

The CER Essay series

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meets business insight

Railways and sustainable tourism

by Zoltán Pafféri, MAV
and Professor Bulcsú Remenyik, THE

CER Essays

The CER Essays initiative features a series of essays that show the rail sector as contributing not only to EU transport policy, but touching on different aspects of society at large. Topics covered by the initiative will range from modal shift, climate policy, infrastructure investment, high-speed rail, demography and more. Each essay will feature a different topic and be co-authored by a CER member CEO and a leading academic from the same country and will be used to spark debate among political stakeholders on the role of rail in the EU.



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About the authors



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Chairman-CEO, MÁV
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Mr. Zoltán Pafféri has a vast experience in the field of transport. Before his recent appointment, he held the position of Chairman-CEO at Volánbusz, a bus company offering passenger transportation in Hungary and beyond, since 2020. Between 2018 and 2020, Mr. Pafféri served as Deputy State Secretary for Corporate Portfolio of the Minister responsible for the Management of National Assets, which also included strategically important companies in the realm of transport (such as MÁV, Volánbusz, Hungarian Public Roads, HungaroControl Hungarian Air Navigation Services Pte. Ltd. Co.). Starting in 2018, he held management

positions at various companies in the field of transport, as a member of the Supervisory Board of Volánbusz, a member of the Supervisory Board and Audit Committee of RÁBA Automotive Holding Plc., a member of the Management Board of MÁV, and later of GYSEV. Prior to this, Mr. Pafféri worked at MÁV Hungarian State Railways Co. for nearly 10 years, where his assignments included leading key projects' management. Between 2016 and 2018, he was CEO of Chinese-Hungarian Railway Nonprofit Ltd., the company preparing the Budapest-Belgrade Railway Project.



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Bulcsú Remenyik has been researching sustainable tourism and hospitality in the field of regional and multidisciplinary sciences for more than a decade. His main research areas are sustainable tourism development in Budapest, transport and tourism development in Budapest and the sustainable development of lake tourism in Hungary.

He received his doctorate from the University of Pécs in 2007 and habilitated at Szent István University in 2018. He is the supervisor of the Budapest Business School's Doctoral School of Business Science and Economics and the Doctoral School of Economics and Regional Studies at the Hungarian University of Agriculture and Life Sciences, and has established a school at the university for doctoral students involved in research on sustainable and rural tourism. He has been participating in higher education since 2007 as an assistant professor and then as an

associate professor, and has been teaching at the Budapest University of Economics for 10 years. He is currently the head of the Tourism and Hospitality Department of Tokaj University. He is a member of the Regional Scientific Society of the IX. Department of the Hungarian Academy of Sciences, of the Hungarian Geological Society of the Hungarian Academy of Sciences (HUNGEO), former Secretary General of the Hungarian Society of Natural Sciences and an advisor to the President.

Remenyik's most cited articles were published in international economic and tourism journals on the subjects of the impact of the Hungaroring Grand Prix on the Hungarian Tourism Industry, the development of lake tourism in Hungary and the role of tourism in the development of border regions in Hungary.

Executive Summary

Travelling by train is one of the most environmentally friendly modes of travel, “if you choose this mode of transport, you have already taken a step **towards a greener future**” (MÁV, 2021). In the drafting of the “**White Paper**” on the future of Europe, it was important to relieve the burden on roads and reduce **emissions** through railway developments. During the construction of pan-European corridors, intra-continental journeys are to be diverted to railways, thus reducing the carbon footprint of air transport (Remenyik et al. 2015). More and more governments are banning the use of aircraft for domestic short-distance travel (Austria, France).

In Hungary, intercity transport is the most convenient and safest mode of transport. With the right vehicle purchases, railways can be the fastest and most reliable public service provider nationwide – ensuring a uniform, high level of service. In the future, the backbone network for public transport in rural Hungary could consist of multipurpose wagons of 21st century quality, and older intercity wagons could be moved to regional railway lines, providing quality improvement.

In Hungarian domestic traffic, train journeys can also be part of the travel experience, and the use of spectacular sites as an attraction could also lead to the designation of a railway line as a World Heritage Site (e.g. Semmering railway line in Austria). For the train-loving target group, Hungary is an ideal location, as besides the unique, thematic railway history park (Füsti), they can choose from

the beautiful railway museums, take part in steam locomotive nostalgia trips and travel with our forest railways.

MÁV-START has also made significant progress in **international rail passenger** transport in recent years, and the continuation of these developments is of paramount importance for geopolitical and social interests and will be further facilitated by purchasing high-speed trains (MÁV, 2021). Traditionally, the dining car is the pinnacle of the comfort offered by rail travel in international traffic, which, with improved offer and state-of-the-art technology can be an important complement to 21st century rail transport, offering a special competitive advantage for both domestic and international transport. The train's catering trolleys are suitable for presenting local cuisine and buying organic food grown locally.

From a **marketing perspective**, digital advertising is a cost effective and efficient way to reach a wide customer base, in particular younger age groups.

For the **railways of the future**, flexible pricing, the expansion of discounts and the promotion of tourist packages are increasingly important. Travellers are becoming more and more individualised, looking for personalised packages. As digitalisation develops, rail can work with external service providers on shared transport and hotel booking. Passengers can also sleep on the train, thus saving accommodation costs for the first and last night.

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Alberto Mazzola

CER Executive Director

Railways can help develop touristic destinations that are not adequately served by aviation, open new routes and foster new value chains.

The EU is the home to some of world's largest outbound markets and most visited destinations. In 2016, nearly 270 million EU residents (two-thirds of the then resident population) made at least one trip for leisure purposes, over half of which were international trips. According to the World Tourism Organization and International Transport Forum study from December of 2019¹, by 2030, transport-related CO₂ emissions from tourism will grow 25% from 2016 levels. This growth in CO₂ emissions will represent 5,3% of all man-made emissions in 2030 (from 5% in 2016). The same study also shows that travel for tourism purposes is predominantly done by air, followed by car. Consequently transport-related emissions from international tourism are expected to grow by 45% from 2016 to 2030.

