 2
<p>To increase its business activity, GHG previously took numerous targeted business development measures to boost risk appetite while at the same time maintaining prudent and conservative risk management principles. In relation to bank lending, the guarantee institution further expanded the range of eligible clients and transactions as well as the range of acceptable debtor ratings and loan-to-value ratios, together with the maximum surety amount. Accordingly, the exclusion factors specified in the surety conditions were reduced to the statutory minimum.</p> <p>AVHGA has also facilitated access to credit for economic agents by relaxing the KO criteria. It plans to ease conditions further by 'fine-tuning' the conditions.</p>		
3.	Seek banks' commitment to increase credit portfolios that qualify as additional	↑ 2
<p>By the end of 2019, the guarantee organisations fulfilled the additionality requirement prescribed by Government Decision 1783/2018 (XII.21) with regard to the surety portfolio. The additional portfolio ratio complied with the expectations in 2020 and 2021, and is even increasing slightly on a continuous basis.</p>		
4.	Offer more flexible guarantee rates (70 to 90 per cent)	2
<p>Both domestic guarantee organisations have signed an agreement with the European Investment Fund (EIF), which will allow them to provide surety under the COSME (Programme for the Competitiveness of Enterprises and Small and Medium-sized Enterprises) in excess of the usual maximum of 80 per cent up to 90 per cent. Given that COSME was launched in the previous programming period, surety applications under the scheme may be submitted until April 2023, as it is unlikely that the scheme will be prolonged. On the other hand, a surety product with similar favourable conditions is likely to be available in the 2021-2027 programming cycle under InvestEU.</p> <p>To mitigate the negative economic effects of the pandemic, the Hungarian guarantor institutions introduced a 90-per cent institutional guarantee to offset the declining risk appetite of financial institutions, in line with the European Commission's temporary framework (under the crisis guarantee scheme, which has become available through the temporary framework, enterprises may apply for institutional guarantees under more relaxed conditions). At present, the institutional guarantee under the temporary framework is available until 31 December 2021, but the deadline is likely to be prolonged until 30 June 2022. Given that the EU's temporary framework has prescribed much simpler conditions for utilising the 90 per cent institutional guarantee than before, it is unlikely that guarantor institutions will launch other similarly preferential guarantee schemes before this one lapses.</p>		
6.	Make concerted marketing efforts to promote institutional guarantees	↑ 1
<p>To make the Garantiqa Direct web application widely known, GHG launched a concerted marketing campaign in 2020 in social media, on its own website and at online conferences, and continued it in 2021 by promoting the mobile application. (As part of high-priority campaign at the end of 2021, it anticipates contacting 13,000 customers directly with a view to making them aware of the Garantiqa Direct application).</p> <p>AVHGA conducted a significant campaign in agricultural journals, at agricultural fairs, in banking courses/presentations and online interfaces in 2021 as well to promote its available products.</p>		

#	Recommendation	Priority
1.3.	Support for credit convergence	
1.3.1.	Sound lending for sustainable economic growth	
10.	Strengthen financial awareness	2

The new National Core Curriculum (NAT) notes the need to strengthen financial literacy in several areas of education, including mathematics, civics, geography, technology and design. More than 450,000 free copies of accredited textbooks and workbooks of the Pénziránytű Alapítvány (Money Compass Foundation), also available in digital format, are supporting the financial education of students in the 2021/2022 school year. From the school year starting in September 2021, the updated edition of the Foundation's 'Finance Compass' secondary school textbook – as the first accredited textbook – was expanded to include augmented reality (AR) solutions. As a supplement to the textbook, the e-learning material for the subject of finance and entrepreneurship – a compulsory subject in technical schools – was prepared, including chapters on entrepreneurship.

1.3.2.	Cheaper banking with more intense price competition	
11.	Continue to promote Certified Consumer-Friendly products	3

The popularity of the Certified Consumer-Friendly framework is confirmed by the fact that the market share of Certified Consumer-Friendly Housing Loans (CCHL) within the housing loans that can potentially be certified is close to 70 percent since 2019. Based on the progress with the certification framework, in 2019 the MNB opted for expanding the range of certified products with a view to providing further support for the competitiveness objectives. Certified Consumer-Friendly Home Insurance products, providing cover for real risks, have been available to consumers since January 2020. Seven insurers were distributing the product by August 2021 and more than 4,500 home insurance contracts were concluded by consumers, insuring assets in the amount of HUF 168 billion. From January 2021 the range of certified consumer-friendly products will be expanded by the Certified Consumer-Friendly Personal Loan product, which – in addition to stimulating competition in the personal loan market – also supports the enhancement of digital processes. By August 2021, the market share of CPL products was close to 20-25 per cent.

1.4.	Enhancing digital transformation in banking	
1.4.1.	Efficiency means lower cost for banks and lower interest rates for customers	
21.	Optimise branch networks	2

As digitalisation progresses, the MNB continues to deem it important to ensure the accessibility of bank branches, while digital developments and solutions for branch operations will broaden the range of transactions available in the branches and make it more flexible. The digitalisation and optimisation of branch networks is also treated as a priority by MNB Recommendation 4/2021 of March 2021 on Digital Transformation. Accordingly, banks were required to include plans and schedules for the digital development of branch networks in their institutional digital transformation strategies to comply with the recommendation.

#	Recommendation	Priority
22.	Improve the coverage of POS terminals and other electronic payment solutions	1

For the penetration of electronic payment methods, it is essential that such can be used in a wide range of payment situations. Many retailers still previously failed to provide cashless payment methods, thereby forcing customers to hold and use cash, which is less efficient from the perspective of society as a whole. However, due to the amendment of the Act on Trade, from 1 January 2021 all taxpayers obliged to use online cash registers will have to give their customers the option of paying electronically. In addition to the further expansion in card payments, already increasingly popular, this may also support the acceptance of instant payments by merchants. Alongside preparing for compliance with the regulation at the end of 2020, significant further progress was made in this area in 2021. As a result – mostly due to the overburdening of those providing card acceptance services – the number of physical merchant points accepting payment by card increased significantly even after the expiry of the deadline, parallel to which the number of installed POS terminals also rose dynamically. In addition to the foregoing, as a result of changed consumer habits attributable to the coronavirus pandemic, the number of online card acceptance points increased further due to the fast penetration of web shops and home delivery services, where cash payment is often not an option. The requirements specified in the Act on Trade and the impact of the coronavirus pandemic resulted in a breakthrough in retail payments in terms of the penetration of electronic payment methods, and thus it may be deemed fully implemented, but this does not mean that there are no additional tasks in other areas, e.g. electronic payment of invoices and services.

1.4.2.	Banking products and services with a few clicks	
24.	Develop and deepen the digital transformation	3

Digital developments have accelerated recently as a result of the coronavirus lockdowns and due to the gradual but steady digitalisation of banks. The improvement in digital transaction channels and product application platforms is increasingly recognised by customers, while opening accounts fully online is already an option at almost all large banks and several domestic actors offer the fully online administration of unsecured loans. Despite the numerous initiatives and multiple developments that have commenced at banks, there is still plenty of room for improvement in the domestic banking sector's digital maturity, as also noted in the MNB's FinTech and Digitalisation Report, an annual publication published twice so far. March 2021 was a significant milestone in the digital development of domestic banks, as the MNB published its recommendation on digital transformation, which expects all institutions to develop a digital transformation strategy covering their entire operations, with specific scheduling and plans. In addition, the central bank will continue to support the digitalisation of the domestic banking sector through its own dedicated digitalisation area, by operating the Innovation Hub and Regulatory Sandbox frameworks, and by fostering 24 specific initiatives and recommendations set out in the MNB's FinTech Strategy, while the MNB has already implemented several digital developments in direct cooperation with domestic FinTech companies (e.g., Digital Student Safe, Chatbot) to support the digital development of the financial system.


#	Recommendation	Priority
26.	Support digital developments related to the instant payment system	2

The instant payment system was successfully launched on 2 March 2020 in Hungary as well, representing the greatest ever development in the Hungarian banking sector. In addition to instant payments, the central infrastructure operated by the MNB and GIRO also supports request-to-pay and secondary identification services, and based on this, market participants are able to provide their clients with widespread innovative payment solutions. Continuous (24/7/365) availability of services and instant settlements (1-2 seconds in practice) enable traditional actors in banking market to preserve their competitiveness vis-à-vis new types of contenders, and they also represent a number of business opportunities for service providers newly entering the market in connection with developing innovative end-user solutions. The MNB also actively supports the development of supplementary services, among other things by elaborating a detailed guide for payment situations and the QR code standard supporting data entry for initiating payments. Consequently, QR code-based payment initiation and request-to-pay services are now available at an increasing number of places. Accordingly, instant payments represent an easy and convenient electronic alternative in an increasing number of payment situations. QR code-based payment initiation is available at 4 payment service providers, covering over 60 per cent of the market among customers. Request-to-pay services are offered by 7 banks and 7 non-bank actors, resulting in a coverage of almost 80 per cent. However, this does not yet justify a change in the partly implemented status, as several actors are still in the process of finalising the related developments and closing the implementation. In addition to the above, the fact that batched corporate credit transfers and requests to pay became an option from 1 September 2020 represents a major step forward for enterprises and public utility companies, which may result in a breakthrough primarily at bill issuers.



27.	Incentivise banks to introduce package pricing in retail payment services	1
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The MNB has drawn the attention of domestic banks on several occasions – also in executive circulars – to the fact that the spreading of electronic payment methods in full may only be possible if banks revise their tariffs. According to MNB surveys, Hungarian banks charge high prices in a bad structure even by international comparison. The latter factor means that only a few banks apply package pricing, commonly used abroad, for transfers. After the launch of instant payments on 2 March 2020 an increasing number of banks are realising that frequent use of the new service by clients is conditional upon the application of a package-priced tariff structure. As a result of the MNB's efforts and banks' awareness, an increasing number of actors offer account packages, where – similarly to purchases by card – no direct transaction costs are charged for transfer transactions either, at least up to a certain volume of turnover, which – as transaction patterns show – is usually sufficient for average household customers. These account packages are already offered to a large number of new customers, and even many existing customers are being switched to these new account packages. However, banks also need to take further steps to achieve a substantial breakthrough in this area.

1.4.3. Convenient credit applications online

28.	Simpler and faster online contracting and e-signature	 2
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In accordance with Act LIII of 2017 on the Prevention and Combating of Money Laundering and Terrorist Financing (hereinafter: AML Act) and the amendment to the Credit Institutions Act, online contracting without any personal presence is already available for a number of financial products. In addition, due to the amendment of the Credit Institutions Act, an increasing number of customers have the option to conclude general digital framework contracts, under which customers who have already passed the due diligence and identification procedure can easily apply for various financial services. The MNB has already updated its regulation on customer due diligence and identification under the AML Act, in view of market needs, and supports the penetration of online contracting processes with central bank circulars. In addition to the already widespread customer due diligence and identification options, the amendment of the laws means identification supported by Central Client Authentication Agent (KAÜ) will also be available from 2022.

#	Recommendation	Priority
32.	Establish full online processing for taking out unsecured loans	 1
<p>Changes to relevant legislation, permitting – among other things – electronic wage enquiries and offering several types of remote customer identification solution, mean fully online personal loan applications are now available at several banks. The ratio of personal loans disbursed online is gradually increasing, and in connection with this process the emergence of the general digital framework contract and the penetration of product application platforms in banks may be regarded as progressive trends.</p>		
33.	Set up a central appraiser database	3
<p>One of the crucial elements of the mortgage lending process that involves a great degree of manual work while also being time-consuming and costly is the appraisal of collateral. In connection with this, after that the government created the relevant legislative background, the MNB made it possible – by amending its debt cap decree – to use statistical property valuation to determine the market value of property for the loan-to-value ratio calculation, which may reduce the time needed for mortgage lending significantly, even by 1 week. With a view to supporting further penetration of valuation processes without on-site inspections, the MNB is also working on the concept of a centralised valuation database, a precondition of which, however, is collecting anonymised information for valuations and providing banks with access to the data. Another important element of the framework may be the reporting by banks related to property transaction data ordered by the MNB, which commenced at the end of 2021, and the e-property register currently under development.</p>		
35.	Increase the share of mortgage and consumer loans granted through digital channels	2
<p>The digital administration of transactions and product application solutions at banks are gradually improving. The wider acceptance of remote customer identification solutions and the legal possibility of a centralised statistical property valuation system may significantly help ensure that part of – or for certain loan types – the entire loan application process (e.g. submission of applications, uploading of documents) takes place over digital channels to an increasing degree.</p>		
1.4.4. Innovate the banking system using innovative ideas from Hungarian companies		
36.	Ensure that administrative and operational requirements are proportional to the risks that are being addressed	 1
<p>To encourage innovation in the domestic financial system and to review the barriers related to reducing the licensing burden for new market entrants, the MNB consulted the Hungarian FinTech Association and the competent ministries. When reviewing the related regulatory requirements and risk management methodologies, the central bank still deems it important to consider prudential aspects and to ensure equal competition conditions for new and incumbent market participants.</p>		
37.	Wider access for new market entrants to existing information sources	3
<p>The key to improving the efficiency of financial services is to create conditions for widespread and regulated data access and data use. To facilitate the digital changeover of the financial sector, the MNB has put forward proposals to support data access in the financial sector. In addition, the MNB has also proposed the establishment of a Data Reform Workshop to develop and implement a data strategy strengthening the digitalisation of the financial sector. According to the MNB's plans, the Data Reform Workshop would be in charge of utilising domestic data assets and serve as a professional forum supporting cooperation with the stakeholder public organisations in connection with use of data in the financial sector.</p>		
1.5.1. Get successful domestic companies listed		
42.	Provide incentives for listing of banks	3
<p>The Magyar Nemzeti Bank will soon publish a new recommendation urging the admission of the shares of banks and insurance companies operating in Hungary to the stock exchange. The recommendation would apply to financial institutions with a market share exceeding five per cent. The objective is to achieve a free float of around 15 per cent in the ownership structure of the respective companies.</p>		

#	Recommendation	Priority
43.	Establish a modern corporate bond market	3

On 26 March 2019, the Monetary Council of the MNB decided to launch the Bond Funding for Growth Scheme (BGS) on 1 July 2019, under which the central bank purchases bonds with a rating of at least B+ issued by non-financial corporations domiciled in Hungary, initially HUF 300 billion, and from August 2021 in the total amount of HUF 1,550 billion. The programme – launched as the result of a strategic decision to develop capital markets – seeks to improve the efficiency of monetary policy transmission by increasing liquidity on the Hungarian corporate bond market. Through the programme, the MNB's intention is to help economic actors rely to an appropriate extent on bond issues – rather than bank loans – when acquiring funds, so central bank interest rate decisions can influence developments in corporate funding costs more efficiently. More than 300 companies registered for the programme by end-September 2021, and the bonds of 70 firms have already received the rating necessary for the central bank purchases. The first BGS purchase by the central bank took place in mid-September 2019, and in the 2 years since then, 84 bond series from a total of 65 companies have been put on the market, raising a total of HUF 1,640 billion overall, while the central bank's bond purchases amounted to HUF 940 billion. As an important milestone for the Hungarian capital market, Hungary's first green corporate bond was issued under the BGS, and by the end of the third quarter of 2021, green securities accounted for nearly one-fifth of the MNB's corporate bond portfolio. Owing to the corporate bond issuances, the outstanding bonds of Hungarian non-financial corporations registered five-fold growth at nominal value, and thus the domestic bond market is successfully converging on the average of the regional countries.

1.5.2.	Promote an environment to support the development of the capital market
49.	Improve access to digital platforms  2

The crowdfunding regulation of the European Parliament entered into force on 10 November 2021. Pursuant to the regulation, crowdfunding service providers may operate under harmonised rules at EU level, which facilitates the penetration of these innovative, online platform-based services under proper investor protection rules. The regulation also lays the foundation for the cross-border operation of crowdfunding in Europe.

1.6.	Improve the competitiveness of the insurance and fund sectors
51.	Increase the product value to customers in non-life insurance 3

In the non-life segment, the MNB has set out to develop a framework with better services to increase product value to customers. As a first step, the concept of Certified Consumer-Friendly Home Insurance (CCHI) was developed, setting minimum standards for the terms and conditions and procedural issues of retail home insurance products. The keywords of the CCHI include comprehensiveness, utility, clarity, digital solutions, green considerations and family-friendly solutions. At present the CCHI products of 7 insurers compete in the CCHI scheme, and additional CCHI products are expected to appear in 2022. The site comparing the CCHI products, operated by the MNB, was launched on 29 March 2021 and on 16 August 2021 it was supplemented with a data navigation online contracting function. All CCHI products are available on the site.

To increase customer value, the MNB published a circular in September 2020 calling upon insurers to review their MTPL premiums, particularly in respect of the unjustified surcharges. Another important step forward was supplementing the Insurance Act with transparency rules related to non-life insurance claims settlement. The amendments entering into force in June 2021 include a provision on the redemption of non-life insurance annuities, the details of which were provided by the MNB in the executive circular.

#	Recommendation	Priority
52.	Provide legal and technological means to facilitate changing insurers	↑ 1

With a view to boosting competition and improving the price-to-value ratio of insurance products, the MNB is striving to make it easier for customers to change insurers through a variety of tools. As the first step in this regard, the possibility of switching insurers quarterly was integrated into the requirements pertaining to the application for Certified Consumer-Friendly Home Insurance, pursuant to which the insured may terminate the contract with 30 days' notice at the end of the calendar quarter. The insurer must provide this opportunity after the end of the third quarter from the start of the risk exposure. Based on the first year's experience with CCHI products, a change in the frequency of repricing was also considered, and thus the concept was changed from annual to quarterly repricing, thereby strengthening competition and supporting customer mobility. The CCHI product comparison site, developed by the MNB, is a technical tool to help change insurers.

54.	Develop the digital links between the insurance and banking sectors	↑ 3
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Among its 2019 developments the MNB started its blockchain project, the first project based on distributed ledger technology (DLT), the use of which may be regarded as a revolutionary innovation not only in Hungary, but also internationally. The purpose of the development is to simplify the endorsement, registration and confirmation of insurance – primarily home insurance – linked to mortgage loans, to resolve the decades-long data exchange problems between banks and insurers, and to reduce the administrative burdens stemming from administration between the two institutions and the difficulties in information flow. During the preparatory phase, the MNB prepared the IT requirements specification for the development. The project is in the IT development phase following a successful public procurement procedure, and cooperation and consultations are ongoing between the participating credit institutions, insurers and the MNB.

Legend

Not started	Started	Partly implemented	Fully implemented
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2 Activation of household savings

The implementation, weighted by priority, of the recommendations in the Activation of household savings chapter rose from 30 per cent in November 2020 to 31 per cent. In 1 of the 9 points of the chapter the degree of implementation increased, and minor progress was achieved with another 1 recommendation. Overall, 4 of the 9 proposals now have a partly implemented status and 1 has started status.

Over the past year, notable progress has been made in the development of traditional and digital sales channels. Based on the experience of the coronavirus pandemic, banks started to drive digitalisation developments, which may have contributed to the sustained demand of households for government securities during the containment measures of the second and third wave of the pandemic. In parallel with this, the Hungarian State Treasury opened new points of sale in Budapest and around the country, facilitating a higher geographical diversification of investors.

The greatest contribution to activating domestic savings was made by the Hungarian Government Securities Plus (MÁP+) bonds, introduced in 2019. These offer attractive investment opportunities for those wishing to make savings, and thus they were able to increase the ratio of debt held by residents within government debt. At the end of September 2021, the stock of MÁP+ amounted to HUF 6,149 billion.

#	Recommendation	Priority
2.1.	Strengthening retail government debt financing	
3.	Use technical innovations and convenience services for retail government securities purchasing	↑ 1

There have been no significant changes in the domestic retail government securities strategy and sales framework since autumn 2020. On the other hand, online sales channels have improved as a result of the coronavirus pandemic. The containment measures introduced during the first wave of the coronavirus pandemic may have contributed to the decrease in demand for government securities, since purchases of MÁP+ were dominated by personal transactions, while the availability of online sales channels at banks was limited. Based on the experiences of this period, several banks started to improve their digital sales channels. This may have contributed to the fact that during the second and third waves no major decline in demand for government securities was observed, thereby highlighting the importance of digitalisation developments.

5.	Develop sales channels	2
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Further measures are necessary to increase the geographical diversification of government securities purchases by households. Increasing the efficiency and popularity of direct sales by the Hungarian State Treasury is of key importance, as it represents the cheapest sales channel both for the government and the population. In 2020, the Hungarian State Treasury opened several retail government securities points of sale outside Budapest (Érd, Gyöngyös and Sopron), and in October 2021, it opened its tenth office in Budapest. As a result, households can now buy government securities at 52 locations nationwide. However, further measures such as increasing the number of cash payment points, improving the availability of the Treasury's customer services and opening additional points of sale are essential to satisfy customer needs in full.

Legend

Not started	Started	Partly implemented	Fully implemented
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3 SME strategy

Weighted by priority, 44 per cent of the recommendations included in the chapter on SME strategy had been implemented by December 2021, compared to 40 per cent registered in autumn 2020. Recently, several government measures have been introduced that favour the SME segment. As regards bankruptcy procedures in a wider sense, it is worth highlighting the Restructuring Act, the key objective of which is to address financial difficulties of enterprises at an early stage, foster their recovery and restore their solvency. One major achievement in the communication and implementation of public programmes is that the time needed to assess economic development tenders connected to the new EU financial cycle has shortened, and tenderers may already start completing their project data several days before the opening of the schemes. The experiences of the current EU cycle nearing its end also show that tendering should be an activity that can be planned better by companies, since tendering opportunities have a major influence on investment decisions.

In the 'Digital Renewal Operational Programme Plus', currently under public consultation, the entity in charge of policy treats the roll-out of rural digital infrastructure started in 2014-2020 as a high priority. This will provide Hungary with the chance to converge on leading EU Member States in terms of broadband and 5G penetration.

In the area of networking, the launch of the battery and drone coalitions – initiated by the government – is worth highlighting, following similar organisations in the fields of 5G and artificial intelligence. Support for university incubators and spin-offs continued with the Hungarian Start-up University programme. As regards digital courses, the SME training material published by the Budapest Institute of Banking (BIB), owned by the MNB, is worth noting. Several knowledge-intensive service companies received additional support recently. Among the proposals to increase the innovation capacity of SMEs, the Modern Sample Factory Programme should be highlighted, which is not new, but the enlargement of the programme may have a positive impact on SMEs. Demonstration programmes in artificial intelligence have also been launched. It could greatly assist SMEs if the government-funded institutions helping them were also able to attract new tenderers to the EU schemes.

#	Recommendation	Priority
3.2.	Increase productivity in the SME segment through greater economies of scale	
5.	Support acquisitions and mergers	3

In 2021, Act LVII of 1996 on the Prohibition of Unfair and Restrictive Market Practices was amended, making it easier for state-owned equity funds to acquire stakes, which may be helpful for the transactions of companies involved in venture capital transactions (start-ups).

