



Audit Report

21/06

State and EU funds earmarked for the implementation of measures related to waste management

The audit was included in the audit plan of the Supreme Audit Office (hereinafter the “SAO”) for 2021 under No 21/06. The audit was managed and the Audit Report drawn up by SAO member Mr. Petr Neuvirt.

The aim of the audit was to verify whether the funds earmarked for the implementation of measures related to waste management had contributed to the achievement of the set objectives and whether they had been provided and used in accordance with the law.

The audit was carried out at the audited entities in the period between March 2021 and November 2021.

The audited period covered the years 2018 to 2020. Where relevant, the preceding and following periods were also subject to scrutiny.

Audited entities:

Ministry of the Environment (hereinafter the “MoE”); State Environmental Fund of the Czech Republic, Prague (hereinafter the “SEF”); the municipality of Kolín; the municipality of Luže; the municipality of Polná; the municipality of Sivice; the municipality of Šakvice; Association of Municipalities of the Nový Bor Area, Nový Bor; Association of Municipalities Peklo, Zahrádky; the Lidice Stream Valley Microregion, Buštěhrad; METAL TRADE COMAX, a.s., Velvary; goodooga s.r.o., Prague; Tomáš Chrbolka s.r.o., Kutná Hora.

At its 6th session held on 11 April 2022, the **Board of the SAO**, by way of Resolution No 12/VI/2022, **approved** the **Audit Report** worded as follows:

Waste management

Low fulfilment of OPEn 2014-2020 indicators as of 31 December 2020

CZK 8.9 billion

OPE 2014-2020 funds in projects under implementation as of 31 December 2020

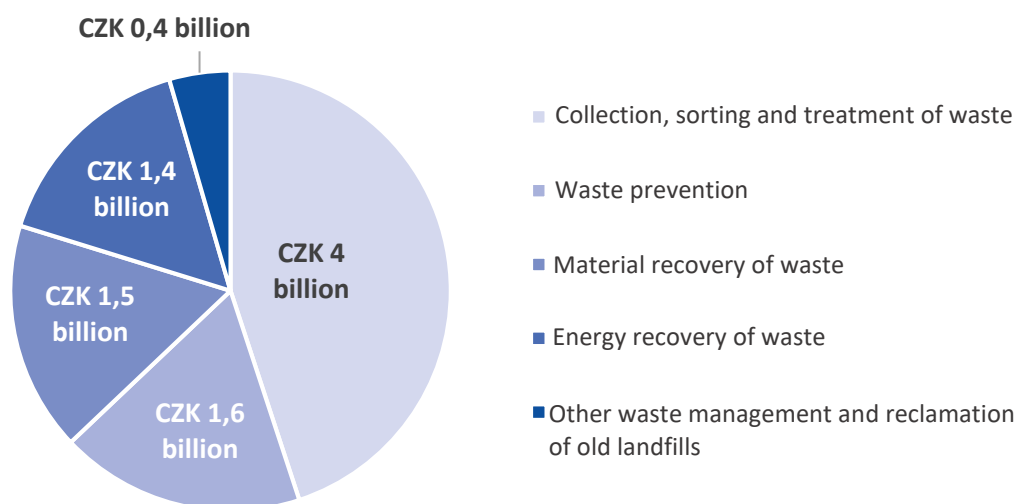
1.2 %

Capacity of newly built or upgraded facilities for the energy recovery of other waste

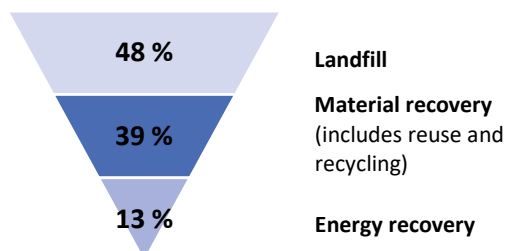
7.47 %

Increasing capacity for waste recycling

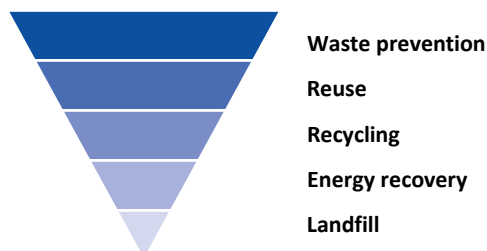
OPEn 2014-2020 funds as of 31 December 2020



Municipal waste management in the Czech Republic in 2020



Hierarchy of waste management methods according to the Waste Act



I. Summary and Evaluation

The audit covered the provision of funds from the resources of the European Union, specifically from the Operational Programme *Environment 2014-2020* (hereinafter also referred to as the “OPEn”), and from the resources of the State Environmental Fund of the Czech Republic, specifically from the *National Programme Environment* (hereinafter also referred to as the “NPE”), by the Ministry of the Environment for the implementation of measures related to waste management. The aim of the audit was to assess whether the funds earmarked for the implementation of measures related to waste management had contributed to the achievement of the set objectives and whether they had been spent in accordance with the law. The audit also examined the implementation of measures under the responsibility of the MoE and the achievement of objectives based on EU and Czech legislation and the *Waste Management Plan of the Czech Republic for the period of 2015-2024* (hereinafter the “WM Plan”).

An interactive annex supplementing the Audit Report No 21/06 is available here: <https://www.nku.cz/scripts/detail.php?id=12406>.

Although the MoE has set up the aid under the OPEn in the field of waste in accordance with the hierarchy of waste management methods set out in the Waste Act¹ and in accordance with the binding part of the WM Plan, not all objectives of the programme will be met.

The funds provided from the OPEn did not contribute to increasing the capacity for waste recycling or to building new facility capacities for the energy recovery of other waste or to modernising these facilities according to the set objectives².

Although landfilling is the least appropriate way to manage waste, 48 % of municipal waste was landfilled in 2020. Landfilling thus continued to be the most common method of municipal waste management in the Czech Republic³. The MoE did not support the statutory landfill ban⁴ by 2024 with financial instruments between 2015 and 2020 so that it could actually be achieved. There was even a 17 % increase in landfill capacity for the disposal of other waste, including municipal waste, between 2016 and 2020. In the same period, there was a 23 % increase in hazardous waste generation, but only 7 % of hazardous waste disposed of by landfill operations was charged with the risk component of the hazardous waste landfill fee, i.e., the component that constituted a revenue of the SEF under the Waste Act⁵.

During the audit of projects aided under the OPEn and focused on waste prevention or waste management, shortcomings were found in the area of public procurement,

¹ Act No 185/2001 Coll., on waste and on amendments to some other acts (hereinafter the “Waste Act”).

² As of 31 December 2020.

³ Municipal waste means mixed and sorted waste from households, as well as mixed and sorted waste from other sources if it is similar in nature and composition to household waste. The exact definition is set out in Article 3(2b) of Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives (hereinafter the “Waste Directive”).

⁴ Act No 229/2014 Coll., amending Act No 185/2001 Coll., on waste and on amendments to some other acts, as amended; Act No 541/2020 Coll., on waste (also referred to as the “New Waste Act”), postponed the ban on landfilling to 2030.

⁵ Section 48(3) of Act No 185/2001 Coll., on waste and on amendments to some other acts.

accounting and eligibility of expenditure, which the SAO assessed as indicating a breach of the budgetary discipline in terms of the Budgetary Rules⁶.

The assessment is based on the following findings:

- 1. The MoE has set up the aid under the OPEn in the area of waste in accordance with the hierarchy of waste management methods and in accordance with the binding part of the WM Plan, but not all output indicators will be met by the end of the programming period. On the contrary, the aid provided from the 3rd priority area of the NPE was not set by the MoE in accordance with the hierarchy of waste management methods and the binding part of the WM Plan.**

Two of the eight output indicators, whose values are based on implemented projects, will not be met by the end of the programming period. The output indicator “*increasing capacity for waste recycling*” showed a performance of 7.47 % as of 31 December 2020 and the output indicator “*capacity of newly built or upgraded facilities for the energy recovery of other waste*” showed a performance of 1.20 % as of 31 December 2020. Due to the fact that no further projects were in the process of assessment, evaluation or approval at the end of 2020 and no further calls were planned by the MoE before the end of the programming period, the target values of these indicators will not be met. The fulfilment of the set specific programme outcome and output indicators as of 31 December 2020 is presented in Annex 1 to this Audit Report.

The audit found that, within the 3rd priority area of the NPE, the MoE had not issued a single call for proposals focused on waste prevention since the beginning of the programme, which does not correspond to the hierarchy of waste management methods.

- 2. In the Czech Republic, there has been no reduction in the overall production of waste, including hazardous waste, the production of municipal waste has been increasing since 2012, and landfilling continued to be the most common method of municipal waste management.**

In the Czech Republic, the total production of all waste is not being reduced and the strategic objective of the WM Plan in the part concerning the reduction of waste production is not being met. The total production of all waste in the Czech Republic ranged from 34.2 to 38.5 megatonnes (Mt) per year between 2015 and 2020.