New patterns of tourism development are needed to address tourism's environmental impact and overtourism. We recognise that data is an essential driver to identify these trends and for developing new mobility solutions that can accelerate modal shift. It will allow for tourism stakeholders to identify new opportunities and offer new services to their customers, something CER members recognise and which is the reason behind the development of the CER Ticketing Roadmap. The upcoming Data Space for Tourism also has great potential to make tourism more sustainable. It would seem apparent that there is no sustainable tourism without sustainable mobility and, while the EU is taking big steps in decarbonising transport, there is only one true sustainable transport mode for the moment. And that mode is rail.

In the post-COVID recovery, tourism-related mobility is expected to grow faster than business travel. In this context, action must be taken to help international, continental and national tourism resume to support broad sectors of the EU economy. Railways can help develop touristic destinations that are not adequately served by aviation, open new routes and foster new value chains. For European railways, it is an opportunity to meet the growing demand of climate-minded tourists, both young and old, on the market and contribute to economic growth in these regions while increasing

sustainable mobility options. It is also an opportunity to create public awareness of sustainable tourism and the new tourist routes that European citizens can discover thanks to rail connections across the continent. Rail and European youth have a particularly strong relationship thanks to initiatives like DiscoverEU and Interrail, helping young Europeans discover the continent and forge a European identity. The 2022 European Year of Youth was therefore a logical successor to the EU Year of Rail, and initiatives like expanding DiscoverEU to all 18-year-olds as a sign of EU citizenship offers more opportunities to further cement this relationship between young Europeans and rail.

Touristic modal shift to rail should be a concept developed and communicated through initiatives, with the joint support of the rail community, the European cultural industry and national and European representatives of the tourism industry. Thanks to the role of rail in European history and its role in the EU identity, the EU has many historic and scenic train routes for passengers, like the Orient Express from Paris to Venice, the rail route of Creusot crossing eastern and southern France, the Munich to Neuschwanstein Castle line in Germany, the rail itinerary of the d'Orcia valley in Italy, the Malopolska Train Routes in Poland, the Győr-Veszprém railway line in Hungary and many others across the continent.

In order to make a difference, both the railway sector and passengers need positive incentives in order to make the modal switch. European railway undertakings are doing their part. In the CER Ticketing Roadmap we commit that rail passengers will have a seamless user experience when searching, selecting and buying their railways services, Eurail celebrating its 50th anniversary gave special offers on Interrail passes and the European Commission has enabled EU Member States to give VAT exemptions to cross-border tickets. These are just some first steps. More concrete examples and a vision of European railways for sustainable tourism is to be found in this CER Essay.

1 <https://www.e-unwto.org/doi/book/10.18111/9789284416660>



The number of **international tourist** arrivals in Europe reached

770 million in 2019, with

a significant increase in visitor numbers bringing in USD 560 billion to the continent

(UNWTO, 2020).

Introduction: The role of railways to establish sustainable tourism

The number of international tourist arrivals in Europe reached **770 million** in 2019, with a significant increase in visitor numbers bringing in USD 560 billion to the continent (UNWTO, 2020). The European Union uses almost 20% of the earth's biocapacity, while it comprises **7%** of the world's population (WWF, 2019). 70% of the EU's 500 million citizens are city dwellers and it is expected to increase to 80% by 2030, with the ecological and carbon footprint of large cities on an upward trend.

In 1996, the World Trade Organisation (WTO) and the World Travel and Tourism Council (W TTC) developed the report *Agenda 21 on Travel and Tourism - Towards Environmentally Sustainable*

Development, which also provided a definition of sustainable tourism development: "Sustainable **tourism development** meets the needs of current tourists and their host areas on the one hand and protects and enhances the opportunities of the future" (Agenda 21, 1996).

In 2005, the United Nations Environment Programme (UNEP) adopted this **definition** of sustainable tourism, according to which "sustainable tourism takes full account of current and future economic and social environmental impacts and the needs of tourists, industry, and the environment and host communities" (UNEP, 2005).

Sustainable tourism is **operational** (Figure 1) if it can **continuously** ensure the availability of resources for the realisation of the visitor experience. Visitor feedback provides tourists with information about the authenticity of **quality** experiences. The solutions used create a link between the industrial sector, the local community and tourists, thus creating a **balance** with the natural environment at the heart of it (Szalók-Remenyik, 2020).

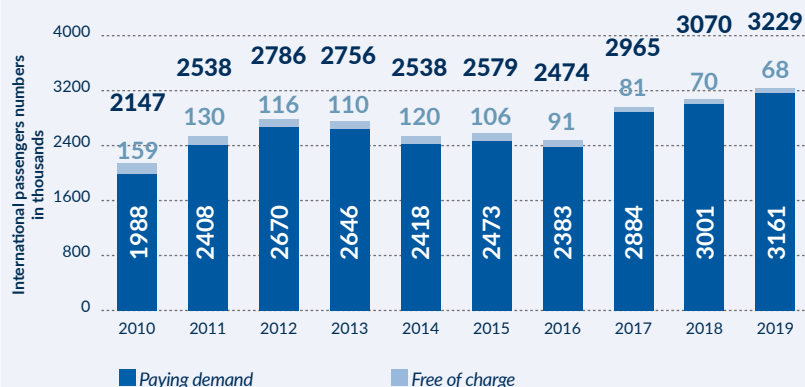
FIGURE 1. THE BASIC PRINCIPLE OF RESPONSIBLE TOURISM



(Pafféri-Remenyik, 2022)

In the area of tourism, railways as a transport sector play the role of an **intermediary sector**, **creating a link** between the tourist (demand) and the destination (supply). Railways play an important role in the operation of sustainable tourism and can continuously provide quality services to those affected, thus striking a balance between tourists, tourism industry participants and the local population.

