# Spring Session on Recycling

## *The risks arising from the draft of new Waste Act relating to the promotion of recycling*

Michal Rampír
Petr Nedbal

Supreme Audit Office
Czech Republic

**Title of the audit:**

# Funds collected in accordance with Act on Hazardous Waste Management

**Year of publication:** 2013

## RECOMMENDATION

**Based on this audit, the SAO recommends that the system for collecting finances by law in the disposal of hazardous waste, including the powers of the concerned bodies, and the use of hazardous waste placed in landfill sites should be reassessed, with a categorical definition of the quantity of landfilled hazardous waste in units of weight or a stipulation of a single conversion coefficient for landfilled hazardous waste.**

## THE SUBSEQUENT REACTION OF THE MINISTRY OF THE ENVIRONMENT

Since 1.10. 2015 new wording of Act No. 185/2001, which Article 45 (3) provides that:

*„The maximum quantity of all waste placed in the landfill site as material for the technical securing of a landfill site, which is exempted from fees, may amount to at most 20% of the weight of waste placed in the landfill site for every calendar year."*

# CIRCULAR ECONOMY PACKAGE

*„The **revised legislative proposals on waste** set clear targets for reduction of waste and establish an ambitious and credible long-term path for waste management and recycling. Key elements of the revised waste proposal include:*

- ✓ *A common EU target for recycling 65% of municipal waste by 2030;*
- ✓ *A common EU target for recycling 75% of packaging waste by 2030;*
- ✓ *A binding landfill target to reduce landfill to maximum of 10% of all waste by 2030;*
- ✓ *A ban on landfilling of separately collected waste;*
- ✓ *Promotion of economic instruments to discourage landfilling ;*
- ✓ *Simplified and improved definitions and harmonised calculation methods for recycling rates throughout the EU;*
- ✓ *Concrete measures to promote re-use and stimulate industrial symbiosis - turning one industry's by-product into another industry's raw material;*
- ✓ *Economic incentives for producers to put greener products on the market and support recovery and recycling schemes (e.g. for packaging, batteries, electric and electronic equipments, vehicles).“*

# January 2016 – Proposals of new legislation

§
THE WASTE ACT

§
THE ACT ON PRODUCTS WITH EXPIRED SERVICE LIFE

# January 2016 – Proposals of new legislation

The waste hierarchy:

- ✓ *waste prevention;*
- ✓ *preparation of waste for re-use;*
- ✓ *recycling of waste (material recovery);*
- ✓ *other recovery (e.g. Energy recovery);*
- ✓ *the disposal of waste.*

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

# WASTE MANAGEMENT PLAN 2015 - 2024

### 3.3.1.1 Municipal waste

In order to meet the objectives of the European Directive 2008/98/EC on waste, meet the defined objectives and targets.

**Objectives and Targets:**

a) By the year 2015 **introduce separate collection** at least for waste consisting of **paper, plastics, glass and metals.**

b) By the year **2020, increase to at least 50% by weight, preparing for re-use and recycling** at least for such waste consisting of materials such as **paper, plastic, metal, and glass** originating from households, and possibly waste of other origin, if such waste streams are similar to waste from households.