In 2020, in terms of ownership structure 44 per cent of transactions were between Hungarian companies, which is a significant decrease compared to the 54.8 per cent registered in 2019 (Deloitte and Mergermarker, 2021).

6.	Make liquidation proceedings simpler and faster	↑ 3
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Substantial progress was achieved in 2021 in the area of bankruptcy proceedings, in the broader sense. The Restructuring Act (Act LXIV of 2021), transposing Directive (EU) 2019/1023, is a significant step forward in respect of the early warning systems. The main economic policy objective of the Directive is to address the financial difficulties of enterprises at an early stage, foster their recovery and restore their solvency. The new procedure is not an insolvency procedure, but a new pre-insolvency proceeding, which could be a real alternative to the ineffective bankruptcy procedure for companies in financial difficulty and for their creditors. The new type of procedure could provide a more flexible solution than bankruptcy for both enterprises in financial difficulty and their creditors. The Act will enter into force on 1 July 2022. An additional development related to the foregoing is the reorganisation of companies, introduced by Government Decree No 179/2021 (IV.16) and finally included in Government Decree No 345/2021 (VI.18), which may bridge the period until the Restructuring Act enters into force for companies that found themselves in financial difficulties during the COVID-19 crisis.

3.3.	Improve SME competitiveness through targeted measures	
8.	Increase the innovation management capacity of SMEs by establishing a non-profit advisory centre	1



A positive development in the new EU development cycle is that extra points will be awarded to enterprises that participate in the Modern Sample Factory Programme. The programme includes 31 factories.

AI Accelerator and Sandbox programmes have been set up to introduce SMEs to AI technologies and help them select the suppliers that are the most favourable for them. An AI testbed was created as an AI sandbox where solutions can be freely tested.

In connection with the EU cycle drawing to a close, the government-financed SME advisory centres should also fulfil a tender-writing function: 42 per cent of the GINOP (Economic Development and Innovation Operational Programme) Priority 1 winners in the current EU cycle are the same as the winners of the relevant GOP (Economic Development Operational Programme) tender of 2007-2013. This is mostly attributable to the fact that these are typically the companies with experience in writing tenders (based on Equinox, 2020). The same document emphasises that tenderers are characterised by a high degree of self-selection, which increases the deadweight effect.

10.	Support the emergence of clusters and other forms of networks	1
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Programmes not specifically aimed at creating clusters, but pointing in the same direction as the recommendation, have been completed or launched in recent months. The University Innovation Ecosystem Programme (UIE) started in 2019, and its first tender cycle ended in 2021 with a grant of HUF 40-150 million per institution. The action plan of the government aimed at moving away from manufacturing facilitates networking in battery production. A professional organisation was also established for implementing the action plan. In another programme, the fact that within the market R&D&I tender two sub-programmes have been launched where research institutions may submit tenders for up to HUF 800 million in partnership with enterprises for sub-programme B, may be regarded as a trend in the direction of clustering, albeit informally. The Hungarian Drone Coalition was established in May 2021, which is the next step after the 5G and Artificial Intelligence strategies/coalitions. The advantage of these coalitions is that they are able to coordinate regulatory, organisational, development and manufacturing tasks in one place.

#	Recommendation	Priority
11.	Communicate state-sponsored programmes and opportunities on a broad base	 1
<p>There is a double trend in the tenders available from EU funds. On the one hand, it is a positive development that the government published the draft of the most important calls for bids months before the adoption of the operational programmes for the next EU cycle, thereby guiding companies.</p> <p>The most common criticism formulated by enterprises with regard to EU grants is that the tenders are available for only a short period. These criticisms are confirmed by the ex-post evaluations carried out at the end of the cycle. It is encouraging that the application form will already be available for completion 10 days before the deadline for submitting the tender, thereby making the process easier and submission faster.</p> <p>It could be crucially important if the shorter lead time for tenders encouraging investments stabilised at the current 45-60 days, compared to the previous 3-5 months.</p>		
12.	Support the operation of mentor networks	1
<p>The Let Us Teach for Hungary programme has been expanded further. In February, the Hungarian University of Agricultural and Life Sciences (MATE) and the University of Szeged (SZTE) joined the invitation, and in June, four new tertiary education institutions joined the programme (Apor Vilmos Catholic College, Károli Gáspár University of the Reformed Church, University of Pannonia and Pázmány Péter Catholic University). Companies also joined the programme (MOL, Teqball).</p>		
3.4.	An inspiring environment for entrepreneurship	
16.	Support university incubators and spin-offs	1
<p>The Hungarian Start-up University Program continued from September 2021 with the participation of 26 tertiary education institutions. Currently, 21 universities across the country offer HSUP e-learning courses.</p>		
18.	Grant a corporate tax exemption for aspiring entrepreneurs in their first three years	3
<p>The tax authority has extended the tax mentorship period by six months, which is a great help to start-up companies.</p>		
3.5.	Qualified human resources in small businesses	
21.	Provide digital courses conditional on achievements	1
<p>The curriculum developed by the Budapest Institute of Banking for SMEs has been available since December 2020. Five of the 9 modules are now available free of charge.</p> <p>The 'Digital Renewal Operational Programme Plus', which is currently under public consultation, includes sections on digital courses.</p>		
3.6.	Support an SME sector that is competitive in modern times	
23.	Develop digital infrastructure in rural areas	 2
<p>The 'Digital Renewal Operational Programme Plus', currently under public consultation, notes that significant progress has been made in the coverage of high-speed networks in the preceding operational programme (GINOP). Fibre coverage is above the EU average, but below the figures of leading European countries. The pandemic has further reinforced the need for network development. Accordingly, the Operational Programme states that in line with the '2030 Digital Compass' – the objective of which is to connect all households with a gigabit network and provide 5G coverage in all populated areas – it is necessary to continue the network development investments previously launched in a targeted manner to ensure that gigabit-capable network connection is also available in the remaining 70 per cent of demand sites.</p>		

#	Recommendation	Priority
24.	Tighten rules for the management of ICT risks	2
It is a positive development that according to the GINOP Plus call for bids financing the business development grants of the next EU development cycle, cybersecurity consultancy will also be eligible.		
26.	Prefer knowledge-intensive industrial services in EU funds' disbursement	3
<p>Several knowledge-intensive industries have benefited from additional support recently. The fashion and design industry call for bids with a global amount of HUF 7 billion was launched in January. At present it is in the pre-qualification phase. In addition to this, among large foreign companies, Continental, Softflow and Ericsson expanded their development activities in Hungary with state support too.</p> <p>The call for bids under the Fast track programme was published in September 2020 for domestic companies capable of outstanding growth and demonstrating significant value added in specific industries. The financial allocation of HUF 3 billion is available to spin-off companies to carry out market-oriented healthcare developments in the areas of smart cell diagnostics and innovative treatments for skin cancer.</p>		

Legend


Not started	Started	Partly implemented	Fully implemented
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4 Foreign trade

The implementation status of the recommendations in the Foreign Trade chapter rose from 24 per cent to 35 per cent, weighted by priority, compared to the status presented in the 2020 Competitiveness Mirror. Major progress has been made in the foreign trade recommendations. The most important event was the large order placed by Egypt for the production of railway wagons, which was concluded through the ministries of foreign affairs of Hungary and Egypt; in addition, the series of economic agreements with Eastern countries also continued. Looking at the service export programmes, the Water conservancy programme and the External Market Growth support continued (although the latter is not specifically services-focused). Another success is that a Hungarian company won the contract to build the road toll network across Indonesia.

The series of programmes in relations with China continued as well. As in previous years, the logistics sector was affected by new announcements in the past year, namely a project to build a rail freight container terminal in Fényeslitke was launched and the idea of an "air-silk road" link was announced. Hungary's international role in east-west transportation is growing with the support or mediation of the Government of Hungary.

Among the economic structural developments, it is a step forward that the budget of the Investment Support for Large Companies (NBT), which typically focuses on more deeply embedded domestic sectors, was raised to reach that of individual government decisions (EKD), a programme that typically focuses on foreign companies, and thus utilisation of individually granted state support in the national economy may improve. Further dedicated resources have opened up for the health and food industries, which have a long-standing tradition in the economy. The adoption of the new National Smart Specialisation Strategy (S3) may provide greater scope for supporting productive investments via knowledge-intensive services. In this strategy, it can be regarded as a step forward that the sectors of the priority target groups were designated much more specifically than in the past, which may result in improved implementation and thereby in a more focused impact of resources.

#	Recommendation	Priority
4.1.	Increase the activity of Hungarian small and medium-sized enterprises abroad	
1.	Strengthen export of services (besides export of goods)	3
<p>The programmes of the Ministry of Foreign Affairs and Trade already under way continued. A Hungarian company won the contract to build a road toll network across Indonesia. Government-funded water technology export projects continued (Cape Verde, Uganda). In April 2021, the focus of the programme was broadened. The aid intensity is 50 per cent.</p> <p>In addition to the previous programmes, 28 winners were announced in February 2021 under the Foreign Market Growth Support Programme, which support Hungarian-owned capital exports, and indirectly, service exports as well.</p>		
2.	Exploit the benefits offered by China's Belt and Road initiative	2
<p>The implementation of logistics projects connected to China continued, and there were new developments as well. The construction of Hungary's largest rail freight container terminal – which may play an important role in trade between China and Europe – has started in Fényeslitke, assisted by state support. Under another cooperation framework with CRRC Changchun, a Hungarian company can start the modernisation of branch-line multiple units in Szolnok. Furthermore, a rail transportation joint venture will be established with the participation of the partly Hungarian-state-owned CER Cargo and RZD Logistics, the logistics company of Russian State Railways, with the involvement of a Chinese partner. This step further increases Hungary's international role in east-west transportation. In terms of air links, the Chinese-Hungarian Silk Road agreement, signed in April 2021, is a step forward, increasing the present three cargo flights per week between the two countries by two more flights. Further airport logistics investments in Budapest are expected to be implemented under the agreement.</p>		
3.	Support the entry into fast-growing new markets with stable institutions	 1
<p>The measure is typically supported by the government through dedicated credit lines or mixed funds of EXIM Bank, and some direct grants are also available. In line with the aim of the proposal, a Hungarian-Russian consortium signed an agreement worth EUR 1 billion with Egypt for 1,300 rail wagons. This is the most significant international economic deal of the past decades subsidised by the Hungarian state. With the support of the Hungarian government, Medicor is setting up a manufacturing plant in Turkey, with more than half of the investment value being financed by the Hungarian government. In addition to the above, the EXIM banks of the two countries signed an agreement on financing health sector developments. In Uzbekistan, five Hungarian food companies are making preparations for investments assisted by state support, and in March, nine agreements were signed for the development of strategic sectors by Hungarian companies. A tied-aid programme of USD 50 million was launched with Pakistan to enable Hungarian companies to sell medical equipment, water industry services and food safety-related technologies on the Pakistani market. An economic fund of HUF 5 billion was established with Kyrgyzstan. EXIM Bank opened credit lines of USD 30 million and USD 100 million for Tajikistan and Azerbaijan, respectively. MOL established a rubber bitumen plant jointly with a company in Tatarstan, supported by a state subsidy of HUF 2 billion.</p>		

#	Recommendation	Priority
4.2.	Utilise the knowledge received with FDI	
7.	Channel public development funds to manufacturing sectors that are knowledge-intensive or well embedded domestically	↑ 2

The targeted subsidy schemes, mostly aimed at large companies and assessed on an ad hoc basis, have a dual nature. As regards the investments financed, the focus is once again on job creation and job preservation as a result of the pandemic. The other source of targeted support to large companies is the Investment Support for Large Companies (NBT), which, unlike the individual government decision scheme, mainly supports sectors with high multiplier effects (chiefly in the food industry). In 2020, three-quarters of the support went to Hungarian-owned companies. While financial support given by the state based on individual government decisions used to operate with a much larger budget than the NBT, by 2020 the amount of the two schemes programmes levelled off, which is in line with the objectives of the proposed measure.

Another new opportunity is the opening of a tender in February 2021 aimed at supporting complex investments by medium-sized food companies, mostly financed from EU funds. Efforts aimed at developing the defence industry may also strengthen knowledge-intensive domestic production. The film industry is supported by a December amendment of the law, according to which foreign performers and crew members may use simplified taxation more widely. In June 2021, the Ministry of Finance announced that the domestic clothing and creative industries will receive support of HUF 15 billion. These sectors have high domestic multipliers. Additional companies were supported under the Healthcare Industry Aid programme.

8.	Provide incentives for strongly subsidised enterprises to use Hungarian suppliers	3
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In the supplier development programme launched in the food industry, food companies may apply for financial support by submitting a joint application with a commercial chain (buyer), laying down their intention to create a market and forge a business cooperation in a cooperation agreement. In addition, targeted developments of enterprises may receive support under a general scheme to help them enter external markets.

9.	Give priority to supporting productive investments on the services side when programming for the next EU programming period	↑ 3
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In parallel with the start of the new programming period, the S3 National Smart Specialisation Strategy – determining the directions of research and development – was published, which designates the key sectoral paths for the next EU cycle. Compared to the strategic document of the same title, published in the previous cycle, it is a significant step forward that it also specifies the priority target groups at sectoral code level. As a result of this, the strategy is more tangible and the quality of its implementation may improve. The directions designated in the S3 strategy are well adapted to the circumstances and competences of Hungary. The target sectors include a number of service sectors, which is in line with the objectives of this recommendation.

Legend

Not started	Started	Partly implemented	Fully implemented
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5 Labour market

Weighted by priority, the implementation status of the recommendations in the Labour Market chapter rose from 24 per cent registered in November 2020 to 43 per cent. Since the publication of the Competitiveness Programme, the implementation of 70 per cent of the labour market-related recommendations has commenced. Since the publication of the 2020 Competitiveness Mirror the status of 11 recommendations has changed, which primarily relate to the reduction of taxes on labour, incentives for Hungarians living abroad to return home, and the education system. In addition, new measures were announced for a further 6 recommendations, but those had no effect on the status of their implementation.

In parallel with the major increase in the minimum wage, looking at labour taxes the reduction in the social contribution tax is continuing in 2022 and the vocational training contribution is to be abolished. For employees, those under 25 years of age are exempted from personal income tax up to the amount of the average gross wage in July preceding the reporting year. The continuing or newly announced wage increases in several public sectors (healthcare, education, police) and the expected simplified acceptance of degrees obtained abroad may persuade Hungarians living abroad to return home. The repatriation programme of the National Federation of Hungarian Building Contractors and the new regulation on the employment of third-country workers through Hungarian temporary employment agencies may help ease the labour shortage in Hungary. In addition, a bill submitted by the Ministry of Interior on the introduction of the White Card would also facilitate the residence of digital nomads from third countries in Hungary.

The adult education system is undergoing a significant transformation and the government has announced a number of programmes to strengthen lifelong learning. From 2022, vocational and qualifying examinations in vocational training and adult education will only be available at independent, accredited examination centres. From the next school year onwards, students enrolled in a vocational training course at a vocational education institution as part of adult education will also be entitled to a student card. The government has launched a call for bids with a financial allocation of HUF 70 billion in autumn 2021 to support participation in internal company training or adult education. The National Media and Infocommunications Authority has launched a campaign entitled 'Netre fel' (Get on the net) to foster the changeover to smart phones by elderly people. More than 40,000 people successfully completed the 8-week free IT training course launched as part of the Economy Protection Action Plan, with more than a thousand of them also completing the related programmer training. From the beginning of 2021, the administration required in adult education decreased further.

In addition to the aforementioned measures, several wage subsidy schemes continued in 2021 as well to mitigate the adverse effects of the coronavirus pandemic: the Sectoral Wage Subsidy programme, the Wage Subsidy for Researchers and Developers and the Labour Force Subsidy for Enterprises. New programmes were also launched in 2021, focusing on the more vulnerable groups in the labour market: long-term jobseekers, young people and people with low school qualification (Complex Job Placement Grant for Long-Term Jobseekers, Work Experience Acquisition Subsidies). The project entitled 'Improving the adaptability and productivity of employees and enterprises through labour force development' helps to implement training and development at work. Under the schemes, enterprises can receive various wage subsidies, a social contribution tax allowance and training subsidies. As of June 2021, self-employed workers primarily in the retail trade, tourism, accommodation and food service activities or entertainment sectors can also apply for a one-off HUF 219,000 grant under the Self-Employment Compensation Scheme.

#	Recommendation	Priority
5.1.	Activate labour market reserves for the private sector	

2.	Increase the difference between the wages paid for public work and the minimum wage	2
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In 2021, the minimum wage increased by 4 per cent to HUF 167,400, and after four years, the wage of workers in public employment also increased by HUF 3,470 to HUF 85,000. Thus, the gap between the minimum wage and the wage paid for public work widened further to HUF 82,400, and the wage paid for public employment was 51 per cent of the minimum wage in 2021 as well, similar to the previous year. In 2022, the minimum wage will rise to HUF 200,000, while the wage of workers in public employment will be 50 per cent of the minimum wage, i.e. HUF 100,000.

3.	Raise the permitted ceiling on earnings for persons employed below the retirement age or while receiving a pension	1
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From 1 July 2020, workers receiving an old-age pension in their own right are exempt from paying social security contribution, which means an abolishment of the earnings limit. However, the annual earnings limit of 18 times the minimum wage remains in force for those receiving a service benefit or early retirement benefits. From 1 January 2021, the earnings limit applicable to work performed while receiving disability and rehabilitation benefits has also been cancelled, and thus those concerned receive their benefits independently of their salary.


4.	Provide additional incentives for atypical forms of employment to encourage capacity building and organisational development	3
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The wider penetration of atypical forms of employment could be helped by the amendment to the Co-operatives Act, effective from 1 July 2021, according to which parents on childcare allowance or maternity benefit may establish or join a co-operative. Working through a co-operative provides flexible conditions for those concerned, and only personal income tax is deducted from the salary of the co-operative member, without any further liability to pay contributions. The measure had no effect on the implementation of the recommendation, but is a step forward in terms of atypical employment.





5.2. Activate labour market reserves via tax regime instruments

6.	Extend the Job Protection Action Plan to employees' contributions	 2
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From 1 January 2022, employees under 25 years of age will be exempt from personal income tax up to the average gross salary in July 2021, i.e. HUF 433,700. The tax exemption also applies to young people who take on a job through a student co-operative. Due to the net wage growth, the measure may increase the labour supply of young people, representing one of the largest labour market reserve groups.

11.	Promote targeted work time reduction combined with full or partial social contribution tax compensation and/or public wage compensation in vulnerable groups	 1
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From autumn 2021, new programmes are helping – among the most vulnerable groups – young people and people with low school qualification to find a job. As part of the Work Experience Acquisition Subsidy, employers may receive a 100 per cent wage expense subsidy for 90 days if they employ skilled young persons under 30 or low-qualified jobseekers. The benefit is also available for part-time employment and the maximum monthly amount is twice the guaranteed wage minimum for full-time work of young skilled workers and twice the minimum wage for low qualified workers. After the expiry of both schemes, it is also possible to apply for a 6-month subsidy amounting to 50 per cent of the wage expenses (up to HUF 100,000) under the Labour Force Subsidy for Enterprises scheme for the respective employees.

#	Recommendation	Priority
5.3.	Sustainable increase in wages	
12.	Continue the reduction of taxes on labour	 3
<p>The reduction of employers' labour taxes is continuing in 2022 as well. Parallel to raising the minimum wage to HUF 200,000, employers' burdens have declined by 4 percentage points, which is the combined result of a 2.5 percentage point decrease in the social contribution tax and the cancellation of the vocational training contribution of 1.5 per cent. Accordingly, from 2022, employers only have to pay the 13 per cent social contribution tax on gross wages.</p>		
13.	Attract digital nomads	 2
<p>Pursuant to bill No T/17283 submitted by the Ministry of Interior in October 2021, the entry and residence of third-country digital nomads in Hungary would be simplified from 2022. Based on the draft, a new type of residence permit meant specifically for digital nomads, i.e. the White Card, will be created, likely to be valid for one year (with a further one-year extension). Eligible for the residence permit would be third-country nationals who have a proven documented employment relationship in another state and would perform their work from Hungary using advanced digital technology solutions, or who are owners of a foreign, profitable company but wish to manage their company from Hungary.</p>		
5.4.	Incentives for Hungarians living abroad to return home	
14.	Increase wages paid in high-demand jobs in the public sector	3
<p>Based on the announcements made in previous years and in 2021, wage increases are continuing for several public occupations. Pursuant to previous regulations, the wage increase for doctors and health professionals will continue in 2022 in the form of a multi-phase increase. In addition, in 2022, the wages of nursery, social, childcare and cultural workers will rise by 20 per cent, while the occupational wage supplement for teachers will increase from 10 per cent to 20 per cent. Based on the bill submitted by the Ministry for Innovation and Technology, lecturers of government-funded universities may also benefit from a wage increase twice of 15 per cent each time in the future. Professional members of the armed forces and law enforcement organisations may receive the law enforcement service allowance (weapon allowance) equivalent to six months' salary at the beginning of 2022 instead of 2023. According to announcements made in December, the salaries of soldiers and law enforcement workers will also rise by 10 per cent.</p>		
16.	Support Hungarian companies' recruitment abroad by deducting expenditures and tax benefits	 1
<p>The National Federation of Hungarian Building Contractors (ÉVOSZ) organised a job fair in Munich in November 2021 as part of the Construction Industry Repatriation Programme, attended by several large Hungarian companies with job offers. The programme was funded by an Economic Development and Innovation Operational Programme (GINOP) project. In addition, pursuant to a regulation effective from 1 September 2021, non-neighbouring third-country workers will be allowed to come to Hungary temporarily via temporary employment agencies. Only qualified and highly experienced temporary employment agencies are allowed to recruit guest workers. The measure may help mitigate the domestic labour shortage.</p>		
17.	Simplify the recognition of degrees obtained abroad	 1
<p>According to a bill submitted by the Ministry for Innovation and Technology in November 2021, the recognition of degrees obtained abroad may be shortened to 1 month in the future. The government is also working on making the process free of charge. A memorandum of understanding on the automatic mutual recognition of tertiary education courses in the Visegrád countries was signed by the countries' representatives in autumn 2021.</p>		

#	Recommendation	Priority
5.5.	Strengthen the system of adult training	
18.	Introduce output criteria and independent examination centres in the system of adult education and training	↑ 1


From 2022, vocational and qualifying examinations in vocational training and adult education will only be available at independent, accredited examination centres. In the future, training and examinations will be separated. Those who have successfully completed the training at the training provider will receive a certificate, which they must then use to find an accredited examination centre where they can take an exam, and if they pass, they receive a state-recognised certificate.