FIGURE 2. EVOLUTION OF INTERNATIONAL PASSENGER PERFORMANCE (PAFFÉRI-REMENYIK, 2022)



The role of railways also has a significant influence on tourism at international level, with passenger traffic increasing year on year (Figure 2). In addition to tourism and business trips to Western Europe and the Visegrád Four (V4) countries (Czechia, Hungary, Poland, and Slovakia), the construction of high-speed rail in Europe is an important direction of development for Hungarians living beyond the border and among the West European diaspora. Due to its comfort and sustainability, travelling by train under 1,000 kilometres could be more competitive than road or air travel.

Today, rail transport in the European Union is the least polluting form of transport. The Association of Train Operating Companies (ATO) estimates that an electric high-speed train emits only a quarter – or even less – of carbon dioxide of that emitted by a short-haul flight (GREENPEACE 2021, BUND 2022). According to a poll conducted by SilverRail Technologies, 90% of respondents would replace the plane with a high-speed train for short journeys, and 86% would take an hour longer journey to avoid airport boarding procedures. The Hungarian State Railways (MÁV), Eurostar, Deutsche Bahn (DB) and the Austrian State Railways (ÖBB) have also announced a special programme to significantly reduce their

CO₂ emissions by 20-30% over the next decade. In the first call for proposals of the EU Horizon Europe Programme (2020-2027), railway companies can apply for research projects worth € 390 million. The Railway Sustainability Index, launched in 2022 as a joint European Union partnership, helps companies to invest sustainably. (Vasutas Magazin 2022).

In today's postmodern tourism, it is becoming increasingly important to provide **diversified, environmentally conscious, fast and convenient access** to tourist areas. Sustainable tourism implemented in the future will provide **an important role for railways**. This means transport should be involved in developing a responsible type of tourist, as sustainable tourism can only be created this way. The international rail network of the European Union can be divided into four groups in terms of tourism: **international train routes, regional train routes, the railway as a tourist attraction and MotoRail trains**.

The largest percentage are international trains, aiming to connect European tourist destinations with each other. The most popular trains among tourists are the French TGV, the German Alleo, the British-French-Belgian Eurostar, the Italian Artesia & Thello, and the Spanish Elipsos Internacional. These trains make the best use of the branding system, their wagons are divided into business, family and leisure sections, they have a DVD rental service, and also a massage service.

In 2015 and 2020, the World Tourism Organization (UNWTO) issued guidance on the creation of a responsible type of tourist (Figure 3).

FIGURE 3. CHARACTERISTICS OF A RESPONSIBLE TOURIST



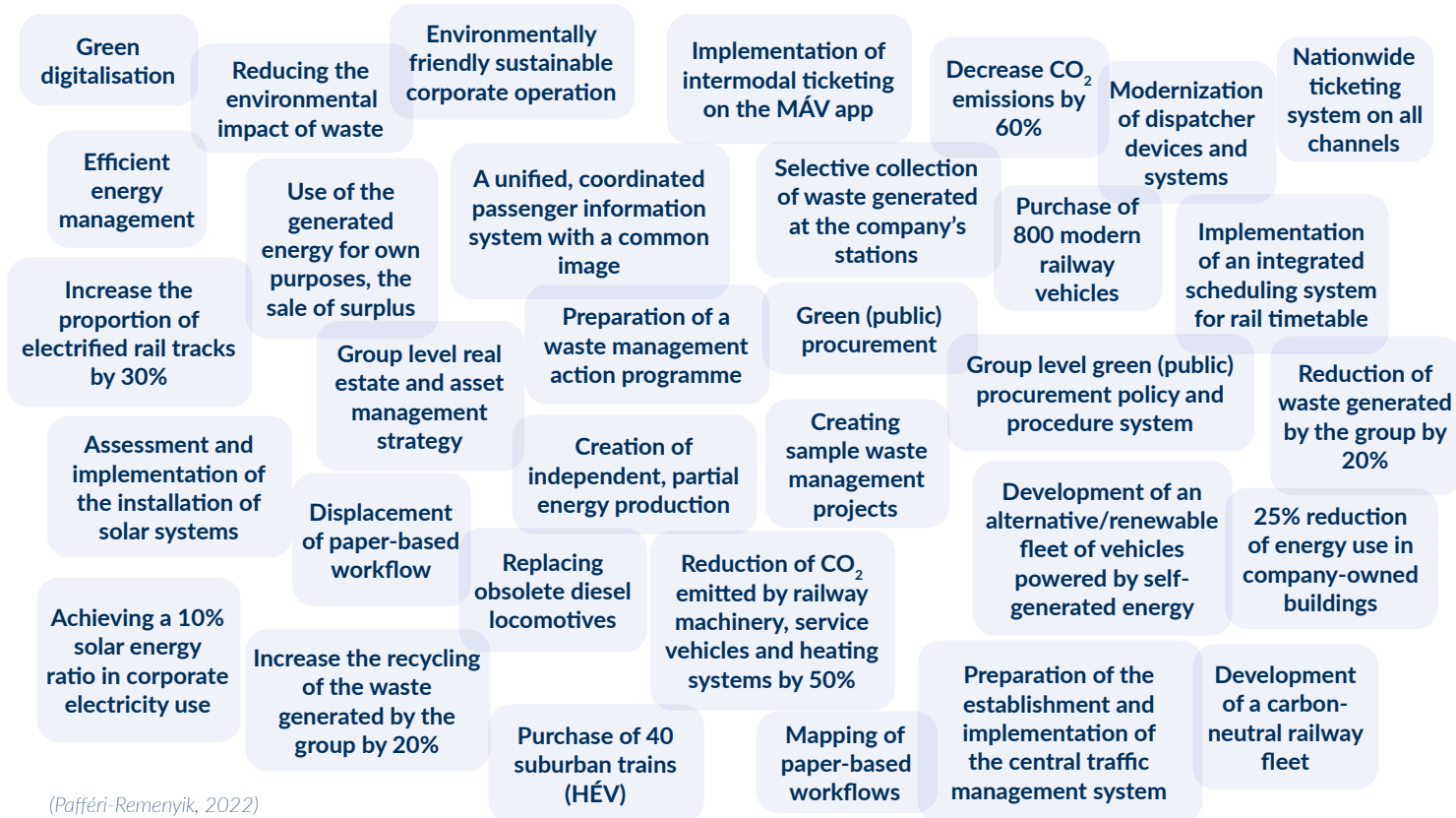
(Pafféri-Remenyik, 2022)

