Green transport plans in Slovakia based on 2030 targets

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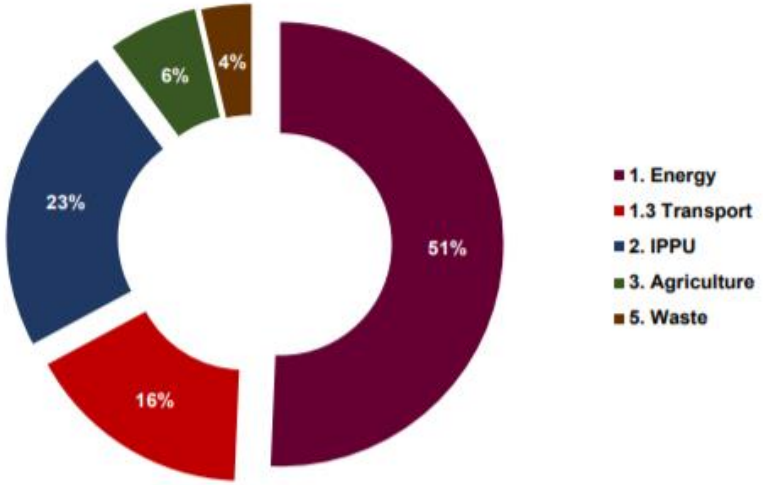
Slovak Foreign Policy Association

Low-emission transport

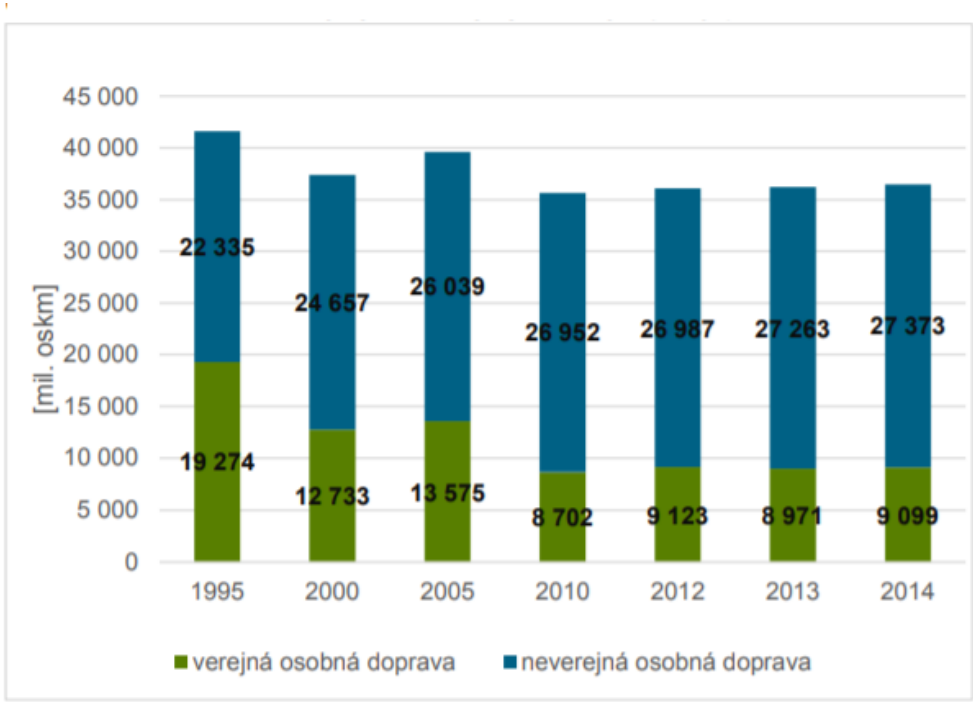
- Ministry of Transport and Construction
- Ministry of Economy
- Ministry of Environment
- Ministry of Finance
- Ministry of Investments, Regional Development and Informatization
- Ministry of Agriculture

Main problems

- Emission increase in transport sector (12 % increase; 58 % increase in road transport compared to 1990 levels)
  - Risky sector to reach 2050 climate neutrality
- Increasing share of individual transport
- Air quality
- Potential for emission decrease / air quality improvement: transport, heating, energy efficiency