19.	Ensure that first qualifications may be obtained free of charge in adult training	2
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To strengthen vocational education further, the training scheme under the National Training Register (OKJ) was revised from the 2020/2021 school year. The list of available courses was simplified significantly: instead of the more than 700 qualifications previously included in the OKJ, vocational training institutions offer 177 basic vocational qualifications, 76 specialist vocational qualifications and 25 cultural and art vocational qualifications. Basic qualifications can be acquired in the school system, paving the way for additional qualifications. Acquiring a second qualification in the school system is already free, but as a result of the reform, the training duration will be shorter and thus the qualification can be acquired more quickly. From the next school year onwards, students enrolled in a vocational training course at a vocational education institution as part of adult education will also be entitled to a student card. The government launched a call for bids with a financial allocation of HUF 70 billion in autumn 2021 to support participation in internal company training or adult education. The Student Loan2 product for tuition fees is also available for vocational and adult education from May 2021.

20.	Develop digital and language skills in senior generations	↑ 3
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The National Media and Infocommunications Authority has launched a campaign entitled 'Netre fel' (Get on the net) to foster the changeover to smart phones by elderly people. The Digital Welfare Software Basic Package has been available since January 2021, which is an easy-to-install and use operating system and user software replacing pay operating systems and office software with open-source solutions. For elderly people, the Digital Welfare Software Basic Package offers a customised, user-friendly user profile (with enlargeable font size and special icons). Under the Digital Welfare Programme, 1,300 mentors helped more than 80,000, mostly elderly people, to cope with digital administration challenges during the pandemic. More than 40,000 people successfully completed the 8-week free IT training course launched as part of the Economy Protection Action Plan, with more than a thousand of them also completing the related programmer training. The average student age was 39, and those opting for reskilling included students who formerly worked as shop assistants, lawyers, interpreters, couriers or teachers. In the second phase of the training, an additional 10,000 people will be able to participate in a 4-week training course of 2-6 hours a day. The HTTP Foundation is offering a free basic programming course for jobseekers and those about to change career. Participants in the virtual summer camp may be able to create their first website on their own by the end of the course, even if they had no experience before. In the first half of 2022, a mobile phone replacement programme will be launched to support the population in replacing their 2G or 3G phones with more modern 4G- and 5G-capable phones. Under the scheme, those who replace their old phone may receive a gross contribution of HUF 20,000.


#	Recommendation	Priority
5.6.	Strengthen professional training	
21.	Provide incentives for lifelong learning by allowing education expenses to be deducted from the corporate income tax base	 3

The cost of training outside the school system – required to perform the job – does not qualify as income under the Income Tax Act, and thus it is not taxable. The government launched a call for bids with a financial allocation of HUF 70 billion in autumn 2021 to support participation in internal company training or adult education. The programme will also include a loan available for costs above half a million forints per employee, and the development of a career tracking system. The subsidy is subject to the company continuing to employ the employee for at least one year, and raise the employees' wage at a rate higher than the increase in the minimum wage. The training subsidy is available to enterprises with fewer than 50 employees at an aid intensity of 70 per cent, to medium-sized enterprises at 60 per cent and to large enterprises at 50 per cent.

With a budget of HUF 2.7 billion, the project of the National Office of Vocational Education and Training and Adult Learning (NOVETAL) to support on-the-job training for employees of micro, small and medium-sized enterprises and large companies has been concluded. The main objective of the project was to implement tenders aimed at on-the-job training and to ensure and monitor the quality of the training implemented in less developed regions.

The government simultaneously supports young Hungarians and micro, small and medium-sized enterprises active in the infocommunications sector by having paid the wages of junior IT professionals for nearly three months in spring 2021 under the Program your Future project.

8,000 employees in the transport sector will be able to participate in the HUF 7 billion project, offering skills development in a virtual learning space. From spring 2022, a unified and centralised electronic system will be in place for driving tests. The completely electronic administration will also simplify the process of obtaining a driving licence, and in the future, driving test applications can be initiated via the e-government client portal, designating the driving school.

22.	Introduce a mandatory further training minimum for companies	 3
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From the beginning of 2021, the administration required for adult training declined further. The changes in the adult education regulation relate to the simplification of rules applicable to in-house training and the reduction of data reporting and data management obligations. As a result of the amendment, training courses of less than six hours no longer form part of in-house training, i.e. they are not subject to any administration, and training courses for employees in the field of labour and fire safety also fall outside the scope of the Act. Another important simplification for enterprises is that they only need to report training data on a quarterly basis.

5.7.	Strengthen entrepreneurial propensity	
25.	Incorporate entrepreneurship skills into public and tertiary education	2

A six-party cooperation agreement has been signed for the successful implementation of MONEY7 (PÉNZ7): the Ministry of Human Capacities as project owner, the Ministry for Innovation and Technology, the Ministry of Finance, the Hungarian Banking Association, the Péntírányítú Foundation and the Junior Achievement Hungary Foundation signed the document as the professional cooperating partners of PÉNZ7. In the 2020/2021 school year, 171,500 students from more than 1,100 schools in Hungary participated in the programme. In recognition of the outstanding attendance, the Hungarian programme was included among the best events of the Global Money Week (GMW) three times.

The IdeaFest competition was organised for the first time in 2021, for enterprising secondary school students over the age of 14.

From September 2021, the Hungarian Startup University Program (HSUP), i.e. the first national university startup training programme, is already available at 26 universities nationwide, aiming to arouse the interest of young people in solution-focused thinking and entrepreneurship during their university years. The two semesters of online training also create credit points. In the first academic year, starting last year, 2,095 students took on the new subject, and in the second semester, with the professional support of 70 mentors, they worked in project teams to implement nearly 100 innovative ideas.

#	Recommendation	Priority
26.	Run domestic and foreign media programmes for the promotion of entrepreneurship	↑ 1

The winner of the 2021 national round of the European Enterprise Promotion Awards in Hungary was Atasi Team, which provides assistance to micro and small enterprises in the field of data protection compliance, and the course of the Business School - Budapest LAB Business Development Centre entitled 'Business Plan in a Week'. The aim of the award is to raise public awareness of these entrepreneurs who make entrepreneurship attractive and set an outstanding example internationally as well. On behalf of the Ministry for Innovation and Technology, the Budapest Institute of Banking (BIB) has developed a free e-learning course entitled 'Be a Smart Entrepreneur'. The total duration of the course is 70 hours, giving participants the opportunity to study the 9 different topics in depth and gain practical knowledge through detailed examples. A programme to support generational change in business leadership has been launched under the title of 'Evolution – programme of reviving enterprises', for which applicants may enrol with the Ministry for Innovation and Technology until 31 August 2022. The programme offers a complex advisory service to enterprises, providing free consultancy on determining goodwill, planning the transfer process and finding the right form of finance to move forward.


Legend

Not started	Started	Partly implemented	Fully implemented
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6 Regional convergence

Weighted by priority, the implementation status of the recommendations in the Regional convergence chapter rose from 28 per cent registered in November 2020 to 40 per cent. On the whole, since the publication of the Competitiveness Programme, progress has been made in 8 of the 13 recommendations fostering regional convergence, i.e. in 62 per cent of them. Since the last Competitiveness Mirror published in autumn 2020, the status of 4 recommendations has changed. In addition, measures were taken in respect of another 5 recommendations without changing the implementation status.

The support for increasing labour market mobility continued in 2021 by announcing the ‘Development of Workers’ Hostels’ programme again. Travel and housing allowances were available for jobseekers working further away from home. Progressive announcements were also made with regard to the development of intercity transport. Looking ahead, the Rural Development Programme of the 2021–2027 EU programming period – providing nearly HUF 4,300 billion for the development of agriculture and the food industry – could make a significant contribution to rural development. Several programmes have supported job creation and investment by enterprises in rural and less developed regions (aid increasing capacity, business restart and tourism development programmes). Developments under existing programmes – such as the Modern Cities Programme and the Hungarian Village Programme – continued, and in order to facilitate the convergence of the most disadvantaged settlements, the measures of the ‘Converging Settlements’ programme are implemented at further 51 locations, in addition to the 67 settlements already included in the programme. Furthermore, the 2021–2027 Territorial and Settlement Development Plus Operational Programme (TOP Plus) – which will provide HUF 1,800 billion for development over the next seven years – may contribute to the development of rural areas and reduce inequalities. Major progress has been achieved at two of the recommendations to finance less developed regions: the European Investment Bank provided significant loans and guarantees to Hungary in 2020 as well, while six MFB urban capital funds are already supporting enterprises in rural areas.

#	Recommendation	Priority
6.1.	Encourage labour mobility	
1.	Support labour market mobility by providing incentives for commuting	3
<p>In September 2021, the ‘Development of Workers’ Hostels’ programme to promote the mobility of the labour force became available for the sixth time, under which enterprises, local governments and municipal companies can submit tenders to a budget of over HUF 10 billion. In the five calls for bids announced under the programme launched in 2017, more than HUF 15 billion has been awarded to date, facilitating the creation of nearly six thousand spaces across the country. In addition, the ‘Travel Allowance 2021’ programme may be applied for between July and December 2021, providing a travel allowance to former jobseekers who found a job up to 60 kilometres from their place of residence and whose wage does not exceed the monthly gross average salary registered in 2020 (HUF 403,616). The maximum amount of the travel allowance is HUF 41,850 for three months. The implementation of the ‘Road to the labour market’ programme from previous years, which also included a travel allowance component, ended in October 2021.</p>		
2.	Support labour market mobility by supporting change of residency status	2
<p>The ‘Housing Allowance 2021’ programme may be applied for between July and December 2021, providing a housing allowance to former jobseekers who found a job at least 60 kilometres from their place of residence and whose wage does not exceed the monthly gross average salary registered in 2020 (HUF 403,616). The housing allowance can be granted for three months, in the amount of HUF 100,000 per month. The implementation of the ‘Road to the labour market’ programme from previous years, which also included a housing allowance component, ended in October 2021.</p>		
3.	Provide mobility incentives to supplement the employment benefits granted to public employees	3
<p>Although the ‘Development of Workers’ Hostels’, ‘Travel Allowance 2021’ and ‘Housing Allowance 2021’ programmes do not specifically target the labour market mobility of workers in public employment, they can support their employment in the primary labour market.</p>		
4.	Improve interurban passenger transport	2
<p>In January 2021, the government announced a comprehensive agglomeration railway development plan for the capital until 2040, entitled ‘Budapest Agglomeration Railway Strategy’, at a total cost of around HUF 2,000 billion. Half of the funds allocated to the implementation can be absorbed until 2027. The Integrated Transport Development Operational Programme Plus draft for 2021–2027 also gives priority to the development of interurban and agglomeration transport. In addition, the May 2021 agreement between Volánbusz and Magyar Közút to share traffic information is a step forward in the development of intelligent passenger information systems. Furthermore, the development of intermodal hubs, which are already underway, may also foster the development of interurban and agglomeration transport.</p>		
6.2.	Direct support for less developed regions	
6.	Ensure strong reliance on the sectoral and technological specialisations of economic centres outside Budapest	 3
<p>Looking ahead, the Rural Development Programme of the 2021-2027 period – providing nearly HUF 4,300 billion for the development of agriculture and the food industry – could make a significant contribution to rural development. The financial allocation is three times the amount of the previous 2014-2020 period, and in 2021 calls for bids were already published for a total of HUF 1,100 billion. The ‘Diversification of non-agricultural activities – Development of rural tourism’ tender, launched at the end of 2021, is a step forward in the development of rural tourism. Under this tender, agricultural producers qualifying as micro enterprises may receive grants in the total amount of HUF 50 billion for the construction and development of tourist accommodation. Furthermore, the ‘Local and Regional Tourism Development’ programme, also with a financial allocation of HUF 50 billion, is expected to be launched in the coming period. In 2021, the implementation of the investments under the Modern Cities Programme continued, including – among other things – the development of infrastructure, public transport, health, industrial parks and sports facilities in several provincial towns. The programme includes 270 projects with a total funding need of HUF 4,000 billion, half of which have been disbursed by the end of 2020, while the vast majority of projects are expected to be completed by 2025.</p>		

#	Recommendation	Priority
7.	Ensure the favourable treatment of tenders based on local suppliers and resources	↑ 3

The 'SME Capacity Expansion Aid' programme announced in autumn 2021 helps micro, small and medium-sized enterprises in rural areas create jobs and expand their capacity, providing support for enterprises outside Budapest and Pest County with a financial allocation of almost HUF 14 billion. The aid is subject to increasing the number of employees by 3-25 people, and companies can receive aid of HUF 4 million per employee.

The Hungarian Village Enterprise Restart Programme helps micro enterprises implement development projects in municipalities with less than 5,000 inhabitants and in Free Enterprise Zones. In previous phases of the programme, micro enterprises received aid in the amount of HUF 27 billion, the tender announced in November 2021 will provide a further HUF 19 billion. Enterprises may receive aid in the amount of HUF 2-10 million for up to 70 per cent of their investment activities. The development of rural areas is supported by MFB Invest Zrt.'s thematic enterprise development fund, i.e. the Urban Funds, which provides capital financing of HUF 3 billion each to enterprises in two additional towns – Veszprém and Pécs – and their surrounding area.

6.3. Funding in less developed regions

11.	Provide a combination of capital and funding via banks	↑ 2
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MFB Invest Zrt.'s thematic enterprise development fund, i.e. the Urban Funds, already provides capital financing to enterprises in six rural towns and their surrounding area, in addition to which equity loans are also available. Launched in autumn 2019, the Funds support the implementation of the developments and investments of enterprises in the regions of Debrecen, Székesfehérvár, Kaposvár, Nyíregyháza, Veszprém and Pécs, with total capital of HUF 29 billion.

12.	Provide a wider range of benefits in Free Enterprise Zones	2
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While there has been no extension of the tax allowances available to enterprises operating in the Free Enterprise Zone, the government has extended the Free Enterprise Zone designation until 31 December 2027. The zones currently cover 1,202 settlements.

13.	Increase the absorption of funds from the European Investment Bank (EIB)	↑ 1
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The European Investment Bank (EIB) Group provided Hungary with total financing of EUR 767 million in 2020, a record amount in the last 5 years. The loan and guarantee of EUR 767 million amounted to 0.57 per cent of Hungary's GDP and made a great contribution to the recovery of the domestic small and medium-sized enterprise and health sectors after the pandemic. From this, the European Investment Bank's funding of EUR 757.5 million was distributed among 6 major projects. Of this amount, EUR 275 million was allocated for financing the SME sector, EUR 200 million for the Hungarian government's access to EU projects, EUR 162.5 million for the National Healthcare Service Centre (ÁEEK) to purchase equipment, and EUR 120 million for the modernisation of MVM's network in South-East Hungary.

Legend

Not started	Started	Partly implemented	Fully implemented
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7 Family-friendly programme


Up to December 2021, progress was made in 59 per cent of the family-friendly recommendations presented in the Competitiveness Programme. As a result, weighted by priority, the implementation status of the recommendations in the chapter rose to 34 per cent from the 27 per cent registered in November 2020. From the 46 recommendations aimed at achieving a demographic turnaround, 1 has been fully implemented, another 11 have been partly implemented and the implementation of 15 recommendations has started. Hungary's extensive family support system has also contributed to the number of births not falling due to the coronavirus pandemic. In the summer of 2021, the birth rate once again exceeded the level of a year earlier, and thus the total fertility rate even increased slightly in Hungary.

In 2021, the elements of the Hungarian family support system were further expanded. From 1 February 2021, the maximum monthly amounts of childcare allowance, childcare allowance for university students and the home-nursing allowance for children increased in line with the increase in the minimum wage and the guaranteed wage minimum. From 1 July 2021, the amount of the infant care allowance increased from 70 per cent to 100 per cent of the mother's salary. As a result of the change, mothers' income is higher during the 24-week maternity leave than their net wage paid while they worked. In 2022, the minimum wage will rise to HUF 200,000 gross and the guaranteed wage minimum to HUF 260,000 gross, which will again increase the maximum amounts of these allowances. In February 2022, if economic trends are favourable, all parents with at least one child will receive a refund of their personal income tax paid in 2021, up to the amount of the national average wage. From 1 January 2022, all employees under the age of 25 will be exempt from personal income tax. The purpose of the measure is to help young people become financially independent and start a family earlier.

In 2021, HUF 350 billion was invested in public education at 900 locations. The investments include the construction of nurseries, kindergartens, schools, gyms and swimming pools. The rules for nursery construction have been simplified and administrative obstacles to opening new nurseries have been reduced; in addition, the maximum number of children in family nursery groups was increased from 7 to 8. In 2021, the Ministry of Human Capacities has made it possible to include 1,000 family nursery places in the normative subsidy budget, for which both existing and new institutions can apply. In November 2021, a new HUF 50 billion tender will be launched for the construction of nurseries, mini nurseries and family nurseries. Also in 2021, a substitution allowance for nursery infant carers was introduced, which is paid when a nursery worker has to substitute for a colleague. The government has further increased the subsidy for workplace nurseries (the per-unit amount of the allowance is HUF 758,000 per year), which thus is already 7 times higher in 2021 than four years earlier. The GINOP (Economic Development and Innovation Operational Programme) project aimed at supporting childcare in non-municipal nurseries has been extended until the end of December 2022, under which families may receive a monthly allowance as high as HUF 40,000. In 2021, 110,000 children had the opportunity to spend their summer holidays in residential Erzsébet camps, more than ever before, and in 2021, the Erzsébet camps provided residential recreation for a total of 150,000 campers on the autumn excursions, family weekends and at the Erzsébet Christmas. In 2021 there were 71,000 participants in the Erzsébet Day Camps, 1,000 in the Saint Elizabeth the Healer Camp, 500 in camps for children with diabetes, and 1,200 local Hungarian children in the Transylvanian Erzsébet Camp.

#	Recommendation	Priority
7.1.	Strengthen the elements of the family support system	
1.	Raise the ceilings applicable to the infant care allowance (CSED) and the childcare allowance (GYED)	3


From 1 July 2021, the amount of the infant care allowance increased from 70 per cent to 100 per cent of the mother's salary. As a result of the change, the mothers' income is higher during the 24-week maternity leave than their net wage paid while they worked, since only personal income tax needs to be paid on the infant care allowance. From 1 February 2021, the maximum monthly amount of the childcare allowance rose to HUF 234,360 in parallel with the rise in the minimum wage. The minimum wage will rise to HUF 200,000 gross in 2022, and thus the maximum childcare allowance will be HUF 280,000 gross from January 2022.

3.	Introduce an initial capital scheme for young returnees who undertake to have children in Hungary	 3
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The childbirth incentive aid is also available for young people returning from abroad until 31 December 2022. This is an interest-free, any-purpose loan of up to HUF 10 million; the maximum monthly instalment is no more than HUF 50,000 with a term of 5 to 20 years. If the first child is born within 5 years from the date of applying for the loan, the loan instalments will remain interest-free during the full term and the instalments are suspended for 3 years. After the birth of the second child, instalments are suspended for another 3 years and 30 per cent of the outstanding debt is cancelled, while upon the birth of the third child the state takes over the entire remaining amount. The allowance may also be used as own funds for a mortgage loan to buy a property or refinance a loan.

5.	Support parenting by higher-education students	2
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The amount of the childcare allowance for university students rose in February 2021, in line with the rise in the minimum wage and the guaranteed wage minimum. In the case of students participating in bachelor programmes, the monthly amount of the childcare allowance for university students is 70 per cent of the minimum wage (HUF 167,400), while in the case of students participating in master programmes or undivided programmes offering a master's degree or PhD, it is 70 per cent of the guaranteed wage minimum (HUF 219,000). The minimum wage and the guaranteed wage minimum will rise again from 1 January 2022, which will repeatedly increase the amount of the childcare allowance for university students.

7.	Promote parenting (by awareness, advertising of family support, and support for preparatory training)	 2
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The Government allocated HUF 1.9 billion in 2020 and HUF 3.4 billion in 2021 on communications about the Hungarian family support system and on implementing a series of national events related to it. In 2020, the National Committee for the Promotion of Breastfeeding was set up, aiming to increase the number of breast-fed infants in Hungary. The newly established KINCS Smart Family Centre, an innovative centre for families, has published a call for bids for start-ups providing smart solutions for families.

7.2.	Family-friendly development of the healthcare system	
8.	Ensure the prevention and treatment of diseases that hinder parenting	3

Within the framework of the Catholic Charity Service's 'Natural Conception' project, spiritual and life management methods, already proven in other countries, were made available in Hungary to couples with health problems related to starting a family. The Buda Fertility Centre (BFC), which aims to provide psychological support and counselling to couples stuck in the process of starting a family, has started working.

#	Recommendation	Priority
10.	Provide more active support for artificial insemination	2

In September 2021, the Róbert Károly Infertility Centre was acquired by the state. Due to the public takeover of the private care facility, the government increased the Health Insurance Fund's appropriation for curative and preventive care by HUF 191 million, and the expenditure line for drug subsidies by HUF 33 million in the 2021 budget. From summer 2022, human reproductive services may only be provided by publicly-owned infertility clinics.

12.	Reduce number of foetal deaths through improvements to prenatal care	↑ 2
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The new healthcare service status introduced in the public healthcare system also covers district nurses. In the next phase of the wage increase programme for healthcare professionals, the salary of district nurses will rise by another 21 per cent from 1 January 2022. The tender announced by the Ministry of Interior for local governments contributed to the renovation of the building or premises for district nurses in 31 municipalities.

13.	Reduce vaccine prices	1
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COVID-19 vaccines are available free of charge to all Hungarian citizens over 12 years of age.

7.3. Family-friendly tax reform

15.	Ensure employment-related elements of the family support benefits track the dynamic wage growth	↑ 3
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From 1 February 2021, the maximum monthly amounts of childcare allowance, childcare allowance for university students and the home-nursing allowance for children rose in line with the increase in the minimum wage and the guaranteed wage minimum. In 2022, the minimum wage will rise to HUF 200,000 gross and the guaranteed wage minimum to HUF 260,000 gross, which again will increase the maximum amount of these allowances.

7.4. Developing the institutional system providing day care for children

19.	Ensure infant nursery care is available for all Hungarian children between 2 and 3 years of age	3
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Pursuant to the decision of the Operative Group in charge of restarting community life, the rules applicable to the construction of nurseries were simplified and the administrative obstacles to starting new nurseries reduced (in the future, a nursery may start operating when the conditions for starting one group are in place) and the maximum number of children per group in family nurseries was increased from 7 to 8. In 2021, the Ministry of Human Capacities made it possible to include 1,000 family nursery places in the normative subsidy budget, for which both existing and new institutions can apply. The Lechner Knowledge Centre has compiled a model catalogue for nurseries, which can be used free of charge when setting up new facilities. In November 2021, a new HUF 50 billion tender was launched for the construction of nurseries, mini nurseries and family nurseries. In 2021, a substitution allowance for nursery infant carers was introduced, which is paid when a nursery worker has to substitute for a colleague. The government has further increased the subsidy for workplace nurseries, which thus is already 7 times higher in 2021 than four years earlier. Parents with three or more children are exempt from paying the nursery fee in public institutions from February 2021. From 2021, nurseries may join the Smart Kindergarten Programme as well, where institutions can set up their own website free of charge.