The proportion of municipal waste going to landfill did not fall below 45 % in those years⁷. In 2014, a legislative ban on the landfilling of selected waste was adopted, with effect as of 2024, without any regulation of the charge for the landfilling of recoverable municipal waste. Between 2009 and 2020, the MoE did not increase the landfill charge for municipal waste, which was CZK 500 per tonne of waste during that period; at the same time, between 2016 and 2020, the capacity of landfills for the disposal of other waste, including municipal waste, increased by 17 %. In the New Waste Act⁸, the MoE proposed postponing the landfill ban to 2030 and increasing the charge for landfilling municipal waste from CZK 800/t in 2021 to a

⁶ Act No 218/2000 Coll., on the budgetary rules and amending certain related acts (the Budgetary Rules).

⁷ In 2015, 47 % of municipal waste was landfilled, in 2016 and 2017 the proportion of landfilled municipal waste decreased to 45 %, in 2018 and 2019 46 % of municipal waste was landfilled and in 2020 48 % of municipal waste was landfilled.

⁸ Act No 541/2020 Coll., on waste, was approved by the Parliament of the Czech Republic on 1 December 2020 with effect from 1 January 2021.

final CZK 1,850/t in 2030. However, an exception in the law allows municipalities to landfill part of the waste generated at the original rate of CZK 500/t (unchanged since 2009) until 2029, which continues to disadvantage other forms of municipal waste management compared to landfilling.

On the basis of data from the *Waste Management Information System* (hereinafter also the “WMIS”), the SAO audit found that only 7 % of the total amount of hazardous waste disposed of (1 Mt) in landfill operations between 2016 and 2020 had been charged at the higher, risk-based rate. According to Section 45(1) of the Waste Act, the waste generator was obliged to pay a charge for landfilling, and, according to Section 46(1) of the Waste Act, for the landfilling of hazardous waste, the waste generator was obliged to pay, in addition to the base component of the charge (CZK 500/t), also the so-called risk component of the charge (CZK 4,500/t), which according to Section 48(3) of the Waste Act constituted a revenue of the SEF. More than 50 % of the hazardous waste landfilled in 2016-2020 without charging the risk component of the charge was reported as so-called landscaping in landfill operations, which represents a reduction in the revenues of the SEF in excess of CZK 2.5 billion for the period of 2016-2020.⁹

3. The following shortcomings were found during the SAO audit of the OPEn projects aimed at waste prevention or waste management:

- a) failure to comply with the principle of non-discrimination under the Public Procurement Act¹⁰;
- b) the project’s accounting records were not properly maintained in accordance with the Act on Accounting¹¹;
- c) the SEF failed to identify ineligible expenditure in two projects, which should have been covered by the applicant’s own resources, not by EU funds;
- d) significant time delays in the final evaluation of projects have been identified at the SEF and the MoE.

4. The SAO audit found shortcomings in relation to the obligations arising from the waste management legislation.

- a) EU Directives in the field of waste management¹² had not been transposed by the Czech Republic into the Czech legal system within the set deadlines.

⁹ According to the Waste Act, the SEF was the recipient of a portion of the collected charges, but it did not have the control authority to check the continuous recording of the waste disposed at the landfill. This authority was vested in the Czech Environmental Inspectorate, regional authorities and the municipalities in whose cadastral territories the landfills were located.

¹⁰ Act No 134/2016 Coll., on public procurement (hereinafter the “Public Procurement Act”).

¹¹ Act No 563/1991 Coll., on accounting (hereinafter the “Act on Accounting”).

¹² Directive (EU) 2018/849 of the European Parliament and of the Council of 30 May 2018 amending Directives 2000/53/EC on end-of-life vehicles, 2006/66/EC on batteries and accumulators and waste batteries and accumulators, and 2012/19/EU on waste electrical and electronic equipment; Directive (EU) 2018/850 of the European Parliament and of the Council of 30 May 2018 amending Directive 1999/31/EC on the landfill of waste; Directive (EU) 2018/851 of the European Parliament and of the Council of 30 May 2018 amending Directive 2008/98/EC on waste; Directive (EU) 2018/852 of the European Parliament and of the Council of 30 May 2018 amending Directive 94/62/EC on packaging and packaging waste; Directive (EU) 2019/904 of the European Parliament and of the Council of 5 June 2019 on the reduction of the impact of certain plastic products on the environment.

- b) The Czech Republic is not meeting the EU Landfill Directive¹³ target for the management of biodegradable municipal waste (hereinafter also “bio-waste”).
- c) In the case of packaging waste, the MoE has set unequal requirements for the extent of recycling of packaging waste.

5. The SAO audit found that the MoE had violated the Waste Act by not updating the WM Plan and also found shortcomings in the implementation and evaluation of the WM Plan objectives.

In 2018, new legislation was adopted at EU level setting new waste management targets. The MoE did not proceed to update the WM Plan immediately after that change in EU legislation, as required by the Waste Act¹⁴. The MoE submitted a draft update of the WM Plan with a view to 2035 at the end of October 2021 for an inter-ministerial comment procedure.

In the reports on the implementation of the WM Plan, the MoE evaluates only the status of implementation of the measures being implemented, which does not allow, for example, to continuously assess the contribution of the measures being implemented to reduce waste production to meeting one of the strategic objectives of the WM Plan¹⁵.

The SAO audit found that the MoE had not set indicators for the evaluation of two objectives of the WM Plan¹⁶ that would take into account the impact of waste and hazardous waste management on human health and the environment, which the SAO found insufficient with regard to the defined objectives of the WM Plan, i.e., to minimise the adverse effects of waste and hazardous waste management on human health and the environment.

In two reports on the implementation of the objectives of the WM Plan¹⁷, the MoE assessed the achievement of the objective of reducing the landfilling of bio-waste with differently constructed indicators, which differed in the calculation of the share of the landfilling of bio-waste in relation to 1995. The MoE did not justify the change in the indicators used in the second evaluation report.

6. The audit identified shortcomings in the monitoring and reporting of waste management data.

The MoE does not have data on the actual utilisation of the capacity of waste management facilities on an ongoing basis. In order to target financial aid, the MoE commissioned an external evaluation of the state of the network of waste management facilities at national and regional level, including proposals for optimisation¹⁸.

The scope of information made available to the public by the MoE from its *Waste Management Information System* is limited compared to the scope of the non-public part of

¹³ Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste.

¹⁴ Section 42(7) of Act No 185/2001 Coll., on waste and on amendments to some other acts.

¹⁵ Strategic Objective 1 of the WM Plan: “waste prevention and reduction of specific waste production”.

¹⁶ Strategic Objective 2 of the WM Plan: “minimisation of the adverse effects of waste generation and management on human health and the environment” and Main Objective 12 of the WM Plan: “minimise the adverse effects of hazardous waste management on human health and the environment”.

¹⁷ *Report on the Fulfilment of the Objectives of the Waste Management Plan of the Czech Republic for the period of 2015-2016* (1st evaluation report), December 2017; *Report on the Fulfilment of the Objectives of the Waste Management Plan of the Czech Republic for the period of 2017-2018* (2nd evaluation report), November 2019.

¹⁸ Analysis: *Basis for the area of aid for waste and recycling management as part of the programming document in the Operational Programme Environment 2021-2027* prepared by Ernst & Young, s.r.o.; the cost of the analysis was CZK 3.4 million.

the WMIS¹⁹, which is not in line with the general principle of public data policy stemming from Directive (EU) No 1024/2019 of the European Parliament and of the Council that public sector information and publicly funded data should be usable by the public with no legal, technical or financial constraints.

The SAO audit found a difference in the data published by the MoE and the Czech Statistical Office (hereinafter the “CZSO”) on the total production of municipal waste; the difference was approximately 10 % (0.5 Mt) for 2019 and approximately 6 % (0.3 Mt) for 2020.

II. Information on the Audited Area

Ministry of the Environment

The Ministry of the Environment is the central state administration authority dealing with, among other things, waste management. The MoE exercises supreme state supervision in the field of waste management, except for the protection of public health in waste management within the meaning of the Waste Act.

The MoE is the managing authority for the OPEn. Furthermore, the MoE decides on the provision of funds from the State Environmental Fund for waste management; these funds are distributed from the NPE.

State Environmental Fund

The SEF plays the role of an intermediary body for the OPEn, based on the *Agreement on Delegation of Certain Activities and Powers of the MoE as the Managing Authority for the OPEn in the Programming Period of 2014-2020 to the SEF*. The SEF also administers the NPE.

Strategic documents

The top, overarching strategic document in the field of environmental protection is the *State Environmental Policy of the Czech Republic for 2012-2020* (hereinafter also referred to as the “State Environmental Policy”), which was approved by Resolution No 6 of the Government of the Czech Republic of 9 January 2013; its updated version was approved by Resolution No 1026 of the Government of the Czech Republic of 23 November 2016. For the area of waste, the State Environmental Policy sets the thematic area/priority 1.2 *Waste prevention, ensuring the maximum use of waste and limiting its negative impact on the environment. Promoting the use of waste as a substitute for natural resources*.

The State Environmental Policy has emphasised compliance with the waste management hierarchy as a prerequisite for meeting the requirements of EU legislation. Landfilling as the most common method of waste disposal was cited as a persistent problem. Improvements were required both in the area of waste prevention (waste production was to be reduced) and in the area of waste management, i.e., increasing the material and energy recovery of waste or other uses of waste.

