SDG Indicator 6.3.1 - Progress on wastewater treatment

Graham Alabaster, UN-Habitat Andrew Shantz, WHO

EG-ECCS 16 October 2024



Progress on the proportion of domestic and industrial wastewater flows safely treated

Mid-term status of SDG Indicator 6.3.1 and acceleration needs, with a special focus on climate change, wastewater reuse and health

2024









Safely treated wastewater

- Target 6.3 seeks to "by 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally"
- Indicator 6.3.1 is "the proportion of domestic and industrial wastewater flows safely treated"
 - Total and industrial wastewater: UN-Habitat
 - Domestic wastewater: WHO



World Health Organization

Domestic (household) wastewater



Agricultural (point source)

Industrial

Domestic

Urban (safely) treated

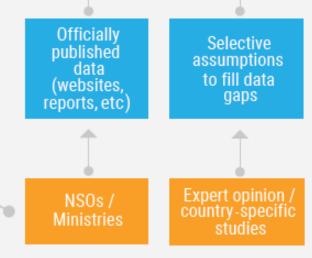
Industrial (safely) treated

Independent treated

UNSD Environmental Questionnaire

OECD/Eurostat Inland Waters Questionnaire

UN -Habitat Wastewater Questionnaire



Data inputs

Data variables

Data sources

Global monitoring components

Table W4: Data for SDG 6.3.1 calculations

Volumes generated

Line Category Total wastewater generated by: Agriculture, forestry and fishing ISIC (01-03) Mining and quarrying (ISIC 05-09) 3 4 Manufacturing (ISIC 10-33) Electricity, gas, steam and air conditioning 5 supply (ISIC 35) of which by: Electric power generation, transmission and 6 distribution (ISIC 351) 7 Construction (ISIC 41-43) 8 Other economic activities 9 Households

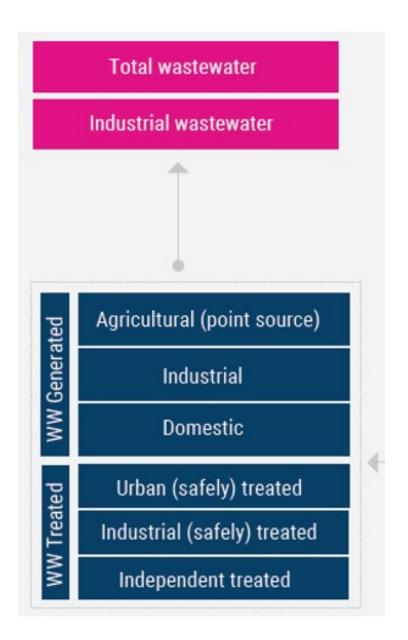
Volumes treated

Line	Category
10	Wastewater treated in urban wastewater treatment plants
11	Of which: Primary treatment
12	Secondary treatment
13	Tertiary treatment
14	Wastewater treated in other treatment plants
15	Of which: Primary treatment
16	Secondary treatment
17	Tertiary treatment
18	Wastewater treated in independent treatment facilities
19	Non-treated wastewater
20	Sewage sludge production (dry matter)

Table W5: Reporting applicable to household wastewater (household wastewater only)

Line	Category
1	Population connected to wastewater collecting system
2	Population connected to wastewater treatment
3	of which at least secondary treatment
4	Population with independent wastewater treatment (e.g., septic tanks)
5	Population not connected to wastewater treatment (100% - (2) - (4))

Total and industrial wastewater (UN-Habitat)