20.	Increase nursery school capacities to enable admissions to mini groups from the age of 2.5 years	↑ 3
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Since 2010, the number of kindergarten places in Hungary has risen by 16,000. In recent years, the government has spent HUF 120 billion on expanding nursery and kindergarten places. In autumn 2021, 250 local governments won funding from a tender under the Hungarian Village Programme for the renovation of playground equipment in kindergarten playgrounds.

#	Recommendation	Priority
21.	Support the use of private nurseries through public contributions to charges	2

The GINOP (Economic Development and Innovation Operational Programme) project aimed at supporting childcare in non-municipal nurseries has been extended until the end of December 2022. Mothers returning to the labour market may apply for a benefit up to HUF 40,000 a month to pay for nursery care. The programme has already supported more than 5,000 infants of nursery age. The total financial allocation of HUF 8 billion can help 7,000 mothers get back to work. The government has also significantly increased the subsidy for workplace and family nurseries in recent years.

22.	Make family-friendly improvements to the public education system	 2
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In 2021, HUF 350 billion was invested in public education at 900 locations. The investments include the construction of nurseries, kindergartens, schools, gyms and swimming pools. In the agglomeration around Budapest, new schools are being set up in 16 municipalities. The 2022 Budget Act contains a record amount of HUF 87 billion for the financing of public catering. In 2021, around HUF 3.6 billion is available for the implementation of the National Talent Programme. Around 300-350,000 talented young people may participate in the programme helping them unfold their talent.

7.5.	Support for the daily lives of families with children
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23.	Support the re-entry of women into the labour market following childbirth	3
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In addition to the enhancement of the family support system (e.g. increasing the number of nursery places, the childcare allowance extra, contribution to nursery fees), the government is also trying to support the return of mothers to the labour market by encouraging atypical forms of employment. As a result of the coronavirus pandemic, the rules applicable to teleworking became more flexible during the emergency period. In the case of teleworking, the employer may contribute to the employee's expenses in the form of a cost reimbursement, up to 10 per cent of the prevailing minimum wage per month.

24.	Create a family-friendly workplace environment and provide incentives for day care in the workplace	3
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The government has further increased the subsidy for workplace nurseries (the per-unit amount of the allowance is HUF 758,000 per year), which thus is already 7 times higher in 2021 than four years earlier. Owing to the favourable regulatory environment, it is easier to set up and operate workplace nurseries than traditional nurseries. Under the Family-friendly Workplace tender, 183 companies submitted tenders for development plans amounting in total to HUF 760 million, 53 of which received subsidy of HUF 90 million in 2021.

25.	Support summer camps for children	 3
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In 2021, 110,000 children – more than ever before – spent their summer holidays in Erzsébet camps. The camps in Zánka and Fonyódliget were fully renovated. In 2021, a total of 150,000 campers had the chance to relax in the Erzsébet camps. In 2021 there were 71,000 participants in the Erzsébet Day Camps, 1,000 in the Saint Elizabeth the Healer Camp, 500 in camps for children with diabetes, and 1,200 local Hungarian children in the Transylvanian Erzsébet Camp. 50 children per week can attend a state-subsidised summer day-care camp in the Single-Parent Centre. In the Summer Student Work Programme, the Ministry for Innovation and Technology supported young people in obtaining work experience and earning money during the summer holidays by HUF 3.4 billion.

7.6.	Support for home starters
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33.	Develop new district concepts to improve the territorial allocation of housing developments	3
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Progress has been achieved in brownfield regulation. From 1 September 2021, people buying a home in brownfield areas may claim back the 5 per cent VAT they paid on their home, and thus new homes can be purchased in these areas at 0 per cent VAT. In addition, the Brownfield Committee has commenced its work of assessing applications to be classified as a brownfield area. Developments launched in the brownfield action regions are focusing on areas better supplied with transport, utilities and service infrastructure.

#	Recommendation	Priority
35.	Increase the duty allowance on first home purchases	2

From January 2021, under the government's home creation programme, the purchase of a home using the family housing benefit scheme is exempt from tax. On the other hand, to provide further help to first-time home buyers, the MNB is assessing the option of increasing the 80 per cent LTV limit for young home buyers to a certain extent. In the housing market, typically young people buying their first home with a loan often find it difficult to raise the necessary own funds due to their lower incomes, which stems from their current living situation. On the other hand, these borrowers may represent a lower credit risk for banks as they mainly buy property to live there, and their income is expected to increase over the term of the loan. Accordingly, in many countries, these borrowers are subject to higher LTV limits (lower own funds requirement) or more relaxed PTI requirements. This solution should also be examined in Hungary in respect of the debt cap rules falling within the MNB's competence. However, due to its complex effects, consideration should be given to introducing this solution after detailed analysis and consultation with public and market actors.

7.7.	Support for home creation by expanding construction capacities	
37.	Increase the construction workforce	1

As a first step to resolving the labour situation in the construction industry, the Glass Gate Programme was launched, which will apply from 1 January 2022 to all construction works related to public procurement, the estimated value of which reaches or exceeds HUF 700 million: only registered workers will be allowed to enter construction sites, with entry and exit times recorded electronically. The measure will increase the ratio of legal employment, which could make the construction industry more attractive to workers.

39.	Ease administrative barriers to home construction	2
<p>The need to carry out archaeological excavation – where required – when implementing developments represents a significant uncertainty, both in terms of time and cost. Currently, the regulation related to archaeology is under review, and a financial limit has already been set by reducing the fees. Developers also deem it necessary to set a time limit, which is still under discussion.</p>		

Legend

Not started	Started	Partly implemented	Fully implemented
Changed to Started 	Changed to Partly implemented 	Changed to Fully implemented 	

8 Healthy society

Up to December 2021, 34 per cent of the recommendations in the Healthy society chapter were implemented, which exceeds the status registered in November 2020 by 6 percentage points. Between November 2020 and December 2021, in terms of the recommendations aimed at improving the health of the population, the implementation of another 3 recommendations commenced, and thus progress has been made in 72 per cent of the recommendations. The implementation of 19 recommendations has started, 8 have been partly implemented and 1 has been fully implemented.

The government supports the forming of general practice partnerships by general practitioners; accordingly, it allocated HUF 100 billion more in 2021 for the high-quality primary care. General practitioners opting for higher levels of cooperation received more aid than those who chose lower levels of cooperation, or autonomy. In line with the European Union directive, excise duty rates on cigarettes and other tobacco products were increased in two steps in 2021, which may contribute to reducing cigarette consumption, and thereby to a healthier lifestyle. The completion of the Oncology Centre in Salgótarján made the Hungarian oncology network complete, consisting of the national institute accredited at the highest international level, four regional centres, and now county oncology centres in every county. From 1 January 2021 vision rehabilitation became free of charge for all visually impaired or blind people over 16 years of age in Hungary. The home nursing allowance, paid to parents of children incapable of self-care, will reach the minimum wage level from 1 January 2022, regardless of the child's age.

To prevent the indebtedness of healthcare institutions and to achieve a more efficient financing system, the National Directorate General for Hospitals (NDGH) plans to introduce new financing modules. Based on the positive experience gained during the pandemic, the financial management system of hospitals will be revised. In the future, the management of city hospitals – including procurements, finance and controlling – will be subordinated to the county hospitals and, in Budapest, to five central hospitals. Channelling private funding to professional institutions could considerably boost the transparency and effectiveness of the system, however, the implementation of the recommendations has not started in this area.

Between 2021 and 2023, the salaries of doctors will increase significantly – 2-2.5 times on average – in three stages. The increase covers doctors, dentists and pharmacists employed in inpatient and outpatient institutions operated by the central and local governments, employed uniformly in a new, healthcare service status from March 2021. In parallel with the salary increase, several regulations have also been tightened: from now on healthcare employees may only undertake part-time jobs with prior permission, patients may not be treated by the same doctor in a public and private care institution, and both the giving and accepting of gratuity payments is an indictable offence. During the salary increase programme – 72 per cent in total – over multiple stages that began in 2016, the salaries of healthcare personnel and staff will grow by 30 per cent in January 2022 relative to the base (compared to the current wage bracket this will represent a 21 per cent increase). The government has also decided to renovate 31 nurse hostels and to create 25 nurse hostels in 23 hospitals.

According to the plans, an EU financial allocation of HUF 150 billion will be available for healthcare IT developments in the next EU budget period. The National Agency for Health Research (NAHR) was established to harmonise scientific activities in the health sector and to support the practical coordination of research in order to enforce public priorities. The government launched the development of skill laboratories equipped with modern technical equipment to model the interventions required for patient care and to improve the knowledge of healthcare workers, in 11 hospitals in Budapest and Pest County, and at 3 provincial medical universities and their 16 teaching hospitals, with a total investment of HUF 15 billion.

#	Recommendation	Priority
8.1.	Strengthening of prevention	
8.1.1.	Preventing illnesses	

5.	Increase the excise duty on tobacco products to reduce smoking and the costs of related diseases	1
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In line with the European Union directive, excise duty rates on cigarettes and other tobacco products increased in two stages in 2021. As of 1 January 2021, the excise duty rate on cigarettes increased to HUF 24,000 per 1,000 pieces, accounting for 23 per cent of the retail sales price. From April 2021 the excise duty rate increased to HUF 26,000 per 1,000 pieces, thus exceeding the tax content from 2020 by more than 20 per cent. In addition to cigarettes, the excise duty rate on other tobacco products (e.g. cut tobacco, cigars, cigarillos) was also increased due to their role as alternates. The excise duty on products using a smokeless solution (e.g. e-cigarettes) rose by 50 per cent, narrowing the tax gap between the two groups of tobacco products. The tax increase was also necessary because the European Court of Justice reproached Hungary for not reaching the EU minimum excise duty rate before 2021.

6.	Provide opportunities for regular sports activities	 3
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In November 2021, in the sixth tender phase of sub-programme II of the 'I Believe in you!' Sports Programme, an additional 478 small and medium-sized sports organisations received grants totalling HUF 300 million. The purpose of the 'I believe in you!' programme – with a view to improving Hungary's national health indicators – is to train people to lead a healthy lifestyle, exploit the potential of competitive sports and related youth education and talent management for social inclusion, and to broaden the social strata of the population involved in recreational sports.

The Ministry of Human Capacities also supported small and medium-sized sports clubs in bringing on the next generation: in 2020, 419 sports organisations received HUF 250 million, while the Ministry allocated grants in the amount of HUF 290 million for school programmes about sports. As part of the support for priority provincial sports clubs, the Nyíregyháza Sports Centre, which is mainly involved in youth sports, will receive HUF 300 million per year until 2026, the highest annual subsidy amount among sports clubs.

In the summer of 2021, the Veszprém Sports Swimming Pool and the Lővér Swimming Pool in Sopron – built with HUF 11 billion and HUF 14 billion – were completed, and are open to both professional athletes and the general public. In 2021, under Phase IV of the National Recreational Health Sports Park Programme, 155 outdoor sports parks were built in a further 150 municipalities. In January 2021, the government provided extraordinary aid of over HUF 2.1 billion to 45 priority provincial sports clubs as compensation for the adverse economic impact of the coronavirus pandemic. This affected several thousand recreational and licensed athletes, including a large number of junior athletes. In addition, the government is providing extra funding of half a billion forints for the Active Hungary programme, which will support programmes that help children socialise and spend time outdoors, and meanwhile exercising.


7.	Offer grant schemes to support the creation of quality work and home environments	 1
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Rules applicable to working from home were amended as a result of the coronavirus pandemic. Employers can provide their employees with a tax-free reimbursement of expenses ('overhead allowance') up to 10 per cent of the minimum wage per month without a certificate. In addition, the possibility of tax-free cost reimbursement supported by an invoice and the possibility of a tax-free grant up to HUF 200,000 for IT equipment needed for teleworking also remain in place. As part of labour safety regulations, work performed on IT equipment (where the employer only needs to inform the employee in writing of the safety regulations) and work performed on non-IT equipment (where the employer must give prior authorisation for the place of work) have been separated.

#	Recommendation	Priority
8.1.2.	Supporting early recognition	
8.	Strengthen the functions of the general practitioner system	3
<p>The government supports the forming of general practice partnerships by general practitioners; accordingly, it allocated HUF 100 billion more in 2021 for the high-quality operation of primary care. General practice partnerships are organised on a regional basis, by district, and consist of general practitioners, general paediatricians, dentists and mixed practices. All doctors involved must provide at least 20 consulting hours per week for their patients, and members of the general practice partnership undertake to substitute each other. There can be different levels of cooperation, which affects the funding of the partnership. From March 2021, those who remain outside the practice partnership, those who opt for looser cooperation with colleagues and those who opt for closer forms of cooperation (merged general practice partnerships, integrated general practice partnerships and consortia of general practice partnerships) received subsidies 30, 80 and 100 per cent higher. After the May 2021 amendment of the regulation, school doctors providing full-time school healthcare as entrepreneurs also received a salary increase of a similar degree as that of general practitioners not joining a general practice partnership. In addition to the foregoing, general practitioners with region-based care obligations, whose registered patient population is over 2,000, may receive a salary subsidy for an additional general practitioner, employed up to 20 hours per week.</p>		
9.	Support regular physicals and screening tests	3
<p>The completion of the Oncology Centre in Salgótarján made the Hungarian oncology network complete, consisting of the national institute accredited at the highest international level, four regional centres, and now county oncology centres in every county. This also includes the oncoradiology clinic at the University of Debrecen, completed in summer 2021, as part of a HUF 25 billion development programme. In May 2021, the renovation of the National Public Health Centre's laboratory evaluating colonoscopy samples was completed, to which EU funds contributed HUF 841 million. A radiotherapy equipment development was completed for HUF 1.9 billion at the National Institute of Oncology as part of the Healthy Budapest Programme. The two X-ray machines with artificial intelligence applications and a new mammography machine providing state-of-the-art breast diagnostics facilitate more accurate and faster detection and diagnosis of breast and lung tumours, pneumothorax and emergency lung lesions, and support patient care at the Medical Imaging Centre of Semmelweis University from autumn 2021. A three-dimensional body scanner – developed at the University of Pécs and awaiting patent protection – is suitable for analysing the correct posture of children and adults, and helps measure and analyse the posture of the examined individuals using a radiation-free imaging method.</p>		
10.	Set up a National Health Database	1
<p>According to the plans, an EU financial allocation of HUF 150 billion will be available for healthcare IT developments in the next EU budget period. In the first year of the coronavirus pandemic, 24 COVID-19 related developments were made in the National eHealth Infrastructure (EESZT), which provides the background for all the pandemic data reporting. From 1 November 2021, therapeutic equipment is prescribed and delivered through the eGYSE module of the EESZT. Before the module went live there was a transitional period with a narrower product list. New disease registries can now only be created in the EESZT, and existing ones are also transferred to it, provided that the registry owner has access to the data stored there at any time.</p>		
12.	Strengthen the system of emergency medical services	2
<p>The National Ambulance Service received 62 new ambulances in the summer of 2021, and thus the average age of the ambulances dropped to 4.8 years. Since 2010, 100 of the 223 ambulance stations have been renovated, while another 30 new ambulance stations and 12 rescue points have been built. The new healthcare service status also covers staff of the National Ambulance Service.</p>		

#	Recommendation	Priority
8.1.3.	Supporting recovery from illnesses	
14.	Strengthen rehabilitation care	2

From 1 January 2021 vision rehabilitation became free of charge for all visually impaired or blind people over 16 years of age in Hungary. The HUF 600 million tender necessary for this was won by 11 associations, and thus primary rehabilitation services for visually impaired people are provided by regional centres across the country. The headquarters of the Hungarian Federation of the Blind and Partially Sighted will be completely renovated and extended from state aid in the amount of nearly HUF 2.9 billion. From 1 August 2021, a new type of insulin pump will be available with public support for people with type 1 diabetes, which will automatically feed insulin when blood sugar levels rise, preventing not only high but also low blood sugar levels. For this new-generation pump, those under the age of 18 and young people in tertiary education will receive a 98 per cent, while adults will receive an 80 per cent subsidy. The calls for bids announced for non-profit organisations representing people with type 1 diabetes, and for centres treating children with type 1 diabetes, with a financial allocation of HUF 100 million and HUF 500 million respectively, ended in the summer of 2021.

15.	Increase capacities for long-term and home care by strengthening cooperation between health care and social care systems	 2
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From 1 January 2019, the home nursing allowance for children was introduced, which is paid to the parents of children who are unable to support themselves, independent of the child's age. The monthly amount of this allowance will reach the minimum wage from 1 January 2022. From autumn 2021, the family home improvement subsidy may be used for developments that make life easier for people with visual and hearing impairments, and autism. Wages for social and child welfare workers will rise by 20 per cent from January 2022.

Subsidised residential homes are being built at 206 locations across the country with a budget of HUF 25 billion, for people with disabilities to live in detached houses accommodating a few people instead of in social care institutions with hundreds of beds. In addition to residential homes, social service centres are also established to provide local residents with employment opportunities. Day-care facilities for people with disabilities were renovated or built in 326 municipalities across the country for around HUF 20 billion.


The budget provides HUF 50.1 billion in 2022 to support accredited companies employing people with a reduced capacity to work. In autumn 2021, there were nearly 400 companies in Hungary accredited to provide employment for people with a reduced capacity to work, providing work for those concerned at 1,100 locations. In the last ten years, the ratio of employed people with a reduced capacity to work rose from 18 per cent to 44 per cent (160,000 people). A financial allocation of around HUF 100 million is available through a tender for temporary support services in the homes of families with children with disabilities. These so-called 'swallow' service providers relieve the burden on families in their homes, looking after children with disabilities, caring for and attending to them while their parents work, manage their affairs or get some rest. The Ministry of Human Capacities provides aid to organisations for the disabled to maintain, develop and renew their existing facilities, as part of a HUF 171 million tender.

8.2.	Transforming the health financing system	
8.2.1.	Reviewing the public financing scheme	
16.	Establish a public funding system based on actual costs	3

To move towards a funding system based on actual costs, the Ministry of Human Capacities amended the government decree related to code maintenance in several places. From autumn 2021, the financing of care for extensively drug-resistant diseases will be based on a daily fee. In addition, the scope of benefits for artificial parenteral nutrition at home will be extended: from now on, regardless of the volume of such care provided by the healthcare provider, the full financing fee will be paid. The regulation will allow for the financing – among other things – of advanced radiotherapy methods and laboratory tests linked to new tumour markers and new cancer diseases. Paediatric cardiac surgery and the implantation of artificial sphincter devices for patients with persistent incontinence will be supported, funding of the examination of patients with cerebral vascular occlusions and strokes will also be available for more difficult cases, while the range of operations that can be performed under same-day care will be extended. The Hungarian Medical Chamber (MOK) has updated the fees for reimbursable GP services, which cover interventions available at GPs that are not subsidised by the National Health Insurance Fund (NEAK) and do not have a regulated price.

#	Recommendation	Priority
17.	Ensure that administration and controlling on a case-to-case basis is implemented at health care institutions	2

Based on the positive experiences gained during the pandemic, the system of financial management at hospitals is to be revised. In future, the management of city hospitals – including procurement, finance and controlling – will be subordinated to the county hospitals and, in Budapest, to five central hospitals.

18.	Review the application of performance volume limits	 1
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To prevent indebtedness at healthcare institutions, the National Directorate General for Hospitals (DGH) plans to introduce new financing modules. One of the first steps is expected to be the replacement of the system of performance volume limits with an annual financial allocation from 1 January 2022. HUF 45 billion is available for the development of the financing scheme.

20.	Extend the application of pay-for-performance financing methods	2
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In autumn 2021, the National Directorate General for Hospitals (DGH) worked on developing a flexible financing environment that is not linked to the number of hospital beds and that fosters quality care. The new model – to be introduced from 1 January 2022 – would motivate both the institution heads and doctors to provide patients with better and more efficient care.

8.2.2. Improving the situation of human resources

22.	Establish a transparent remuneration system	 3
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Between 2021 and 2023, the salaries of doctors will increase significantly – 2-2.5 times on average – in three stages. The new wage brackets, developed by the Hungarian Medical Chamber based on Austrian doctors' wages, entered into force on 1 March 2021. The salary increase covers doctors, dentists and pharmacists, employed in inpatient and outpatient institutions operated by the central and local governments, who from now on will be employed uniformly in a new, healthcare service status. In parallel with the salary increase, several regulations have also been tightened: from now on doctors may only undertake part-time jobs with prior permission, patients may not be treated by the same doctor in a public and private care setting, and both the giving and accepting of gratuity payments is now an indictable offence. Doctors who (also) carry out teaching and research activities in tertiary education institutions are affected by the model change, as these institutions will be able to develop their own wage strategies, and upon setting the wages they can also take performance into consideration in jobs related to teaching and research activities.

23.	Increase the number of health care personnel and staff	3
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During the salary increase programme – 72 per cent in total – over multiple stages that began in 2016, the salaries of healthcare personnel and staff will grow by 30 per cent in January 2022 relative to the base (compared to the current wage bracket this will represent a 21 per cent increase). The salary increase affects 83,000 healthcare professionals and nearly 5,000 district nurses. The government decided to renovate 31 nurse hostels and to establish 25 nurse hostels in 23 hospitals. Under the programme, the largest nurse hostel of the National Korányi Institute of Tb and Pulmonology, among others, was renovated for HUF 377 million, and it was completed in summer 2021. The government launched the development of skill laboratories equipped with modern technical equipment to model the interventions required for patient care and to improve the knowledge of healthcare workers, in eleven hospitals in Budapest, at three provincial universities and in their 16 teaching hospitals. The practical teaching facilities of the Faculty of Health Sciences of the University of Pécs, renewed as part of the Modern Cities programme for HUF 2.5 billion, was completed in the summer of 2021. The Ministry of Human Capacities concluded a strategic partnership agreement with the Democratic Trade Union of Social and Healthcare Workers in Hungary and with the Independent Trade Union of Ambulance Workers.

#	Recommendation	Priority
8.3.	Improvement of the care system	
8.3.1.	Strengthening control in the care system	
29.	Ensure that minimum requirements, professional and financial directives and protocols are regularly reviewed and updated	↑ 3

The revision of the professional guidelines has started. By mid-November 2021, 17 new or revised directives were in the Official Health Gazette. Guidelines have been issued, among other things, on mental and psychological support for cancer patients, care for patients with multimorbidity, i.e. several diseases at the same time, and adult chronic kidney disease. Work has started on the National Infection Control Programme, the importance of which was highlighted by the coronavirus pandemic.

31.	Strengthen professional and financial control	3
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In parallel with the doctors' salary increase commencing in 2021, the rules applicable to doctors tightened significantly (e.g. they may only undertake part-time work with prior permission, they may not treat a patient in the public system whom they already treat in a private healthcare setting), and both giving and accepting gratuity payments became an indictable offence. The acceptance of gratuities is checked by the National Protective Service. Private doctors are entitled to prescribe medicines and therapeutic equipment subsidised by public social insurance on the basis of their prescription contract with the National Health Insurance Fund (NEAK). Accordingly, from 1 January 2022, private service providers also need to check the validity of their patients' insurance status. From the beginning of 2022, the economic functions of city hospitals are being taken over by the county or central hospitals designated to control them. The economic integration of the city hospitals into the county hospitals was essentially completed during the pandemic, but the formal takeover of economic functions was still in progress in autumn 2021.