¹⁹ These include, e.g., data on available landfill capacities and data on the production of selected packaging waste.

Strategic Framework for the Development of the Czech Republic until 2030 (*Czech Republic 2030*)

Czech Republic 2030 is a strategic framework that sets the direction in which the development of the Czech Republic should evolve and serves as a basis for evaluating the development of the Czech Republic and its global responsibilities. The document formulates strategic and specific objectives that the Czech Republic should achieve by 2030, including increasing the share of the circular economy in the total volume of material flows and achieving a decrease in the amount of landfilled municipal waste. The Strategic Framework was approved by Resolution No 292 of the Government of the Czech Republic of 19 April 2017.

Waste Management Plan of the Czech Republic for the period of 2015-2024

The *Waste Management Plan of the Czech Republic for the period of 2015-2024* is the instrument for regulating the waste management in the Czech Republic and for implementing the long-term waste management strategy. The WM Plan contains, among other things, an analytical part, a binding part and a guideline part. The binding part was announced by Government Decree²⁰ of 22 December 2014 No 352/2014 Coll., on the Waste Management Plan of the Czech Republic for the period of 2015-2024. The obligation of the Czech Republic to prepare a WM Plan is stipulated in Directive 2008/98/EC of the European Parliament and of the Council on waste.

The WM Plan defines four strategic objectives: waste prevention and reduction of specific waste production; minimisation of the adverse effects of waste generation and management on human health and the environment; sustainable development of society and moving towards a European “recycling society”; maximum use of waste as a substitute for primary resources and transition to a circular economy.

Legislative framework for waste management

During the audited period, the following legislation was in force and effect: Act No 185/2001 Coll., on waste and on amendments to some other acts, and Act No 477/2001 Coll., on packaging and on amendments to some other acts (the Packaging Act). The Waste Act was the legislation governing waste management in the Czech Republic for almost 20 years. At the end of 2020, new waste legislation was approved with effect from 1 January 2021, through which new European regulations were transposed into Czech law.

Hierarchy of waste management methods

According to Section 9a(1) of the Waste Act, the following hierarchy of waste management methods must be observed in the waste management:

- a) waste prevention;
- b) preparation for reuse;
- c) waste recycling;
- d) other uses of waste, such as energy recovery;
- e) waste disposal.

²⁰ Effective from 1 January 2015.

Aid for waste management

The audited funds earmarked for the implementation of measures related to waste management were provided by the Ministry of the Environment and the State Environmental Fund of the Czech Republic from the OPEn and the NPE.

Operational Programme *Environment 2014-2020*

The issue of waste is addressed in Priority Axis 3 – *Waste management and material flows, environmental burden and risks* (hereinafter “PA 3”), specifically in Investment Priority 1²¹.

Investment Priority 1 of Priority Axis 3 of the OPEn has three specific objectives (hereinafter also referred to as “SO”): 3.1 *Prevent waste generation*; 3.2 *Increase the share of material and energy recovery of waste*; 3.3 *Reclaim old landfills*.

National Programme *Environment*

The NPE aids projects for the protection and improvement of the environment in the Czech Republic from national resources or from the funds of the SEF. In the audited period, the NPE was divided into nine priority areas; the audited issues were covered by the 3rd priority area: *Waste, old burdens, environmental risks*.

III. Scope of the Audit

The aim of the audit was to verify whether the funds earmarked for the implementation of measures related to waste management had contributed to the achievement of the set objectives and whether they had been provided and used in accordance with the law.

The audit focused on the performance of the tasks of the managing authority (the MoE) and the intermediary body (the SEF) in the administration of the OPEn and the NPE, and on the verification of the fulfilment and evaluation of the objectives in the field of waste management resulting from the EU and Czech legislation and from the WM Plan.

Furthermore, for selected beneficiaries under the OPEn, the audit focused on compliance with the conditions for granting the subsidy, the demonstrability and justification of eligible expenditure, verification of economy, the use of subsidy funds for the stated purpose, the fulfilment of project objectives and the sustainability of projects. A total of 11 projects were selected for the audit; these were aimed at the implementation of measures related to waste management and were financed from SO 3.1, 3.2 and 3.3 of PA 3 under the OPEn.

The audit also examined 5 projects financed from the 3rd priority area of the NPE. An audit of the administration, implementation and compliance with the conditions of the subsidy for these projects was carried out at the SEF.

An overview of the audited projects is presented in Annex 2 to this Audit Report.

The audited volume of funds at the system level amounted to CZK 10.46 billion, of which CZK 9.88 billion was from the OPEn and CZK 0.59 billion from the NPE.

²¹ Investment Priority 1 of Priority Axis 3: *Preserving and protecting the environment and promoting resource efficiency by investing in the waste sector to meet the requirements of the Union’s environmental acquis and to address needs, identified by the Member States, for investment that goes beyond those requirements (under Regulation (EU) No 1300/2013 of the European Parliament and of the Council, Article 4(c)(i)).*

The audited volume at the project level amounted to CZK 99.70 million, of which CZK 96.33 million was from the OPEn and CZK 3.37 million from the NPE.

The audited period covered the years 2018 to 2020 and, where relevant, the preceding and following periods were also subject to scrutiny.

Note: All the legal regulations referred to in this Audit Report are applied in the version effective for the audited period.

IV. Detailed Facts Ascertained by the Audit

- The MoE has set up the aid under the OPEn in the area of waste in accordance with the hierarchy of waste management methods and in accordance with the binding part of the WM Plan, but not all output indicators will be met by the end of the programming period. On the contrary, the aid provided from the 3rd priority area of the NPE was not set by the MoE in accordance with the hierarchy of waste management methods and the binding part of the WM Plan**

Operational Programme *Environment 2014-2020*

The SAO audit found that the activities aided under PA 3 of the OPEn had been set to meet the objectives of the WM Plan. Allocation and status of the spending of funds under PA 3 of the OPEn as of 31 December 2020 are presented in Table 1.

Table 1: Summary data on the spending of EU funds in PA 3 of the OPEn as of 31 December 2020

| SO | Total allocation of announced calls after changes (in CZK) | Funds in registered aid applications | | Funds in projects under implementation | | Amounts paid out to beneficiaries (in CZK) |
|--------------|------------------------------------------------------------|--------------------------------------|--------------------|----------------------------------------|--------------------|--------------------------------------------|
| | | CZK | Number of projects | CZK | Number of projects | |
| 3.1 | 1,874,389,654 | 2,326,796,396 | 1,424 | 1,633,267,481 | 926 | 886,995,871 |
| 3.2 | 7,564,731,450 | 12,177,750,754 | 3,081 | 6,987,404,791 | 1,925 | 3,069,770,213 |
| 3.3 | 437,906,808 | 512,001,637 | 27 | 284,195,873 | 17 | 197,017,739 |
| Total | 9,877,027,912 | 15,016,548,787 | 4,532 | 8,904,868,145 | 2,868 | 4,153,783,823 |

Source: MoE.

On the basis of the calls announced within the audited activities of the OPEn, as of 31 December 2020, 2,868 projects were in various stages of progress with a subsidy decision issued on the provision of the EU contribution of CZK 8.9 billion, and the beneficiaries received the payment of expenditure amounting to CZK 4.2 billion.

In PA 3, focusing on waste, environmental burdens and risks, 47.32 % of the allocation for Specific Objective 3.1 *Prevent waste generation*, 40.58 % of the allocation for Specific Objective 3.2 *Increase the share of material and energy recovery of waste*, and 44.99 % of the allocation for Specific Objective 3.3 *Reclaim old landfills* were paid to beneficiaries from the beginning of the programming period until 31 December 2020.

In the framework of the calls announced under PA 3 of the OPEn, it was found that the spending of the allocation for SO 3.1 had predominantly covered the interest in the aided activity 3.1.1 *Prevention of municipal waste*, where the EU contribution as of 31 December 2020 amounted to CZK 1,612 million, of which CZK 1,412 million was allocated to the aid for home compost bins and collection containers for textile and clothing waste.

The spending of the allocation for SO 3.2 was mainly covered by the interest in the aided activity 3.2.1 *Construction and modernisation of waste collection, sorting and treatment facilities*, where the EU contribution reached CZK 3,947 million as of 31 December 2020, of which CZK 1,837 million was allocated to the aid for separate collection of waste and CZK 1,476 million was aid for collection yards.

The lowest EU contribution within all audited activities aided was found for aided activity 3.1.2 *Prevention of industrial waste*; that contribution amounted to CZK 21 million as of 31 December 2020. In the context of waste prevention, there has been minimal interest in promoting technological change to reduce industrial waste production. By the end of 2020, a total of 9 projects had received aid in three calls. A detailed overview of the number of implemented projects and the status of EU contribution spending as of 31 December 2020, based on the breakdown in which the projects are monitored by the MoE, is presented in Annex 3 to this Audit Report.