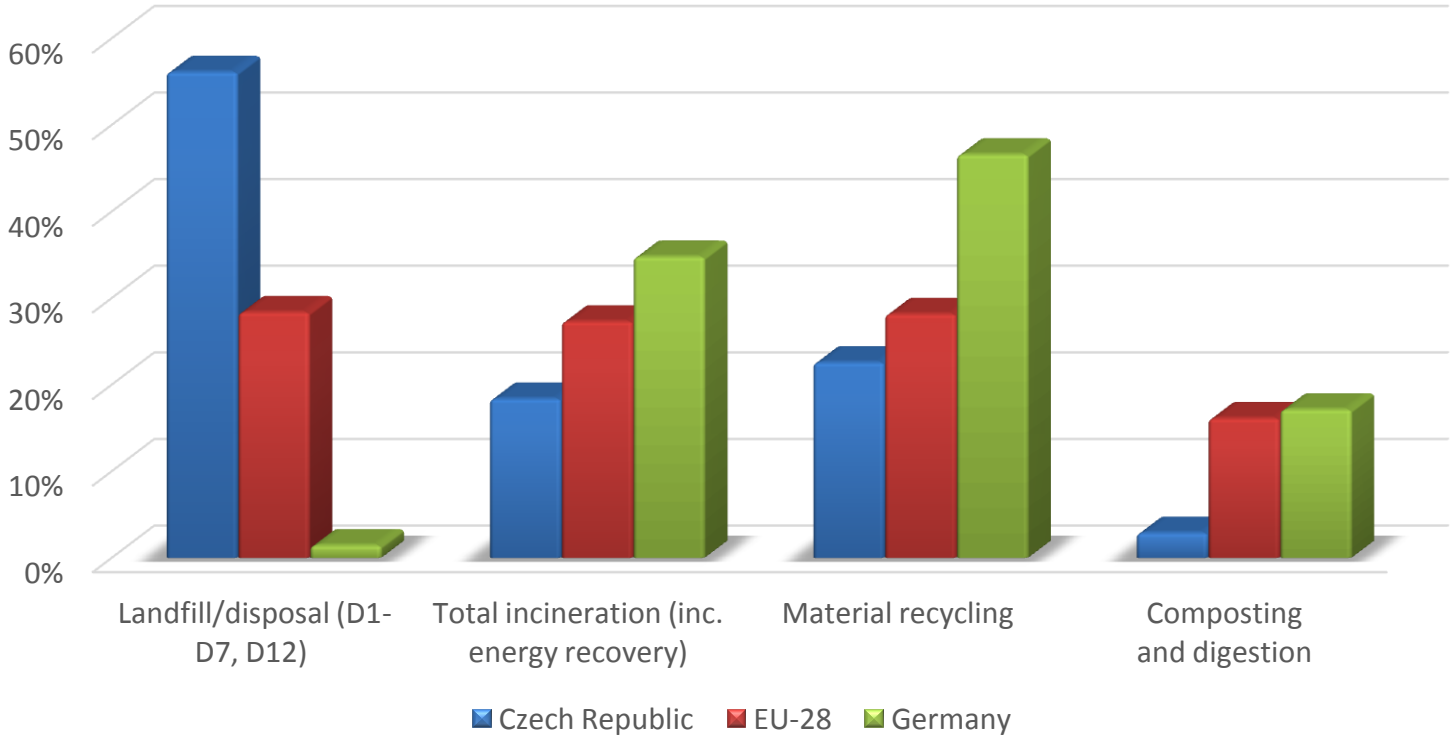
The targets are based on Directive 2008/98/EC on waste.

The method of monitoring the targets will be determined in accordance with the applicable EU[15] legislation.

Table 39: For target b) the establishment of intermediate values in the specified years is proposed.

| Year | Target |
|---|---|
| **2016** | **46%** |
| **2018** | **48%** |
| **2020** | **50%** |

# WASTE MANAGEMENT – MUNICIPIAL WASTE - 2014




*Source: EUROSTAT*

# WASTE MANAGEMENT PLAN 2015 - 2024

### 3.3.1.1.1 Mixed municipal waste

Mixed municipal waste is waste classified according to the Waste Catalogue under the code 200301 and for the purpose of setting targets it is defined as residual waste after sorting of materially recoverable components, hazardous substances, and biodegradable waste that will be recovered.

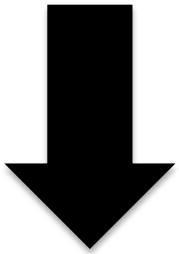
Fulfil:

**Objective:**

a) **Use mixed municipal waste** (after sorting of materially recoverable components, hazardous substances and biodegradable waste) **especially for energy recovery in facilities designed for this purpose in accordance with effective legislation.**