8.3.2.	Increasing efficiency in the care system	
35.	Increase the capacity for active same-day care	3

In September 2021, three new surgical interventions were added to the range of surgeries that can be provided as same-day care. Two of the newly available procedures are diagnostic catheterisation, and one is a minimal invasive procedure for vertebral fractures.

37.	Treat the pharmaceuticals trade as a strategic industry	↑ 1
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The Minister for Innovation and Technology appointed a Ministerial Commissioner for Pharmaceutical Innovation in autumn 2021 to ensure the logistical and commercial security of the domestic pharmaceutical supply, to develop the pharmaceutical segment which is increasingly important strategically, to strengthen the links between domestic and international market participants, and to support the development and marketing of innovative products.

38.	Develop telemedicine	1
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A major upgrade of the telemedicine capability of the National eHealth Infrastructure (EESZT) was necessary due to the coronavirus pandemic. Among other things, a feature that allows authentic patient identification was installed.


#	Recommendation	Priority
39.	Increase reliance on innovative technologies to simplify care management	2

The National Agency for Health Research (NAHR) was established to harmonise scientific activities in the health sector and to support the practical coordination of research to enforce public priorities. The objective of the Agency is to create an outstanding innovation environment by supporting clinical trials and medical research, facilitating the development of new Hungarian-developed technologies and procedures, increasing added value and making innovative therapies more widely available to patients. The government launched the development of skill laboratories equipped with modern technical equipment to model the interventions required for patient care and to improve the knowledge of healthcare workers, in 11 hospitals in Budapest and Pest County, and at 3 provincial medical universities and their 16 teaching hospitals, with a total investment of HUF 15 billion.

Within the Modern Cities programme, the University of Pécs may carry out a development for a total of over HUF 30 billion, with a significant share of the projects being dedicated to health education. Among other things, HUF 2.5 billion was spent on the renovation of practical training sites, and the simulation training centre of the medical faculty will be expanded to six times its current size and given new equipment as part of an investment of more than HUF 1 billion.

Under the Healthy Budapest Programme, a virtual onco-team service will be implemented at the Telemedicine Centre to be established at the National Institute of Oncology, which can help improve the efficiency of patient care across the country. The new hybrid operating room was inaugurated in the summer of 2021 in Budapest, at the Traumatology Centre on Fiumei road, where the necessary imaging examinations can be performed without moving or transporting the patient.

Legend

Not started	Started	Partly implemented	Fully implemented
Changed to Started 	Changed to Partly implemented 	Changed to Fully implemented 	

9 Knowledge-based society

The aggregate implementation status of the recommendations included in the Knowledge-based society chapter was 40 per cent, which exceeds the level of 32 per cent registered in November 2020 by 8 percentage points. Up until December 2021, progress had been made in 39 recommendations, i.e. in 80 per cent of them, fostering the development of a knowledge-based society. 15 recommendations have already been partly implemented, while the implementation of 24 recommendations has started.

From 1 January 2022, the teachers' wage supplement is expected to amount to 20 per cent, while nursery workers' wage will increase by 20 per cent. As the next step in the renewal of public education content, detailed school-leaving exam requirements have been prepared in line with the content of the National Core Curriculum amended in 2020 and the framework curricula. The new requirements will be applied for the first time for the May-June exams of the 2023/2024 school year. The government has launched a HUF 7 billion tender to develop state-of-the-art smart classrooms that support experience-based and collaborative teaching and learning. The teacher training system is also being reformed: in the future, teacher training will last 5 years instead of 6, while students will do professional placements every semester.

The reform of vocational education and training has significantly improved switching between various forms of education. There are already workshop schools in 9 vocational training institutions and 2 church charity organisations, where young people who have dropped out of the traditional education system can gain marketable partial vocational qualifications. The Student Loan2 product for tuition fees is also available for vocational and adult education from May 2021. The Digital Welfare Software Basic Package has been available since January 2021, which is an easy-to-install and use operating system and user software replacing pay operating systems and office software with open-source solutions. Thirteen universities already participate in the Let Us Teach for Hungary programme, where university students mentor disadvantaged 6-8th grade pupils.

To make teaching careers more attractive, tertiary education institutions will implement a wage increase of more than 30 per cent in two phases in the 2021/22 academic year. By December 2021, a model change was completed in 21 tertiary education institutions. The role of the state is transforming as part of the model change, since instead of being an operator it is becoming a partner, a client, and an entity responsible for quality assurance. The new tertiary education funding model will include separate resources for the cost of education, the funding of research and the maintenance of infrastructure. In 2022, the budget appropriation for tertiary education will be HUF 650 billion, of which more than HUF 400 billion will be direct public funding. Together with funds for the creation of science parks and other university developments, this will add up to more than HUF 1,000 billion for tertiary education in 2022.

In the first tender cycle of the University Innovation Ecosystem Programme, more than 1,300 contracts were signed between companies and universities, while the number of industrial property rights protection applications in tertiary education institutions has also increased significantly. 14 Science and Innovation Parks will be created based on the local conditions to strengthen links between universities and enterprises.

The Pénziránytű Foundation has distributed 176,000 copies of maths and history textbooks to Hungarian secondary schools supporting the development of financial literacy. The digital training package elaborated by the Budapest Institute of Banking (BIB) for the development of domestic enterprises is available free of charge until the end of 2022.

To mitigate the effects of the coronavirus pandemic, the roughly 5,000 tertiary education students who did not meet the requirements in the 2020/21 academic year and would have been transferred to self-financed courses can continue their studies with public funding. In November 2020, the government made fixed-line internet access services free for teachers and students in secondary schools who switched to digital education during the state of emergency. Nearly 100,000 families took advantage of the 3-month option, and thus they were exempt from paying fees totalling almost HUF 1 billion.

#	Recommendation	Priority
9.1.	Improving the public education system	
9.1.1.	Primary education focusing on skills development	

2.	Elaborate a National Core Curriculum focusing on skills development and practical knowledge	3
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As the next step in the renewal of public education content, detailed school-leaving exam requirements have been prepared in line with the content of the National Core Curriculum amended in 2020 and the framework curricula. The new requirements will be applied for the first time for the May-June exams of the 2023/2024 school year. The detailed examination requirements, in line with the renewed National Core Curriculum, define the exam criteria for new subjects, or subjects with a changed focus – such as digital culture or civics. Also, the requirements provide students with a wide scope for independent problem solving and creativity by incorporating modern assessment methods. The latter is confirmed by the fact that under the new structure, secondary school students taking the school-leaving exams may also choose a project task in any science subject, i.e. biology, chemistry, physics, geography. However, the two-tier system of the school-leaving examination will remain, and the range of compulsory subjects will not change.

3.	Improve the methods and forms of teaching and learning	3
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The government has launched a HUF 7 billion tender to develop state-of-the-art smart classrooms that support experience-based and collaborative teaching and learning. The preliminary plans involve developments at no less than 180 sites, and creating smart classrooms in the coming period providing ideal conditions for digital education. The Hungarian Eco-Schools Network now has around 1,200 members, and received professional recognition from Global Education Network Europe (GENE) in 2021.

6.	Increase the weight of sciences and information technology in secondary school admission examinations	2
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In 2023, Szeged will host the International Student Olympiad in Informatics. The Government is supporting the organisation of the most prestigious world competition for young people in IT with HUF 1.6 billion. The main objective of the Student Olympiad is to attract more and more young Hungarians to the digital world, encouraging them to obtain a tertiary education degree in IT and to enter the labour market in this field.

7.	Improve career guidance and promote increased awareness in career planning	2
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Thirteen universities already participate in the Let Us Teach for Hungary programme, where university students mentor disadvantaged 6-8th grade pupils. Since the launch of the programme in 2018, more than 500 mentors and 2,300 mentees have participated in the programme. The primary school pupils involved in the mentoring can acquire skills, abilities and social patterns helping them to complete their studies successfully in the long run and enter the labour market. In addition, an important objective of the programme is to build communities and deepen the feeling of responsibility among young people. The programme has also been joined by companies who would like to open their doors to mentees, who thus gain insight into workflows and useful experiences to help them in their career choices.

9.1.2.	Strengthen secondary education
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10.	Strengthen dual vocational training	3
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In 2021, 55,000 of those enrolled in secondary education will continue their studies in the new vocational education and training system, increasing around 10 per cent compared to 2020. More than 35,000 young people will be able to obtain a school-leaving certificate in addition to a vocational certificate in technical schools launched in autumn 2021. The Student Loan2 product for tuition fees is also available for vocational and adult education from May 2021.

#	Recommendation	Priority
11.	Strengthen the links between vocational training schools and market actors	↑ 2
<p>Companies participating in dual training receive substantial tax benefits in respect of the students they train. In the reformed system, the apprenticeship contract has been replaced by a vocational training work contract. The student are employees of the company, and in return for their completed studies and work performed they are entitled to a significantly higher wage than the previous benefits, which can be as high as the prevailing minimum wage, but at least 60 per cent of it. Employers do not have to pay any social contribution tax, vocational training contribution or personal income tax for such employment.</p>		
12.	Ensure flexible switching between various forms of education	↑ 2
<p>The reform of vocational education and training has significantly improved switching between various forms of education. Students starting vocational training first choose a sector, and only after basic training do they need to decide on a specific profession, once in possession of broader knowledge, and thus they can make a more informed decision on choosing a profession. In the five-year technical schools, which also offer a school-leaving certificate, the specific profession is chosen after two years, and in the three-year vocational schools after one year. In the certified technician training, students leave secondary school on the basis of an advanced vocational programme developed jointly by a technical college and a tertiary education institution, and can then automatically continue their studies at that tertiary education institution, where they can graduate in a shorter time than their peers from general secondary schools. The programme offers the possibility of harmonising not only the content of secondary and tertiary education, but also dual training. This means that students can automatically continue their advanced dual training at the company where they previously worked under a vocational training contract. There are already workshop schools in 9 vocational training institutions and 2 church charity organisations, where young people who have dropped out of the traditional education system can gain marketable partial vocational qualifications. This training is not school-based in nature, it is rather a joint work based on a master and apprentice relationship. Workshop schools can also provide the basis for a full vocational qualification, as participants in the programme can continue their studies in a vocational school by acknowledging the skills they have acquired.</p>		
13.	Reduce students leaving without a qualification	3
<p>As part of the vocational education reform, the government wants to reduce the rate of early school earlyyearlyearly without qualifications by offering scholarships, making it possible to switch between types of education and by setting up workshop schools. More than 110,000 vulnerable students received free school supplies worth more than HUF 900 million in the summer of 2021. The supplies were packaged by KÉZMŰ Közhasznú Nonprofit Kft., a non-profit organisation employing almost 10,000 people, most of whom have a reduced capacity to work.</p> <p>The Ministry of Human Capacities, in cooperation with the Hungarian Charity Service of the Order of Malta, supported the children of the families of the 300 poorest Hungarian municipalities with 40,000 packages to help children start kindergarten, worth HUF 800 million. To strengthen the competitiveness of vocational education and training, it is planned to launch a talent development student circle and a mentoring programme from the next school year, with a special focus on vulnerable students.</p>		

9.1.3. Making teaching careers more attractive

15. Increase the number of primary school teachers and teaching assistants

↑ 2

The teacher training system is being reformed: in the future, teacher training will last 5 years instead of 6, while students will do professional placements every semester. From the next academic year, the current 4+1 or 5+1 year training will uniformly last for 5 years, and the optional 1-year specialist teacher master's course can be built on that. One important innovation in the content of the renewed teacher training is the introduction of integrated science teacher training, the science and ecology teacher faculty. Newly graduated teachers participating in the Klebelsberg Training Scholarship Programme can now also be employed by a public education institution run by a church or a public trust with a public service mission. Applications are open to Hungarian native-speaking students studying in tertiary education in Hungary, in undivided teacher training, in the special education of children with a learning disability or in bachelor teacher training. The amount of the scholarship per person and per semester varies between HUF 125,000 and HUF 375,000, depending on the academic performance. Those receiving the scholarship must undertake to work full-time as a teacher after graduation, in the subject of their degree.

#	Recommendation	Priority
16.	Provide regular further training for teachers	3

A self-assessment tool developed for teachers to help them identify their digital strengths and areas for improvement is now also available in Hungarian. The online platform, based on the European Framework for the Digital Competence of Educators, provides detailed feedback on teachers' digital competence levels after answering 22 questions, and also provides useful recommendations for improvement.

17.	Improve the social esteem of teachers, kindergarten teachers and nursery nurses by extending and enhancing the career path model	3
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A substitution allowance for nursery infant carers was introduced in nurseries and mini nurseries, which is paid when a nursery worker has to substitute for a colleague. From 1 January 2022, the salaries of teachers and nursery staff will increase by 20 per cent. The teachers' salary age bracket will not change, the increase will take the form of a professional supplement.

9.1.4.	Increasing the efficiency of language teaching	
18.	Redesign language examination requirements and align school programmes accordingly	1

Online language exams may already be taken in 8 examination centres. About 8,200 online language exams were organised in 2020.

9.1.6.	Enhancing digital skills	
25.	Develop and maintain information technology instruments in schools and vocational training centres	3



The Ministry for Innovation and Technology and Huawei Technologies Hungary have signed a Memorandum of Understanding for long-term cooperation. According to the signed document, Huawei will continue to work closely with Hungarian educational institutions, supporting the development of digital education through innovation and knowledge transfer. The company supports tertiary education in Hungary by testing and launching smart campus solutions, continues to develop Wi-Fi systems and broadband networks in educational institutions, and offers smart collaboration and virtual desktop solutions to increase the efficiency of distance learning.




26.	Develop digital learning materials	3
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The Digital Welfare Software Basic Package has been available since January 2021, which is an easy-to-install and use operating system and user software replacing pay operating systems and office software with open-source solutions. The KDS Portal, the database of the Digital Public Collection Strategy, was launched in summer 2021, aiming to make materials of public collections available to anyone in a high quality and informative digital format.

9.2.	Internationally recognised tertiary education	
9.2.1.	Boosting competition among tertiary education institutions	
28.	Create a competitive environment in tertiary education	↑ 3

By December 2021, a model change was completed in 21 tertiary education institutions. The role of the state is transforming as part of the model change, since instead of being an operator it is becoming a partner, a client, and an entity responsible for quality assurance. The new model creates a predictable funding system based on 25-year framework agreements and 6-year contracts financing public tasks. The advantage of the solution, based on the Austrian model, is that it ties the medium-term institutional support to pre-defined performance and quality indicators, taking into account the special features of the different tasks. In 2022, the budget appropriation for tertiary education will be HUF 650 billion, of which more than HUF 400 billion will be direct public funding. Together with funds for the creation of science parks and other university developments, this will add up to more than HUF 1,000 billion for tertiary education in 2022. In addition to tertiary education institutions funded by foundations or by the church, state institutions will also implement a wage increase of more than 30 per cent in two phases in the 2021/22 academic year.

#	Recommendation	Priority
29.	Develop the infrastructure and equipment of tertiary education institutions	 2
<p>Tertiary education institutions have notified the government of development needs totalling HUF 2,700 billion. The financing for most of this is already available. The new, fully digitalised examination centre of the Faculty of Economics of Eötvös Loránd University (ELTE) has been inaugurated, with capacity for 200 students and suitable for conducting 10,000 exams per week. The exam centre will replace a classroom capacity of 1,600 seats, and will also greatly reduce the burden on teachers. In addition, exams will be twice as fast as in a traditional classroom setting.</p> <p>An IT laboratory for university education was inaugurated at the University of Pannon in Veszprém, where students can learn about the IT environment of large enterprises and of the government. The facility comprising three laboratories offers students the opportunity to network building, cloud building and engineering design. A new central library and student centre will be built at the Budapest Business School as part of a HUF 5.3 billion investment. The ELI-ALPS Laser Research Institute will become the property of the University of Szeged and it will be fully operated by the public sector.</p>		
30.	Strengthen links between tertiary education and companies	 2
<p>In the first tender cycle of the University Innovation Ecosystem Programme, more than 1,300 contracts were signed between companies and universities, while the number of applications for industrial property right protection in tertiary education institutions also increased significantly. The first tender cycle cost HUF 2 billion, which meant aid of HUF 40-150 million per tertiary education institution. The core objective of the University Innovation Ecosystem Programme is to provide a funding instrument that enhances, supports and promotes the institution's activities related to technology transfer and innovation management.</p> <p>In September 2021, the Bay Zoltán National Network of Applied Research Institutes was established to coordinate the development and entrepreneurial activities of 4 publicly owned institutions and to increase their market revenue-generating capacity. Hungarian universities and enterprises use their knowledge and intellectual property to create new products and processes with high added value in 20 priority projects under the National Research, Development and Innovation Fund's Fast Track Initiative. The financial allocation of HUF 3 billion is available to spin-off companies to carry out market-oriented healthcare developments in the areas of smart cell diagnostics and innovative treatments for skin cancer. Due to the success of the programme, the Ministry for Innovation and Technology launched a new tender in autumn 2021, with a financial allocation of HUF 8 billion.</p> <p>Óbuda University and the fund manager of Széchenyi Funds signed a cooperation agreement, the aim of which is for the parties to jointly mobilise their knowledge base and opportunities in the interests of their professional goals, while implementing joint projects. The first year of the Hungarian Startup University Program (HSUP) was joined by nearly 2,100 students from 21 universities. Teams showing excellence in the programme will have up to HUF 3 million to spend, while being supported by corporate partners.</p>		
31.	Channel market needs and private capital into education	3
<p>The trustee board of the public-interest trust foundations responsible for running the universities-changing model includes representatives of the most important companies in the respective areas. In the future, the University of Dunaújváros will focus on training and research related to Hungary's nuclear industry to ensure its long-term operation.</p>		
32.	Raise R&D expenditure in tertiary education to 0.5 per cent of GDP	2
<p>Universities' R&D expenditure and investments exceeded HUF 100 billion in 2021. 14 Science and Innovation Parks will be created drawing on the local conditions to strengthen links between universities and enterprises. As part of the Thematic Excellence Programme (TKP), the public will provide HUF 75 billion to support priority research areas of tertiary education institutions that respond to key social and economic challenges. The TKP includes three sub-programmes, each worth HUF 25 billion, which are either of major importance for the national economy or have strong domestic capacities. These sub-programmes are: health, national research, and national defence and security. Since 2020, the government has spent HUF 14 billion on the National Laboratory Programme, under which 18 laboratories have started operating. The implementation of the Centre for Innovation and Development at the Budapest University of Technology and Economics (BME) has commenced. The new facility will house the university's innovation, start-up and development departments, as well as units of other research, development and innovation institutions, such as the National Intellectual Property Office, the National Research, Development and Innovation Office, and the Bay Zoltán National Applied Research Institute Network.</p>		


#	Recommendation	Priority
9.2.2.	Improving the international competitiveness of Hungarian tertiary education	
34.	More attractive career path for university professors	3
<p>To make teaching careers more attractive, tertiary education institutions will implement a wage increase of more than 30 per cent in two phases in the 2021/22 academic year. Institutions that change model can shape their own salary systems individually. According to plans disclosed to date, institutions will seek to differentiate the salaries of teachers based on performance.</p>		
35.	Ensure that the ranking criteria for tertiary education institutions are taken into account in funding	 3
<p>The government's explicit aim is to help Hungarian institutions advance in the international rankings on tertiary education. The new tertiary education funding model will include separate resources for the cost of education, the funding of research and the maintenance of infrastructure. One sectoral objective is to create a higher quality, performance-driven research, development and innovation system, based on competition and quality, resulting in performance and success.</p>		
36.	Support dual degree programmes	1
<p>The government has signed a strategic agreement with Fudan University to establish a campus in Budapest. The Fudan Hungary University will be able to offer Hungarian and Hungarian-Chinese dual degrees, primarily in business, and later on in engineering and medicine. The government has started negotiations with a university in South Korea to establish a similar campus. A Memorandum of Understanding on the automatic mutual recognition of tertiary education degrees in the Visegrád countries was signed by the countries' representatives in October 2021.</p>		
37.	Support publications in English	 2
<p>The Corvinus University of Budapest, which was the first to start an institutional model change in tertiary education, has its own doctoral scholarship scheme that requires doctoral students to write international publication(s) during their studies.</p>		
38.	Launch specific postgraduate courses to reverse student emigration	 1
<p>In 2020, the Ministry for Innovation and Technology decided to support 246 applications under the Cooperative Doctoral Programme. The aim of the programme – with the involvement of companies – is to encourage young people graduating mainly from engineering and science faculties – who tend to leave university after graduation – to engage in research with companies. The programme will support the winners' doctoral studies with HUF 400,000 per month for up to 48 months. In addition to the scholarship holders, the hosting doctoral school, the consultant teacher and the company expert involved in the project will also benefit from the programme. The tender was announced for the second time in 2021 with a financial allocation of HUF 4.9 billion. In 2021, the initiative was extended with a HUF 1 billion National Defence Sub-Programme, which aims to increase the number of highly qualified employees with scientific skills in this strategic sector. Researchers and research teams submitted tenders under The Hungarian Scientific Research Fund, supporting basic research, for an amount four times higher than the announced financial allocation of nearly HUF 13 billion. Interest in post-doctoral and young researcher programmes has increased the most, where the number of applicants rose one and a half times in three years. According to the bill submitted by the Ministry for Innovation and Technology, doctoral training could become more flexible in the future by allowing students of general medicine, veterinary medicine, pharmacy and dentistry to complete their studies parallel to the final year of their master's education. The National Competitiveness Council decided on a new scholarship that will enable 50 talented Hungarian students to study at the world's best universities every year. The programme would not only allow applicants to complete one semester, but would also cover all the costs associated with the studies up to graduation. Young people should then work in Hungary for the first five years after their graduation.</p>		
9.2.3.	Increasing the ratio of tertiary education graduates	
39.	Widen the enrolment base of tertiary education	3
<p>A total of HUF 2 billion in funding was open for tenders under the National Talent Programme in the 2021/2022 school year, including the popular National Young Talent Scholarship. Applications are open to individuals, talent support organisations, specialist colleges, national and international educational institutions and organisations implementing talent supporting projects, from kindergarten talent development programmes to the National Scientific Student Conference.</p>		

