

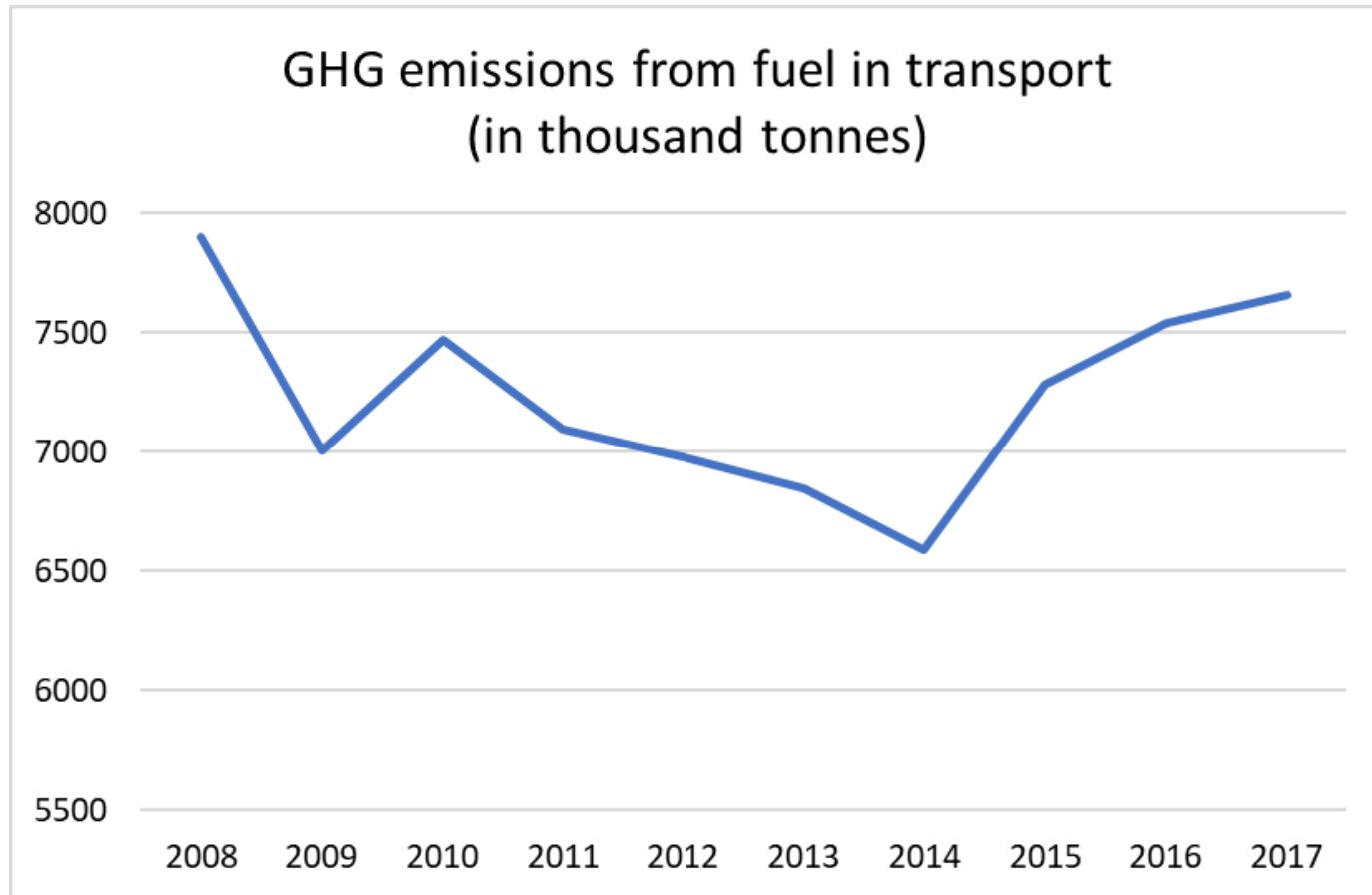


Renewables in the Slovak Transport Sector: Developments and Challenges

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GHG emissions from fuel in transport (in thousand tonnes)



GHG emissions in the Slovak transport sector

- Slovakia is **on track** to reach its emission goals under the ESD (up to 13% in 2020 compared to 2005)
- GHG emissions from fuel combustion in transport **have been rising** steadily since 2014 (7.6 million tones reached in 2017)
- **Transport:** 16.3% share on total GHG emissions

Vehicle fleet	1990	2016	Change
Passenger cars	875,550	2,124,528	+142.65%
Light commercial vehicles	89,949	493,245	+448.36%
Consumption (PJ)	61,027.37	91,103.49	+49.28%
Emissions CO2 eq. (kt)	4,588.64	6,336.18	+38.08%