# ENERGY RECOVERY OF MUNICIPAL WASTE IN THE CZECH REPUBLIC

- SAKO Brno
- ZEVO Praha Malešice
- TERMIZO Liberec



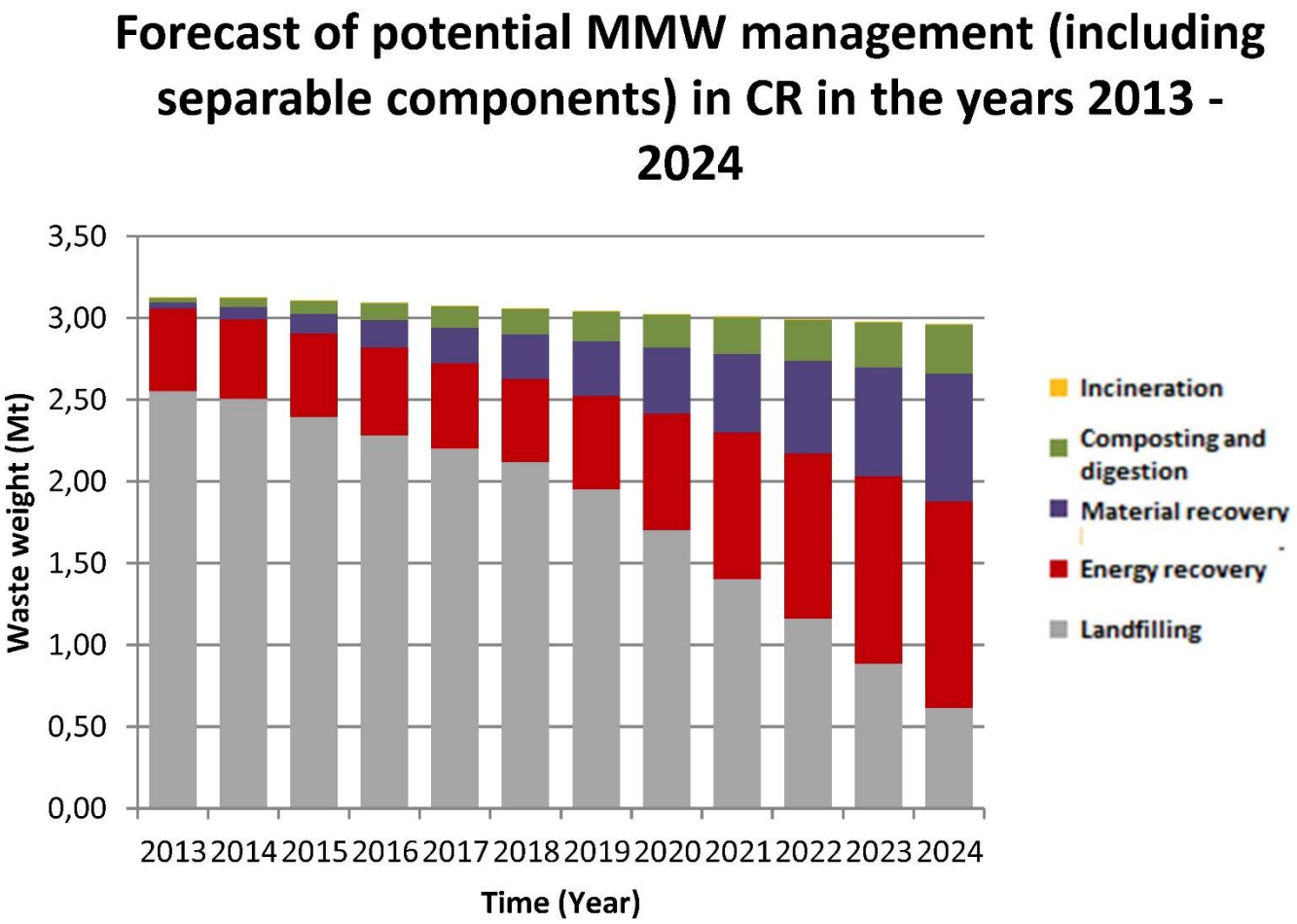
***Total capacity approximately***

***650 000 tons/year***

# FORECAST OF MIXED MUNICIPAL WASTE MANAGEMENT FOR 2013 - 2024

| Table 24: Forecast of management of potential mixed municipal waste (Mt) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Management** | **2013** | **2014** | **2015** | **2016** | **2017** | **2018** | **2019** | **2020** | **2021** | **2022** | **2023** | **2024** |
| **Composting** | 0.03 | 0.05 | 0.08 | 0.10 | 0.13 | 0.15 | 0.18 | 0.20 | 0.23 | 0.25 | 0.28 | 0.30 |
| **Material recovery** | 0.04 | 0.08 | 0.12 | 0.17 | 0.22 | 0.27 | 0.34 | 0.40 | 0.48 | 0.57 | 0.67 | 0.78 |
| **Energy recovery** | 0.51 | 0.48 | 0.51 | 0.54 | 0.52 | 0.51 | 0.57 | 0.71 | 0.90 | 0.91 | 1.15 | 1.26 |
| **Landfilling** | 2.55 | 2.51 | 2.39 | 2.28 | 2.20 | 2.12 | 1.95 | 1.70 | 1.40 | 1.16 | 0.89 | 0.62 |
| **Incineration** | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

# FORECAST OF MIXED MUNICIPAL WASTE MANAGEMENT FOR 2013 - 2024



# FORECAST OF MIXED MUNICIPAL WASTE MANAGEMENT FOR 2013 - 2024

| Table 25: Forecast of management of potential mixed municipal waste (%) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Management** | **2013** | **2014** | **2015** | **2016** | **2017** | **2018** | **2019** | **2020** | **2021** | **2022** | **2023** | **2024** |
| **Material recovery** | 0.8 | 1.7 | 2.5 | 3.4 | 4.2 | 5.0 | 5.9 | 6.7 | 7.6 | 8.4 | 9.3 | 10.1 |
| **Composting** | 1.2 | 2.5 | 3.9 | 5.4 | 7.1 | 9.0 | 11.0 | 13.4 | 16.0 | 19.0 | 22.4 | 26.4 |
| **Energy recovery** | 16.2 | 15.5 | 16.4 | 17.4 | 17.0 | 16.6 | 18.9 | 23.5 | 29.8 | 33.8 | 38.5 | 42.7 |
| **Landfilling** | 81.8 | 80.3 | 77.1 | 73.8 | 71.7 | 69.4 | 64.2 | 56.4 | 46.6 | 38.8 | 29.8 | 20.8 |
| **Incineration** | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

