



Ministerstvo životního prostředí České republiky

Air pollution fees in the Czech republic



Financial measures for emission reductions – fees in the history

- **Air pollution fees introduced in the Czech(oslovakian) legislation already in 1967** (Act. 35/1967, on measures against air pollution).
- The fee was designed to be paid mainly from the pollution over a „maximum admissible emission level“ that was dependent on the stack height – intermediate between fee and sanction.
- Fee would not be set, if no technical measures for the emission reduction are applicable.
- Fee could not be transferred in the price of a product (in a centrally planned economy).



Financial measures for emission reductions – fees in the history

- **Air Protection legislation from 1991** (Acts. No. 309/1991, 389/1991) revised the system substantially.
- fees have been assessed by the total amount of pollutants emitted and a rate. **From 1992 to 1997 the calculated fee was reduced by decreasing factor (70 % to 0 %),**
- rates were set for **TSP, SO₂, NO_x, CO, hydrocarbons and 3 groups of pollutants** (that included about 50 organic compounds and heavy metals),
- 50 % surcharge in case the ELVs were exceeded (not replacing sanction),
- if an operator starts investments to the emission reduction measures, 40 % of the fee is conditionally remitted.

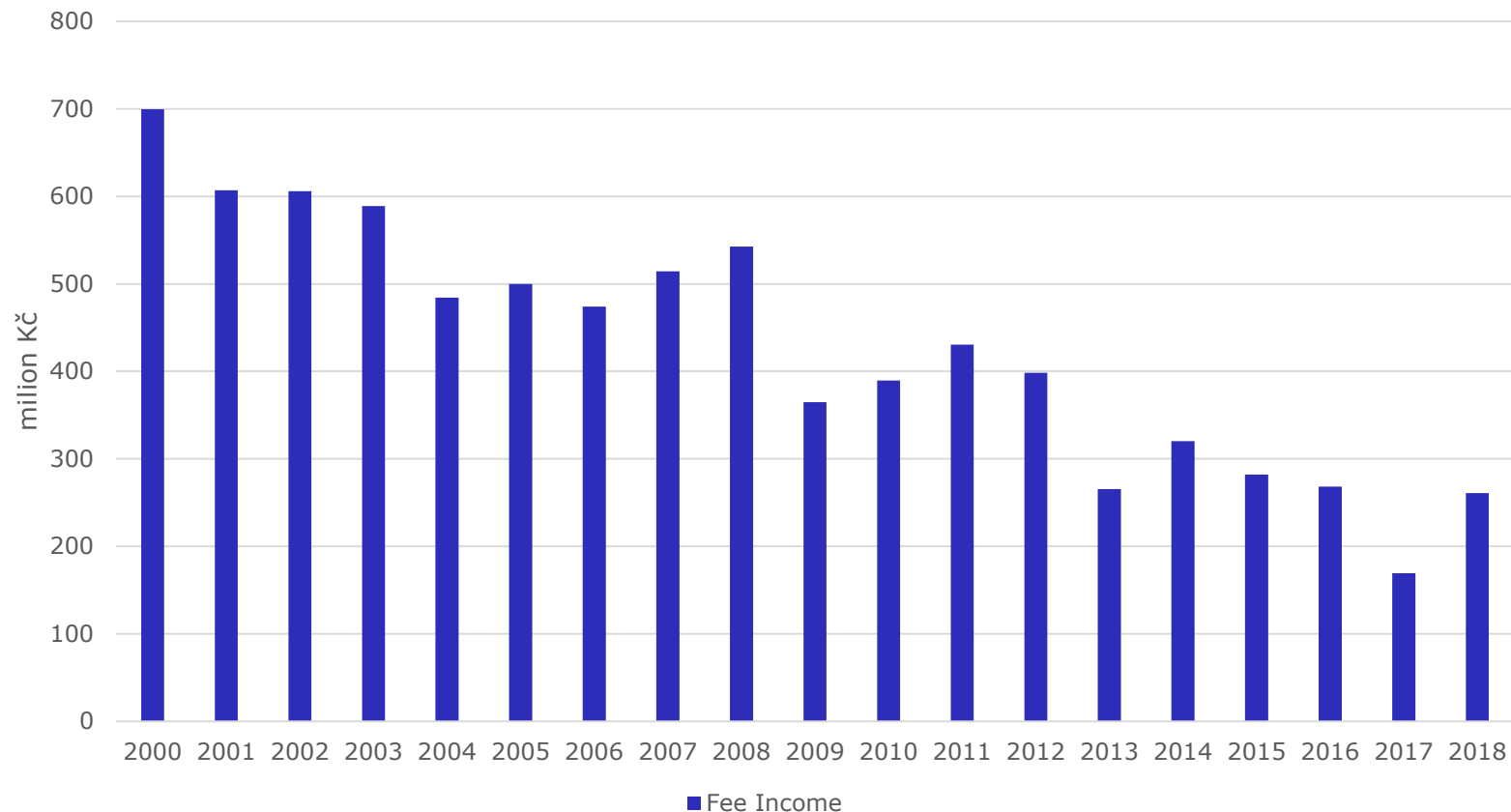


Financial measures for emission reductions – fees in the history

- By the Act 388/1991 **State Environmental Fund** has been created.
- Most of the fees were income of the Fund (releases of pollutants to air, water, deposition of waste). For „Small pollution sources“ (e.g. combustion installations below 200 kW) – fees were income of the municipality. (*Households were excluded, however small scale boilers in the commercial sectors were subject to the fee*).
- State Environmental Fund used the finance for supportive scheme in various areas (incl. biodiversity and natural habitat protection) – only part of the air pollution fee was used for emission reduction programs.



Air pollution fees – income



Financial measures for emission reductions – fees in the history

- In the period 1991 – 2012 the system of the fees have mostly been unchanged.
- The cumulative inflation from 1991 to 2012 was 300 %, so the fee rates had only 1/3 of the original value.
- Motivational character was lost (investments needed for the emission reductions were much higher than the fee).
- Transaction costs were disproportionate due to very large number of installations under the fee (cca 39 000).
- Basic pollutants (TSP, SO₂, NO_x and CO) represented 97 % of the collected fee.



2012 Air Protection Act

- Fee rates have been **proposed in 6 variants** on the basis of **marginal costs for emission reduction** included in the GAINS model.
- **Other economic incentives were analyzed** (e.g. shorter investments depreciation for investments leading to emission reduction) but proved ineffective.