In order to assess the fulfilment of the objectives of the OPEn, specific outcome and output indicators have been defined and quantified for SO 3.1, 3.2 and 3.3. The established output indicators make it possible to express the incremental capacity of the aided projects. The outcome indicators are mostly retrieved from statistics, as requested by the European Commission. The use of statistical indicators for monitoring and reporting on the benefits of the OPEn is problematic, as the statistical reporting does not take into account the direct link to the implemented projects, but the value for the whole Czech Republic is reported; i.e., even facts that were not subject to aid under the OPEn are included.

The output indicator 40101/C017 concerning the increasing in capacity for waste recycling showed a performance of 7.47 % as of 31 December 2020 and the output indicator 40701 concerning the capacity of newly built or upgraded facilities for the energy recovery of other waste showed a performance of 1.20 % as of 31 December 2020. The target values of these indicators will not be met by the end of the programming period. An overview of the fulfilment of all the audited output and outcome indicators as of 31 December 2020 is presented in Annex 1 to this Audit Report.

National Programme Environment

The NPE was financed by the SEF. An overview of the revenues of the SEF in the waste sector is given in Table 2. The largest part of the revenues of the SEF in the area of waste in the years 2018 to 2020 consisted of “fees to promote the collection, processing, recovery and disposal of selected car wrecks” collected in the audited period on the basis of the Waste Act (CZK 420.8 million). The second most significant revenue item was charges for the landfilling of hazardous waste (CZK 72.9 million). Furthermore, the SEF received revenues from registration fees levied on the basis of the Packaging Act and revenues from fines imposed by the Czech Environmental Inspectorate (hereinafter the “CEI”) or municipalities with extended powers (hereinafter also “municipalities with ext. powers”) in the total amount of CZK 84.2 million.

Table 2: Overview of the SEF revenues related to waste management (in CZK million)

| Type of fee/charge or revenue of the SEF | Period | | | Total for the period |
|----------------------------------------------------------------------------------------------------|---------------|---------------|---------------|----------------------|
| | 2018 | 2019 | 2020 | |
| Risk component of the charge (Section 48 of Act No 185/2001 Coll.) | 20.81 | 23.39 | 28.66 | 72.86 |
| Fines imposed by the CEI and municipalities with ext. powers (Section 68 of Act No 185/2001 Coll.) | 11.51 | 12.24 | 8.41 | 32.16 |
| Registration fees (Section 30 of Act No 477/2001 Coll.) | 17.31 | 17.35 | 17.42 | 52.08 |
| Fees for the disposal of car wrecks (Section 37e of Act No 185/2001 Coll.) | 170.77 | 139.49 | 110.54 | 420.80 |
| Total | 220.40 | 192.47 | 165.03 | 577.90 |

Source: SEF.

In the audited period, the revenues of the SEF in the area of waste were not earmarked, even though the guideline part of the WM Plan and the *State Energy Concept* required that it be ensured that the funds obtained from the landfill charge would be used for the development of waste management in the Czech Republic, which according to these strategic documents should have been ensured by the MoE.

The SAO found that under the 3rd priority area of the NPE, in the years 2018 to 2020, CZK 75.2 million had been paid to the beneficiaries from the SEF for the material recovery of car wrecks and CZK 48.3 million had been paid for the ecological removal of illegal landfills and warehouses. However, since the beginning of the calls for proposals under the NPE, not a single call for waste prevention has been announced, although waste prevention is the first in the hierarchy of waste management methods according to the Waste Act and the principles set out in the WM Plan.

2. In the Czech Republic, there has been no reduction in the overall production of waste, including hazardous waste, the production of municipal waste has been increasing since 2012, and landfilling continued to be the most common method of municipal waste management

Waste production

The SAO audit found that the strategic objectives of the WM Plan in terms of the requirements to reduce waste production were not being met: neither Strategic Objective 1 “*waste prevention and reduction of specific waste production*” nor Strategic Objective 2 “*minimisation of the adverse effects of waste generation and management on human health and the environment*”. The development of the production of selected waste types between 2015 and 2020 is shown in Table 3.

Table 3: Production of selected waste types between 2015 and 2020 (in tonnes)

| | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|-----------------------------------|------------|------------|------------|------------|------------|------------|
| Construction and demolition waste | 21,891,225 | 18,003,909 | 17,953,901 | 20,843,989 | 20,835,951 | 22,528,164 |
| Municipal waste | 5,274,126 | 5,612,416 | 5,690,585 | 5,782,066 | 5,879,163 | 5,729,917 |
| Packaging waste | 1,087,762 | 1,149,843 | 1,195,374 | 1,296,883 | 1,334,427 | 1,328,731 |
| Hazardous waste | 1,503,979 | 1,443,759 | 1,507,679 | 1,767,964 | 1,758,504 | 1,781,816 |

Source: WMIS.

In the long term, there is no reduction in total waste production in the Czech Republic.

Municipal waste management

The problems of waste management in the Czech Republic between 2015 and 2020 consisted in a high landfill rate, low landfill prices for municipal and other waste²² and a non-increasing share of the energy recovery of municipal waste. The MoE assumed in the WM Plan that the reduction of municipal waste landfilling would be gradually achieved mainly by reducing production, banning landfilling from 2024, increasing the landfill charge and increasing the share of energy recovery.

In 2014, legislation was adopted to ban the landfilling of selected types of waste from 2024. There was no increase in the landfill charge for municipal and other waste between 2009 and 2020. The MoE proposed an increase in the landfill charge in the draft of the New Waste Act, which was being considered between 2015 and 2017. The MoE withdrew that draft from the Government's agenda.

The share of municipal waste landfilling did not fall below 45 % between 2015 and 2020 and the share of the energy recovery of municipal waste remained constant at around 12 %. The material recovery rate of municipal waste in relation to its total production increased from 36 % in 2015 to 39 % in 2020.

There was a 17% increase in landfill capacity for the disposal of other waste, including municipal waste, between 2016 and 2020. As of 1 January 2016, the available capacity of landfills for the disposal of other waste was 36.4 Mt, and as of 31 December 2020 the available capacity of these landfills was 42.8 Mt. An overview of available landfill capacity in 2016 and 2020 is provided in Annex 4 to this Audit Report.

In the New Waste Act, the date for the landfill ban was postponed until 2030, while it was also stipulated that the charge for the disposal of recoverable waste would gradually increase from CZK 800 per tonne to the final CZK 1,850 per tonne from 2030. Under an exemption²³, municipalities could landfill up to 2.14 Mt of municipal waste in 2021 at a rate of CZK 500 per tonne, i.e., 79 % of the amount of municipal waste disposed of by landfilling in 2019. In 2022, municipalities will be allowed to landfill up to 2.03 Mt of municipal waste, i.e., 75 % of the amount of municipal waste disposed of by landfilling in 2019. The exemption in the law continues to significantly favour the landfilling of municipal waste over its energy or material recovery. The price for the disposal of 1 tonne of mixed municipal waste (hereinafter also "mixed waste") in 2021 was, according to the weighted average, CZK 1,799.²⁴

²² For example, in the *Roadmap for Czech Republic – Support to Member States in improving waste management based on assessment of Member States' performance* dated 2011, the European Commission already recommended the Czech Republic to, among other things, gradually increase the existing landfill charge in order to divert waste from landfills and use the revenues to promote separate collection and alternative infrastructure, and to keep the landfill charges higher than incineration charges.

²³ Section 157 of Act No 541/2020 Coll.

²⁴ In the Czech Republic, four waste-to-energy facilities were in operation in 2021 (in Prague, Plzeň, Liberec and Brno), with a total maximum capacity of 0.8 Mt. The data for the calculation is set out in Annex 5 to this Audit Report.

The SAO also found that between 2015 and 2019 there had been an increase in the amount of waste electrical and electronic equipment (hereinafter also “waste el. equipment”) being disposed of by landfilling, which is not in line with the hierarchy of the waste management methods.

The SAO audit found that, contrary to the hierarchy of the waste management methods and in contradiction with the principles of the WM Plan, there had been no reduction in the production of municipal waste and no increase in the share of energy recovery of municipal waste between 2015 and 2020.

The landfill ban, which was set by law for 2024, was not supported by the MoE with economic instruments and measures to achieve it by the set deadline. The landfill charge had not been increased by 2020. The legislative ban on landfilling has been postponed until 2030.

The development of municipal waste management is presented in Table 4.

Table 4: Main ways of municipal waste (mun. waste) and mixed municipal waste (mixed waste) management in 2015-2020

| | 2015 | | 2016 | | 2017 | | 2018 | | 2019 | | 2020 | |
|----------------------------------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|-----------|
| | Quantity [t] | Share [%] | Quantity [t] | Share [%] | Quantity [t] | Share [%] | Quantity [t] | Share [%] | Quantity [t] | Share [%] | Quantity [t] | Share [%] |
| Landfilling of mun. waste | 2,498,736 | 47 | 2,522,799 | 45 | 2,583,390 | 45 | 2,658,338 | 46 | 2,696,303 | 46 | 2,737,281 | 48 |
| landfilling of mixed waste | 2,070,735 | 73 | 2,070,815 | 73 | 2,088,770 | 75 | 2,128,268 | 76 | 2,110,499 | 76 | 2,129,391 | 77 |
| Material recovery of mun. waste | 1,877,447 | 36 | 2,136,237 | 38 | 2,135,660 | 38 | 2,230,391 | 39 | 2,408,484 | 41 | 2,213,778 | 39 |
| material recovery of mixed waste | 86,314 | 3 | 101,291 | 4 | 109,384 | 4 | 115,137 | 4 | 122,434 | 4 | 40,301 | 1 |
| Energy recovery of mun. waste | 620,313 | 12 | 680,504 | 12 | 685,277 | 12 | 676,574 | 12 | 689,110 | 12 | 721,217 | 13 |
| energy recovery of mixed waste | 574,899 | 20 | 612,892 | 22 | 601,810 | 21 | 588,155 | 21 | 596,087 | 21 | 618,650 | 22 |

Source: WMIS.