Economic sustainability and tourism

In terms of economic, social and environmental sustainability, creating a balance (reliable operation), creating quality and ensuring continuous visitor experience is the way to develop sustainable tourism. **From the point of view of the economy, sustainability is important because crises that are recurrent according to the tourism cycle theory are bringing ever deeper waves. Sustainable tourism can reduce the swing of cycle waves** (Remenyik et al. 2021).

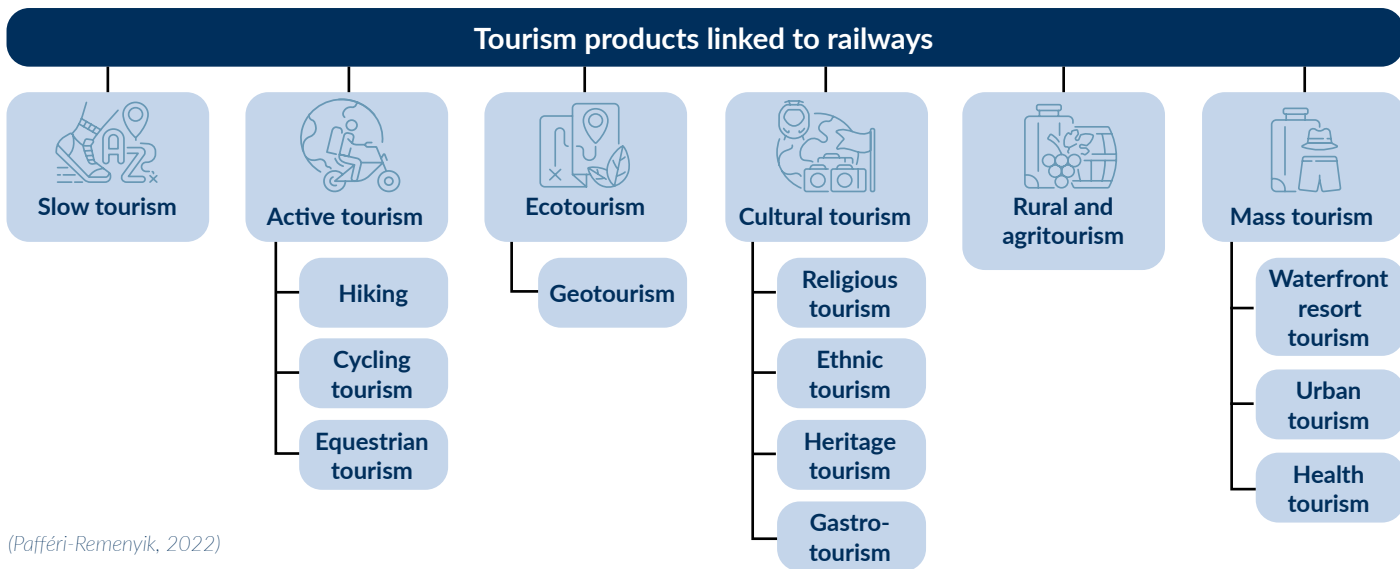
The **Sustainability Strategic Objective** of the MÁV-Volán Group (MÁV, 2020) was established to ensure the sustainable functioning of the economy. In line with the sustainability strategies of CER and UIC, the Hungarian railway company has also decided to become climate neutral by 2050 (Homolya, 2021). Among other objectives, it is also committed to further reducing CO₂ emissions, increasing green digitalisation, decreasing the environmental burden of waste, creating a sustainable and circular economy, efficient energy management and environmentally friendly corporate operation by 2030 (Table 1).

TABLE 1. COMMITMENTS IN THE SUSTAINABILITY STRATEGY OF THE MÁV-VOLÁN GROUP UNTIL 2030



(Pafféri-Remenyik, 2022)

FIGURE 4. TOURISM PRODUCTS LINKED TO RAILWAYS



(Pafféri-Remenyik, 2022)

Thanks to its reliable operation, the railway system is in close synergy with a relatively large number of tourism products (Figure 4) and can **become an attraction itself** in terms of slow tourism.

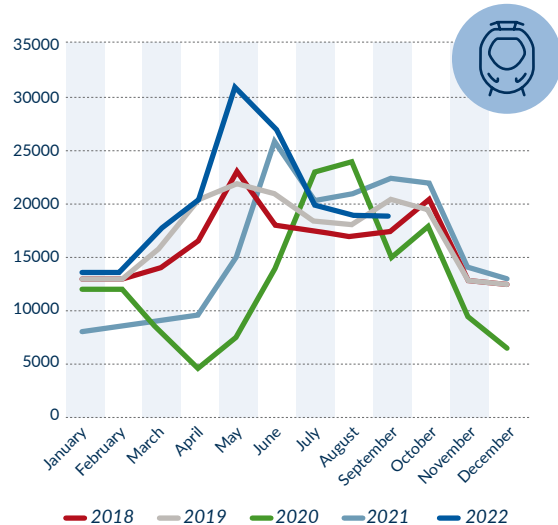
Participation in slow tourism, based mainly on the model of the Swiss Glacier Express, can be built across the country, such sections already exist today, but their numbers can be further increased:

- The Győr-Veszprém railway line sections rich in romantic landscapes and monuments,
- The Eger-Putnok mountain railway line between Eger and Szilvásvárad,
- The Panorama of Lake Balaton on the Székesfehérvár-Tapolca railway line,
- The Börzsöny and Ipoly sections with romantic views of the Vác-Balassagyarmat railway line,
- The Balatonfenyves “wetlands and reeds” light rail network.