Source: SHMI

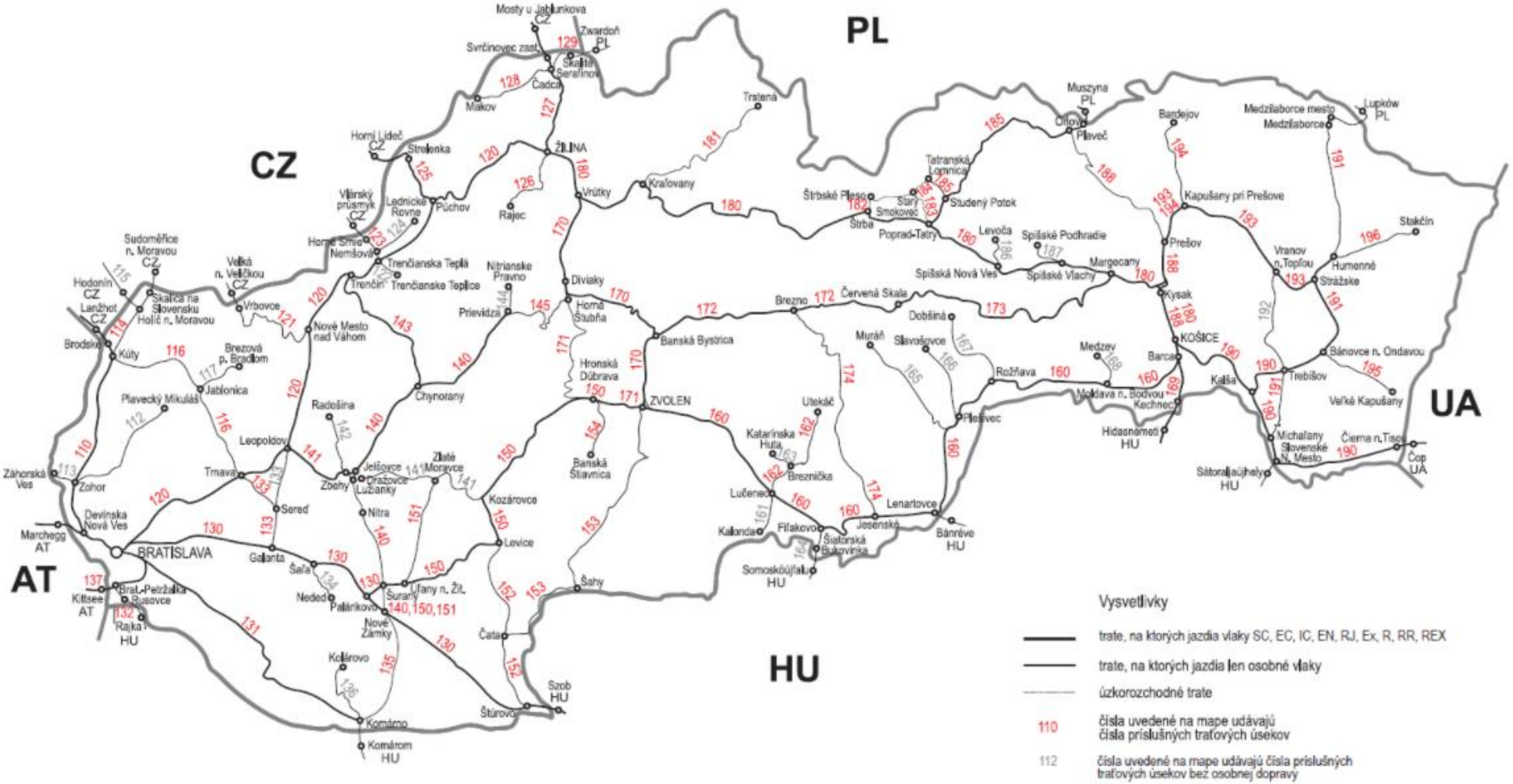


Key documents

- National Policy Framework for the Development of the Alternative Fuels Market (Government Resolution No 504/2016)
- Action plan for electro mobility development (2019)
- Low carbon Strategy (2019)
- Environmental Policy Strategy of the Slovak Republic until 2030 (2019)
- Strategy for the Adaptation of the Slovak Republic to Climate Change - Update (Government Resolution No 478/2018)

Strategic Plan for the Development of Transport of the SR to 2030 (Government Resolution No 13/2017)

- Support for the creation and deployment of integrated transport systems
- Modernisation of transport infrastructure, including intermodal freight terminals
- Increasing energy efficiency in freight transport
- Soft measures aimed at driver behaviour to reduce energy consumption and energy intensity