Note: Mixed municipal waste – the part of municipal waste that excludes sorted waste.

Hazardous waste management

According to the Waste Act, the generator of hazardous waste was obliged to pay, in addition to the base component of the charge (CZK 500/t), a risk component of the charge, the so-called risk charge rate for the disposal of hazardous waste in landfills (CZK 4,500/t). On the basis of data from the WMIS on hazardous waste management, the audit found that, between 2016 and 2020, 1 Mt of hazardous waste had been landfilled, of which only 7 % (0.08 Mt) had been charged with the risk component for landfilling hazardous waste under Section 46(1) of Act No 185/2001 Coll. For example, for the years 2016 to 2020, 0.6 Mt of hazardous waste landfilled was reported as landscaping without being charged with the risk rate, which represents a reduction of more than CZK 2.5 billion in revenue for the landfilling of hazardous waste; this revenue should have belonged to the SEF according to Section 48(3) of Act No 185/2001 Coll., see Annex 6 to this Audit Report. According to the Waste Act, the SEF was the recipient of a portion of the collected charges, but it did not have the control authority to check the continuous recording of the waste disposed at the landfill. This authority was vested

in the CEI, regional authorities and the municipalities in whose cadastral territories the landfills were located.

3. Shortcomings were found during the SAO audit of the OPEn projects aimed at waste prevention or waste management

a) Public procurement

At one beneficiary of an OPEn subsidy, the SAO audit found that the beneficiary had not proceeded in accordance with the Public Procurement Act²⁵, as it had defined the technical specification in the tender documentation in a way that had limited the range of possible participants in the tender procedure, thereby failing to comply with the principle of non-discrimination, which the SAO assessed as a fact indicating a breach of the budgetary discipline in the amount of up to CZK 231,627 according to the Budgetary Rules²⁶.

b) Bookkeeping

At one beneficiary of an OPEn subsidy, the audit found that the beneficiary had not kept separate records of all revenues, expenditure, income and costs of the project and had not documented complete bookkeeping. The audit revealed that the project's accounting records had not been kept in a proper manner in accordance with the Act on Accounting²⁷, which the SAO assessed as indicating a breach of the budgetary discipline of up to CZK 215,050 according to the Budgetary Rules²⁶.

c) Eligibility of expenditure

In two cases, the SAO found that the beneficiary had included in the eligible project expenditure also expenditure that could not be considered eligible under the rules of the OPEn, which the SAO assessed as facts indicating a breach of the budgetary discipline under the Budgetary Rules²⁸ and as an irregularity under EU legislation²⁹. The SEF failed to detect these shortcomings and, in both cases, approved the statement in the amount requested by the beneficiary, thereby not proceeding in accordance with the Act on Financial Control³⁰ and its implementing decree³¹.

²⁵ Section 6(2) and Section 36(1) of Act No 134/2016 Coll., on public procurement.

²⁶ Section 44(1)(j) of Act No 218/2000 Coll., on the budgetary rules and amending certain related acts (the Budgetary Rules).

²⁷ Act No 563/1991 Coll., on accounting.

²⁸ Section 44(1)(b) of Act No 218/2000 Coll., on the budgetary rules and amending certain related acts (the Budgetary Rules).

²⁹ Article 2(36) of Regulation (EU) No 1303/2013 of the European Parliament and of the Council of 17 December 2013 laying down common provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund, the European Agricultural Fund for Rural Development and the European Maritime and Fisheries Fund and laying down general provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund and the European Maritime and Fisheries Fund and repealing Council Regulation (EC) No 1083/2006.

³⁰ Sections 6 and 26 of Act No 320/2001 Coll., on financial control in public administration and on amendments to certain acts (the Act on Financial Control).

³¹ Section 13(2) of Decree No 416/2004 Coll., implementing Act No 320/2001 Coll., on financial control in public administration and on amendments to certain acts (the Act on Financial Control), as amended by Act No 309/2002 Coll., Act No 320/2002 Coll. and Act No 123/2003 Coll.

d) Time delays in the final evaluation of projects

The SAO audit found that for 10 out of the 11 audited projects, the SEF had not reviewed the final reports on project implementation within the deadline of 10 days³² as set out in the Operational Manual of the OPEⁿ³³, in five cases it had done so in more than six months and in three cases in more than a year. Further time delays were found for the SEF in the process of reviewing and assessing project changes and project sustainability reports.

The MoE, as the managing authority of the OPEⁿ and the programme administrator, did not proceed in accordance with the Decree on the participation of the state budget in the financing of asset reproduction programmes³⁴, as it did not carry out the final evaluation of the action for five completed audited projects.

4. The SAO audit found shortcomings in relation to the obligations arising from the waste management legislation

a) EU Directives governing the field of waste management had not been transposed by the Czech Republic into the Czech legal system within the set deadlines.

In June 2018, four new EU Directives³⁵ for waste management were published in the *Official Journal of the EU*. The Czech Republic was obliged to bring into force the legislation necessary to comply with those directives by 5 July 2020. The relevant waste legislation³⁶ was adopted with effect from 1 January 2021, almost six months after the deadline.

In June 2019, a new EU Directive³⁷ was published in the *Official Journal of the EU* to restrict the use of single-use plastic products. The Czech Republic was obliged to bring into force the legislation necessary to comply with that directive by 3 July 2021. As of the date of completion of the audit, the relevant legislation had not been adopted. The Czech Republic thus failed to meet the transposition deadline.

³² The period from the date when the beneficiary of the subsidy submits the documents for the final evaluation to the State Environmental Fund of the Czech Republic for review, until the approval of the final report on implementation in terms of formal requirements and quality of content by the Ministry of the Environment as the managing authority of the OPE.

³³ The Operational Manual of the Operational Programme *Environment 2014-2020* defines the working procedures at the level of the managing authority and intermediary bodies. These procedures serve to properly manage the implementation of the Operational Programme *Environment 2014-2020*.

³⁴ Section 6(2) of Decree No 560/2006 Coll., on the participation of the state budget in the financing of asset reproduction programmes.

³⁵ Directive (EU) 2018/849 of the European Parliament and of the Council of 30 May 2018 amending Directives 2000/53/EC on end-of-life vehicles, 2006/66/EC on batteries and accumulators and waste batteries and accumulators, and 2012/19/EU on waste electrical and electronic equipment; Directive (EU) 2018/850 of the European Parliament and of the Council of 30 May 2018 amending Directive 1999/31/EC on the landfill of waste; Directive (EU) 2018/851 of the European Parliament and of the Council of 30 May 2018 amending Directive 2008/98/EC on waste; Directive (EU) 2018/852 of the European Parliament and of the Council of 30 May 2018 amending Directive 94/62/EC on packaging and packaging waste.

³⁶ Act No 541/2020 Coll., on waste; Act No 542/2020 Coll., on end-of-life products; Act No 543/2020 Coll., amending certain acts in connection with the adoption of the Waste Act and the End-of-Life Products Act; Act No 545/2020 Coll., amending Act No 477/2001 Coll., on packaging and on amendments to some other acts (the Packaging Act), as amended.

³⁷ Directive (EU) 2019/904 of the European Parliament and of the Council of 5 June 2019 on the reduction of the impact of certain plastic products on the environment.

The 2012 EU Directive³⁸ imposed the obligation to apply the principle of producer responsibility in order to achieve a minimum level of collection of waste electrical and electronic equipment each year. The Czech Republic was obliged to bring into force the legislation necessary to comply with that directive by 14 February 2014. The Czech Republic applied the producer responsibility principle in the End-of-Life Products Act³⁹, which came into force on 1 January 2021, bringing its legislation into line with the directive almost 6 years after the due date.

b) The Czech Republic is not meeting the EU Landfill Directive target for the management of bio-waste.

The EU Landfill Directive⁴⁰ obliges the Czech Republic to ensure that the amount of biodegradable municipal waste landfilled is reduced to 35 % of the total 1.53 Mt of bio-waste produced in the Czech Republic in 1995. The Czech Republic was obliged to reduce the amount of bio-waste landfilled to a maximum of 0.54 Mt by the end of 2020. According to the SAO's calculation⁴¹, the 2020 target was not reached. The Ministry of the Environment did not publish official data on the landfilling of bio-waste for 2020 by the completion of the audit. The Czech Republic did not even meet the target set for 2013, i.e., to landfill 50 % less bio-waste than in 1995.

c) In the case of packaging waste, the MoE has set unequal requirements for the extent of recycling of packaging waste.