The changes of the passenger traffic of the Győr-Veszprém line (Figure 5) show that due to its

new schedule, vehicle developments and tourist attraction, the number of visitors increases every year during the summer season.

FIGURE 5. CHANGES IN PASSENGER TRAFFIC FROM 2018 TO 2022 ON THE GYŐR-VESZPRÉM LINE



(Pafféri-Remenyik, 2022)

From an economic point of view, quality improvement of railways is considered continuous (Integrated Transport Development Operational Program, CEF, GSM-R system). Several important sections of the Trans-European Transport Network

(TEN-T) run through Hungary (10 strategic railway routes), making it an important transit country from the point of view of the European Union and tourism (Figure 6).

FIGURE 6. INTERNATIONAL DESTINATIONS



(MÁV, 2022)

In terms of economic sustainability, **marketing communication activities** carried out by MÁV play an important role in the field of tourism development, with which they try to reach all age groups. The **Kajla programme** for young people was launched in June 2019 and was a large-scale domestic tourism demand-boosting and educational campaign. The aim of the campaign is for primary school children (grades 1-4) to discover the wonders of Hungary together with

their parents and a Hungarian vizsla puppy, Kajla. As part of the campaign, by presenting the Kajla passport, children were able to visit a total of 41 attractions in Hungary during the holidays. They could also use a Kajla app, where Kajla the dog presented the attractions one by one and shared special information and stories about the attractions with the students.

The “SEA←YOU Sleep to Sea” campaign, which promotes MÁV-START’s coastal journeys, addressed younger generations. On the Adriatic express train, holidaymakers were able to travel directly to Split, on the Dalmatian coast, on **hotel-like** sleeping and dining cars. The operation of nighttime sleeper trains shows the merger of MÁV-START’s national business and tourism. Lonely Planet has presented

ten of the most beautiful or adventurous train paths in Europe, including the MÁV Adria IC (Lonely Planet, 2022). Night trains (Figure 7) will play a role in strengthening international urban tourism in a rapidly urbanised Europe, in addition to coastal resort tourism. With the advent of high-speed sleeper and couchette cars, travel to Brussels and Paris can also become profitable.

FIGURE 7. DIRECTIONS FOR NIGHT ROUTES



(MÁV, 2022)

On the domestic market, MÁV-START, as a public service railway company, was able to organise its own trips only within a limited framework, even with having tour operator licenses. The operation of special trains for tourism purposes is mostly based on an order from a partner. Experience railway journeys are typically organised by MÁV Rail Tours Kft. Among the tourist-themed train routes, special tourist trains to foreign countries (e.g. Advent trains) and domestic special trains to

large events (e.g. student camps, university camps) are the most popular. Pilgrimage trains run on the Hungarian railway network on a regular basis. In the years before COVID-19, MÁV-START also provided significant capacity for the Pentecostal pilgrimage to Şumuleu Ciuc (Csíksomlyó), a famous Hungarian Roman Catholic pilgrimage site in Romania. The year 2021 was considered outstanding, because due to the Pope’s visit, seven special trains travelled to Budapest for the Eucharistic Congress. The number

of special trains for sports fans is also increasing, and has become a research topic mainly in the field of safety and tourism (Forman, 2021). Most of the trains run at the request of the Ferencváros Gymnastics Club and the Budapest Honvéd Football Club.

TABLE 2. THEMATIC SPECIAL TRAINS

Pilgrimage special trains	20 trains	capacity 15 790 persons
Special trains for sports fans	18 trains	capacity 12 105 persons
Special touristic trains to abroad	45 trains	capacity 12 712 persons
Domestic self-organised group trips with scheduled trains (city visits, health tourism, etc.)	117 groups	number of passengers (round-trip) 6 011 persons

(Pafféri-Remenyik, 2022)

MÁV-START has been organising retro weekends for several years, where passengers can typically travel by locomotives and carriages from the 1970s and 1980s. In 2021, four events took place, two on the northern shore of Lake Balaton, one around Miskolc and one in the South Great Plain. In domestic trade (the Danube Bend day ticket, the Balaton24 and Balaton72 tickets, as well as the Bakony day ticket), the packaged trips are also included in the offer of the tour operators, as a result, many trains, buses and boat services can be used with a single fee product. MÁV also announced an awareness-raising programme as part of the Green Railways campaign: CO₂ emissions saved during rail travel are **indicated on the ticket** by the railway company, which may be as much as 70% lower than doing the same trip by personal car.

From a social point of view, sustainable tourism improves the quality of life and income of tourists, local people and businesses living on tourism.

TÓTH-REMEYIK-TARDY, 2019

Social sustainability

Railway developments can improve the accessibility of tourist destinations, and this is one of the most important considerations for younger generations when making a travel decision. In order to diversify transport systems, MÁV-Volán Group also cooperates with other elements of shared transport (bicycle and scooter transport), helping to create P+R and B+R car parks, all of which contribute to the increase of tourist attractions' accessibility. The construction of shared transport and the development of green railway stations make our cities and towns more livable and greener. The Stuttgart and the new Vienna railway stations are examples of best practice in the construction of green railway stations. In addition to the design of parks, green areas, residential and work areas, the buildings

are made of recycled stone, solar panels are used to meet the building's electricity and water needs, wind turbines for electricity generation and rainwater harvesting for waste management. The green redesign of the Budapest Nyugati Railway Station is also in progress, with the involvement of world-famous architectural teams.

From the point of view of tourists and local residents, while the costs of individual transport are increasing dramatically, rail ticket prices have not increased for 10 years, with many social benefits and even smart tickets and combined tourist ticket offers making the services offered by rail available to everyone in the recent times. (Pafféri, 2022).