**The 2014-2020 Operational Programme Environment (OPE)**

**Priority Axis 3 Waste management and material flows, environmental burden and risks**

## SPECIFIC OBJECTIVE 1: WASTE PREVENTION

approx. 62,5 mil. €

## SPECIFIC OBJECTIVE 2: TO INCREASE THE SHARE OF MATERIAL AND ENERGY RECOVERY OF WASTE

approx. 250 mil. €

## CONSTRUCTION AND MODERNISATION OF FACILITIES FOR THE ENERGY RECOVERY OF WASTE

**approx. 55 mil. €**

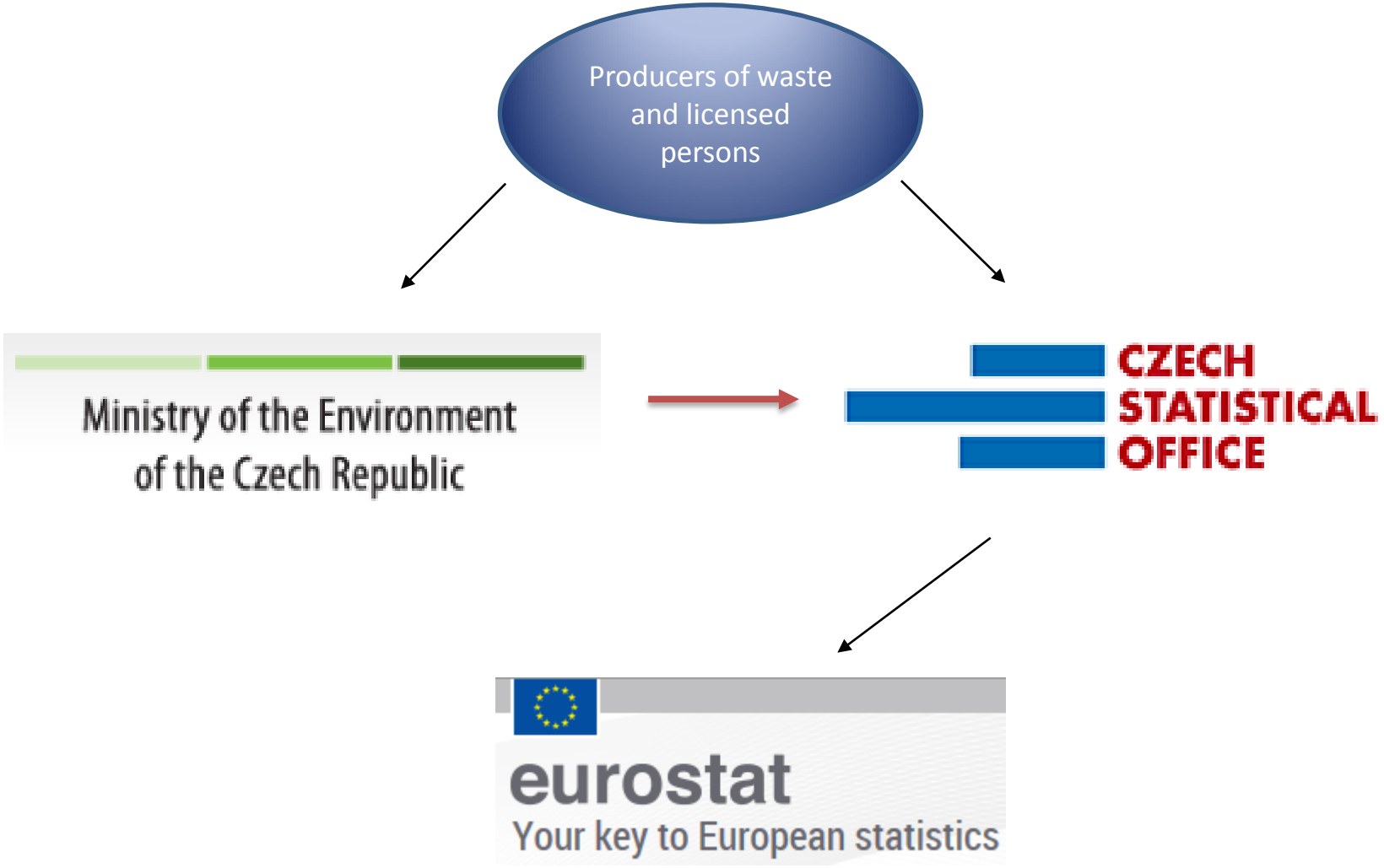
# Municipal waste generated by country (kg per capita)