Persons who place packaging or packaged products on the market or in circulation have the option to comply with the requirements for take-back, recycling and recovery of packaging waste under the Packaging Act either individually or through an authorised packaging company, i.e., through a so-called collective system. Similarly, it is possible to fulfil statutory obligations in the field of take-back, recycling and recovery of selected end-of-life products under the End-of-Life Products Act (e.g., for waste batteries and accumulators or waste electrical and electronic equipment). Between 2015 and 2020, more than 90 % of packaging waste was covered by the collective system.

The SAO audit found that while the same scope of recycling and recovery requirements for selected end-of-life products applied to those fulfilling their obligation individually and those using the collective system, the requirements for packaging waste were set differently. For the years 2015 to 2020, the scope of recycling of packaging waste, e.g., paper, cardboard and glass, was set in the Packaging Act for persons fulfilling their obligation individually more strictly by five percentage points than for the collective system according to the authorisation decision, see Annex 7 to this Audit Report. The MoE decision of 19 March 2021 has widened the inequality in the extent of the requirements for recycling of packaging waste between the

³⁸ Article 7(1) of Directive 2012/19/EC of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment; EU Member States had until 14 February 2014 to bring into force the legislation necessary to comply with that directive.

³⁹ Act No 542/2020 Coll., on end-of-life products.

⁴⁰ Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste.

⁴¹ The calculation was made on the basis of data from the *Waste Management Information System* and according to the methodologies of the MoE: 1) *Mathematical expression of the calculation of the WM Indicator System in accordance with Decree No 383/2001 Coll., on the details of waste management, as amended*; 2) *Methodology for the evaluation of the objectives of the 2019 WM Plan*.

two compliance routes during the COVID-19 pandemic⁴². In the case of packaging waste, the MoE has thus set unequal requirements for the extent of recycling of packaging waste.

5. The SAO audit found that the MoE had violated the Waste Act by not updating the WM Plan and also found shortcomings in the implementation and evaluation of the WM Plan objectives

The SAO found that the MoE had not proceeded in accordance with Section 42(7) of the Waste Act when it had failed to amend the WM Plan immediately after each substantial change in the conditions on the basis of which it had been prepared. One such major change was the amendment of EU legislation¹² which set new targets for waste management and, in the area of packaging waste, for example, set new rules for calculating recycling rates from 2021. The MoE submitted a draft update of the WM Plan with a view to 2035 at the end of October 2021 for an inter-ministerial comment procedure.

In the audited period, the MoE did not provide economic instruments to promote the increase of the energy recovery of mixed municipal waste, although this is one of the main objectives of the WM Plan.

For the management of mixed municipal waste, the following objective was set in the WM Plan: *“recover mixed municipal waste (after sorting out the materially recoverable components, hazardous components and biodegradable waste) mainly for energy recovery in facilities designated for that purpose in accordance with the legislation in force”*. In order for mixed municipal waste to be recovered, in particular for energy recovery, the capacity of these facilities would have to be increased, which was largely dependent on financial aid for these facilities.

The MoE planned to support facilities for the energy recovery of municipal waste within the framework of the OPEn. The granting of the aid was subject to an assessment by the European Commission. Although the assessment process had not yet been completed by the European Commission, at the end of 2016 the MoE decided that the OPEn would not aid the construction of new capacities of waste-to-energy facilities and did not provide aid for these purposes from other sources. The reality is that in 2020, 77 % of mixed municipal waste was landfilled, while 22 % of mixed municipal waste was recovered for energy recovery (in 2015, 73 % of mixed municipal waste was landfilled and 20 % recovered for energy recovery).

In its *Reports on the Fulfilment of the Objectives of the WM Plan*, the MoE primarily focuses on the evaluation of the implementation of measures that are supposed to lead to the achievement of the objectives, not on the continuous evaluation of the achievement of the objectives themselves. For example, in the *Report on the Fulfilment of the Objectives of the WM Plan for the period of 2017-2018*, the MoE assessed that Strategic Objective 1 of the WM Plan was being partially fulfilled on the basis of the implementation of measures and activities that were supposed to lead to a reduction of the total waste production. However, there has been no real reduction in waste production. This method of evaluation, i.e., without a link between the evaluation of the implementation of measures and the evaluation of the

⁴² For example, the Packaging Act sets a 50% recycling rate requirement for plastic packaging waste for the period of 2021-2024 for those fulfilling their obligation independently. For the collective system, the MoE reduced the requirement for the recycling rate of plastic packaging waste from 45 % to 42 % in the authorisation decision of 19 March 2021.

achievement of objectives, does not allow the MoE to continuously assess the effectiveness of the waste reduction strategy.

The MoE has defined indicators for the evaluation of two objectives of the WM Plan⁴³ that relate only to the total production of waste or hazardous waste, although these objectives are also aimed at minimising the effects of waste management on human health and the environment. The MoE has not set indicators taking into account waste management methods in relation to the objectives of the WM Plan in question.

The MoE reported higher values for the share of landfilling of bio-waste in the Czech Republic in relation to the 1995 baseline in the Waste Management Indicator System of the Czech Republic⁴⁴ for 2017 and 2018 (62 % for 2017 and 61 % for 2018) than reported in the *Report on the Fulfilment of the Objectives of the WM Plan for the period of 2017-2018* (47 % for 2017 and 46 % for 2018). The achieved values of the share of landfilling of bio-waste reported in the *Report on the Fulfilment of the Objectives of the WM Plan for the period of 2017-2018* were not supported by the approved system of waste management indicators of the Czech Republic or the established method of their calculation.

6. The audit identified shortcomings in the monitoring and reporting of waste management data

Waste management monitoring system

According to the Waste Act, the MoE is obliged to publish up-to-date information on the operation of waste management facilities and, according to the WM Plan, is responsible for creating and maintaining a comprehensive, adequate and efficient network of waste management facilities in the Czech Republic. The MoE is to evaluate the waste management system in the Czech Republic and the system of sorted waste collection, while assessing the capacity of the waste management system and proposing measures to improve it.

The WMIS is a database information system containing data reported under the Waste Act, the New Waste Act and the Packaging Act. The public can access, among other things, the database of the *Public Waste Management Information System* (hereinafter also the “Public WMIS”) and the database of the *Register of Facilities, Traders and Files* (hereinafter also the “Register of Facilities”)⁴⁵. The SAO audit found that the scope of information made available to the public was limited compared to the scope of the non-public part of the WMIS. In the case of the Register of Facilities, most of the information on the operation of waste management facilities is not accessible to the public, such as information on the available capacity of landfills, the amount of charged and uncharged waste deposited in landfills, etc. In the case of the Public WMIS, only basic aggregated information on waste production and management is published.

⁴³ Strategic Objective 2 of the WM Plan “*minimisation of the adverse effects of waste generation and management on human health and the environment*” and Main Objective 12 of the WM Plan “*minimise the adverse effects of hazardous waste management on human health and the environment*”.

⁴⁴ The system of waste management indicators represents a set of basic indicators designed to monitor the set objectives of the WM Plan. It is the duty of the MoE to evaluate the indicator system, propose adjustments or updates to the indicator system and determine the method of calculation of the individual indicators.

⁴⁵ In addition, the following databases are available to the public: *List of producers of electrical equipment; Register of take-back points for electrical equipment; Car wrecks module (WMIS Car wrecks module); List of carriers;* see <https://www.cenia.cz/odpadove-a-obehove-hospodarstvi/isoh/>.

Information on waste management facilities is collected in the Register of Facilities⁴⁶. This register does not record the actual use of the capacity of these waste management facilities in a given calendar year (except for landfills where both the available capacity and the amount of waste disposed of are monitored), but only the permitted maximum capacity of the facility (the so-called projected treatment capacity) is recorded.

Another shortcoming of the waste management monitoring system is that the MoE cannot monitor the methods of the management of waste produced in a specific area (e.g., a region) in relation to the waste producer. The MoE can track the amount of waste that has been used or disposed of in facilities within the region, but without a link to the origin of the waste, which prevents continuous monitoring of interregional waste streams.

These shortcomings make it difficult for the MoE to assess the load on the network of waste management facilities and to optimise it, and do not allow the MoE to respond flexibly to the needs of waste management and to better identify areas for financial aid from national or European funds. The MoE commissioned an external analysis for the purpose of evaluation of the state of the network of waste management facilities at national and regional level, including proposals for optimisation.

Differences in data on total municipal waste production

On the basis of an *agreement on the provision of administrative data for statistical purposes* of 29 October 2019, the CZSO decided to partially replace the original statistical reports with data from the MoE. The effect of this partial unification of the source base for data reported by the MoE and the CZSO and the effect of the audit of the MoE information system and the audit of waste classification codes has reduced the differences in the reported data on the Czech waste management. Nevertheless, there is still a difference in the data published by the MoE and the CZSO on the total production of municipal waste – for 2019 this difference was approximately 10 % (0.5 Mt) and for 2020 approximately 6 % (0.3 Mt).

⁴⁶ The Register of Facilities records information on the annual projected, annual projected treatment, daily projected treatment and maximum instantaneous capacity of waste collection, recovery and disposal facilities, and data on the total projected, planned and available capacity of landfills and the amount of waste disposed of in landfills, including the forms of charging for them.