- **Rates based on the external costs** (model ExternE) would **not be acceptable**.
- Continuous increase of rates was proposed up to 2021.



2012 Air Protection Act

Air Pollution Fees in the approved 2012 Air Protection Act (no. 201), compared to 1991 – 2012 rates.

€/t	1991 - 2012	2013 - 16	2017	2018	2019	2020	from 2021
TSP	117	164	246	327	409	491	573
SO₂	39	53	82	109	136	164	191
NO_x	31	43	66	86	109	129	152
VOC	78	105	164	218	273	327	382

rates recalculated to EUR in 2019 exchange rate (25,65 Kč/EUR).



2012 Air Protection Act

- Discussion about the air pollution fees was very difficult, to achieve the increase in rates number of flexibilities were proposed:
 - i. minimal fee was set to 2000 EUR (if calculated lower, the fee is not paid),
 - ii. since 2017 an additional factor is added corresponding to achieved emission concentrations (percentage of ELV or BAT-AEL)
 - iii. the fee is not assessed in cases:
 - due to modernization or reconstruction of the installation, there is a total emission reduction compared to 2010 over 70 % for TSP and VOC and 45 % for SO₂ and NO_x, or
 - the emission concentration in the whole year is below 50 % of ELVs or BAT-AEL



2012 Air Protection Act

Additional factor corresponding to the emission concentrations over the whole year (as a percentage of ELV of BAT-AEL)

Emission concentration	50 - 60 %	> 60 - 70 %	> 70 - 80 %	> 80 - 90 %	> 90 %
Factor	0,2	0,4	0,6	0,8	1

The concentration level is assessed as a maximum valid half-hourly concentration corresponding to the wording in the legislation.

The flexibilities based on the emission concentrations are applicable only in cases, where emissions are **measured continuously**.

= potential incentive to use continuous measurements even in cases not required by the legislation.



2012 Air Protection Act

Changes in the number of subjects obliged to pay the fee and the sum of fees collected in the 3 most recent years.

	2015	2016	2017
Total fees collected (EUR)	9 053 776	8 904 112	7 038 194
Number of installations	290	296	297

Around 70 installations have changed in the three years (some fell below the 2000 EUR limit, some got above it).

Number of installations using one of the flexibilities is low.



Résumé

Effects of the air pollution fees can not be distinguished from the effects of the lowering ELVs and general modernization and changes in the energy and industry sectors.

Air pollution fees continue to play an important role in the financing the State Environmental Fund enabling financing of various projects and activities.

The pragmatic approach to collect fees only from certain amount further increased the different conditions of small and bigger polluters (together with e.g. carbon pricing in EU-ETS, environment assessment – EIA and other) – this different requirements are incentivizing operation of smaller units, may lead to disconnection from the central heating plants.



Thank you for your attention

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