Working Group on Strategies and Review, Fifty-seventh session, 21–24 May 2019

Provisional agenda item 6 (a) Information sharing by Parties on the implementation of the Convention: Good practices to strengthen the implementation of air pollution-related policies, strategies and measures

#### Background information and template for the submission of examples of good practices with regard to air pollution related policies, strategies and measures

### I. Background

- 1. The Executive Body, at its thirty-sixth session, adopted decision 2016/3 on Improving the effectiveness of reporting on strategies, policies and other measures to implement obligations under the Convention and its Protocols. This decision stipulates that "the period for reporting the information referred to in article 5, paragraph 1 (a), of the 1994 Protocol on Further Reductions of Sulphur Emissions, article 7, paragraph 1 (a), of the Protocol on Heavy Metals, article 9, paragraph 1 (a), of the Protocol on Persistent Organic Pollutants and article 7, paragraph 1 (a), of the Protocol to Abate Acidification, Eutrophication and Ground-level Ozone (Gothenburg Protocol) is at least once every four years". As per this decision, the Executive Body also "invites States and organizations referred to in article 14, paragraph 1, of the Convention that are not Parties to these four Protocols to provide information on strategies, policies and measures to abate air pollution at the sessions of the Working Group on Strategies and Review."
- 2. The present document provides background information on the obligations to report on strategies, policies and measures for the respective Protocols. The enclosed template has been developed to facilitate the submission by Parties of examples of and good practices with regard to different regulatory, voluntary, economic and other measures relating to air pollution in advance of WGSR's fifty-seventh session.
- 3. Delegations are invited to submit to the secretariat case studies/examples which could be of interest to other countries and thus to the policy discussion at the WGSR session. Parties that had not yet shared such information at the previous sessions of the Working Group are particularly invited to do so. An overview of the previous reporting at WGSR sessions since 2013 is available on the Convention website:

http://www.unece.org/environmental-policy/conventions/envlrtapwelcome/convention-bodies/working-group-on-strategies-and-review/strategies-and-policies-for-the-abatement-of-air-pollution.html

In order to facilitate the preparation of the policy discussion on the basis of the examples submitted, please send your examples to <u>air meetings@un.org</u> by 15 April 2019.

4. Examples could comprise, amongst others, economic measures such as financial incentives or disincentives (such as taxes, subsidies, set prices or caps/ceilings, payments, rebates), voluntary measures (such as voluntary agreements, programmes or contracts), regulatory or legislative measures or other measures (such as educational or informational measures). They can include policies, strategies and measures emanating from different sectors with positive effects on air pollution abatement (such as acts/laws on sustainable transport, sustainable agriculture/farming, energy, green building, biodiversity conservation and enhancement). A more detailed description of the implementation of your chosen policy, strategy or measure and related challenges and problems as well as solutions would be more useful than the presentation of many different examples. Furthermore, your examples could also be

useful to other Parties even if they have not been successful by indicating why this was the case. You are thus also invited to submit experiences that cover such items as:

- a) A measure that was less effective than you anticipated and why;
- b) A measure that was actually more effective than you predicted;
- c) A measure that had particular implementation challenges what were they and how did you address them:
- d) A measure that was either less expensive or more expensive than you had estimated. What caused the increased or decreased costs?
- e) Goals that were set and were met by innovative strategies.

### II. Obligations under the Protocols to the Convention to report on strategies, policies and measures

### II.1 Reporting on strategies, policies and measures under the 1994 Sulphur, Heavy Metals, POPs and Gothenburg Protocols

7. In accordance with decision 2013/2 adopted by the Executive Body at its thirty-second session, "the sessions of the Working Group on Strategies and Review shall be considered the format for reporting on strategies, policies, and measures referenced in Article 5.1 of the 1994 Sulphur Protocol, Article 7.2 of the Heavy Metals Protocol, Article 7.2 of the Protocol on POPs, and Article 7.2 of the Gothenburg Protocol". In accordance with decision 2016/3 adopted by the Executive Body at its thirty-sixth session, the period for reporting is at least once every four years.