List of terms and abbreviations:

| | |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bio-waste | biodegradable municipal waste |
| CEI | Czech Environmental Inspectorate |
| CR | Czech Republic |
| CZSO | Czech Statistical Office |
| EU | European Union |
| WMIS | <i>Waste Management Information System</i> |
| Mun. waste | municipal waste |
| MS2014+ | monitoring system of European funds for the programming period of 2014-2020 |
| MoE | Ministry of the Environment |
| Mt | megatonne |
| NICL | National Indicator Code List |
| SAO | Supreme Audit Office |
| NPE | <i>National Programme Environment</i> |
| Waste el. equipment | waste electrical and electronic equipment |
| WM | waste management |
| OPEn | <i>Operational Programme Environment 2014-2020</i> |
| Municipality with ext. powers | municipality with extended powers |
| PA 3 | <i>Priority Axis 3 – Waste management and material flows, environmental burden and risks (one of the priority axes of the Operational Programme Environment 2014-2020)</i> |
| WM Plan | <i>Waste Management Plan of the Czech Republic for the period of 2015-2024</i> |
| Register of Facilities | <i>Register of Facilities, Traders and Files (one of the databases of the Waste Management Information System)</i> |
| SO | specific objective (under the OPEn) |
| SEF | State Environmental Fund of the Czech Republic |
| Mixed waste | mixed municipal waste |
| State Environmental Policy | <i>State Environmental Policy of the Czech Republic for 2012-2020</i> |
| Public WMIS | <i>Public Waste Management Information System (one of the databases of the Waste Management Information System)</i> |

Short titles of laws and regulations:

New Waste Act – Act No 541/2020 Coll., on waste

Budgetary Rules – Act No 218/2000 Coll., on the budgetary rules and amending certain related acts (the Budgetary Rules)

Waste Directive – Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives

Packaging Act – Act No 477/2001 Coll., on packaging and on amendments to some other acts (the Packaging Act)

Waste Act – Act No 185/2001 Coll., on waste and on amendments to some other acts

Act on Accounting – Act No 563/1991 Coll., on accounting

Public Procurement Act – Act No 134/2016 Coll., on public procurement

Annex 1: Fulfilment of programme output and outcome indicators for SO 3.1, 3.2 and 3.3

Output indicators

| NICL 2014+ code | Indicator | Target value (2023) | Values as of 31 December 2020 | Implementation |
|-----------------|---------------------------------------------------------------------------------------|---------------------|-------------------------------|----------------|
| | | t/year | t/year | % |
| 40106 | Newly built capacity for municipal waste prevention | 160,000.00 | 137,915.94 | 86.20 |
| 40202 | Amount of non-produced industrial waste | 1,500.00 | 450.54 | 30.04 |
| 40101/C017 | Increasing capacity for waste recycling | 700,000.00 | 52,319.89 | 7.47 |
| 40102 | Capacity of aided facilities for the material recovery of other waste | 300,000.00 | 129,942.56 | 43.31 |
| 40103 | Newly created capacity for all waste separation and collection systems | 400,000.00 | 167,581.70 | 41.90 |
| 40701 | Capacity of newly built or upgraded facilities for the energy recovery of other waste | 400,000.00 | 4,810.00 | 1.20 |
| 40901 | Capacity of newly aided or upgraded hazardous waste management facilities | 50,000.00 | 8,069.12 | 16.14 |
| | | m ² | m ² | % |
| 40301 | Area of reclaimed old landfills from aided projects | 480,772.00 | 114,184.26 | 23.75 |

Source: MoE, programming document OPEn (version 8.0 and version 9.0).

Outcome indicators

| NICL 2014+ code | Indicator | Baseline (2012) | Target value (2023) | Values as of 31 December 2020 | Implementation |
|-----------------------------------------------------------------------------|----------------------------------------------------------------------------|-----------------|---------------------|-------------------------------|----------------|
| SO 3.1 – Prevent waste generation | | t/year | t/year | t/year | % |
| 40110 | Capacity for municipal waste prevention | 16,000.00 | 172,000.00 | 153,915.94 | 89.49 |
| 40210 | Waste intensity of production | 1,114,564.00 | 992,581.00 | 1,005,286.00 | 101.28 |
| SO 3.2 – Increase the share of material and energy recovery of waste | | t/year | t/year | t/year | % |
| 40105 | Total amount of material recovery of other waste | 22,122,976.00 | 40,936,620.00 | 31,064,655.00 | 75.88 |
| 40104 | Amount of waste treated in separation and collection systems for all waste | 22,592,701.00 | 42,481,265.00 | 31,478,799.00 | 74.10 |
| 40711 | Total amount of other waste recovered for energy | 1,009,000.00 | 1,409,000.00 | 1,251,630.00 | 88.83 |
| 40911 | Use of hazardous waste | 313,403.00 | 416,474.00 | 414,144.00 | 99.44 |
| SO 3.3 – Reclaim old landfills | | m ² | m ² | m ² | % |
| 40310 | Area of reclaimed old landfills | 949,075.00 | 1,429,677.00 | 1,063,259.26 | 74.37 |

Source: MoE, programming document OPEn (version 8.0 and version 9.0).

Note: Indicators 40104, 40105, 40210, 40711 and 40911 are statistical indicators. The performance of these indicators is shown for 2019 due to the absence of data for 2020.

Annex 2: Sample of audited projects (paid out as of 31 December 2020)

(in CZK)

| Audited sample of OPEn projects | | | | | |
|-----------------------------------|----------------------------------------------------|-------------|-----------------------------|-------------------|--------------------|
| Project number | Beneficiary | Call number | Total resources | EU contribution | Paid out by the EU |
| CZ.05.3.29/0.0/0.0/15_024/0001154 | Municipality of Polná | 05_15_024 | 41,646,352 | 35,399,399 | 35,399,399 |
| CZ.05.3.29/0.0/0.0/15_024/0001166 | Municipality of Sívce | 05_15_024 | 3,877,018 | 3,285,594 | 3,285,594 |
| CZ.05.3.29/0.0/0.0/15_024/0001249 | Municipality of Šakvice | 05_15_024 | 17,147,527 | 14,541,596 | 14,541,596 |
| CZ.05.3.29/0.0/0.0/16_041/0003060 | Municipality of Kolín | 05_16_041 | 8,233,127 | 6,998,158 | 6,985,816 |
| CZ.05.3.29/0.0/0.0/17_069/0007596 | Municipality of Luže | 05_17_069 | 8,143,983 | 6,608,908 | 6,608,908 |
| CZ.05.3.29/0.0/0.0/15_005/0000745 | Tomáš Chrbolka s.r.o. | 05_15_005 | 8,457,900 | 5,159,500 | 5,159,500 |
| CZ.05.3.29/0.0/0.0/16_041/0003347 | METAL TRADE COMAX, a.s. | 05_16_041 | 36,591,029 | 7,560,130 | 7,560,130 |
| CZ.05.3.29/0.0/0.0/17_068/0005448 | Lidice Stream Valley Microregion | 05_17_068 | 6,317,621 | 5,321,029 | 5,321,028 |
| CZ.05.3.29/0.0/0.0/16_040/0003318 | Association of Municipalities of the Nový Bor Area | 05_16_040 | 8,752,777 | 7,439,860 | 7,439,860 |
| CZ.05.3.29/0.0/0.0/16_040/0003082 | Association of Municipalities Peklo | 05_16_040 | 3,711,199 | 3,154,519 | 3,154,519 |
| CZ.05.3.29/0.0/0.0/16_040/0003765 | goodooga s.r.o. | 05_16_040 | 1,224,520 | 860,200 | 860,200 |
| TOTAL | | | 144 103 052 | 96 328 893 | 96,316,550 |
| Audited sample of NPE projects | | | | | |
| Project number | Beneficiary | Call number | Paid out from the SEF funds | | |
| 10461842 | Marius Pedersen a.s. | 05/2016 | 119,250 | | |
| 2341942 | GERA, export import, spol. s r.o. | 22/2017 | 233,100 | | |
| 2431942 | Autocentrum Vojkov s.r.o. | 22/2017 | 376,900 | | |
| 1931942 | AUTOVRAKOVIŠTĚ HEJTMÁNKA s.r.o. | 22/2017 | 406,500 | | |
| 2411942 | MILATA s.r.o. | 22/2017 | 2,234,750 | | |
| TOTAL | | | 3,370,500 | | |

Source: MS2014+, SEF.