Combined train tickets bring significant savings for tourists, and are more cost effective for passengers than buying a separate ticket for each section. The two most important ticket types are Eurail and Interrail, founded in 1959 and in 1972 respectively. TopRail, a project of the International Union of Railways (UIC) aims to increase the visibility of rail tourism products and to promote training and tourism opportunities through stakeholder collaboration. There are also a number of EURegio ticket types that make it easy and low cost to explore a cross-border region. DiscoverEU, in the framework of Erasmus+ programme, is an opportunity for 18-year-olds across the EU to gain new knowledge and lifelong experiences when travelling across Europe. Passengers can explore Europe's diverse landscapes and highly interesting settlements, especially by rail.

In addition to the above, it is a socially important issue to create a responsible type of tourist. The responsible tourist actively strives to reduce the harmful effects of their travels, while contributing to the wellbeing of the population of the destination, the place and the environment. As a railway task, the need to raise passengers' awareness, to help them make conscious choices and to (rediscover) green solutions remains an important issue.

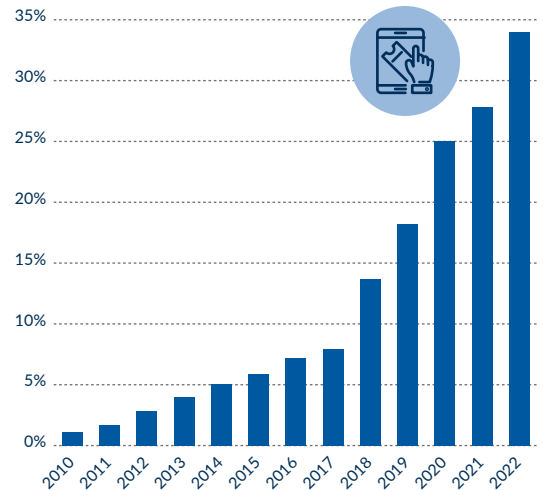
Internationally, MÁV-START makes Central and Eastern European cities accessible to tourists (a high-speed rail connection can be established between them within 8-10 years). With the operation of international and night trains with high quality on-board service, the Hungarian railway can compete with the more polluting short-haul air transport in journey times and comfort. In recent years, the railway company has also undergone a lot of changes in the areas of on-board comfort, group travel, public safety, speed, cycling and hospitality.

In the field of digital sustainable tourism and hospitality, smart solutions are best able to **continuously** ensure the availability of resources for the visitor experience. Visitor feedback gives tourists information about the authenticity of **quality** experiences. Digital solutions create a link

between the industrial sector, the local community and tourists, thus **striking a balance** with the natural environment at the heart of it.

One of the advantages of digital devices is that they eliminate language communication barriers, as these smart solutions are available in several languages and foreign guests can easily and quickly order different services with the help of applications.

FIGURE 8. INCREASE IN ONLINE TICKET SALES AS A PERCENTAGE OF TOTAL DOMESTIC TICKET SALES



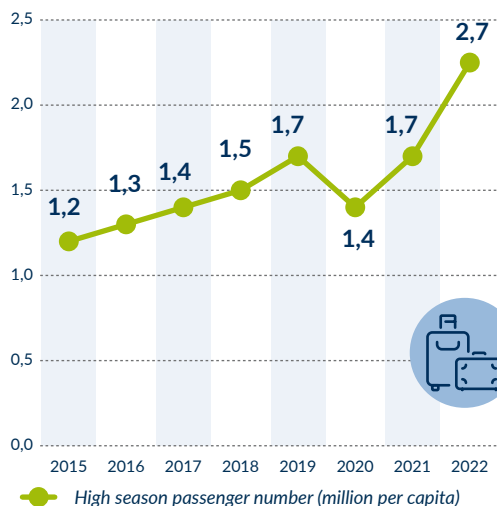
(Pafféri-Remenyik, 2022)

Young generations (Y, Z and Alpha) are increasingly using online services, as exemplified by the rapid increase in online ticket sales of MÁV-START (Figure 8). With the further expansion of online channels, the service can be made more passenger-friendly, with the increase of pre-purchase of tickets, capacities can be planned more easily, and the quality of service increased (Hegyí, 2021). You can also green your sales process by reducing the paper ticket ratio. European governments also support the spread of digital solutions, which make business operations more transparent and also circumvent labour shortage in certain jobs (e.g. replacing a call centre with a chatbot).

Environmental sustainability and tourism

Environmental sustainability means the development of slow tourism, this tourism product can be interpreted as a concept, a development opportunity and a product-based approach (Pécsek, 2014). Slow tourism is “a journey in which tourists also explore the area surrounding the destination, usually travelling on foot or by bike, although they can use other means of transport. During their journey, those on slow journeys interact more with people around them, places, culture, food, cultural/local heritage and the environment than other tourists would otherwise do so. They usually (but not only and exclusively) stay in self-catering accommodation, they can arrive by train, car, bus or boat.” (Dickinson, 2010).

FIGURE 9: DEVELOPMENT OF HIGH-SEASON PASSENGER NUMBERS AT LAKE BALATON IN MILLIONS



(Pafféri-Remenyik, 2022)

The continuous increase in the number of passengers in the high season at Lake Balaton shows that more and more tourists are choosing the services provided by the railways (Figure 9).

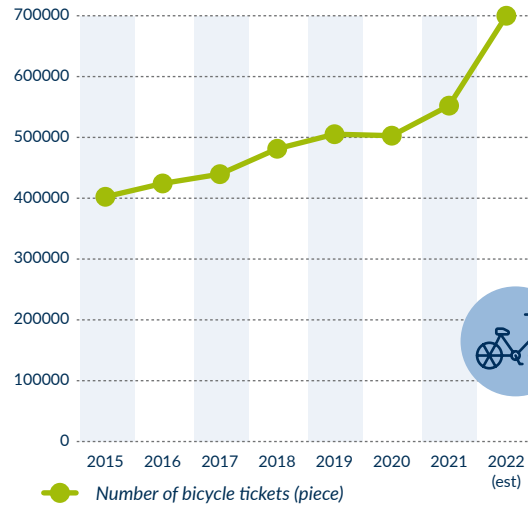
According to the Sustainable Tourism Program of the Balaton Priority Area (Balatonregion, 2020), the air quality of the area can be improved with the high-quality rail service. On the roads leading to the lake, the number of traffic jams can be reduced, the number of parked vehicles decreases, which increases the overall quality of life of the public areas of the Balaton coast. The 24-hour accessibility of the destination (owl trains) is also important from the point of view of traffic safety and the livability of Lake Balaton. At EU level, the High Tatras in Slovakia, the French coast, Lake Como in Italy and ski resorts in Austria and Germany are also such tourist destinations.