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trate, na ktorých jazdia vlaky SC, EC, IC, EN, RJ, Ex, R, RR, REX
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úzkorozchodné trate
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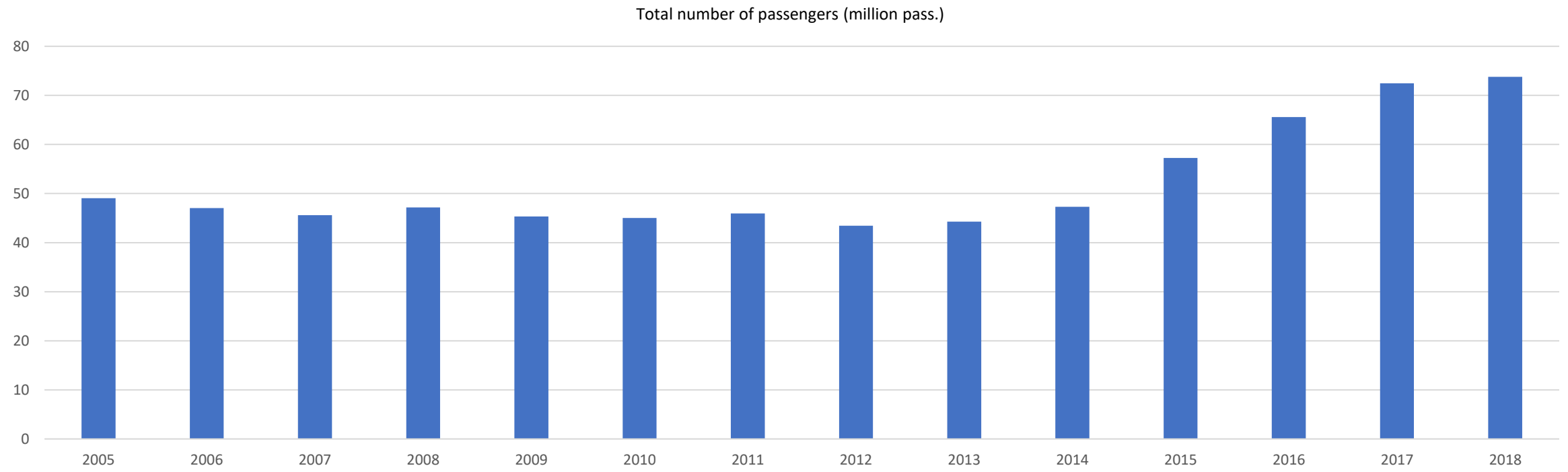
čísla uvedené na mape udávajú čísla príslušných traťových úsekov
112
čísla uvedené na mape udávajú čísla príslušných traťových úsekov bez osobnej dopravy

Objectives

- increasing the share of public passenger transport, in particular passenger rail transport
- increasing the share of rail freight by transfer from road freight
- improving the efficiency of rail transport operations



2030 targets

- National Energy and Climate Plan
  - 14 % share of RES in transport
  - National Traffic Information System
  - Methodological guide on assessing the impacts of climate change on large projects in the transport sector
  - Low-emission zones working groups