| | 1995 | 2000 | 2004 | 2008 | 2011 | 2014 | change (%) 1995-2014 |
|---|---|---|---|---|---|---|---|
| **EU-28** | : | 521 | 511 | 520 | 496 | 475 | : |
| **EU-27** | 473 | 523 | 513 | 521 | 497 | 475 | 0 |
| **Belgium** | 455 | 471 | 485 | 479 | 456 | 435 | -4 |
| **Bulgaria** | 694 | 612 | 599 | 599 | 508 | 442 | -36 |
| **Czech Republic** | 302 | 335 | 279 | 306 | 320 | 310 | 3 |
| **Denmark** | 521 | 610 | 620 | 741 | 781 | 759 | 46 |
| **Germany** | 623 | 642 | 587 | 589 | 614 | 618 | -1 |
| **Estonia** | 371 | 453 | 445 | 392 | 301 | 357 | -4 |
| **Ireland** | 512 | 599 | 737 | 718 | 617 | 586 | 14 |
| **Greece** | : | 412 | 436 | 458 | 503 | 510 | : |
| **Spain** | 510 | 658 | 600 | 551 | 485 | 435 | -15 |
| **France** | 475 | 514 | 519 | 541 | 538 | 511 | 8 |
| **Croatia** | : | 262 | 304 | 415 | 384 | 387 | : |
| **Italy** | 454 | 509 | 540 | 552 | 529 | 488 | 7 |
| **Cyprus** | 595 | 628 | 684 | 728 | 683 | 626 | 5 |
| **Latvia** | 264 | 271 | 318 | 345 | 350 | 281 | 6 |
| **Lithuania** | 426 | 365 | 373 | 428 | 442 | 433 | 2 |
| **Luxembourg** | 587 | 654 | 679 | 697 | 666 | 616 | 5 |
| **Hungary** | 460 | 446 | 454 | 454 | 382 | 385 | -16 |
| **Malta** | 395 | 546 | 623 | 674 | 589 | 600 | 52 |
| **Netherlands** | 539 | 598 | 599 | 600 | 568 | 527 | -2 |
| **Austria** | 437 | 580 | 574 | 600 | 573 | 565 | 29 |
| **Poland** | 285 | 320 | 256 | 320 | 319 | 272 | -5 |
| **Portugal** | 352 | 457 | 445 | 518 | 490 | 453 | 29 |
| **Romania** | 342 | 355 | 349 | 411 | 259 | 272 | -20 |
| **Slovenia** | 596 | 513 | 485 | 542 | 415 | 432 | -28 |
| **Slovakia** | 295 | 254 | 261 | 313 | 311 | 321 | 9 |
| **Finland** | 413 | 502 | 469 | 521 | 505 | 482 | 17 |
| **Sweden** | 386 | 428 | 460 | 483 | 449 | 438 | 13 |
| **United Kingdom** | 498 | 577 | 602 | 541 | 491 | 482 | -3 |
| **Iceland** | 426 | 462 | 503 | 495 | 320 | 345 | -19 |
| **Norway** | 624 | 613 | 414 | 487 | 485 | 423 | -32 |
| **Switzerland** | 600 | 656 | 660 | 736 | 689 | 730 | 22 |
| **Montenegro** | : | : | : | : | : | 508 | : |
| **The former Yugoslav Republic of Macedonia** | : | : | : | : | 357 | 370 | : |
| **Serbia** | : | : | : | 347 | 375 | 302 | : |
| **Turkey** | 441 | 465 | 440 | 400 | 416 | 405 | -8 |
| **Bosnia and Herzegovina** | : | : | : | : | 340 | 349 | : |

(:) not available

*Source: EUROSTAT*

# WASTE REPORTING DATA



MUNICIPAL WASTE (kg per capita)

Ministry of the Environment of the Czech Republic

CZECH STATISTICAL OFFICE

eurostat
Your key to European statistics

506 kg

310 kg

# Thank you for your attention

Michal RAMPÍR - michal.rampir@nku.cz

Petr Nedbal – petr.nedbal@nku.cz

Supreme Audit Office
Czech Republic