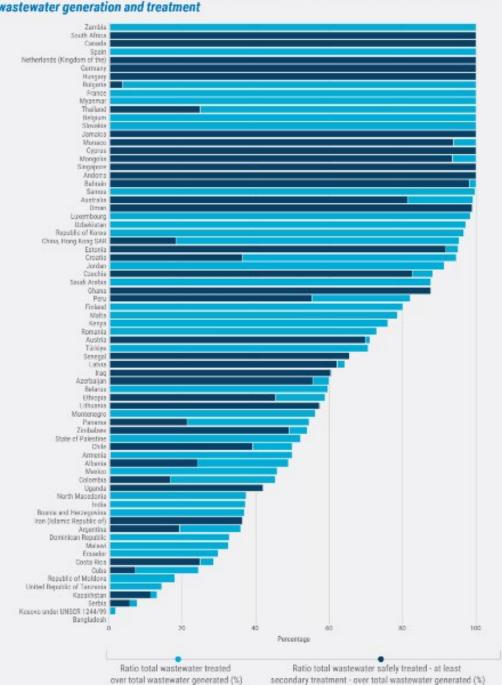


SDG 6.3.1 monitoring builds on different databases and data sources

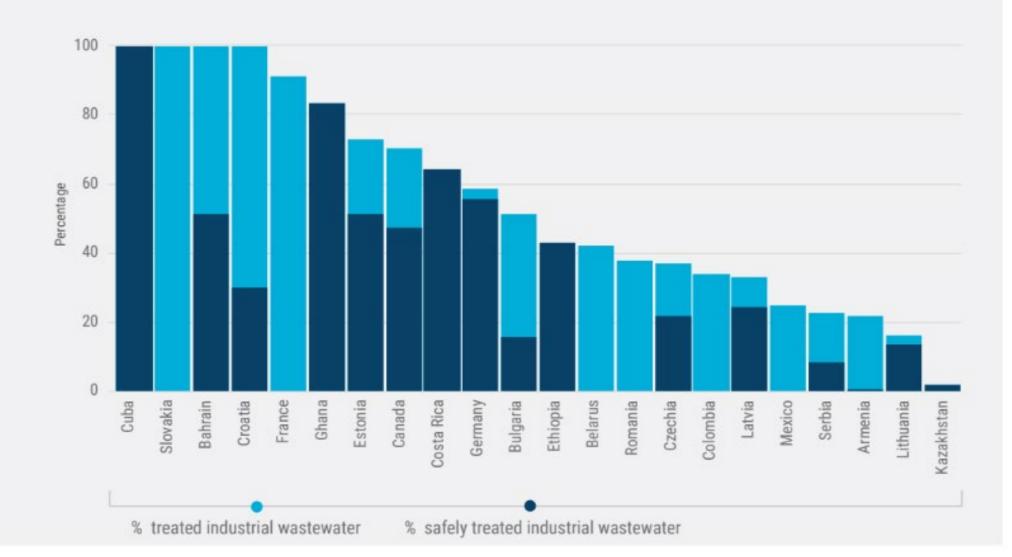


6.3.1 monitoring includes total and industrial wastewater flows from generation to discharge Wastewater generated Collecting systems Discharges → Treatments Non point sources: Untreated Rainwater runoff Rainwater runoff input into wastewater collecting systems Agriculture Point sources: Urban collection system Urban wastewater Total treatment plants (public sewerage) Agriculture wastewater treated: Industry total Industrial and Water collection domestic sources (plus runoff) **Energy production** treated in urban, other, and Other treatment Manufacturing independent plants (including treatment facilities industrial) Independent Mining and quarrying wastewater collecting systems (storage tanks) Construction Independent treatment Reuse Domestic sector (e.g. septic tanks) Services Untreated Direct discharge to the environment Private Households without collection and/or treatment

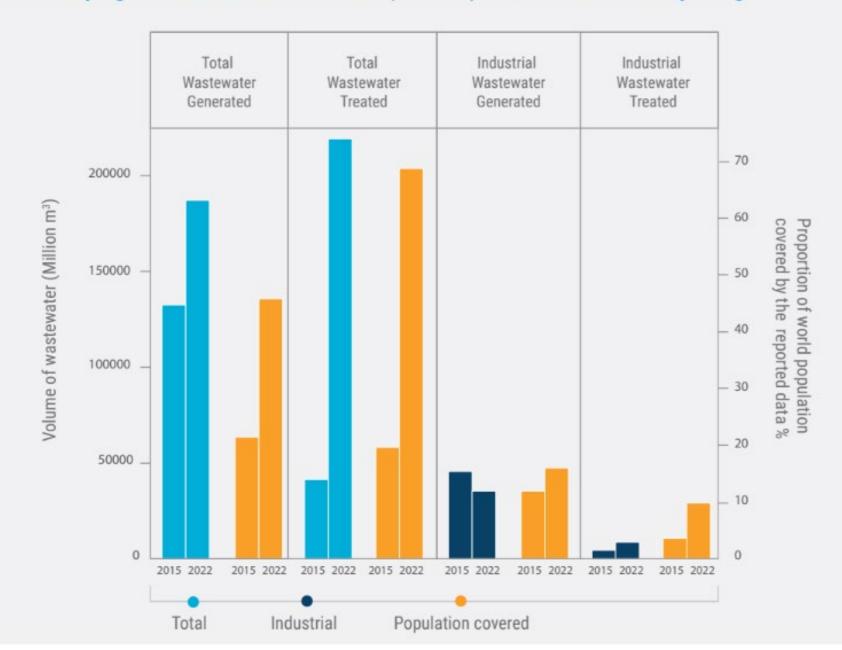
Only 73 Member States (representing less than 50 per cent of the population) reported on both total wastewater generation and treatment