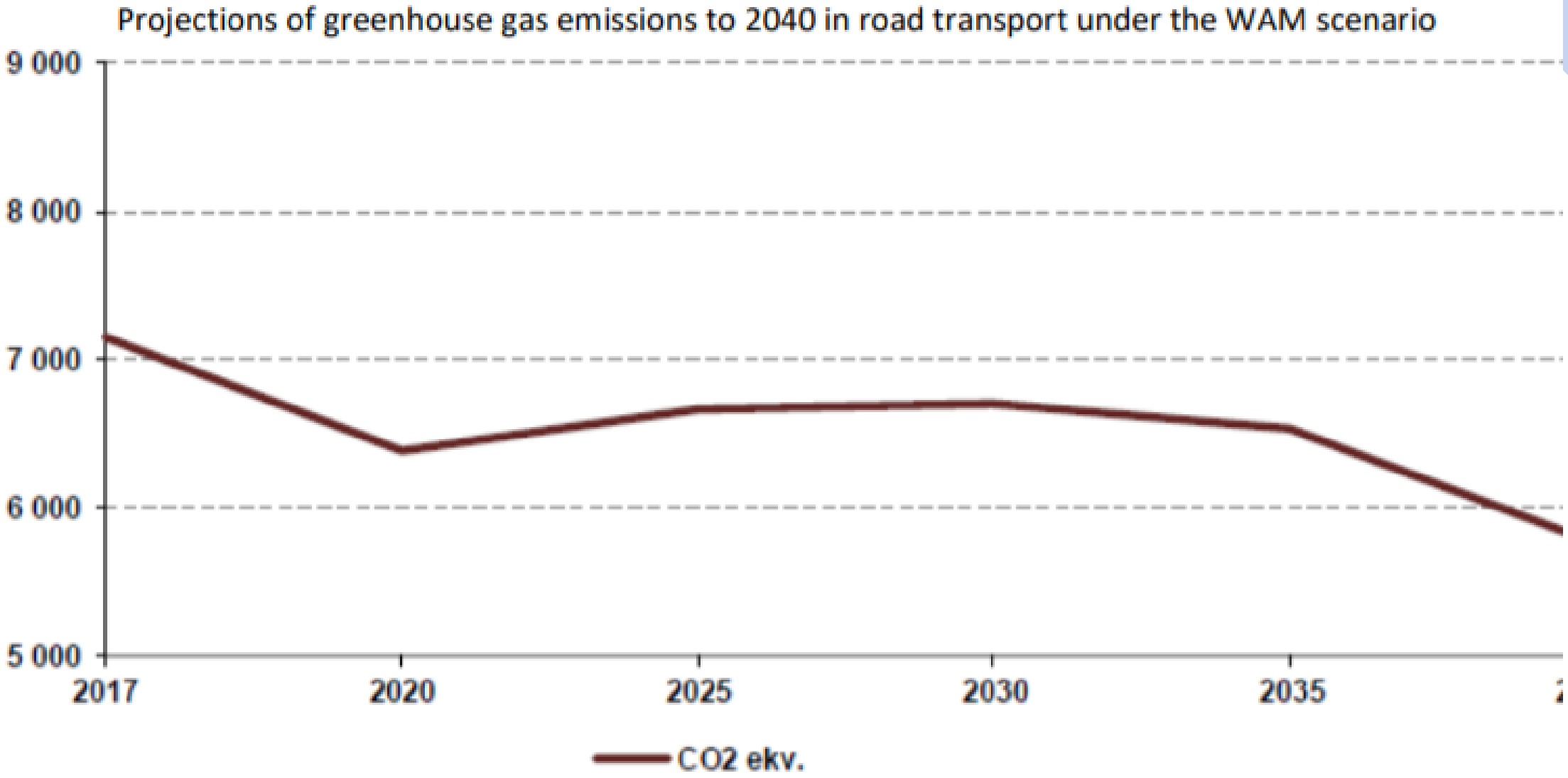
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
RES – heat & cold generation (%)	13.0	14.3	14.6	15.2	16.1	16.7	17.5	18.1	18.5	19.0
RES – electricity generation (%)	22.4	23.4	23.9	24.4	24.8	25.9	26.4	26.7	27.0	27.3
RES – transport, including multiplication (%)	8.9	9.2	9.5	9.7	9.8	10.4	10.7	11.2	12.3	14.0
Overall RES share (%)	**14.0**	**15.0**	**15.4**	**15.8**	**16.4**	**17.1**	**17.8**	**18.2**	**18.7**	**19.2**

Source ME SR

Anticipated fuel consumption in the transport sector for the 2017-2040 period under the WAM scer