In the course of railway developments, regional public transport in rural Hungary can become more economical, sustainable, greener, and more competitive. Transport congestion and parking problems present in the countryside can be reduced, and the long-standing problems of the sidelines can be addressed with considerable social utility. The majority of regional railway lines can once again become competitive transport corridors in rural Hungary, filled with new content and service concepts, but this requires the replacement of the fleet, infrastructure interventions on a reasonable scale, an interoperable tariff system and coordinated regional timetables.

Environmental sustainability assessment is the most important of all elements, because the use of tourism services involves above-average consumption in all respects and has a strong impact on its environment.

TÓTH-REME NYIK-TARDY, 2019

FIGURE 10. EVOLUTION OF THE NUMBER OF BICYCLE TICKETS ON THE LINES OF MÁV



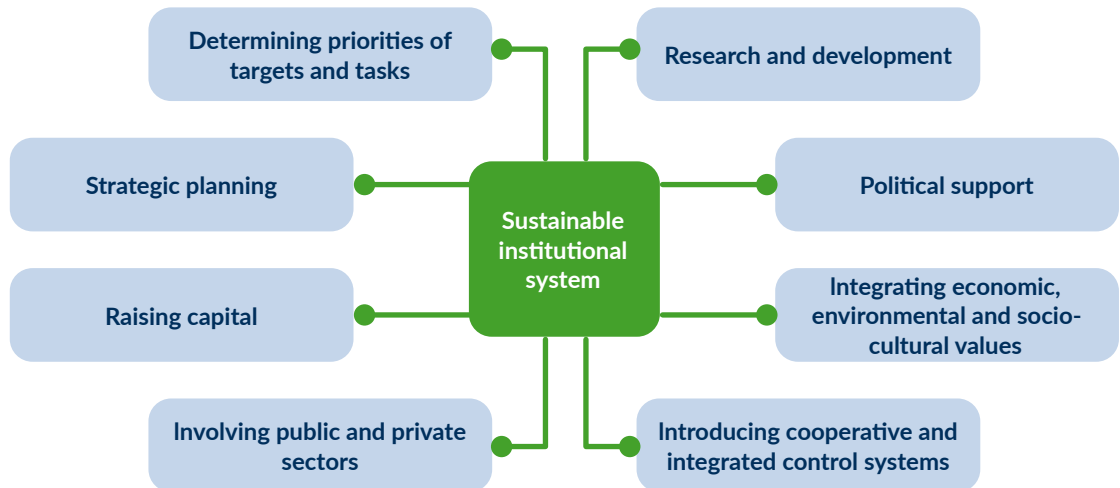
In shared transport, the combination of railways and bicycles ensures quick and comfortable access (Figure 10), which is able to reduce the use of motor vehicles in daily professional traffic, allows for experiential transport for the planning of excursions, makes transport easier than using a car, and makes the route informal and diversified with different departure and arrival locations, reducing the environmental impact of transport. Bicycle transport is considered to be the most dynamically growing passenger transport segment of MÁV-START (Kormányos, 2021). The railway company is one of the most competitive service providers for cyclists throughout Europe and nationally.

In conclusion, the balance of sustainable tourism can be guaranteed by a well-established sustainable institutional system and quality tourism (Figure 11).

The quality tourism to be built by rail is aimed at natural areas, contributes to the preservation of local values and minimises the negative environmental, cultural and social impacts of tourists.

(Pafféri-Remenyik, 2022)

FIGURE 11. DIAGRAM OF A SUSTAINABLE INSTITUTIONAL SYSTEM



(Pafféri-Remenyik, 2022)

Bibliography

Balatonregion 2020: https://balatonregion.hu/wp-content/uploads/2020/07/Koncepcio_2014-2030_aktualiza%CC%81lt_2020.pdf

BUND, 2022: www.bund.net/fileadmin/user_upload_bund/publikationen/mobilitaet/mobilitaet_flug.pdf

CER, 2012: http://www.cer.be/sites/default/files/publication/CER-UIC_Sustainable_Mobility_Strategy_-_SUMMARY.pdf

Dickinson, J. 2010: *Slow Travel and Tourism*. Earthscan. London

Forman, B. 2021: Mi lesz veled magyar vasút a válság után? Mobilitás Konferencia. https://www.uni-corvinus.hu/fooldal/kutatas/intezeti-kutatokozpontok/turizmus-tovabbkepzo-es-kutatokozpont/konferenciak/#accordion-item-vegleges_programterv

GREENPEACE 2021: <https://www.greenpeace.de/klimaschutz/mobilitaet/zug-flug>

Hegyi, Zs. 2021: Szolgáltatásfejlesztés: célkeresztben az utazási élmény. KTE konferencia. Siófok. https://www.ktenet.hu/uploads/Hegyi_Zsolt.pdf

Homolya, R. 2021: Közös úton a MÁV-Volán csoport. XXI. Közlekedési és Beruházási Konferencia. Bükkfürdő. <https://protect-eu.mimecast.com/s/8f62CGZYt725UKkJc?domain=ktenet.hu> <https://www.ktenet.hu/uploads/Bukfurd%202021/Dr%20Homolya%20Robert.pdf>

Interrail, 2020: <https://www.interrail.eu/en/plan-your-trip/sustainable-tourism-europe/what-is-sustainability>