Only 22 Member States (representing less than 10 per cent of the population) reported on both industrial wastewater generation and treatment



Substantial progress was achieved from 2015 (baseline) to 2022 in statistics reporting



Domestic wastewater (WHO)

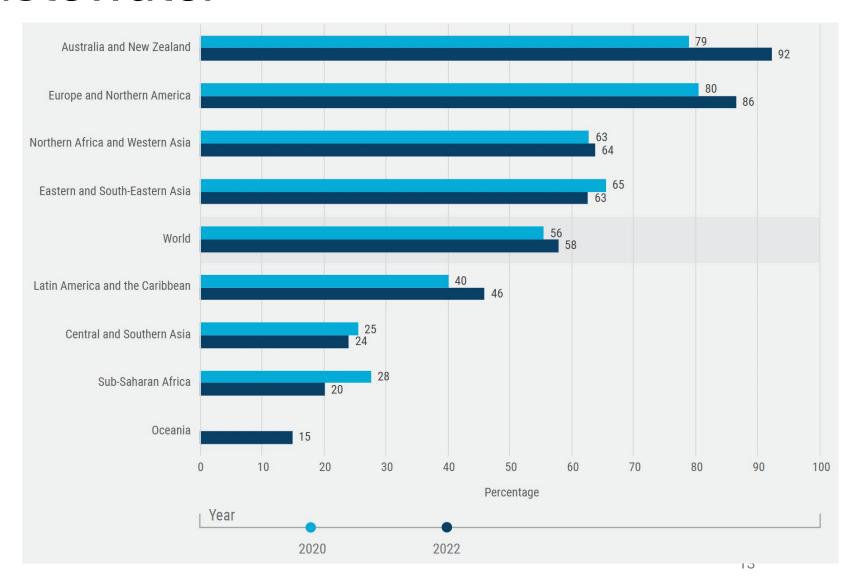
- Domestic wastewater
 - Households
 - Services
- Methods
 - Estimation of total household wastewater flows generated
 - Estimation of proportion of flow associated with sewer and septic tank connections
 - Estimation of proportions...
 - ...delivered to treatment facilities
 - ...safely treated at treatment facilities (secondary or higher or discharged in compliance)