#	Recommendation	Priority
40.	Increase the capacity of dormitories	 3
<p>At the end of 2020, the government decided to return 5,800 dormitory places into the ownership or management of universities. As a result of the measure the existing PPP schemes were replaced in the case of 10 dormitories of 7 tertiary education institutions in a total amount of HUF 27 billion. The government has already spent nearly HUF 146 billion to replace 48 of the 54 PPP schemes effective in 2010. In connection with the International Eucharistic Congress, universities providing accommodation for volunteers and pilgrims received aid in the amount of nearly HUF 500 million. The University of Pécs received more than HUF 400 million as public supplementary aid to complete the renovation of the János Balassa Dormitory.</p>		
41.	Expand merit-based and needs-based scholarship schemes	2
<p>In the 2021 tenders of the New National Excellence Programme, scholarships are awarded to around 2,000 winners in the amount of almost HUF 4 billion. The main aim of the programme, implemented for the sixth time with the professional support of the Ministry for Innovation and Technology, is to strengthen the scientific and creative performance of universities by supporting individual excellence and encouraging the development of a new generation of R&D&I.</p>		
44.	Increase student activity	 1
<p>According to the amendment to the National Tertiary Education Act of 24 November 2020, the educational system of tertiary education institutions must be able to support closed-system electronic distance learning.</p> <p>As part of the Let's Teach for Hungary programme, launched by the Ministry of Innovation and Technology, the Ministry of Human Capacities, the Klebelsberg Centre and the National Conference of Student Self-Governments, mentoring university students help 6th-8th grade pupils with learning and career guidance after school leaving, while also supporting vulnerable first-year university students with their integration, which is rewarded by the educational institutions with credits.</p>		
9.2.4. Increasing the ratio of graduates from technical, natural science and ICT faculties		
47.	Reduce the drop-out rate in university courses	2
<p>For the first time in spring 2020, the government made it possible to receive stalled degrees even without a language certificate. By August 2021, tertiary education institutions issued 142,000 degrees in total. The roughly 5,000 tertiary education students who did not meet the requirements in the 2020/21 academic year and would have been transferred to self-financed courses can continue their studies with public funding. From 1 January 2021, students with poor results in their undergraduate studies can be transferred to vocational training in tertiary education to avoid dropping out of university.</p>		
9.2.5. Spreading financial skills		
48.	Deepen financial literacy	 2
<p>In the last week of August 2021, the Pénziránytű Foundation distributed 176,000 copies of maths and history textbooks to Hungarian secondary schools supporting the development of financial literacy. Schools ordered a total of 237,000 copies of primary school mathematics and science exercise books for grades 3–8 for the 2021/2022 school year. In addition, primary and secondary schools ordered 53,000 copies of textbooks and comprehension exercise books on basic financial and management skills. A novelty in 2021 is that the latest edition of the accredited textbook for secondary school students will make everyday financial education more exciting with spectacular Augmented Reality (AR) solutions. Financial education publications of the Pénziránytű Foundation were distributed free of charge to schools owing to the support provided by the Magyar Nemzeti Bank.</p> <p>A six-party cooperation agreement has been signed for the successful implementation of MONEY7 (PÉN27): the Ministry of Human Capacities as project owner, the Ministry for Innovation and Technology, the Ministry of Finance, the Hungarian Banking Association, the Pénziránytű Foundation and the Junior Achievement Hungary Foundation signed the document as the professional cooperating partners of PÉN27. In the 2020/2021 school year, 171,500 students from more than 1,100 schools in Hungary participated in the programme. In recognition of the outstanding attendance, the Hungarian programme was included among the best events of the Global Money Week (GMW) three times.</p>		

#	Recommendation	Priority
49.	Provide further training for financial professionals	1

The training package developed by the Budapest Institute of Banking (BIB) for the development of domestic businesses is available free of charge until the end of 2022. This is a unique and complex digital learning tool that addresses a range of relevant topics for businesses, with a particular focus on the importance of human capital in digital transformation. The modular knowledge base can be completed at the entrepreneur's own pace, since through individual interviews it provides comprehensive insight into the operations of companies that have implemented several successful generational changes and digitalisation in a well-structured IT framework.

Legend

<i>Not started</i>	<i>Started</i>	<i>Partly implemented</i>	<i>Fully implemented</i>
<i>Changed to Started</i> 	<i>Changed to Partly implemented</i> 	<i>Changed to Fully implemented</i> 	

10 Research and development and innovation

By December 2021, the implementation status of the recommendations included in the Research and development and innovation chapter rose by 31 percentage points from 24 to 55 per cent weighted by priority, compared to the Competitiveness Mirror published in autumn 2020. Following the publication of the Competitiveness Programme, the implementation of three-quarters of the recommendations in the R&D&I chapter commenced. In 6 of the 8 recommendations, policy initiatives and measures were taken for their implementation. 83 per cent of the recommendations in progress have implemented or partly implemented status. Compared to autumn 2020, progress has been made in 3 recommendations, which also resulted in a change of status, while new developments occurred at 1 recommendation.

In July 2021, the government adopted Hungary's Research, Development and Innovation Strategy for the period 2021-30, which sets the main objective for R&D expenditure to reach 3 per cent of GDP by 2030, which exceeds the 2 per cent target set in the MNB Competitiveness Programme. Inter alia, this strategy sets the goal of raising salaries of researchers and developing a researcher career model, along with spreading cooperative PhD programmes jointly funded by the state and companies, which incorporate both academic research and market requirements. It also includes the recommendation of creating a modern regulatory framework and business environment supporting R&D&I as an objective, as well as increasing patenting activity and further developing the necessary support system. It facilitates the provision and replacement of research human resources along with incentive wage setting, so employers hiring research and development employees can halve the social contribution tax payment obligation incurred on research and development activity. To offset the negative economic effects of the coronavirus pandemic, the government launched a salary support programme for research and development employees, for which enterprises could apply in two phases, between April and August 2020, and January and May 2021. In the programme, the budget took over 40 per cent of the lost salary of highly qualified employees in the research, development and innovation sector for three months to retain these employees. In the two phases, roughly 30,000 employees at about 2,000 enterprises benefited from this support. The total cost of the support reached HUF 26 billion.


To ensure the development of doctoral programmes and their alignment with real market needs, the government provides HUF 4.9 billion for the implementation of the cooperative doctoral programme in the 2021/2022 academic year. The government decree of December 2021, which allowed no maintenance fee to be paid for the first three years of patent protection filed during the coronavirus pandemic, and reduced the fee between years 4 and 10, is helping to increase the number of intellectual property right registrations and to utilise them more efficiently (the government introduced the exemption from the fee payment for the first three years in August 2021). In addition, the National Research, Development and Innovation Office issued a call for bids with a total budget of HUF 400 million in 2021 to support companies, public research organisations and individuals in covering their fees related to the protection of their intellectual property rights.

#	Recommendation	Priority
10.1.	Providing the necessary human resources for research	
1.	Extend the tax allowance for PhD graduates to researchers holding university degrees	 3

Pursuant to Section 16 of Act LII of 2018 an employer – classified as a research centre carrying out basic research, applied research or experimental development within the scope of its own activities as a company – who employs a research and development worker in an employment relationship giving rise to a tax liability, has to pay only 50 per cent of the social contribution tax liability arising from that employment relationship.

2.	Raise the number of assistant staff in research and development through further wage increases	2
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The Research, Development and Innovation Strategy of Hungary (2021-2030), adopted by Government Decree No 1456/2021 (VII.13), identifies the development of a career path model for researchers as a priority to bring salaries of researchers as close as possible to those of industry. The Ministry for Innovation and Technology would create the legal conditions for a wage increase of around 30 per cent for the personnel of state-owned tertiary education institutions, similar to those of tertiary education institutions operating under foundation or church status, by amending the law.

3.	Provide state coverage of 50 per cent of the costs of doctorate courses for employees over 30 years of age	 2
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The Research, Development and Innovation Strategy of Hungary (2021-2030) includes the spread of the cooperative PhD concept, where doctoral students conduct their research partly in a university and partly in a corporate environment during their training period, and half of the cost of their training is jointly financed by the state and industry, similar to the doctoral model used by the EIT Digital institution network. In the 2021/2022 academic year, the government allocated a budget of HUF 4.9 billion for the implementation of the cooperative doctoral programme. In addition, to ensure the supply of researchers, the Hungarian doctoral training system would be made known to a wider range of companies and some of the doctoral thesis would be adapted to the needs of companies on the basis of the R&D strategy. The introduction of industrial PhD courses, following the Danish model, which emphasises practical application in doctoral training and is also included in the R&D strategy, is also a step forward.

10.2.	Increasing research expenditure	
7.	Reduce patent maintenance fees	 3

Government Decree No 675/2021 (XII.3) allows for a lower fee than before to be paid for the maintenance of patent protection filed after the entry of the Decree into force until the end of the state of emergency, for the period from the 4th to the 10th year. In addition, the waiving of the maintenance fee for patents filed during the state of emergency for the first three years of the maintenance period was already decided in Government Decree No 474/2021 (VIII.6) of August 2021. The National Research, Development and Innovation Office disbursed financial support of HUF 95 million in 2020 and opened a HUF 300 million budget in 2021 to support the costs of protecting intellectual property rights of research and development sites operating within the framework of the budget, under tender No 2020-1.1.3-IPARJOG. In addition, the 2020-1.1.1-IPARJOG tender also provided HUF 100 million in 2021 for private individuals to subsidise costs related to the protection of intellectual property rights.

Legend

<i>Not started</i>	<i>Started</i>	<i>Partly implemented</i>	<i>Fully implemented</i>
<i>Changed to Started</i> 	<i>Changed to Partly implemented</i> 	<i>Changed to Fully implemented</i> 	


11 Efficient governance

Implementation of 96 per cent of the recommendations included in the Efficient governance chapter has commenced, and thus by December 2021, the status of implementation, weighted by priority, rose from 44 per cent to 57 per cent in one year. 22 of the 23 recommendations in the chapter acquired implemented status according to the latest summary, compared to 17 in November 2020.

The government measures announced between November 2020 and December 2021 affected 10 of the 23 recommendations, of which 8 resulted in a change in the implementation status of the recommendation. Of the 8 status changes, the status of 4 recommendations changed to started and another 4 to partly implemented. Many of the measures announced are closely linked to digitalisation and the wider penetration of e-governance. Among other things, the HUF 2.5 billion development aimed at the standardisation of communication between ministries was completed, an online satisfaction survey was launched on the magyarorszag.hu website, while version 3.0 of online invoicing is available. Progress was achieved in the taxation of digital multinationals by joining the global minimum tax system. A key government measure was a tax cut to reduce the burdens of enterprises, as part of which the social contribution tax has been reduced by 2.5 percentage points and the 1.5 per cent vocational training contribution is cancelled from January 2022.

#	Recommendation	Priority
11.2.	Digital public administration	
5.	Adopt the Estonian model to ensure that all matters dealt with in government one-stop shops may also be processed online	3


The roll-out of e-governance continues, and as a result of recent developments, in addition to certificates of good conduct and registering ownership titles to vehicles, it is now also possible to register a change of address and replace lost documents online. From January 2021, customers can submit their applications electronically in 449 government office matters. The new electronic applications also include those for infant care allowance and childcare allowance. The introduction of facial identification from February 2021 brings a major simplification in electronic public administration. The simple identification method does not require any assistance from an administrator, nor any codes or passwords, just the camera on the mobile device to allow the customer to transact online.

6.	Interlink the databases of administrative organisations	 2
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In December 2020 a multi-year development project was completed, as a result of which the IT systems of central administration were moved to a common platform. The project, led by the National Infocommunication Service (NISZ) and implemented under the quality assurance of the Governmental Information-Technology Development Agency (KIFÜ), received an EU grant of HUF 2.5 billion. Its planning and implementation started in 2015 and in 2017, respectively. The enhancement of the IT environment that provides the technological background for e-administration will, among other things, standardise communication channels between ministries and simplify integration processes, while reducing operational costs.

7.	Enhance mobile applications for simpler processing	 1
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The tax authority has been providing free invoicing software for taxpayers since 2018, and from 2020 the system is also available to users as a mobile app. Another important innovation was added to the mobile app in August 2021, as identification through the Central Client Authentication Agent was enabled. With the new developments, primary users can access the Online Invoice system in an even simpler way, making it easier for them to provide data.

9.	Carry out regular online satisfaction surveys for public services	 1
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In March 2021, NISZ launched an online survey concerning the magyarorszag.hu website and the electronic services available through it. With this survey, the operator aims to implement customer-oriented improvements, including possible extensions to the services available. Part of the reason for the survey is that interest in the central e-administration portal rose dynamically between 2019 and 2020. The number of visits to the website increased five-fold in a year to 51 million, while the number of cases opened rose from 4 million to 13 million. The most popular services in 2020 include vehicle enquiries, electronic tax returns, the Electronic Health Service Space (EESZT) and title deed enquiries.

11.3.	Customer-friendly tax authority	
10.	Develop the tax authority and increase its efficiency	 3

In autumn 2020, the Ministry of Finance unveiled a plan targeting the full digital transformation of tax administration over the next 4 years. As part of this, version 3.0 of online invoicing was launched at the beginning of 2021, and one of the new features is that the XML file for data reporting to the NTCA also functions as an electronic invoice. The development also simplifies the processing of incoming invoices, allowing the company to spend more time on productive/service activities. The change of the recommendation's status to partly implemented was attributable to the fact that Hungary ranked 13th out of 37 OECD countries in the US Tax Foundation's Tax Competitiveness Ranking, which measures the extent to which a country's tax system supports two important aspects of tax policy: competitiveness and neutrality. Hungary was ranked before countries such as Germany, Austria and the United Kingdom, among others.

#	Recommendation	Priority
15.	Reduce administrative burdens	2

To improve competitiveness, the government has taken a number of measures to reduce administrative burdens on enterprises. Among other things, the opening and closing of bank accounts for businesses has been simplified, and from 2021 it is not necessary to contact the tax authority, the Chamber of Commerce and the notary separately. In the future, it will be a relief for builders in the real estate market that the procedure for extending building permits has been abolished, and the extension period that could be initiated until now has been incorporated in the basic permit. This will allow 4 years for construction to start and a further 6 years for completion. Another major decision was the HUF 750 billion tax cut package for 2022, officially announced in November 2021, which supports a 20 per cent increase in the minimum wage and the guaranteed wage minimum (to 200,000 and 260,000 forints respectively) from 1 January 2022. Among other things, the social contribution tax will be reduced by 2.5 percentage points, the 1.5 per cent vocational training contribution will be abolished, the small business tax rate will be reduced to 10 per cent, and the SME sector will have to pay a preferential local business tax of 1 per cent.

11.4.	Reduce the extent of tax evasion	
16.	Extend tax obligations to digital multinationals	↑ 2

In October 2021, more than 130 countries agreed on the OECD's proposal to reform the international tax system, which was also supported by G20 leaders. Hungary has joined the new system too, which is due to start in early January 2023. Digital multinationals are also part of the OECD's reform measures, and these companies will in future have to pay tax partly where their revenue is generated, regardless of their economic activity. In addition, since the digital multinationals in question in Hungary failed to prove through legal proceedings that they were not taxable in Hungary, they subsequently paid the advertising tax.

20.	Reducing illicit activity in the construction industry	↑ 2
Companies will have to comply with new employment supervision requirements, including the essential new requirement that, from 1 March 2021, companies that employ workers illicitly must register the workers concerned with the tax authority, in addition to paying penalties. This means that the contribution must be paid at least up to the amount of the minimum wage and for at least 30 days retrospectively for a previously unregistered worker.		

11.5.	Competitive treasury system	
21.	Consolidate and improve the efficiency of the Treasury system	↑ 3

From 1 May 2021, the Hungarian State Treasury introduced a completely new, modern account management system for its customers with payment accounts. The changeover will be gradual, with pre-selected and invited account holders being included from that date, while the roll-out to the full customer base is scheduled to start from 1 January 2022. The Treasury's aim with the new system is to provide its institutional customers with robust payment services supported by high-tech and professional systems that meet the challenges of our age.

22.	Provide treasury account management for local governments and state-owned enterprises	↑ 2
The introduction of a completely new account management system, as detailed in the previous section, could have a beneficial effect on the institutions whose accounts are managed by the Treasury, facilitating full account management over time.		

Legend

Not started	Started	Partly implemented	Fully implemented
Changed to Started ↑	Changed to Partly implemented ↑	Changed to Fully implemented ↑	

12 Modern infrastructure and efficient energy use

Implementation of 96 per cent of the recommendations has at least started, and thus the status of the chapter's implementation, weighted by priority, rose from 39 per cent in November 2020 to 48 per cent. Some progress has been made in each of the recommendations related to the improvement of transport infrastructure, efficient energy use and the green economy. Since November 2020, the status of 6 recommendations changed and new developments occurred at a further 17 recommendations.

The green economic turnaround has begun in Hungary. The implementation of the energy and climate policy strategies presented in January 2020 is gradually progressing, and the implementation of all elements of the Climate and Nature Protection Action Plan announced by the Government in February 2020 has commenced. The Action Plan supports the implementation of 5 central bank proposals. In addition, in 2021 the Magyar Nemzeti Bank was the first central bank to get a legal mandate to promote environmental sustainability in Europe. Following the publication of the Green Monetary Policy Toolkit Strategy in July 2021, the Green Home Programme was launched in October 2021 to help renew the domestic housing stock while significantly improving the energy efficiency of dwellings. Several strategies to support green goals, such as the National Hydrogen Strategy of Hungary and the National Clean Development Strategy of Hungary, were adopted in 2021. The government also adopted the National Digitalisation Strategy for the period 2021-30, setting out strategic digital paths. The announcement of tenders for the multi-annual financial framework of the EU for the period of 2021-27 has commenced, with a large number of projects supporting the green and digital transformation.


The electrification of the North Balaton railway line between Szabadbattyán and Balatonfüred has been completed. The increasing of the rail speed limit has started on new lines since November 2020 and the modernisation of the rolling stock has continued with the involvement of Hungarian rolling stock manufacturing and repair capacity. The government has also embarked on internationally significant freight rail developments, including the development of intermodal hubs, container terminals and rail lines.


The implementation of more than 85 per cent of the recommendations supporting a telecommunications and electric network that meets the needs of the Fourth Industrial Revolution has already started. Publicly funded research and development of 5G technology has started in the academic sector, and the latest 5G solutions are also used in transport projects. The newly established National Laboratory for Information Technology, funded by the government, may facilitate the development of cyber solutions in Hungary. Between November 2020 and May 2021, the government provided free internet access for all students to make distance learning easier.

The MNB's Green Home Programme, launched in October 2021, may foster energy efficiency improvements in the residential properties. The programme provides a preferential loan for the construction or purchase of net-zero emission new properties and the related interest-free green HPS capped at HUF 15 million. The HUF 200 billion tender announced by the government in October 2021 to support the electrification of residential solar systems and heating systems in combination with solar systems will also support energy efficiency improvements of real estate. The implementation of the MNB's energy policy proposals will be supported by projects to develop electricity storage capacity across the country and the expansion of installed solar capacity (industrial solar parks and residential solar panels), which exceeded 2,000 MW by the end of 2020.

Among the measures to help the economy go green, the government has allocated significant resources for environmental investments by SMEs: the Green National Champions programme provides applicants with conditional grants for greening their businesses, while HUF 8 billion is available for forest farmers to protect forest ecosystems until the end of 2022. A total

of HUF 95 billion has been earmarked in 2 tenders for the infrastructure development and increasing the efficiency of water utilities, while HUF 367 billion was allocated for the development of the wastewater disposal network between 2015 and 2023. One of the key elements of the Climate and Nature Protection Action Plan is the creation of a circular economy, which is why several single-use plastics (such as plastic cutlery) were banned from July 2021, while the government is supporting technology change by the companies affected by the ban. In addition, the Let us Clean Our Country programme will remove illegal waste from public areas between 2020 and 2022, while an Act severely punishes illegal dumping. The electrification of transport is a key element of the Climate and Nature Protection Action Plan. Accordingly, in 2021 the government has provided HUF 7 billion for the purchase of electric cars, HUF 1 billion for electric bicycles and HUF 18.4 billion for electric buses since the start of the programme. Tenders for supporting the development of irrigation infrastructure will foster adaptation to climate change, with a total budget of more than HUF 100 billion from 2021 to the end of 2022.

#	Recommendation	Priority
12.1.	Faster railway traffic	
1.	Provide electric railway access to every town with at least 30,000 inhabitants and to the Northern Balaton region	 2
<p>In June 2021, the 55 km long, electrified and modernised railway line between Szabadsbattyán and Balatonfüred was completed, making access to one of the busiest tourist areas of Hungary, the North Balaton region, more comfortable, environmentally friendly and faster. By November 2021, the tram-train connection between Hódmezővásárhely and Szeged was also completed. The renovation and electrification of the 13 km railway line between Szeged and Röske has begun with a budget of HUF 41 billion. The project is also linked to developments on the Serbian side of the border. In addition, the preparation for the electrification and upgrading of the 53 km Zalaszentiván-Nagykanizsa railway line started in 2021. The Integrated Transport Operational Programme Plus for 2021–2027 includes plans for further extensions and upgrading of electrified rail lines.</p>		
2.	Ensure travel speeds of at least 160 km/h on all principal railway lines	3
<p>In October 2021, the modernisation of the railway section between Békéscsaba and Lőkösháza started, including the increase of the cruising speed to 160 km/h, the construction of a second track and the installation of the trackside subsystem of the European Train Control System (ETCS) level 2 for a net expenditure of HUF 147 billion. Between Kiskunfélegyháza and Szeged, Almásfüzitő and Komárom, Hatvan and Füzesabony, preparations have started to increase the speed of the railway line to 160 km/h. In the first case, this started by planning the upgrading of the line to a double track. In terms of branch lines, the preparation for rail traffic developments between Szeged and Makó was announced in 2021. The Integrated Transport Operational Programme Plus for 2021–2027 includes an increase in the speed of railway lines, an increase in the axle load on railway lines, in some cases conversion into double track, and the scheduled introduction of the ETCS 2 rail traffic management support system. In 2020, the first phase of the GSM-R railway radio communication system was completed, covering some 935 kilometres. The trial operation of the first domestic ETCS L2 system for the supervision of train traffic between Ferencváros and Székesfehérvár commenced in December 2020.</p>		
3.	Replace or modernise railway engines and passenger wagons	2
<p>The renewal of the railway rolling stock is supported by the fact that MÁV and the Chinese company CRRC Changchun signed a Memorandum of Understanding for the modernisation of the branch-line rolling stock, with the involvement of the Szolnok rolling stock repairer in January 2021. In addition, all KISS double-decker trains are expected to be in service by the end of 2022, mainly on suburban lines of Budapest. As a continuation of the IC+ programme of MÁV-START, the first Intercity 1st class and premium class coach was presented in September 2021. A total of 35 model cars are expected to be produced by mid-2022. Eight (and optionally another 4) hybrid tram-train vehicles are being purchased in 2021 for the introduction of the 'Tram-train' integrated tram and high-speed rail system between Hódmezővásárhely and Szeged. In December 2021, MOL and Alstom signed a Memorandum of Understanding to explore the use of hydrogen technology in domestic rail transport. To improve the comfort of rail transport, a maintenance and enhanced convenience programme for the busiest stations, launched in 2019, has been and will be carried out at 50 stations in the capital and around the country, to provide passengers using public transportation with civilised settings at the stations. In addition, the entire roof of Budapest's Western Railway Station was renewed in 2021. The Integrated Transport Operational Programme Plus for 2021–2027 prioritises the replacement programme for passenger rail vehicles and the improvement of railway stations.</p>		

#	Recommendation	Priority
4.	Establish an intermodal hub in every county seat and develop railroad freight terminals	 2

In June 2021, preparations for the construction of the intermodal hub in Kőszeg started. According to the government's announcement on 2 July 2021, the complete reorganisation and renovation of the Záhony freight station will be completed for HUF 150 billion, and HUF 30 billion of private investment will be used to build the East-West Gate intermodal rail container terminal in Fényeslitke, which will be built to support trade between Asia and Europe at the junction of the standard and broad gauge rail, and is expected to be operational in the first quarter of 2022. The construction of a freight rail container terminal in Zalaegerszeg has also started with a budget of around HUF 15 billion. The preparation of the V0 freight railway line bypassing Budapest from the south has started and the Ministry for Innovation and Technology is preparing a national rail freight development concept. Accessibility is an important part of railway station renovations. P+R and B+R areas for parking cars and bicycles will be built and expanded near transport hubs. On the already renovated Budapest-Esztergom railway line, preparations have started for the construction of a further 368 P+R parking spaces. The government raised the grant for single-wagon traffic from HUF 10 billion to HUF 26 billion for the period 2021-25. The development of intermodal transport is identified as a top priority in the Integrated Operational Programme for Transport Plus for 2021-27.