### II.1.1 Reporting on strategies, policies and measures under the 1994 Sulphur and the Gothenburg Protocol

- 8. Article 4 of the 1994 Sulphur Protocol requires that "[each] Party shall, in order to implement its obligations under article 2: (a) adopt national strategies, policies and programmes, no later than six months after the present Protocol enters into force for it; and (b) take and apply national measures to control and reduce its sulphur emissions". Article 5 of the 1994 Sulphur Protocol on "Reporting" stipulates that "each Party shall report, through the Executive Secretary of the Commission, to the Executive Body, on a periodic basis as determined by the Executive Body, information on: (a) the implementation of national strategies, policies, programmes and measures referred to in article 4, paragraph 1;[...] (c) the implementation of other obligations that it has entered into under the present Protocol, in conformity with a decision regarding format and content to be adopted by the Parties at a session of the Executive Body. The terms of this decision shall be reviewed as necessary to identify any additional elements regarding the format and/or content of the information that are to be included in the reports".
- 9. The 1994 Sulphur Protocol sets emission ceilings for 2005 and 2010 for some Parties. With the exception of Austria, Greece, Ireland, Italy, Liechtenstein and Monaco, all Parties to the 1994 Sulphur Protocol have also ratified or acceded to the 1999 Gothenburg Protocol which sets ceilings for 2010.
- 10. Article 6 of the Gothenburg Protocol stipulates that "each Party shall, as necessary and on the basis of sound scientific and economic criteria, in order to facilitate the implementation of its obligations under article 3: (a) adopt supporting strategies, policies and programmes without undue delay after the present Protocol enters into force

- for it;[...]" Paragraph 1 of Article 7 on "Reporting" stipulates that "subject to its laws and regulations and in accordance with its obligations under the present Protocol: (a) each Party shall report, through the Executive Secretary of the Commission, to the Executive Body, on a periodic basis as determined by the Parties at a session of the Executive Body, information on the measures that it has taken to implement the present Protocol". Paragraph 2 stipulates that "the information to be reported in accordance with paragraph 1 (a) shall be in conformity with a decision regarding format and content to be adopted by the Parties at a session of the Executive Body. The terms of this decision shall be reviewed as necessary to identify any additional elements regarding the format or the content of the information that is to be included in the reports."
- 11. In 2012, amendments to the Gothenburg Protocol and its annexes were adopted by decisions 2012/1, 2012/2 and 2012/3. In addition, Parties adopted decision 2012/4 on the Provisional application of the amendments to the Protocol, which enables Parties to make use of the adjustment procedure under decision 2012/3 immediately.
- 12. Sulphur as a pollutant is covered by both the Gothenburg Protocol and the 1994 Sulphur Protocol. Moreover, the following pollutants are covered by the Gothenburg Protocol: nitrogen oxides (NOx), ammonia (NH3) and volatile organic compounds (VOC).
- 13. In accordance with Decision 2013/2, Parties to the 1994 Sulphur and Gothenburg Protocol are thus invited to report on the design and implementation of strategies, policies and measures to implement obligations under the 1994 Sulphur Protocol and the Gothenburg Protocol, notably to abate pollution of sulphur, nitrogen oxides, ammonia and volatile organic compounds.

## II.1.2 Reporting on strategies, policies and measures under the Protocol on Persistent Organic Pollutants (Protocol on POPs)

- 14. Article 7 of the Protocol on POPs requires that each Party shall, no later than six months after the date on which this Protocol enters into force for it, develop strategies, policies and programmes in order to discharge its obligations under the present Protocol. Article 9, paragraph 1 of the Protocol on POPs on "Reporting" stipulates that "subject to its laws governing the confidentiality of commercial information: (a) each Party shall report, through the Executive Secretary of the Commission, to the Executive Body, on a periodic basis as determined by the Parties meeting within the Executive Body, information on the measures that it has taken to implement the present Protocol". Furthermore, paragraph 2 of article 9 stipulates that "the information to be reported in accordance with paragraph 1 (a) above shall be in conformity with a decision regarding format and content to be adopted by the Parties at a session of the Executive Body. The terms of this decision shall be reviewed as necessary to identify any additional elements regarding the format or the content of the information that is to be included in the reports."
- 15. In 2009, amendments to the Protocol on POPs were adopted through decisions 2009/1, 2009/2 and 2009.
- 16. The pollutants covered by the Protocol on POPs are the following: polycyclic aromatic hydrocarbons (PAH), hexachlorobenzene (HCB), and dioxins/furans.
- 17. In accordance with decision 2013/2, Parties to the Protocol on POPs are thus invited to report at the WGSR session on the design and implementation of strategies,

policies, and measures employed to implement obligations under the Protocol on POPs, notably to reduce emissions of PAH, HCB and dioxins/furans.