Kormányos, L. 2021: A távolsági személyszállítás fejlesztési lehetőségei a világjárvány után. XXI. Közlekedési és Beruházási Konferencia. Bükkfürdő. <https://protect-eu.mimecast.com/s/lc8DCJZYtJgEcG3EXi?domain=ktenet.hu> <https://www.ktenet.hu/uploads/Bukfurd%202021/Dr%20Kormanyos%20Laszlo.pdf>

Lonely Planet, 2022: *Lonely Planet's Guide to Train Travel in Europe*

MÁV, 2021: https://www.zoldkozossegi kozlekedes.hu/sites/default/files/2021-04/mav-volan-csoport_fenntarthatosagi_kiadvany.pdf

Pafféri, Z. 2022: Vezetői interjú. *Vasutas Magazin* 72/10. 4-7. https://www.mavcsoport.hu/sites/default/files/upload/page/vm_okt_new_webre.pdf

Pécsék, B. 2014: Gyorsuló idő, lassuló turizmus: a lassú turizmus modellezése. *Turizmus Bulletin* XVI. évf. 1. szám. pp. 3-9.

Remenyik, B. et al. 2015: *Közlekedéscsoporthoz és turizmus. Dialóg-Campus Kiadó. Budapest. 167p.*

Remenyik, B. et al. 2021: The correlation between the responsible flying and changes in the tourism. *Economic Annals-XXI*. 190(5-6,2) pp. 86-98.

Szalók, Cs. - Remenyik, B. et al. 2020: Fenntartható turizmus. BGE. Budapest. <http://skill4work.com/lms/mod/scorm/player.php?a=327&curentorg=SP&scoid=694&sesskey=pyzBHh5xdE&display=popup&mode=normal>

Tóth, Z. - Remenyik, B. - Tardy, J. 2019: Fenntartható turizmus. MTTE. Budapest. http://mtte.hu/sites/default/files/kiadvanyok/2021/van-jovonk_VP2-K_vegleges.pdf

UIC Sustainability, 2019: <https://uic.org/sustainability/>

UNWTO, 2020: *International Tourism Highlights*. <https://www.e-unwto.org/doi/pdf/10.18111/9789284422456>

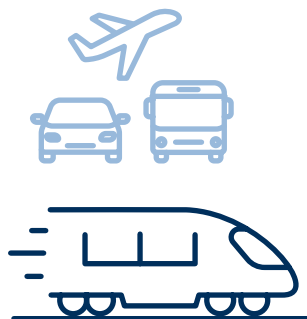
Vasutas Magazin 2022: www.vasutasmagazin.hu/hirek/lisszabonban-ulesezett-nemzetkozi-vasutegylet-europai-vezeto-bizottsaga

WWF, 2019: <https://www.wwf.eu/?uNewsID=346835>

Key facts



The number of international tourist arrivals in Europe reached **770 million** in 2019



Travelling by train under 1,000 kilometres could be **more competitive** than road or air travel.

According to a poll conducted by SilverRail Technologies, **90% of respondents would replace the plane with a high-speed train** for short journeys, and **86%** would take an hour longer journey to avoid airport boarding procedures.





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MAV Co.

MAV Hungarian State Railways Co. is Hungary's state-owned railway company with more than 150 years of history. The main activities of MAV Co. and its subsidiaries cover the operation of railway lines of 7260 kms and passenger transport services. The MAV-Volan Group including Volanbusz Co., providing public interurban and long-distance bus services, is Hungary's largest public transport group and one of the country's largest employers, with nearly 57,000 employees. Today, Volanbusz and MAV annually serve around 600 million and 140 million passengers, respectively.

In recent years, the state invested around EUR 3.6 billion in the modernisation of railway lines using EU funds. An ongoing priority project is the development of the Budapest-Belgrade railway line with more than 150 kms of double-track section. In addition, the modernisation of the rolling stock is in progress with the purchase of 40 double-decker KISS motor trains and 123 FLIRT trains, serving among others in the agglomeration of Budapest. A unique development is TramTrain, which has been running between Hódmezővásárhely and Szeged in the South of Hungary for a year now. Furthermore, the railway company developed IC+ wagons. As a result, 55 accessible, multipurpose second-class coaches and 28 first-class coaches with a bistro, all produced in Hungary are already in service. The renovation of Budapest's main railway stations is also under way, thus in October 2022 the 145-year-old Nyugati Railway Station, designed by the Eiffel Company, was partly renewed.

The Budapest Children's Railway operated by MAV, running through hiking spots of Budapest's hills, was entered in the Guinness Book of World Records in 2015 as the longest narrow-gauge railway line in the world where traffic and commercial services are provided by children.

University of Tokaj

The University of Tokaj is dedicated to restore the formerly internationally outstanding religious, cultural, historical, political and economic role of the Tokaj-Hegyalja region in northeastern Hungary. The university, as legal successor of Sárospatak Teacher Training College historically founded in 1857, became independent on 1 August 2021. Building on the cultural heritage of past centuries and the traditional values of Comenius, the leading pedagogue of the 17th century invited to Sárospatak, the institution aims to raise educational standards, and to strengthen the region's cultural, scientific, touristic and economic attractiveness. The university seeks to assist the contemporary synthesis of Sárospatak's 500-year educational tradition of Comenius and Tokaji wine culture – also world heritage since 2002 – in cooperation with the region's leading local council figures. Tokaj-Hegyalja Region is also accessible by rail on two main railway lines.

CER

The Community of European Railway and Infrastructure Companies (CER) brings together railway undertakings, their national associations as well as infrastructure managers and vehicle leasing companies. The membership is made up of long-established bodies, new entrants and both private and public enterprises, representing 71% of the rail network length, 76% of the rail freight business and about 92% of rail passenger operations in EU, EFTA and EU accession countries. CER represents the interests of its members towards EU policy makers and transport stakeholders, advocating rail as the backbone of a competitive and sustainable transport system in Europe.



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