12.2.	Excellent road network	
6.	Promote the construction of motorway feeder roads bypassing localities	2


The Integrated Transport Operational Programme Plus related to the period 2021–2027 identifies a strong need to develop roads bypassing towns and access to the TEN-T road network. The government treats the construction of bypasses as a priority in this document. The construction of the bypass roads at Látvány, Kaposfüred and Sajószentpéter-Berente has started, and the preparations have begun for those at Győr, Simontornya, Siófok and Zirc, the Gödöllő junction of the M3 and M31 motorways and the M2 motorway, Dunakeszi/Észak (Göd/Dél) junctions and the bypasses between Gödöllő and Isaszeg.

12.3.	A telecommunications and electric network that meets the needs of the Fourth Industrial Revolution	
8.	Develop 5G technology by opening higher frequency ranges and providing state subsidies for the development of smaller cell sizes	3

Mobile operators in Hungary are gradually rolling out their 5G base stations, mainly in major cities and in the Balaton region. In January 2021, the National Media and Infocommunications Authority (NMHH) held an auction for the 900 MHz and 1800 MHz frequency bands, in which operators were awarded licences for 15 years, renewable for 5 years. With modernisation, the 900 MHz frequency is suitable for the future transmission of 5G technology. At the Budapest University of Technology, a 5G Research and Innovation Network and 5G developments are being built in cooperation with corporate partners on a total of 70 MHz, as part of the ICT sub-programme of the Centre for Higher Education and Industrial Cooperation project supported by the National Research, Development and Innovation Office. The university received the frequency free of charge from the operators. The fifty-two 5G radios installed in 6 university buildings will provide researchers with access to state-of-the-art mobile services in university laboratories, lecture halls and community spaces. To achieve these goals, with the support of the FIEK project the BME has carried out significant infrastructure development in the past year and acquired several state-of-the-art IT and other research tools needed for the development of 5G applications. In addition, a special, self-developed industrial 5G network will be deployed at the East-West Gate rail terminal in Fényeslitke, currently under construction and expected to be completed by 2022. The special feature of this technology is that it can be used for the remote control of cranes that tranship the wagons.

#	Recommendation	Priority
9.	Subsidise the spread of fibre optic cables	1
The GINOP-3.4.1-15 tender (Development of new generation NGA and backhaul networks), with a budget of HUF 59 billion, has been closed and its implementation has started. According to the National Digitalisation Strategy, this project may facilitate help the whole of Hungary be covered by an optical backhaul network by 2030.		
11.	Increase the share of underground power cables	1
Projects are underway to replace overhead power lines with underground cables. MVM will carry out 46.5 kilometres of cable laying in the Mátra region by the end of 2022, at the cost of HUF 1.2 billion, and will dismantle 50 kilometres of the medium-voltage overhead network.		
12.	Provide subsidies for increasing the number of higher-amperage connections in households	1
The MNB's Green Home Programme, launched in October 2021, will also support the achievement of this goal, while helping to meet the central bank's new environmental sustainability mandate, which came into force in August 2021. However, according to Decree No 7/2006 (V.24) on the determination of the energy performance of buildings, in force from 1 January 2021, in the case of new residential buildings and buildings undergoing major renovation, only if the number of parking spaces exceeds ten is it necessary to equip each parking space with an electrical connection facility that allows for the installation of charging points for electric vehicles at a later date. Existing buildings are not required to install an electrical charging point. The Digital Renewal Operational Programme Plus and the Territorial and Settlement Development Plus Operational Programme will set out the directions and objectives for making the electricity network smart, by installing smart meters.		
13.	Upgrade the capital and all county seats into smart cities	2
The Ministry for Innovation and Technology and Huawei signed a Memorandum of Understanding for long-term cooperation on the development of 5G and fixed-line networks, including smart city solutions, at the end of October 2021. Huawei would contribute to ensuring sustainability and environmental protection with its smart city solutions. The Territorial and Settlement Development Plus Operational Programme for the 2021-27 development period includes ICT and smart city developments. Among the areas of intervention, the programme mentions the development of smart community points organised in a regional network, the development of real-time municipality monitoring systems and smart grids supporting municipality management, smart city developments related to metropolitan parking, public space developments based on smart solutions (e.g., deployment of complex green space maintenance-support systems,); creation of municipal infrastructure for community shared-economy developments; and preparation of local governments for well-considered, well-founded and locally appropriate smart city/town developments.		
14.	Develop Hungary's information security software industry	3
18 national laboratories will be created between 2021 and 2025, which will be knowledge centres in areas of particularly high potential for the national economy, with policy support from the National Research, Development and Innovation Office and the Ministry for Innovation and Technology. They integrate domestic professional working groups in a given subject area, contribute to the development of competences enabling responses to major global problems at international level, and to the social, economic and environmental exploitation (knowledge transfer) of research results. Among these, the National Laboratory for Infocommunications and Information Technology is engaged in 5G-related cyber defence research, research on the application of artificial intelligence (AI) in the field of information security, supporting the development of cyber capabilities (detection, reconnaissance, response) and strengthening national cyber sovereignty, i.e. reducing the current level of information security exposure. In addition, the National Laboratory for Security Technologies contributes to basic research on information security.		

#	Recommendation	Priority
12.4.	Efficient energy use	
15.	Grant tax benefits to improve corporate energy efficiency	3
A grant of HUF 1 billion, announced by IFKA Iparfejlesztési Közhasznú Nonprofit Limited Liability Company (IFKA), announced in July 2021, will help companies, including Hungarian SMEs, to modernise their vehicle fleet and make them more environmentally friendly, by helping companies and sole traders purchase electric vehicles.		
16.	Allocate public funds to support the introduction of energy audits	 2
The Digital Renewal Operational Programme Plus project, entitled 'Development and introduction of energy management systems for local governments, tertiary education institutions and SMEs, with a budget of HUF 7.6 billion, planned for 2021-27, may contribute to the penetration of energy auditing among SMEs and public institutions.		
17.	Improve household energy efficiency through more intensive subsidisation of renovations	3
<p>The MNB's Green Home Programme, available from October 2021, is expected to make a significant contribution to improving the energy efficiency of the Hungarian housing stock. With a facility amount of HUF 200 billion, loans of HUF 70 million per applicant – a maximum interest rate of 2.5 per cent for a maximum period of 25 years – will be available for the purchase or construction of new properties with a calculated total energy performance (primary energy consumption) of up to 90 kWh/m²/year or with an energy quality rating of BB (i.e. close to zero energy demand) or better. In connection with this, the Home Purchase Subsidy for Families (HPS) is available interest-free if it is required as a supplement to the loan taken under the Green Home Programme.</p> <p>In addition, the tender No RRF-6.2.1 'Support for residential solar systems and electrification of heating systems in combination with solar systems' – announced in October 2021, offers 100 per cent grants for private individuals with a budget of HUF 202 billion – for the electrification of heating systems with heat pumps, installation of electricity storage and replacement of doors and windows. These factors substantially support the improvement of households' energy efficiency.</p> <p>According to the Hungarian Official Gazette No 283 of 2020, the energy efficiency obligation scheme included in the National Energy and Climate Plan was introduced on 1 January 2021, which supports the practical implementation of the 'energy efficiency first' principle and the reduction of energy consumption. Under the Energy Efficiency Obligation scheme, electricity and natural gas trading and universal service license holders as well as entities selling transport fuel to end users are obliged to achieve certain annual energy savings on end users. This rate will increase from 0.05 per cent to 0.5 per cent between 2021 and 2024, then remain at this level until 2027, before falling again to 0.05 per cent between 2028 and 2030 (due to the coronavirus pandemic, the government will allow the 2021 target to be met by the end of 2022). The KEHOP-5.2.14-21 tender announced in 2021 will support the introduction of an energy efficiency obligation scheme with HUF 4 billion in grants. In addition, from March 2021, HUF 3 billion will be available in grants for condominiums and housing associations to modernise 170,000 homes that do not yet have adjustable heating. The grant may cover half of the gross eligible costs of the investment.</p>		
18.	Continuously assess opportunities for further reductions in regulated energy prices	1
Several projects have been completed to promote the international integration of Hungary's energy network, thereby diversifying Hungary's energy imports and enhancing energy security. Two new 400 kV cross-border transmission lines linking the electricity systems of Hungary and Slovakia were put into commercial operation on 5 April 2021, doubling the electricity transmission capacity between the two countries. In spring 2022, the Hungarian-Slovenian cross-border power line may also be opened for commercial purposes. In summer 2021, the Serbian-Hungarian gas interconnector was completed, starting from Turkey and transporting gas through Bulgaria and Serbia. On the Hungarian side, the Hungarian-Serbian gas connection was developed at a cost of around HUF 20 billion.		


#	Recommendation	Priority
19.	Add high-capacity power storage facilities to the power grid	 3

The 2021-27 Environment and Energy Efficiency Operational Programme Plus aims to foster energy storage by promoting new and innovative energy storage solutions and technologies and developing electricity storage capacity for seasonal storage. With a budget of HUF 6 billion, the National Research, Development and Innovation Office has announced its 2021 call for bids No 2021-2.1.1-EK, which supports the implementation of carbon-free, innovative electrochemical storage of surplus electricity.

The research and development of electricity storage can also be facilitated by the establishment of the Hungarian Battery Association on 30 September 2021, whose main objective is to promote Hungary's position as a centre of the European battery value chain. The plans include exploring the potential for extracting lithium from domestic thermal water resources and developing domestic R&D capacity.

At the end of 2020, companies were awarded a state subsidy of HUF 2.7 billion for innovative grid development solutions and battery electricity storage, which are needed due to the penetration of solar power stations. In Kazincbarcika, a research project has developed and integrated an electricity storage system into the electricity system, seeking a solution for the increasing balancing needs of weather-dependent renewable energy sources in the circular economy. The new facility in Kazincbarcika differs from the standard solutions currently available on the market. It uses two types of batteries, including those manufactured mainly for automotive use. In Bükkkábrány, the development of innovative energy storage technology using the power generated by a local solar power plant will be implemented with financial support of HUF 1.2 billion.

The RRF-6.2.1 tender 'Support for residential solar systems and electrification of heating systems in combination with solar systems', announced in October 2021, with a budget of HUF 202 billion providing 100 per cent grants to private individuals, allows for the installation of electricity storage systems with a maximum storage capacity of 14 kWh in properties.


12.5.	Green economy	
20.	Allocate HUF 50 billion in subsidies for wind and solar power plants	 3

The government launched a call for bids in October 2021 under RRF-6.2.1 'Support for residential solar systems and electrification of heating systems in combination with solar systems' for the installation of solar systems or roof-mounted solar systems to cover own consumption, electrification of heating systems with heat pumps, installation of electricity storage and replacement of doors and windows, with a budget of HUF 202 billion for the population. The amount is a 100 per cent grant. Almost 35,000 families are expected to benefit from this funding. Only individuals with aggregate annual per capita income not exceeding HUF 4,850,000 are eligible to apply.

As a result of the continuous expansion of domestic solar panels, their installed capacity exceeded 2,000 MW by the end of 2020. About two-thirds of this was from industrial-scale solar farms and one-third from small-scale household plants. In April 2021, the third tender under the renewable support scheme (METÁR) was announced for subsidising 300 GWh of electricity per year, while under the fourth METÁR tender, launched in October 2021, subsidies for 870 GWh of electricity per year will be available. The fourth tender is only available to existing power plants that have been in operation for at least 20 years prior to the date of the tender, and are at least partially renewable (mixed-fuel), or to those that have undergone significant renovation or upgrading. Raising the lower nominal capacity limit to 5 MW means that only large power plants can now apply for the premium type subsidy. The fourth tender may create opportunities to modernise old biomass-fired power plants.

In June 2021, the Ministry for Innovation and Technology announced a call for bids to support the activities of geothermal heat generation projects with a budget of HUF 6 billion, providing grants for the high-cost phase of geothermal energy activities, the implementation of the production and reinjection pump system.

The National Hydrogen Strategy, adopted in spring 2021, may support the transition to green energy by exploring the possibilities for the domestic deployment of clean hydrogen and hydrogen technologies and by setting out paths for the creation of a background base for the hydrogen industry. In addition, one of the priorities of the Environment and Energy Efficiency Operational Programme Plus to be implemented during the period 2021-27 is the development of a renewable energy economy.

#	Recommendation	Priority
21.	Allocate HUF 25 billion in subsidies for SMEs' environmental protection investments	 3
<p>On 5 October 2021, the GINOP PLUSZ-1.3.1-21 'Green National Champions' programme for SMEs restarted with a budget of HUF 30 billion, under which Hungarian micro, small and medium-sized enterprises may be awarded grants of between HUF 20 million and HUF 1.5 billion for their investments in energy efficiency, electromobility, water management and the use of recycled materials or the replacement of single-use plastics, covering up to 50 per cent of the costs, provided they meet certain performance targets.</p> <p>Until the end of 2022, foresters can apply for 100 per cent grants up to HUF 8 billion for investments to increase the resilience and environmental value of forest ecosystems. This includes activities such as the removal of intensively invasive alien tree and shrub species or the creation and restoration of forest clearings. (Rural Development Programme, VP5-8.5.1.-17)</p>		
22.	Modernise and equip water utilities with smart meters	1
<p>From 19 July 2021, local governments and water utility companies can apply for funding for the transformation, development, assessment and improvement of the technical condition, and the energy efficiency of water utility infrastructure up to a budget of HUF 77 billion (Environment and Energy Operational Programme, KEHOP 2.1.11)</p> <p>In January 2021, the Government of Hungary launched a programme to increase the efficiency of water utility networks, foster sustainable water management, water saving and security of supply, and develop green-blue infrastructure in municipalities. The maximum grant amount available through the tender is HUF 18 billion (Green Infrastructure and Climate Protection Operational Programme, ZIKOP-2.1.1).</p>		
23.	Enhance the sewerage infrastructure in localities with fewer than 2,000 inhabitants, and increase the number of wastewater treatment plants	1
<p>In 2021, the financial allocation for the KEHOP-2.2.2 tender, Sewerage and Wastewater Treatment Development, was increased. The total amount of the financial support co-financed by the Cohesion Fund and the budget of Hungary for 2021 is HUF 367.05 billion for the time being. The number of tenders submitted is expected to be around 109, including applications from municipalities with less than 2,000 inhabitants and larger municipalities. In early November 2021, the 'Call for the implementation of pilot wastewater projects in municipalities with less than 2,000 inhabitants'(KEHOP-2.2.7-21) was published. The planned budget of HUF 5 billion can be used to support, for example, the construction or extension of wastewater treatment plant(s), the construction of a wastewater collection network or transmission pipelines.</p>		

#	Recommendation	Priority
24.	Increase the share of recycled waste and introduce the deposit and return system	2

Government Decree No 349/2021 (VI.22), which partially entered into force on 3 July 2021, stipulates that 77 per cent of PET beverage bottles placed on the market in any given year must be collected separately by 2025, and 90 per cent by 2029. Producers must also ensure that at least one quarter of the PET bottles they put on the market are made from recycled plastic from 2025, and around one-third from 2030. On 15 December 2020, a package of laws was adopted to make the return of bottles mandatory. The mandatory return fee scheme is expected to enter into force from 1 July 2023.

As part of the Climate and Nature Protection Action Plan, the illegal waste clean-up programme 'Let us Clean Our Country' was announced, which will remove waste from public areas in four phases between 2020 and 2022. In the first phase, the project has removed 25,000 tonnes of waste from Hungary. In January 2021, 'Raising awareness on waste management and the circular economy' (KEHOP-3.1.5), a HUF 2 billion tender, was launched to prevent waste accumulation and promote selective waste collection.

The tenders published in December 2020 and February 2021, with a financial allocation of HUF 10 billion, will support the development of businesses affected by the restriction of single-use plastic products, of which HUF 3 billion is earmarked for developments in the Central Hungary region. They support technological change and capacity expansion at domestic SMEs affected by the ban on single-use and other plastic products, or SMEs which manufacture substitutes for them, or which have otherwise lost market share in the plastics sector. This is grant funding subject to certain performance conditions. A project can receive a grant of HUF 20–400 million.

On 22 February 2021, Parliament adopted an act amending certain acts on energy and waste management that addresses the renewal of the waste management system. Illegal dumping is punished severely by the law – with up to 3 years imprisonment. As of July 2021, the marketing of plastic ear cleaning sticks, cutlery, plates, straws, stirring sticks, sticks for attaching and holding balloons, including the device for attaching the balloon to the stick, and expanded polystyrene food storage containers, beverage cups and some plastic bags will be banned. Single-use plastic drinks cups and lids will be banned from 2023.

SP Hungary Zrt., based in Polgárd, is building a plastics recycling plant in Székesfehérvár with an investment of HUF 624 million, which will be implemented with a subsidy from the Economic Development and Innovation Operational Programme (GINOP) amounting to HUF 282 million. 600-700 tonnes of plastic waste (including PET bottles) will be processed in the 3,000 square metre facility, which is scheduled for completion in June 2022.

#	Recommendation	Priority
25.	Strengthen support for electric vehicles	1

Electric cars: From 14 June 2021, sole traders or companies providing passenger transport services by taxi or private car (E-AUTO-2021 / taxi), as well as natural persons, civil organisations, associations and tertiary education institutions (E-AUTO-2021 / population) can apply for the purchase of an electric car, from a financial allocation of HUF 3 billion, with a maximum aid intensity of 45 per cent. From 12 July 2021, companies and sole traders (E-AUTO-2021 / GT) may also apply for a subsidy to purchase electric vehicles (cars, trucks and electric scooters) from a financial allocation of HUF 1 billion and a maximum aid intensity of 50 per cent.

Electric buses: Under the Green Bus Programme, the government will provide 36 billion forints over 10 years to replace vehicles in municipalities with a population over 25,000. So far, grant agreements were signed for the purchase of 127 vehicles, with the Hungarian state contributing HUF 18.37 billion. Available from November 2020, the tender provides support for local governments and public transport operators for the purchase of electric buses and self-driving trolleybuses, up to 80 per cent, and up to 60 per cent for infrastructure improvements needed to operate the vehicles. The demonstration pilot project (code number ZFR-ZBP-001), which is part of the Climate and Nature Protection Action Plan, has been and is currently testing electric buses in several large provincial towns, and is expected to be completed by the end of March 2022. In 2020, Debrecen, Békéscsaba and Nyíregyháza have already tested e-buses; in 2021, electric urban transport was tested in Székesfehérvár, Kaposvár, Szolnok, Kecskemét, Zalaegerszeg, Veszprém, Mosonmagyaróvár and Esztergom.

Electric assisted bicycles: In November 2020, the Ministry for Innovation and Technology announced a HUF 1 billion tender for the purchase of electric bicycles in monthly phases – with an intensity of up to 50 per cent – as part of the Climate and Nature Protection Action Plan. The Electromobility Strategy foresees a full review of the provisions related to the green license plate by 2025, at the latest. As part of this process, it was decided that motorcycles powered solely by electricity can also be fitted with a green number plate, thereby exempting them from several taxes.

South Korean-owned SK Innovation is setting up a new HUF 681 billion lithium-ion battery factory in Iváncsa, Fejér County, with significant public support, as announced by the Ministry of Foreign Affairs. The annual production capacity of 30 GWh at the Iváncsa plant will facilitate the production of enough batteries to make around 600,000 electric cars. The investment may be fully completed by 2025.

26.	Improve the agricultural irrigation infrastructure	2
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Tenders for the call for bids entitled ‘Development of the agricultural water management sector’ (VP2-4.1.4-16) may be submitted until 30 December 2022, for grants of 40-50 per cent in projects for water-efficient irrigation technologies and the spread of climate-resilient cultivation methods. The maximum amount that may be awarded to individual or collective projects is HUF 2 billion, from the budget of HUF 99.57 billion.

Also under the Rural Development Programme, a call for bids was published, entitled ‘Support for cooperation between irrigation communities’ (VP5-16.5.2-21), with a budget of HUF 2.32 billion, of which 30 projects are planned to be supported until 31 December 2022. The tender supports new irrigation investments or the operation of existing irrigation facilities by irrigation communities (legal entities formed by at least 2 agricultural producers). Applicants must undertake to irrigate at least 100 hectares in the case of arable crops and at least 10 hectares in the case of fruit and vegetables for at least 5 years. The maximum state subsidy amount per project is the forint equivalent of EUR 250,000. The maximum rate of the funding is 90 per cent of the total eligible costs.

In September 2021, the government adopted the National Clean Development Strategy, a strategic document of the Ministry for Innovation and Technology that is part of the 2050 carbon neutrality target. The document treats the spreading of water-efficient irrigation practices as a priority policy-development direction.