### II.1.3 Reporting on strategies, policies and measures under the Protocol on Heavy Metals

- 18. Article 5 of the Protocol on Heavy Metals stipulates "each Party shall develop, without undue delay, strategies, policies and programmes to discharge its obligations under the present Protocol." Paragraph 1 of Article 7 on "Reporting" requires that "subject to its laws governing the confidentiality of commercial information: (a) each Party shall report, through the Executive Secretary of the Commission, to the Executive Body, on a periodic basis as determined by the Parties meeting within the Executive Body, information on the measures that it has taken to implement the present Protocol". Paragraph 2 stipulates that "the information to be reported in accordance with paragraph 1 (a) above shall be in conformity with a decision regarding format and content to be adopted by the Parties at a session of the Executive Body. The terms of this decision shall be reviewed as necessary to identify any additional elements regarding the format or the content of the information that is to be included in the reports."
- 19. In 2012, amendments to the Protocol and its annexes were adopted by decisions 2012/5 and 2012/6.
- 20. The pollutants covered by the Protocol on Heavy Metals are cadmium, lead and mercury.
- 21. In accordance with decision 2013/2, Parties to the Protocol on Heavy Metals are invited to report at the WGSR session on the design and implementation of strategies, policies, and measures employed to implement obligations under the Protocol on Heavy Metals, notably to reduce emission of mercury, lead and cadmium.
  - II.2 Reporting on strategies, policies and measures by Parties to the Protocol concerning the control of Nitrogen Oxides or their transboundary fluxes (Protocol on NOx) and the Protocol concerning the control of emissions of Volatile Organic Compounds and their transboundary fluxes (Protocol on VOC)
- 22. In accordance with decision 2013/2, "Parties to the Protocol on NOx and the Protocol on VOC may utilize the time set aside during the annual session of the Working Group on Strategies and Review to report on changes or revisions to their policies, strategies, and measures to implement obligations under the respective Protocols in satisfaction of their obligations under Article 8.1 of the Protocol on NOx and Article 8.2 of the Protocol on VOC".
- 23. Article 7 of the 1988 Protocol on NOx stipulates that "Parties shall develop without undue delay national programmes, policies and strategies to implement the obligations under the present Protocol that shall serve as a means of controlling and reducing emissions of nitrogen oxides or their transboundary fluxes." Article 8 requires that "Parties shall exchange information by notifying the Executive Body of the national programmes, policies and strategies that they develop in accordance with article 7 and by reporting to it annually on progress achieved under, and any changes to, those programmes, policies and strategies, [...]" Paragraph 2 of article 8 stipulates that "such

information shall, as far as possible, be submitted in accordance with a uniform reporting framework."

- 24. Article 7 of the 1991 Protocol on VOC stipulates that "Parties shall develop without undue delay national programmes, policies and strategies to implement the obligations under the present Protocol that shall serve as a means of controlling and reducing emissions of VOCs or their transboundary fluxes." Article 8 on "Information exchange and annual reporting" provides that "Parties shall exchange information by notifying the Executive Body of the national programmes, policies and strategies that they develop in accordance with article 7, and by reporting to it progress achieved under, and any changes to, those programmes, policies and strategies [....]" Paragraph 4 of article 8 stipulates that "such information shall, as far as possible, be submitted in accordance with a uniform reporting framework".
- 25. The majority of the Parties to the NOx and VOC Protocols are also Parties to the Gothenburg Protocol, which covers the pollutants covered by the NOx and VOC Protocols. Parties to the NOx Protocol that are not Parties to the Gothenburg Protocol are the following: Albania, Austria, Belarus, Estonia, Greece, Ireland, Italy, Liechtenstein, Russian Federation, Ukraine. Parties to the VOC Protocol not Parties to the Gothenburg Protocol are the following: Austria, Estonia, Italy, Monaco, Liechtenstein. In accordance with decision 2013/2, the Parties listed above may wish to consider reporting on changes or revisions to their policies, strategies, and measures to implement obligations under the respective NOx or VOC Protocols.
- As it is not possible to cover all the above issues in one meeting, Parties are invited to inform the secretariat of the information they may wish to provide on a particular measure at the WGSR session, by submitting the enclosed template **by 15 April 2019** by writing to <u>air meetings@un.org</u>. The priority for presentations would be given to Parties that have not shared their experience during last WSGR sessions and to Parties that would submit their inputs by the indicated deadline, taking due account of the available time.

# III. Template to facilitate the submission of examples/good practices of strategies, policies and measures employed to implement obligations under any of the protocols to the Convention on Long-range Transboundary Air Pollution

Country: Czechia	Pollutant(s): SO <sub>2</sub> , NO <sub>x</sub> , TSP, NH <sub>3</sub> , VOC as a fraction of TSP: PCDD/F, HMs
Protocol(s): Gothenburg protocol, Protocol on POPs, Protocol on Heavy Metals	Sector: Public electricity and heat production, Stationary combustion in manufacturing industries and construction, Metallurgy, Cement production etc. (Most impacted are sectors with high emissions per installation).
Type of strategy, policy or measure and the level of implementation:  Economic instrument - disincentive (tax);  Implemented at national level, regions collect the revenue and may use part of the income.	Method used for the current analysis: Directly reported data on emissions from operators have been used in the analysis. Financial assessment of the air pollution impact and cost of emission reduction measures and monitoring have been taken into consideration in the drafting of the legislation.

