

20 June 2025

EU Green Week Partner Event

Managing sludge from an EU country perspective (Hungary)

Dr Károly Kovács PhD (oec)
President
Hungarian Water Association

**WASTEWATER AS A RESOURCE:
REGIONAL WORKSHOP ON
SEWAGE SLUDGE MANAGEMENT
AND ENERGY EFFICIENCY**

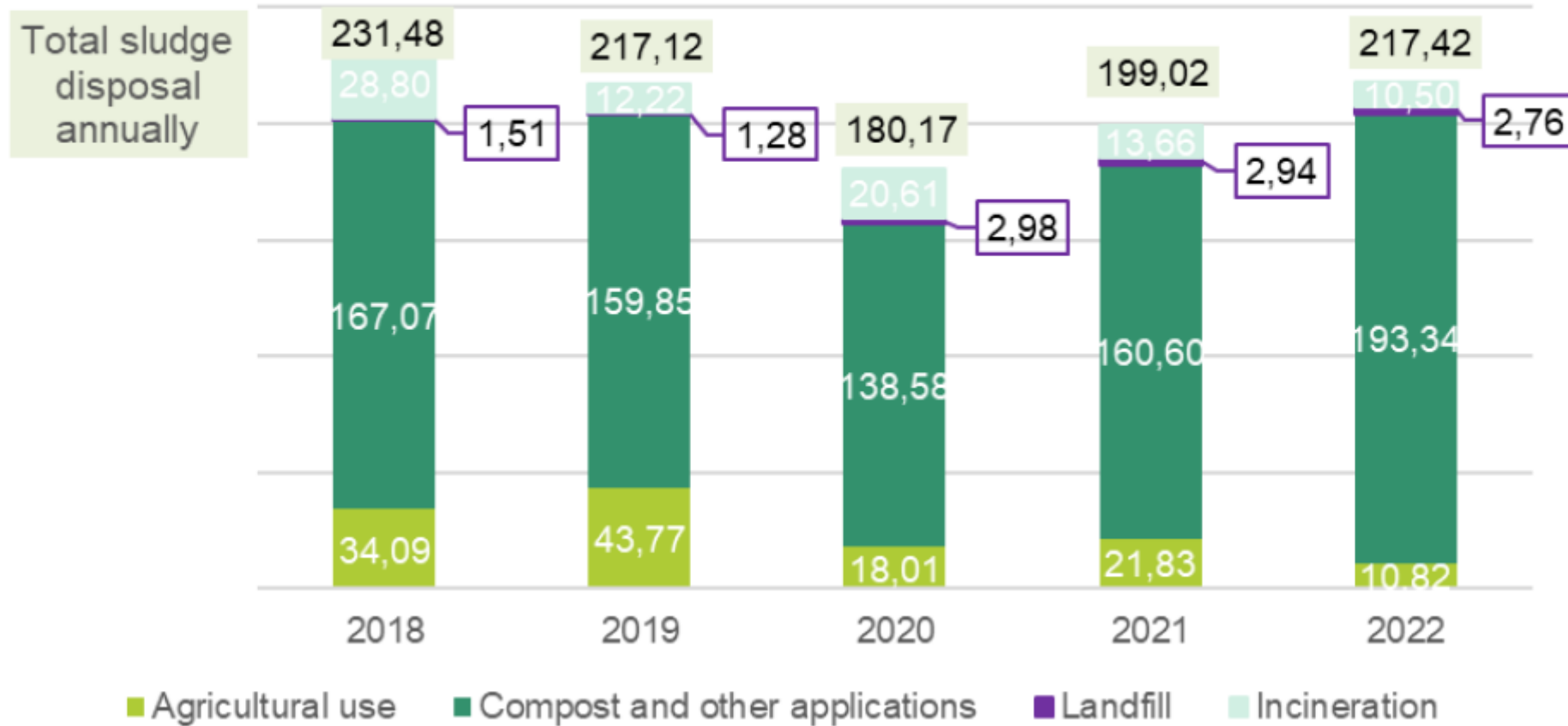
Sewage sludge production and disposal in Hungary in tonnes and in percentage

| | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|--------|--------|--------|--------|--------|
| Sludge production (Thousand tonnes) | | | | | |
| Total | 233.66 | 227.89 | 167.03 | 226.21 | 248.08 |
| Sludge disposal (Thousand tonnes) | | | | | |
| Total | 231.48 | 217.12 | 180.17 | 199.02 | 217.42 |
| Agricultural use | 34.09 | 43.77 | 18.01 | 21.83 | 10.82 |
| Compost and other applications | 167.07 | 159.85 | 138.58 | 160.60 | 193.34 |
| Landfill | 1.51 | 1.28 | 2.98 | 2.94 | 2.76 |
| Incineration | 28.80 | 12.22 | 20.61 | 13.66 | 10.50 |
| Other | 0 | 0 | 0 | 0 | 0 |
| Produced minus disposed sludge (Thousand tonnes) | | | | | |
| Gap | 2.18 | 10.77 | -13.14 | 27.19 | 30.66 |

| | 2018 | 2019 | 2020 | 2021 | 2022 |
|--|--------|--------|--------|--------|--------|
| Sludge production (Thousand tonnes) | | | | | |
| Total | 233.66 | 227.89 | 167.03 | 226.21 | 248.08 |
| Sludge disposal (percentage) | | | | | |
| Total | 99% | 95% | 108% | 88% | 88% |
| Agricultural use | 15% | 19% | 11% | 10% | 4% |
| Compost and other applications | 72% | 70% | 83% | 71% | 78% |
| Landfill | 1% | 1% | 2% | 1% | 1% |
| Incineration | 12% | 5% | 12% | 6% | 4% |
| Other | 0% | 0% | 0% | 0% | 0% |
| Produced minus disposed sludge (percentage) | | | | | |
| Gap | 1% | 5% | -8% | 12% | 12% |

Study on the possibilities of the utilisation of sewage sludge in the Danube Region - PA 04

Sludge disposal in Hungary (Thousand tonnes)



Gap between the sludge production and sludge disposal (%)

| | 2018 (%) | 2019 (%) | 2020 (%) | 2021 (%) | 2022 (%) |
|------------|----------|----------|----------|----------|----------|
| Austria | 0 | 0 | 0 | 0 | 0 |
| BiH | 0 | 0 | 0 | 0 | 0 |
| Bulgaria | 20 | 25 | 15 | 30 | 23 |
| Czech Rep. | 0 | 0 | 0 | 0 | 0 |
| Croatia | 79 | 85 | 76 | 73 | 73 |
| Germany | 1 | 1 | -2 | -1 | 0 |
| Hungary | 1 | 5 | -8 | 12 | 12 |
| Moldova | - | - | - | - | - |
| Montenegro | - | - | - | - | - |
| Romania | 0 | 0 | 0 | 0 | 0 |
| Serbia | 0 | 10 | 26 | 0 | 0 |
| Slovenia | 0 | 0 | 0 | 0 | 0 |
| Slovakia | 0 | 0 | 0 | 0 | 0 |
| Ukraine | - | - | - | - | - |



Study on the possibilities of the utilisation of sewage sludge in the Danube Region - PA 04

Distribution between disposal methods, 2022 (%)

| 2022 | Total Sludge disposal (%) | Agricultural use (%) | Compost and other applications (%) | Landfill (%) | Incineration (%) | Other (%) |
|------------|---------------------------|----------------------|------------------------------------|--------------|------------------|-----------|
| Bulgaria | 77 | 53 | 8 | 5 | 0 | 11 |
| Czech Rep. | 100 | 35 | 46 | 8 | 11 | 0 |
| Germany | 100 | 15 | 8 | 0 | 76 | 1 |
| Croatia | 27 | 2 | 6 | 2 | 0 | 17 |
| Hungary | 88 | 4 | 78 | 1 | 4 | 0 |
| Austria | 100 | 26 | 20 | 0 | 45 | 10 |
| Romania | 100 | 30 | 1 | 37 | 0 | 31 |
| Slovenia | 100 | 0 | 1 | 3 | 23 | 74 |
| Slovakia | 100 | 0 | 52 | 20 | 19 | 9 |
| BiH | 100 | 0 | 0 | 100 | 0 | 0 |
| Serbia | 100 | 0 | 0 | 100 | 0 | 0 |
| Moldova | - | - | - | - | - | - |
| Ukraine | - | - | - | - | - | - |
| Montenegro | - | - | - | - | - | - |

Dark grey cells: estimations from previous years due to data gaps for the actual year

Study on the possibilities of the utilisation of sewage sludge in the Danube Region - PA 04

Thank you for your attention!

Dr Károly Kovács PhD (oec)
President
Hungarian Water Association

www.maszesz.hu