Status Quo: Overview

- **RES-T Share:** 7.0% in 2017 (-1.5% compared to 2015, however, +0.2% compared to the NREAP's 2017 interim trajectory) with the EU 2020 RES-T target set at 10%
- Slovak Government considered **least active** in the Visegard Group's (V4) region
- **biofuels:** mandatory blending of biocomponents into transport fuels (shares defined by 2030) (6.9% for 2019, 8.2% for the period of 2022-2030) & tax regulation mechanism
- no **hydrogen vehicles** and no publicly accessible infrastructure
- negligible share of vehicles on alternative fuels (e.g., M1 category: EVs 951, 619 PHEVs)
- **electro-mobility infrastructure network (Dec 2018):**
 - 92 DC charging points (over 44 kW), 143 AC charging points (up to 44 kW)
 - **By 2025:** 1,500 points in total

EV Country Readiness Index 2019 (LeasePlan)

Country	Total scoring	EV maturity	Charging maturity	Government incentives	LeasePlan maturity
Norway	34	12	7	7	8
Netherlands	33	9	8	8	8
Sweden	29	9	6	7	7
Austria	28	7	6	9	6
Finland	26	7	6	6	7
Germany	25	7	5	8	5
United Kingdom	25	5	6	7	7
Portugal	24	7	5	5	7
Belgium	23	7	5	5	6
Luxembourg	23	7	6	5	5
Ireland	23	7	5	8	3
France	22	7	5	4	6
Switzerland	22	8	6	3	5
Denmark	20	6	6	1	7
Spain	20	4	4	6	6
Hungary	19	5	5	6	3
Italy	17	5	4	3	5
Romania	12	2	4	5	1
Slovakia	12	2	5	4	1
Czech Republic	11	4	5	1	1
Greece	10	2	2	4	2
Poland	9	3	3	2	1

Slovakia ranked 19th out of 22 evaluated European countries.

Relevant Policy Documents on Alternative Mobility in Slovakia

- **National Renewable Energy Action Plan (2010)**
- **Strategy of Electromobility Development in the Slovak Republic and Its impact on the National Economy of the Slovak Republic (2015)**
- **National Policy Framework for the Market Development of Alternative Fuels (2016)**
- **National Policy for the Implementation of Infrastructure for Alternative Fuels in the Slovak Republic (2016)**
- **Action Plan on Electromobility Development (March 2019)**
- **Measures to Remove Barriers to the Sustainable Development of the Automotive Industry in Slovakia, Including the Supply Network (April 2019)**
- **& National Energy and Climate Plan (NECP; in progress)**

Overview of the Latest Policy Developments

- **November 2018:** first ultra-fast charging stations for EVs opened
- **November 2018:** SK and CZ agreed on cooperation in the field of clean mobility
- **June 2019:** a founding agreement of the Slovak Battery Alliance (SBaA) signed
- **March 2019:** MŽP's launched funding scheme on EVs for municipalities and regions
- **April 2019:** a grant of 6.9 million EUR from EU Funds on smart mobility obtained
- **May 2019:** Working Group on the Support of Industrial Battery Production in Slovakia at the Ministry of Economy created
- **June 2019:** green European Vehicle Numbers (EVN) for EVs and PHEVs approved by the Government
- **July 2019:** a funding scheme for municipalities and regions on AC charging stations launched
- **December 2019 (awaited):** a new subsidy scheme on EVs and PHEVs

- I. Insufficient Professional Capacity and Lack of Communication
- II. Problematic Conditions of Subsidy Drawing
- III. Incorrect Transposition of the Directive 2014/94/EU on the Deployment of Alternative Fuels Infrastructure
- IV. Investment Instability in the Sector of Biofuels
- V. Slow Development of Electromobility
- VI. Biofuels Disadvantaged Compared to Other RES-T Technologies
- VII. Too Powerful Position of Oil Refineries in the V4 region

What to do next?

- **Slovakia has recorded significant developments** on its way towards improving deployment of low- and zero-emissions vehicles and enhancing the potential of energy storage in the last years.
- Nevertheless, **Slovakia should focus on the following priorities in the upcoming years:**
 - EU Commission (2019) recommends to Slovakia in the field of climate mitigation to take action on investment-related economic policy, **incl. transport and its sustainability in 2019-2020**
 - introduction of a practically non-existing **hydrogen vehicles market**
 - ensure a **proper implementation of Electromobility Action Plan** (2019-2020), especially charging infrastructure & shortened depreciation period for entrepreneurs
 - elaborate action plans on the development of **other alternative fuels**
 - ... ?

Thank you for your attention!



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