### What is the main objective of the strategy, policy or measure? When has it been implemented/or will be implemented?

Main objective of the measure is to achieve decrease of the main pollutants by providing the fiscal signal for choice of technologies with lower emissions, counterbalance increased operational costs of some of the emission reduction measures, and provide economic incentive for setting up a system of continuous measurements of emissions.

Air pollution fees have been part of the Czech (and Czechoslovak) legislation since 1967(Act 35/1967), major overhaul of the system happened in 1991, and current version (subject of this reports) is from 2012 with two transitional periods: 2012-2016 and 2017-2021.

#### **Background and driving forces:**

Air pollution fees are important part of the air pollution control system in the Czech Republic since decades ago. The revision in 1991 was driven mainly by the very poor air quality and high emission levels together with set up of the State Environment Fund that provided financial support for various environmental projects. The latest revision in 2012 was based on several factors: existing system was not efficient (high number of subjects and low tariff rates – high transaction costs, low motivational function, high level of complexity of the system (high number of pollutants, different levels of implementation), increased role of technical legislative requirements (ELVs, BAT) leaving less space for economically motivated emission reduction measures.

#### **Description of the strategy, policy or measure:**

A fee from releasing air pollutants is paid by the operator of an installation for pollutants for which they have either ELVs of technical operational condition required by law or permit and for all emission sources in the installations (e.g. all boilers in a power plant, whole refinery etc). Fee is calculated by multiplication of tariff, yearly amount of released pollutant and coefficient of BAT level. Tariffs have been set stable for period 2012-2016 and with yearly increase from 2017-2021 (up to 350 % of the original level).

Number of flexibilities are in place: only calculated fees over 50.000 K'e ( $2000 \in$ ) are paid, coefficient of BAT/ELVs levels (6 levels of the coefficient from 1 to 0,2 if the maximum concentration is over 90% or below 60% of BAT/ELV concentration), no fee is paid if the

maximum recorded concentration (half-hour)in a given year is below BAT/ELVs or in cases where due to modernization or reconstruction of the emission source (e.g. boiler) the emissions have decreased by 30-55 % (depending on the pollutant) compared to 2010.

The flexibility based on coefficient requires monitoring of emissions by means of continuous measurement systems thus motivating the operators to apply them even in cases not required by the legislation.

#### Costs, Funding and Revenue allocation:

Air pollutant fess revenues has been up to 2016 income of the State Environment Fund (composing cca 18 % of its income). Since 2017 revenue is distributed as follows: 65 % State Environment Fund, 25 % income of the regional authority and 10 % income of the national budget, in all three cases the income could only be spent on activities in environment protection (not necessarily air protection), in case of the national budget share it could only be activities specifically mentioned in the Air Protection Act (air pollution monitoring, compiling emission inventories and projections, information activities etc).

Transaction costs of the air pollution fees have been calculated in 2012 only in comparison to the previous legislation (with a reduction of costs around 200.000  $\epsilon$ /yr).

The total amount of the air pollutants fees collected was in 2017 8 mil.  $\epsilon$ /yr in comparison to 20 mil. in 2001 and around 11 mil. in 2014. The number of installations for which the fees have been collected lowered from around 40.000 in 2007 to 300 in 2017.

### Effect and impacts on air pollution abatement:

The effect of the air pollutant fees could not be separated from the emission reduction caused by strengthening ELVs and application of BATs. The motivational effect that was envisaged in the original increase of the pollutants tariffs has probably in most cases not been achieved, due to higher investment and operational costs of emission reduction measures. It may play a role in the choice of investment in case the modernization is required (either by the legislation or due to obsolescence), however is has not yet been observed. The full effect of the measure may be tangible only after the tariffs achieve the highest level in 2021.

#### **References/Further information:**

Kaprová k., Kolská K., Krpatová K, Kačmárová P., Prášek J., Šauer P.: Environmentální poplatky a daně v České republice a ostatních zemích EU, CENIA, Praha, 2009.

Information on the actual collection of the fee in the table 5.1.1. of the Statistical Environmental Yearbook of the Czech republic (<a href="https://www.cenia.cz/publikace-2/statisticka-rocenka-zivotniho-prostredi-cr/">https://www.cenia.cz/publikace-2/statisticka-rocenka-zivotniho-prostredi-cr/</a>).

Zákon o ochraně ovzduší (Air Protection Act), 201/2012 Sb., fees in § 15 and Annex 9.

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**Additional comments:** Please include any additional information you may wish to provide here.