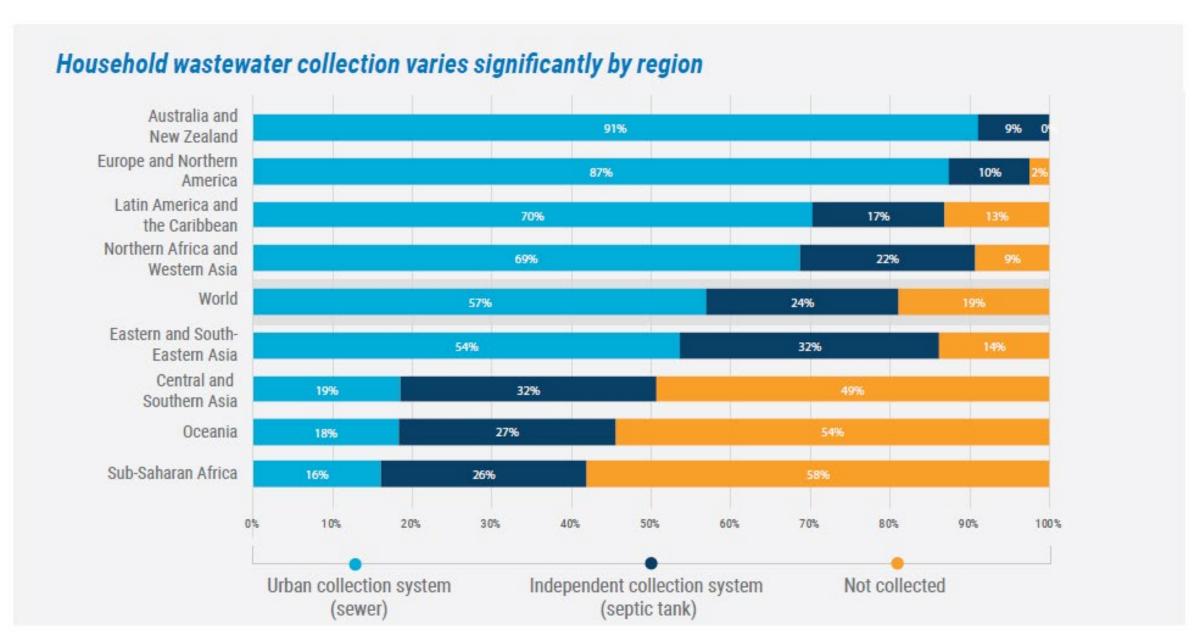
Household wastewater

Variability across regions

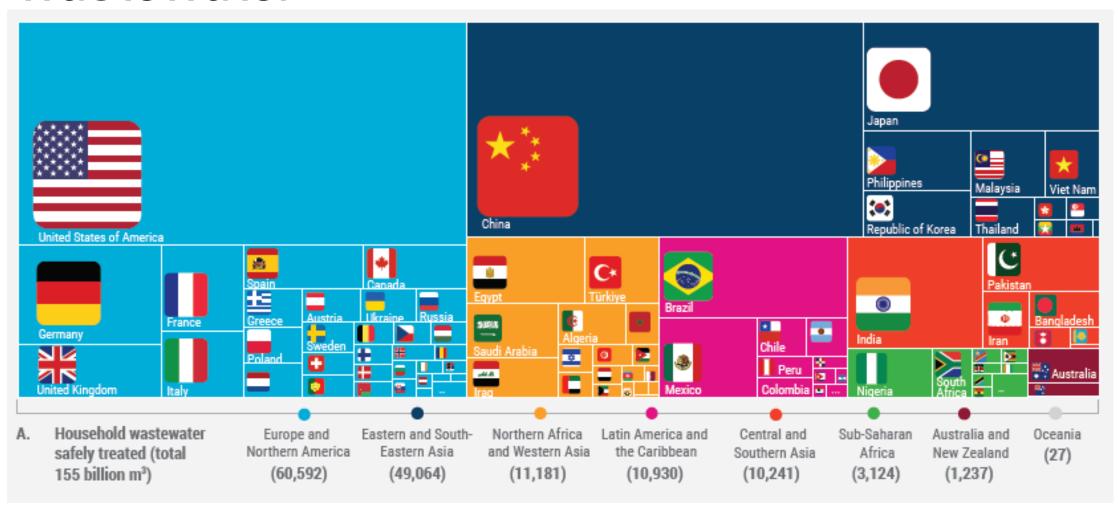
 2020 and 2022 statistics similar, limited scope for trend analysis

• World: 56% to 58%

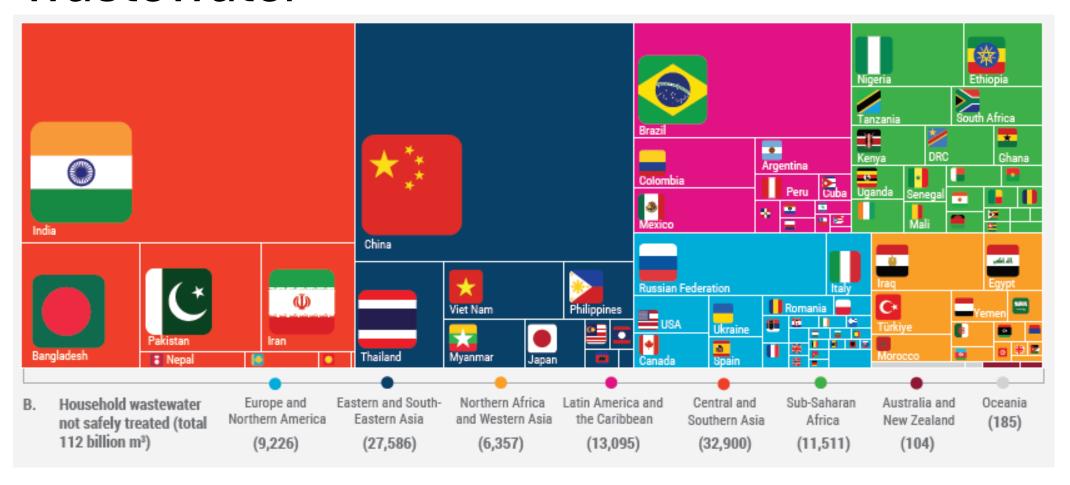




Discharges of safely treated household wastewater



Discharges of not safely treated household wastewater



Download the report!

 https://www.unwater.org/ publications/progresswastewater-treatment-2024update

 https://www.unwater.org/publications/ domestic-wastewater-treatmentmethodology-2024

• https://tinyurl.com/631household2022



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