Legend

Not started	Started	Partly implemented	Fully implemented
Changed to Started	Changed to Partly implemented	Changed to Fully implemented	

Summary table on the implementation of the 330 competitiveness recommendations

Description of recommendation	Implementation
1. New financial model	
1. Develop a 'reverse' suretyship procedure	↑
2. Ease exclusion ('KO') criteria in a targeted manner	↑
3. Seek banks' commitment to increase credit portfolios that qualify as additional	↑
4. Offer more flexible guarantee rates (70 to 90 per cent)	
5. Redesign bank processes related to higher risk taking	
6. Make concerted marketing efforts to promote institutional guarantees	↑
7. Extend the tax benefits for 'business angels' to enterprises that have been running for more than 3 years	
8. Facilitate co-investment opportunities through government assistance	
9. Mitigate interest rate risks for customers	
10. Strengthen financial literacy	
11. Continue to promote Certified Consumer-Friendly products	
12. Reduce lead times for loan refinancing	
13. Reduce administrative burdens and charges related to early repayment	
14. Enable the mandatory sharing of positive credit histories	
15. Establish the continuous querying of credit histories	
16. Enable simple, user-friendly bank account switching	
17. Increase the comparability of bank account plans	
18. Develop and promote bank accounts to improve the banking relations of retirees and socially disadvantaged persons	
19. Adopt standardised bank account statements	
20. Establish a standardised loan application interface for small businesses	
21. Optimise branch networks	
22. Improve the coverage of POS terminals and other electronic payment solutions	
23. Provide a tax benefit on the financial transaction levy to encourage the upgrade or replacement of obsolete IT systems, and developments related to the instant payment system	
24. Develop and deepen the digital transformation	
25. Provide a tax benefit to encourage the development of mobile payment applications	
26. Support digital developments related to the instant payment system	
27. Incentivise banks to introduce package pricing in retail payment services	
28. Make online contracting and e-signature	↑

29. Enable credit institutions to submit electronic queries for the income statements held by the National Tax and Customs Administration	
30. Reduce the notarial fees associated with housing loans	
31. Replace notarial certification with a central digital platform	
32. Establish full online processing for taking out unsecured loans	↑
33. Set up a central appraiser database	
34. Automate the land registry information system (TakarNet) while ensuring continuous availability	
35. Increase the share of mortgage and consumer loans granted through digital channels	
36. Ensure that administrative and operational requirements are proportional to the risks that are being addressed	↑
37. Provide wider access to available information sources for new entrants to the market	
38. Facilitate close cooperation between innovators and the regulator through the Innovation Hub	
39. Grant preliminary operating licences in the Regulatory Sandbox framework	
40. Enhance the Regulatory Sandbox with the capability to grant exemptions from regulatory provisions	
41. List state-owned enterprises through a stock ownership plan for small investors	
42. Provide incentives for listing of banks	
43. Establish a modern corporate bond market	
44. Ensure state participation in the development of the domestic equity market	
45. Grant tax exemption on long-term investment accounts holding newly listed shares	
46. Launch a specialised trading platform tailored for SMEs	
47. Ensure the deductibility of listing expenses from corporate income tax	
48. Ensure consistency between capital market rules and general EU practices	
49. Improve access to digital platforms	↑
50. Appoint a government or ministerial commissioner for stock exchange development	
51. Increase the product value to customers in non-life insurance	
52. Provide legal and technological means to facilitate changing insurers	↑
53. Enhance the system of the Annual Cost Rate (ACR) and extend it to the pension funds sector	
54. Develop the digital links between the insurance and banking sectors	↑
55. Increase CASCO in motor insurance penetration	
56. Develop the system of guarantees in the insurance and the health and pension fund sectors	
2. Activation of household savings	
1. Increase maturity of bonds and redesign the product structure	
2. Encourage the transition from cash savings to government securities	
3. Use technical innovations and convenience services for retail government securities purchasing	↑
4. Redesign the arrangements for granting tax benefits, rethink the concept of long-term investment accounts	
5. Develop sales channels	
6. Grant tax exemption on stock dividends	

7. Provide incentives for employee stock ownership programme	
8. Establish welfare funds through a combination of pension and health savings	
9. Extend dividend tax exemptions to pension savings accounts	
3. SME strategy	
1. Reduce the investment limit from HUF 500 million to HUF 100 million for the development tax benefit available to SMEs	
2. Enable the immediate deductibility of investments in the corporate tax base	
3. Ensure the deductibility of investments from the local business tax base	
4. Provide assistance for SME wage increases subject to investment commitments	
5. Support acquisitions and mergers	
6. Make liquidation proceedings simpler and faster	↑
7. Provide a 2-year dividend tax waiver for companies undergoing a generation change in management	
8. Increase the innovation management capacity of SMEs by establishing a non-profit advisory centre	
9. Support the operation of clusters	
10. Support the emergence of clusters and other forms of networks	
11. Communicate state-sponsored programmes and opportunities on a broad base	↑
12. Support the operation of mentor networks	
13. Provide preferential grant application and borrowing options for young and female entrepreneurs	
14. Increase the number of co-working offices in large cities	
15. Increase the number of accelerators sponsored by large corporations	
16. Support university incubators and spin-offs	
17. Organise and support relevant startup conferences and meetups	
18. Grant a corporate tax exemption for aspiring entrepreneurs in their first three years	
19. Reduce the social contribution tax further for SMEs	
20. Enter into strategic partnership agreements with innovative SMEs	
21. Provide digital courses conditional on achievements	
22. Make company websites mandatory	
23. Develop digital infrastructure in rural areas	↑
24. Tighten rules for the management of ICT risks	
25. Establish the János Neumann Fund to support firms' ICT developments	
26. Prefer knowledge-intensive industrial services in EU funds' disbursement	
4. Foreign trade	
1. Strengthen export of services (besides export of goods)	
2. Exploit the benefits offered by China's Belt and Road Initiative	
3. Support the entry into fast-growing new markets with stable institutions	↑
4. Support foreign traders in Hungary, introduce a new trading house concept	
5. Enable market-ready companies to operate temporarily in international co-working offices	
6. Separate country, sector and product promotion and corporate brand building	

7. Channel public development funds to manufacturing sectors that are knowledge-intensive or well embedded domestically	↑
8. Provide incentives for strongly subsidised enterprises to use Hungarian suppliers	
9. Give priority to supporting productive investments on the services side when programming for the next EU programming period	↑
5. Labour market	
1. Public employee wages to be paid by the state for a certain period if the employer continues employing them for at least the same length of time	
2. Increase the difference between the wages paid for public work and the minimum wage	
3. Raise the permitted ceiling on earnings for persons employed below the retirement age or while receiving a pension	
4. Provide additional incentives for atypical forms of employment to encourage capacity building and organisational development	
5. Expand the category of elementary occupations of the Job Protection Action Plan	
6. Extend the Job Protection Action Plan to employees' contributions	↑
7. Extend the Job Protection Action Plan up to the minimum wage	
8. Extend the Job Protection Action Plan in the form of sector-specific allowances based on criteria for reducing the shadow economy	
9. Provide an incentive for the employment of pre-retirees by granting a tax exemption on employers' voluntary pension fund contributions	
10. Introduce a counter-cyclical labour market contribution	
11. Promote targeted work time reduction with full or partial social contribution tax compensation and/or public wage compensation in vulnerable groups	↑
12. Continue the reduction of taxes on labour	↑
13. Attract digital nomads	↑
14. Increase wages paid in high-demand jobs in the public sector	
15. Increase awareness of family support elements, run campaigns to raise awareness of the educational and health care system supported by the state	
16. Support Hungarian companies' recruitment abroad by deducting expenditures and tax benefits	↑
17. Simplify the recognition of degrees obtained abroad	↑
18. Introduce output criteria and independent examination centres in the system of adult education and training	↑
19. Ensure that first qualifications may be obtained free of charge in adult training	
20. Develop digital and language skills in senior generations	↑
21. Provide incentives for lifelong learning by allowing education expenses to be deducted from the corporate income tax base	↑
22. Introduce a mandatory further training minimum for companies	↑
23. Reimbursement of fees for successful examinations for the most renowned international certifications	
24. Support the retraining of labour released as part of reducing red tape, by covering costs and granting allowances	
25. Incorporate entrepreneurship skills into public and tertiary education	
26. Run domestic and foreign media programmes for the promotion of entrepreneurship	↑

6. Regional convergence	
1. Support labour market mobility by providing incentives for commuting	
2. Support labour market mobility by supporting change of residency status	
3. Provide mobility incentives to supplement the employment benefits granted to public employees	
4. Improve interurban passenger transport	
5. Introduce coupon benefits based on the Polish model	
6. Ensure strong reliance on the sectoral and technological specialisations of economic centres outside Budapest	↑
7. Ensure the favourable treatment of tenders based on local suppliers and resources	↑
8. Introduce a territorial compensation mechanism to counterbalance the labour drain	
9. Introduce a compensation mechanism for teachers taking up employment in less developed regions	
10. Incorporate territorial differentiation into the Széchenyi Card Programme	
11. Provide a combination of capital and funding via banks	↑
12. Provide a wider range of benefits in Free Enterprise Zones	
13. Increase the absorption of funds from the European Investment Bank (EIB)	↑
7. Family-friendly programme	
1. Raise the ceilings applicable to the infant care allowance (CSED) and the childcare allowance (GYED)	
2. Raise the amount of the one-off maternity allowance subject to an employment relationship (introduce a progressive allowance amount for additional children, depending on the number of children)	
3. Introduce an initial capital scheme for young returnees who undertake to have children in Hungary	↑
4. Provide a one-off health fund allowance to cover the expenses of childbirth care	
5. Support parenting by higher-education students	
6. Ensure constant review of the elements of the family support system and analysis of their efficiency	
7. Promote parenting (by awareness, advertising of family support, and support for preparatory training)	↑
8. Ensure the prevention and treatment of diseases that hinder parenting	
9. Run an information campaign on insulin resistance and provide free insulin resistance screening for women of reproductive age	
10. Provide more active support for artificial insemination	
11. Provide a wider range of subsidised examinations during pregnancy	
12. Reduce number of foetal deaths through improvements to prenatal care	↑
13. Reduce vaccine prices	
14. Align consulting hours to working hours	
15. Ensure that the employment-related elements of the family support benefits track the dynamic wage growth (e.g... family tax base allowance)	↑
16. Reform the family tax base allowance by allowing negative taxation	
17. Grant full tax exemption for mothers in large families on a broader base	

18. Increase the family tax base allowance for the children of mothers giving birth under 30 years of age	
19. Ensure infant nursery care is available for all Hungarian children between 2 and 3 years of age	
20. Increase nursery school capacities to enable admissions to mini groups from the age of 2.5 years	↑
21. Support the use of private nurseries through public contributions to charges	
22. Make family-friendly improvements to the public education system	↑
23. Support the re-entry of women into the labour market following childbirth	
24. Create a family-friendly workplace environment and provide incentives for day care in the workplace	
25. Support summer camps for children	↑
26. Clarify the legal status of babysitters	
27. Set up a public-school bus system	
28. Make family-friendly improvements to the services of the financial system	
29. Extend eligibility for grants under the family housing benefit scheme (HPS) as an incentive for birth of second children	
30. Adjust the figures specified in the HPS rules so that the scheme may effectively track developments in the property market	
31. Remove the HUF 35 million cap on the HPS available for the purchase of used homes	
32. Tighten the rules applicable to the purchase of homes for investment	
33. Develop new district concepts to improve the territorial allocation of housing developments	
34. Utilise vacant public housing	
35. Increase the duty allowance on first home purchases	
36. Arrange for the continuous review of the duty allowance on new home purchases	
37. Increase the construction workforce	
38. Scheduled market entry of public investments	
39. Ease administrative barriers to home construction	
40. Acknowledge the number of children raised in assessing the initial amount of pension	
41. Consider the family tax allowance in pension calculation	
42. Membership in supplementary pension funds by subjective right	
43. Support employers' contributions to supplementary pension funds	
44. Increase the effectiveness of state subsidies in supplementary pension funds	
45. Increase investment and cost effectiveness, and security	
46. Ensure welfare funds provide a range of family-friendly services and support home purchases	
8. Healthy society	
1. Promote healthy eating habits through information and tax benefits	
2. Incorporate basic health knowledge into public education curricula	
3. Extend the public health product tax	
4. Increase the excise duty on spirits	
5. Increase the excise duty on tobacco products to reduce smoking and the costs of related diseases	

6. Provide opportunities for regular sports activities	↑
7. Offer grant schemes to support the creation of quality work and home environments	↑
8. Strengthen the functions of the general practitioner system	
9. Support regular physicals and screening tests	
10. Set up a National Health Database	
11. Develop and systematically implement a comprehensive mental health package	
12. Strengthen the system of emergency medical services	
13. Extend funding methods based on patient cooperation	
14. Strengthen rehabilitation care	
15. Increase capacities for long-term and home care by strengthening cooperation between health care and social care systems	↑
16. Establish a public funding system based on actual costs	
17. Ensure that administration and controlling on a case-to-case basis is implemented at health care institutions	
18. Review the application of performance volume limits	↑
19. Introduce a financing method across levels of care	
20. Extend the application of pay-for-performance financing methods	
21. Set up a professional feedback system for patient treatment histories	
22. Establish a transparent remuneration system	↑
23. Increase the number of health care personnel and staff	
24. Elaborate the conditions for a system of supplementary private health insurance	
25. Guaranteed membership in health funds and provision of targeted incentives for in and out payments	
26. Extend support to prevention and service invoices	
27. Provide tax benefits on corporate health care packages	
28. Provide tax benefits on private health insurance	
29. Ensure that minimum requirements, professional and financial directives and protocols are regularly reviewed and updated	↑
30. Develop a clear definition of the care package covered by social security	
31. Strengthen professional and financial control	
32. Ensure standardised measurement and publication of the performance of health care institutions and patient satisfaction	
33. Increase the reporting obligations of private health providers	
34. Introduce a management assessment system in public institutions	
35. Increase the capacity for active same-day care	
36. Reallocate and reduce pharmaceutical expenditures on a professional basis	
37. Treat the pharmaceuticals trade as a strategic industry	↑
38. Develop telemedicine	
39. Increase reliance on innovative technologies to simplify care management	

9. Knowledge-based society	
1. Introduce a grounding grade 0 in primary schools on demand	
2. Elaborate a National Core Curriculum focusing on skills development and practical knowledge	
3. Improve the methods and forms of teaching and learning	
4. Ensure standardised measurement and publication of the performance of educational institutions and the satisfaction of stakeholders	
5. Introduce a basic examination at the end of primary school studies	
6. Increase the weight of sciences and information technology in secondary school admission examinations	
7. Improve career guidance and promote increased awareness in career planning	
8. Implement curriculum reform in the secondary school system	
9. Apply output criteria and more flexible curricula	
10. Strengthen dual vocational training	
11. Strengthen the links between vocational training schools and market actors	↑
12. Ensure flexible switching between various forms of education	↑
13. Reduce students leaving without a qualification	
14. Allocate more public and private funds to education	
15. Increase the number of primary school teachers and teaching assistants	↑
16. Provide regular further training for teachers	
17. Improve the social esteem of teachers, kindergarten teachers and nursery nurses by extending and enhancing the career path model	
18. Redesign language examination requirements and align school programmes accordingly	
19. Provide public support and premises for extra-curricular foreign language activities and language exam preparatory courses	
20. Provide the option to take secondary school admission and secondary school leaving examinations in English	
21. Promote more active participation in exchange programmes with other countries	
22. Provide incentives for foreign students to stay in Hungary	
23. Provide bi- and multilingual education in each Hungarian county	
24. Promote subtitled films and series	
25. Develop and maintain information technology instruments in schools and vocational training centres	
26. Develop digital learning materials	
27. Integrate programming into the teaching of mathematics	
28. Create a competitive environment in tertiary education	↑
29. Develop the infrastructure and equipment of tertiary education institutions	↑
30. Strengthen links between tertiary education and companies	↑
31. Channel market needs and private capital into education	
32. Raise R&D expenditure in tertiary education to 0.5 per cent of GDP	
33. Provide opportunities to lease university infrastructure	

34. More attractive career path for university professors	
35. Ensure that the ranking criteria for tertiary education institutions are taken into account in funding	↑
36. Support dual degree programmes	
37. Support publications in English	↑
38. Launch specific postgraduate courses to reverse student emigration	↑
39. Widen the enrolment base of tertiary education	
40. Increase the capacity of dormitories	↑
41. Expand merit-based and needs-based scholarship schemes	
42. Make tuition fees in tertiary education dependent on academic progress	
43. Redesign the course structure in tertiary education	
44. Increase student activity	↑
45. Increase opportunities for partial training abroad	
46. Introduce another science subject in addition to mathematics as a mandatory school leaving examination	
47. Reduce the drop-out rate in university courses	
48. Deepen financial literacy	↑
49. Provide further training for financial professionals	
10. Research and development and innovation	
1. Extend the tax allowance for PhD graduates to researchers holding university degrees	↑
2. Raise the number of assistant staff in research and development through further wages increases	
3. Provide state coverage of 50 per cent of the costs of doctorate courses for employees over 30 years of age	↑
4. Encourage enterprises to raise their R&D expenditures via enhancements to the business environment (reduction of red tape, more benefits for R&D)	
5. Grant special assistance for companies at the start of their life cycles for their R&D expenditure	
6. Reduce employers' contributions for SMEs implementing R&D investments	
7. Reduce patent maintenance fees	↑
8. Favourable accounting treatment of patent revenues	
11. Efficient governance	
1. Audit, rationalise and remove parallels in the system of public institutions	
2. Raise average wages in public administration and reduce bureaucracy	
3. Promote wage bill management and performance measurement instead of headcount management	
4. Measure the efficiency of state-owned enterprises and of services provided by state agencies	
5. Adopt the Estonian model to ensure that all matters dealt with in government one-stop shops may also be processed online	
6. Interlink the databases of administrative organisations	↑
7. Enhance mobile applications for simpler processing	↑
8. Increase the share of auto-populated information in electronic forms and datasheets	

9. Carry out regular online satisfaction surveys for public services	↑
10. Develop the tax authority and increase its efficiency	↑
11. Implement the scheme for corporate tax and value added tax returns produced by the Tax Administration	
12. Develop a taxpayer-friendly, transparent website, provide online processing for a wider range of matters	
13. Discontinue the use of supplements to the advance corporate tax	
14. Gradually shift the corporate income tax to 'cash-based taxation'	
15. Reduce administrative burdens	
16. Extend tax obligations to digital multinationals	↑
17. Continue the roll-out of online cash registers	
18. Phase out the financial transaction levy	
19. Make it mandatory for specific merchant groups to accept electronic payment methods	
20. Reducing illicit activity in the construction industry	↑
21. Consolidate and improve the efficiency of the Treasury system	↑
22. Provide treasury account management for local governments and state-owned enterprises	↑
23. Improve the Treasury's customer relations, particularly in the sale of retail government securities	
12. Modern infrastructure and efficient energy use	
1. Provide electric railway access to every town with at least 30,000 inhabitants and to the Northern Balaton region	↑
2. Ensure travel speeds of at least 160 km/h on all principal railway lines	
3. Replace or modernise railway engines and passenger wagons	
4. Establish an intermodal hub in every county seat and develop railroad freight terminals	↑
5. Upgrade the motorways M1 and M7 to three lanes motorways	
6. Promote the construction of motorway feeder roads bypassing localities	
7. Enable the use of self-driving cars on highways	
8. Develop 5G technology by opening higher frequency ranges and providing state subsidies for the development of smaller cell sizes	
9. Subsidise the spread of fibre optic cables	
10. Improve insulation across the power grid	
11. Increase the share of underground power cables	
12. Provide subsidies for increasing the number of higher-amperage connections in households	
13. Upgrade the capital and all county seats into smart cities	
14. Develop Hungary's information security software industry	
15. Grant tax benefits to improve corporate energy efficiency	
16. Allocate public funds to support the introduction of energy audits	↑
17. Improve household energy efficiency through more intensive subsidisation of renovations	
18. Continuously assess opportunities for further reductions in regulated energy prices	
19. Add high-capacity power storage facilities to the power grid	↑

SUMMARY TABLE ON THE IMPLEMENTATION OF THE 330 COMPETITIVENESS RECOMMENDATIONS

20. Allocate HUF 50 billion in subsidies for wind and solar power plants	↑
21. Allocate HUF 25 billion in subsidies for SMEs' environmental protection investments	↑
22. Modernise and equip water utilities with smart meters	
23. Enhance the sewerage infrastructure in localities with fewer than 2,000 inhabitants, and increase the number of wastewater treatment plants	
24. Increase the share of recycled waste and introduce the deposit and return system	
25. Strengthen support for electric vehicles	
26. Improve the agricultural irrigation infrastructure	

Legend

Not started	Started	Partly implemented	Fully implemented
Changed to Started ↑	Changed to Partly implemented ↑	Changed to Fully implemented ↑	

Albert Szent-Györgyi

(Budapest, 16 September 1893 – Woods Hole, Massachusetts, 22 October 1986)

Albert Szent-Györgyi, Nobel Prize winner Hungarian physician, biochemist.

Between 1904 and 1911 he attended the Presbyterian Secondary Grammar School in Lónyay Street, then continued his studies at the Medical Faculty of the Budapest University. He participated in World War I as a medical officer on the Eastern Front. Risking his life, he helped to rescue the wounded, for which he received the Silver Medal for Valour. After World War I he continued his studies in Bratislava, Prague, Berlin, Leiden and Groningen in the fields of biology, physiology, pharmacology, bacteriology and then physics and chemistry.

During his studies, he identified a new material in the adrenal of animals; later he succeeded in extracting the same material from cabbage and orange. The material with the molecular formula $C_6H_8O_6$ was named hexuron acid. In 1927 he defended his doctoral thesis written about discovering the hexuron acid at Cambridge University, and became a doctor of chemical sciences.

On 1 October 1928 he was appointed to professor of Szeged University, where he started his research and teaching activities as a professor of the medical chemical institute in 1931. As of 1931, he dealt with the research of vitamin C, whose exact composition was still unknown. However, Szent-Györgyi proved that the hexuron acid found in the adrenal and vitamin C is the same material. Following that, he succeeded in producing significant quantity of vitamin C from green pepper. His further researches covered, inter alia, biological oxidation, the examination of certain parts of the citrate cycle, which was not completely known at that time, and the exploration of the protein chemical background of mechanical muscular movement.

In 1937 he received the Nobel Prize in Physiology or Medicine for his research related to vitamin C, 'for his discoveries in connection with the biological combustion processes, with special reference to vitamin C and the catalysis of fumaric acid'. He offered the medal he received with the Nobel Prize to those who suffered from the Finnish war that broke out at that time. Later this medal was bought by Wilhelm Hilbert, a company director in Helsinki, who, in 1940, presented it to the Hungarian National Museum, where it is still preserved. In 1938 he became a member of the Hungarian Academy of Sciences.

In 1947 he left the country, and settled in Woods Hole, near Boston, where first he was the director of the Marine Biological Laboratory, then a professor of Dartmouth College. He devoted the last two decades of his life to cancer research. His important observation was the realisation of the role of free radicals in the development of cancer and the realisation of the radical catching role of vitamins (such as vitamin C). In 1972 he founded the National Cancer Research Foundation. In the 1960s he started to deal with politics as well. He wrote numerous articles in which he criticised the nuclear arms race, and in 1970 he also protested against the Vietnam War. In 1978 he was a member of the delegation that brought the crown jewels back to Hungary.

Albert Szent-Györgyi remained mentally and physically fit in his old age as well. He died in his home due to renal insufficiency on 22 October 1986. He was buried in the garden of his house on the shore of the Atlantic Ocean.

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