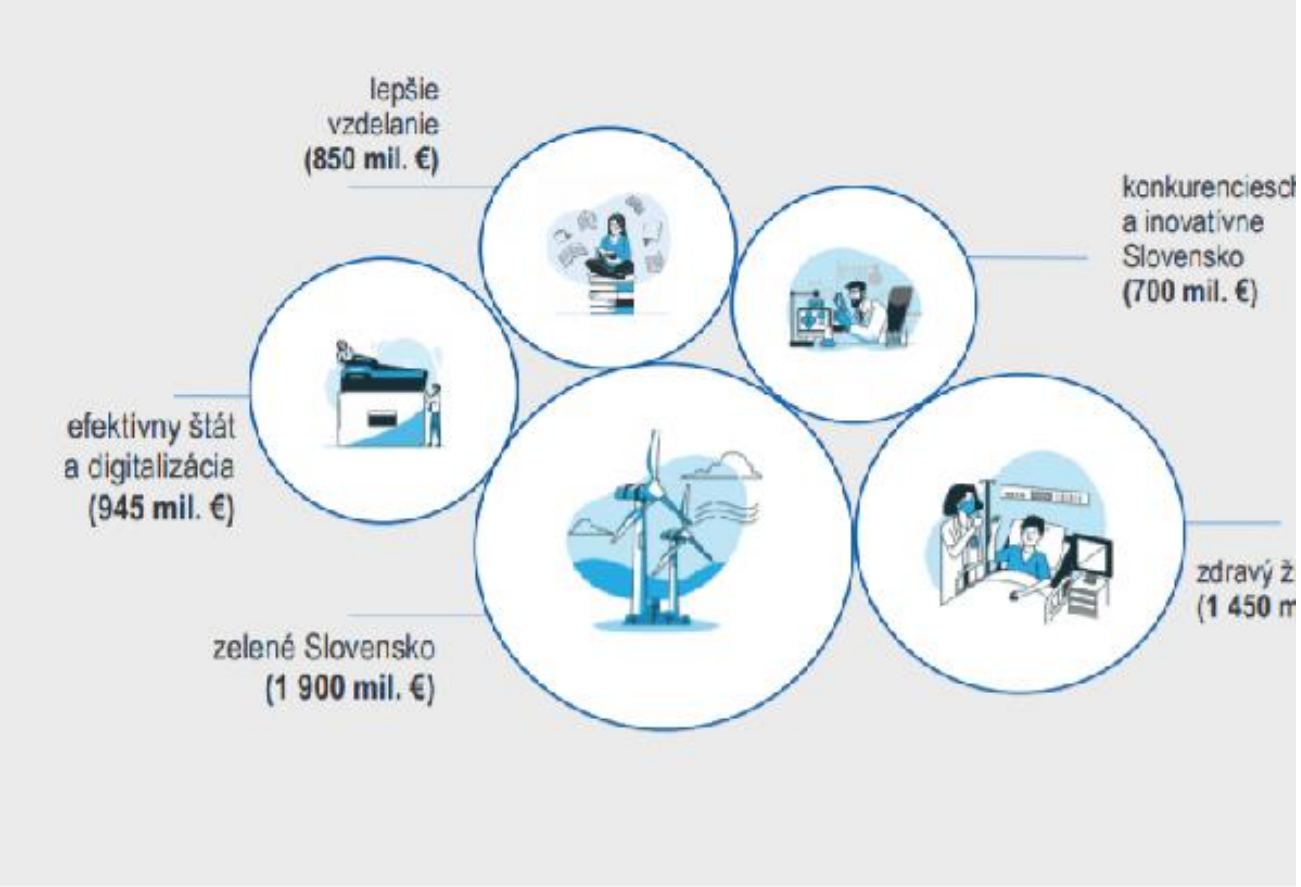
Fuel	unit	2017*	2020	2025	2030	2035
Petrol	TJ	22 034.4	21 747.6	21 186.0	21 142.8	19 090.8
Diesel	TJ	74 694.6	56 314.8	57 020.4	56 844.0	50 464.8
LPG	TJ	1 944.1	3 506.4	3 204.0	3 358.8	3 168.0
Natural gas	TJ	223.2	752.4	784.8	1 080.0	1 400.4
Biogas	TJ	0.0	3.6	25.2	111.6	169.2
Conventional biofuels	TJ	6 481.6	7 437.6	7 326.0	7 938.0	3 214.8
Advanced biofuels	TJ	0.0	0.0	0.0	10.8	7 146.0
Kerosene	TJ	45.0	2 268.0	2 768.4	3 394.8	3 556.8
Hydrogen	TJ	0.0	0.0	0.0	10.8	327.6
Electricity	GWh	0.2	707.0	870.0	1 056.0	1 301.0

*real values; Source: SHMI


Projections of greenhouse gas emissions to 2040 in road transport under the WAM scenario
9 000
8 000
7 000
6 000
5 000
2017
2020
2025
2030
2035
CO2 ekv.

Financial aspect

- EU funds are crucial
- Next Generation EU (National recovery and resilience plan)
  - Railway (700 million EUR)
  - Target: 2% annual emission decrease in transport sector
  - Investments: high-speed rails, digitalization, electrification, fleet modernization
  - Reforms: priority for railway projects, more efficient investment plans, better coordination between municipalities and state in public transport



Investments in the transport sector (by type)

	2015	2020	2025	2030	2035	2040	2045	2050
Investment costs (EUR million)	28 948	55 315	56 684	64 804	72 980	100 671	114 241	113 127
Personal transport	24 838	47 592	50 157	58 163	66 096	92 533	106 468	104 807
Public road transport	840	1 628	1 357	1 302	1 254	1 998	1 581	1 409
Individual road transport	20 687	40 661	43 329	50 791	59 538	84 753	98 963	97 006
Rail transport	2 644	3 814	4 001	4 150	3 618	3 716	4 064	4 110
Air transport (incl. international)	667	1 488	1 470	1 920	1 685	2 066	1 859	2 281
Inland navigation	-	-	-	-	-	-	-	-
Freight	4 110	7 723	6 528	6 641	6 884	8 137	7 773	8 320
Road transport	3 112	5 650	4 665	4 733	5 224	6 663	5 694	6 289
Rail	960	1 969	1 770	1 810	1 570	1 396	1 991	1 904
Inland navigation	38	104	93	97	89	79	88	127
International freight	-	-	-	-	-	-	-	-