

The Diesel and Health Position Paper for Slovenia

Air pollution, which knows no boundaries and to which the person contributes the most, is classified as a major public health and environmental problem. According to the European Environment Agency in the EU member states, 399.000 premature deaths per year happen due to the long-term exposure to air pollution. In public debates, the impact of air pollution on the state budget and the health system is less frequently mentioned.

Air quality in Slovenia has improved significantly over the last few decades, but the concentration of pollutants (e.g. PM) in the ambient air is still high, especially in the cold part of the year. Main reasons for this are geographical features such as hilly relief and poor ventilation in the basins and valleys of Slovenia. Due to frequent inversion air pollution stays on the ground. The most polluted areas in Slovenia are urban areas in Ljubljana basin, Celje basin, Maribor, Novo Mesto, Murska Sobota and Zasavje region.^{1 2}

Road traffic is one of the sources of air pollution in Slovenia. Most particles matters (PM₁₀, PM_{2,5}), nitrogen oxides (NO_x) and carcinogenic pollutants Benzo (a) pyrene come from a diesel engine exhaust.² The latterly mentioned pollutants have big environmental and public health consequences.

The average annual concentration of PM₁₀ exceeds the limit recommended by the World Health Organization for Human Health (20 µg PM₁₀ /m³). An estimated average annual exposure to PM₁₀ value of 40 µg / m³, mortality increased by more than 2%.³

According to the National Institute for Public Health is 2/5 of Slovenian children (0-15) exposed to the negative impacts of PM₁₀ pollutants. The recent data on hospital admissions is showing that respiratory diseases account approximately 15 % of all admissions of children in Slovenia. Most admissions to the hospital with asthma of diseased children are in Ljubljana and Maribor.⁴

Similar public health evidence is related to NO_x emissions. Around 75.000 people die early from NO₂ air pollution every year in Europe.⁵ According to True Initiative, most of the newest diesel cars in European cities and throughout the continent are still polluting the streets with nitrogen oxide (NO_x) emissions up to 18 times the levels set by Euro vehicle standards.⁶

Environmental, public health and economic impacts of air pollution and diesel cars have also important European component. Significant and recent changes in the field of reduced

¹ Air Quality. 2018. Slovenian Environment Agency. URL: http://www.arso.gov.si/soer/kakovost_zraka.html

² Ukrepi varstva okolja. 2018. Moj zrak. URL: <http://www.mojzrak.si/onesnazena-obmocja/>

³ Samoli E, Antonis A, Touloumi G in sod. (2005). Estimating the exposure-response and relationships between particulate matter and mortality within the APHEA multicity project. Environ Health Perspect 2005; 113(1):, 88–95.

⁴ Izpostavljenost prebivalcev in otrok onesnaženemu zraku zaradi delcev PM₁₀. 2015. Kazalci okolja. ARSO. URL: http://kazalci.arso.gov.si/?data=indicator&ind_id=684

⁵ Many Europeans still exposed to harmful air pollution. 2015. European Environmental Agency. URL: <https://www.eea.europa.eu/media/newsreleases/many-europeans-still-exposed-to-air-pollution-2015#tab-related-infographics>

⁶ True Initiative, 2018. URL: <https://www.trueinitiative.org/blog/2018/june/true-initiative-reveals-diesel-cars-in-eu-produce-up-to-18-times-nox-emission-limits-emission-limits>

use of (especially old) diesel engines in some European countries and cities (e.g. German Federal Court on the gradual limitation of cars with diesel engines in cities). Declining prices of older diesel cars are increasing rise of imports of exports of second-hand diesel cars to Central and Eastern European countries.⁷ This can also lead to additional ageing of the fleet in Slovenia. In doing so, we must not forget the above-average share of car ownership in Slovenia (the motoring rate of 517 cars per 1000 inhabitants).⁸

The estimate of the external costs of passenger road transport in Slovenia amounted to 2,21 billion euros in 2010. In addition to road accidents, the highest share of cargo costs is reflected in climate change (448,9 million euros) and air quality (412,9 euros). With the transition of all diesel fuels to a gasoline engine, external costs would be reduced by 204,40 million euros and EUR 503,66 million euros when moving to electric cars. The difference in external costs is known primarily for environmental and health issues.

However, tackling air quality, mobility and health will certainly not be solved solely with measures in the field of diesel engines. It is not advisable to take measures only on the issue of diesel and diesel engines, but to generally promote more sustainable mobility. Limiting vehicles with a diesel engine can only be one of the measures, and besides the environmental aspect (the prohibition of old diesel engines) we should not neglect social and economic aspect (everyone cannot afford a new and more environmentally friendly car yet). Consequently, traffic needs to be planned globally – from local to international level, considering environmental and social factors.

A variety of measures have been proposed to help improve the situation in general were proposed at the national conference "From diesel engines to low-carbon transport and better health", organized by the Institute for Youth Participation, Health and Sustainable Development (IMZTR) and the Youth Network No Excuse in May 2018 with experts, decision-makers and interested public.

Generally, proposals can be divided according to the principle of remuneration and taxation. Due to a large share of daily migration to the workplace in Slovenia, some proposals for measures at the mentioned consultation related to the reorganization of work. If the workplace allows so, employees could partly work from home. According to participants, it would make sense to reward employees who use active mobility to get to work, as this would have a positive effect on changing travel habits. Some of the proposals mentioned a subsidy for car ownership and subsidies for electric mobility (electric bikes, electric cars ...).

Some proposals by participants were also related to taxation of traffic. As an effective measure, the transfer of (external) traffic costs to users was indicated. It was pointed out here that it is necessary to provide more competitive alternatives (e. g. public transport), otherwise, the said measure may have a negative social impact. When we talk about socio-

⁷ Dirty diesels heading East. 2018. Transport and Environment. URL: <https://www.transportenvironment.org/publications/dirty-diesels-heading-east>

⁸ SURS, 2016.

economic aspects, we cannot pass the un-taxed reimbursement of transport costs to the workplace. The latter places Slovenia among rare countries with such legislation. According to the participants, the reform of the reimbursement of travel expenses would be very effective from the environmental point of view but would encourage other social risks, because the reimbursement of travel expenses is often used as a social salary correction.