Annex 3: Overview of the use of the audited activities under the OPEn by type of projects as of 31 December 2020 (in CZK)

| SO | Activity | Name of the type project | Number of projects | EU contribution | Share of the total EU contribution (in %) | Paid out from the EU contribution | Paid out in % | |
|----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--------------------|-------------------------|-------------------------------------------|-----------------------------------|-------------------------|-----------------------|
| 3.1 | 3.1.1 – Municipal waste prevention | Other projects excluding re-use centres and door to door systems (municipal waste) | 829 | 1,412,032,763.12 | 15.86 | 842,906,425.34 | 59.69 | |
| | | Re-use centres and door to door systems | 68 | 147,595,925.81 | 1.66 | 44,089,445.41 | 29.87 | |
| | | Prevention of disposable dishes | 20 | 52,403,740.25 | 0.59 | 0 | 0.00 | |
| | Total 3.1.1 | | | 917 | 1,612,032,429.18 | 18.10 | 886,995,870.75 | 55.02 |
| | 3.1.2 – Industrial waste prevention | Industrial waste prevention | 9 | 21,235,051.65 | 0.24 | 0 | 0.00 | |
| | Total 3.1.2 | | | 9 | 21,235,051.65 | 0.24 | 0 | 0.00 |
| | TOTAL SO 3.1 | | | 926 | 1,633,267,480.83 | 18.34 | 886,995,870.75 | 54.31 |
| 3.2 | 3.2.1 – Construction and modernisation of waste collection, sorting and treatment facilities | Separate waste collection without cars | 1,022 | 1,780,646,858.00 | 20.00 | 1,186,508,300.38 | 66.63 | |
| | | Collection yards | 353 | 1,475,903,497.51 | 16.57 | 851,778,399.30 | 57.71 | |
| | | Sorting/follow-up sorting/treatment | 132 | 634,460,572.44 | 7.12 | 135,087,323.44 | 21.29 | |
| | | Separate waste collection with cars | 52 | 56,157,996.19 | 0.63 | 41,867,166.43 | 74.55 | |
| | Total 3.2.1 | | | 1,559 | 3,947,168,924.14 | 44.33 | 2,215,241,189.55 | 56.12 |
| | 3.2.2 – Construction and modernisation of waste material recovery facilities | Material recovery | 157 | 897,605,293.64 | 10.08 | 156,124,807.38 | 17.39 | |
| | | Composting facilities | 147 | 585,324,005.93 | 6.57 | 582,135,987.94 | 99.46 | |
| | Total 3.2.2 | | | 304 | 1,482,929,299.57 | 16.65 | 738,260,795.32 | 49.78 |
| | 3.2.3 – Construction and modernisation of waste-to-energy facilities and related infrastructure | Bio gas power plants | 13 | 827,721,164.51 | 9.30 | 39,311,370.53 | 4.75 | |
| | | Energy recovery of waste | 19 | 589,819,324.81 | 6.62 | 34,651,000.00 | 5.87 | |
| Total 3.2.3 | | | 32 | 1,417,540,489.32 | 15.92 | 73,962,370.53 | 5.22 | |
| 3.2.4 – Construction and modernisation of hazardous waste management facilities, including medical waste | Hazardous waste management | 30 | 139,766,078.46 | 1.57 | 42,305,857.15 | 30.27 | | |
| Total 3.2.4 | | | 30 | 139,766,078.46 | 1.57 | 42,305,857.15 | 30.27 | |
| TOTAL SO 3.2 | | | 1,925 | 6,987,404,791.49 | 78.47 | 3,069,770,212.55 | 43.93 | |
| 3.3 | 3.3.1 – Reclamation of old landfills (technically insufficiently secured) | Landfills | 17 | 284,195,873.06 | 3.19 | 197,017,739.31 | 69.32 | |
| | | Total 3.3.1 | | | 17 | 284,195,873.06 | 3.19 | 197,017,739.31 |
| | TOTAL SO 3.3 | | | 17 | 284,195,873.06 | 3.19 | 197,017,739.31 | 69.32 |
| TOTAL SO 3.1, 3.2 and 3.3 | | | 2,868 | 8,904,868,145.38 | 100.00 | 4,153,783,822.61 | 46.65 | |

Source: MoE.

Annex 4: Overview of available landfill capacity in 2016 and 2020

| Type of landfill | Number of landfills | | Available capacity (in tonnes) | |
|-------------------------------|---------------------|------------------|-----------------------------------|------------------|
| | 1 January 2016 | 31 December 2020 | 1 January 2016 | 31 December 2020 |
| Other waste ⁴⁷ | 139 | 132 | 36,412,433 | 42,754,517 |
| Hazardous waste ⁴⁸ | 31 | 21 | 9,037,788 | 6,558,222 |
| Inert waste ⁴⁹ | 36 | 19 | 13,268,459 | 5,247,012 |

Source: WMIS.

Note: A landfill operator may be permitted to dispose of more than one type of waste.

⁴⁷ Other waste – waste that does not meet the conditions for hazardous waste, see footnote 48. Mixed municipal waste is always considered as other waste.

⁴⁸ Hazardous waste – waste that:

- a) exhibits at least one of the hazardous properties listed in the Annex to the directly applicable European Union legislation on hazardous properties of waste,
- b) is classified in a waste type that is assigned a hazardous waste category in the “Waste Catalogue”, or
- c) is mixed with or contaminated by any of the wastes referred to in clause (b).

⁴⁹ Inert waste – waste which does not have hazardous properties and which, under normal climatic conditions, does not undergo any significant physical, chemical or biological changes. Inert waste does not burn or otherwise react chemically or physically, nor does it undergo biological decomposition or cause the decomposition of other substances with which it comes into contact in a manner endangering human health, endangering or damaging the environment or leading to exceeding pollution limits set by special legislation. Mixed waste is not considered inert waste.

Annex 5: Calculation of the average price of energy recovery of mixed municipal waste (mixed waste) in 2021

| Facility for the energy recovery of waste | In operation since | Capacity (t/year) | Weight (according to capacity) | Price for the disposal of 1 tonne of mixed waste (in CZK) | Weighted price for the disposal of 1 tonne of mixed waste (in CZK) |
|---------------------------------------------------------------------------|--------------------|-------------------|--------------------------------|-----------------------------------------------------------|--------------------------------------------------------------------|
| Prague | 1998 | 330,000 | 0.42 | 2,500 | 1,059 |
| Brno | 1989 | 248,000 | 0.32 | 950 | 302 |
| Plzeň | 2016 | 105,000 | 0.13 | 1,830 | 247 |
| Liberec | 1999 | 96,000 | 0.12 | 1,550 | 191 |
| Total | – | 779,000 | 1.00 | – | – |
| Average price for the disposal of 1 t of mixed waste – arithmetic average | – | – | – | 1,708 | – |
| Average price for the disposal of 1 t of mixed waste – weighted average | – | – | – | – | 1,799 |

Source: <https://www.chmi.cz/files/portal/docs/uoco/oez/emise/spalovny/index.html>; <https://www.psas.cz/>; <https://www.sako.cz>; <https://www.zevoplzen.cz>; <https://tmz.mvv.cz>; **SAO calculation.**

Note: In the calculation of the average price, the maximum annual capacity of each waste-to-energy facility was weighted.

Annex 6: Amount of hazardous waste disposed of in landfills

| No | Text/ unit | 2016 | 2017 | 2018 | 2019 | 2020 | Celkem |
|----|-------------------------------------------------------------------------------------------------------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|----------------------|
| 1 | Quantity of hazardous waste disposed of in landfill operations (in tonnes) | 145,755 | 173,503 | 241,828 | 289,847 | 189,862 | 1,040,795 |
| 2 | Quantity of hazardous waste disposed of subject to charges (in tonnes) | 50,382 | 8,061 | 4,897 | 6,005 | 7,513 | 76,858 |
| 3 | Quantity of hazardous waste disposed of as landscaping in landfill operations (in tonnes) | 73,889 | 145,036 | 145,926 | 175,963 | 26,372 | 567,186 |
| 4 | Risk component of the charge according to Annex 6 to the Waste Act (in CZK/t) | 4,500 | 4,500 | 4,500 | 4,500 | 4,500 | 4,500 |
| 5 | Value of uncharged hazardous waste deposited as landscaping in landfill operations (line 5 = line 3 x line 4) (in CZK) | 332,500,500 | 652,662,000 | 656,667,000 | 791,833,500 | 118,674,000 | 2,552,337,000 |

Source: WMIS.

Note: Data in the WMIS were available from 1 January 2016.

Annex 7: Required scope of recycling of packaging waste for 2015-2020 for the individual system (IndS) according to the Packaging Act and for the collective system (CollS) according to the decision of the MoE on authorisation

(in %)

| Packaging waste | 2015 | | 2016 | | 2017 | | 2018 | | 2019 | | 2020 | |
|-----------------------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|
| | IndS | CollS | IndS | CollS | IndS | CollS | IndS | CollS | IndS | CollS | IndS | CollS |
| – paper and cardboard | 75 | 70 | 75 | 70 | 75 | 70 | 75 | 70 | 75 | 70 | 75 | 70 |
| – glass | 75 | 70 | 75 | 70 | 75 | 70 | 75 | 70 | 75 | 70 | 75 | 70 |
| – plastic | 40 | 27 | 45 | 45 | 45 | 45 | 45 | 45 | 45 | 45 | 50 | 50 |
| – metal | 55 | 50 | 55 | 51 | 55 | 52 | 55 | 52 | 55 | 52 | 55 | 55 |
| – wooden | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 |
| Total | 60 | 55 | 65 | 60 | 65 | 65 | 65 | 65 | 65 | 65 | 70 | 70 |

Source: Annex 3 to the Packaging Act; MoE document “Decision on Authorisation” as amended on 20 February 2014.