

7th pan-European Environmental Assessment

Chemicals and Waste

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Joint Task Force on Environmental Statistics and Indicators

- Chemicals and Waste (CW) → crucial part of solutions to our transition to a zero carbon and sustainable economy.

- **Opportunities:** mitigation of climate change, building blocks towards a green economy
- **Risks:** remains difficult to capture our full exposure to hazardous chemicals At the same time, risks to the environment and human health must be controlled.

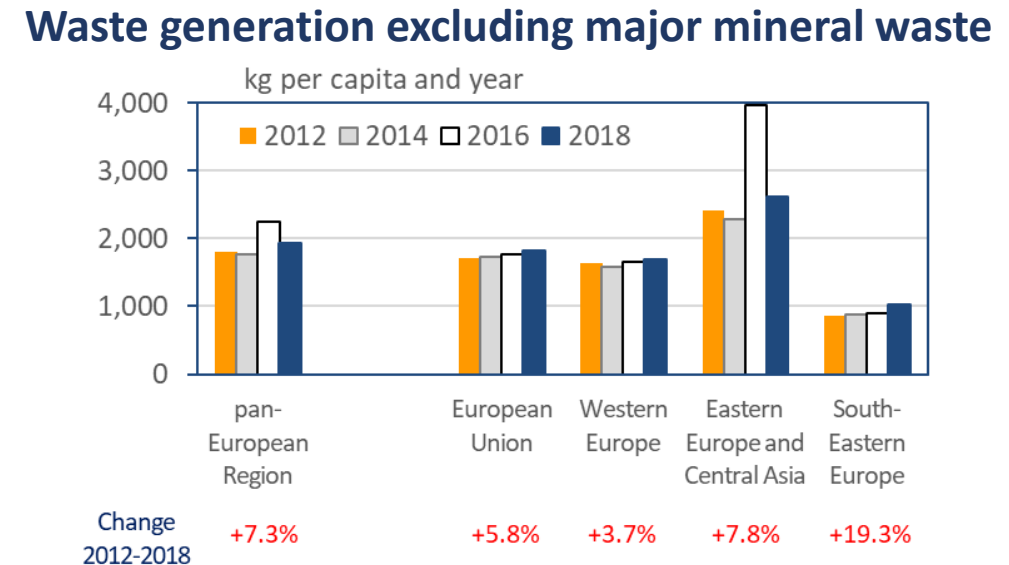
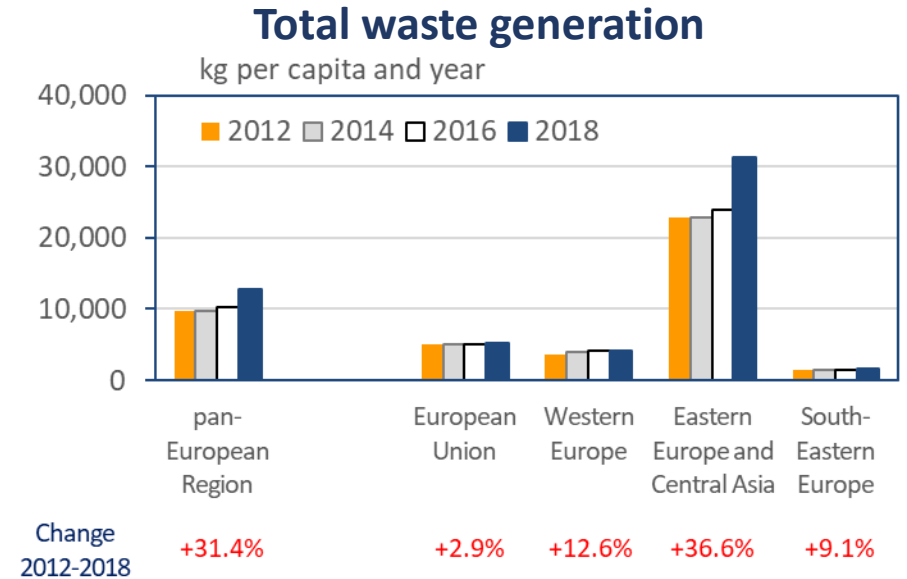
- Governance of CW must be made fitter for the challenges of today and the years of transition of our economies that lie ahead of us.
- Capacities to make well informed decisions must be strengthened.

Risks and opportunities related to chemicals and waste must be better balanced.

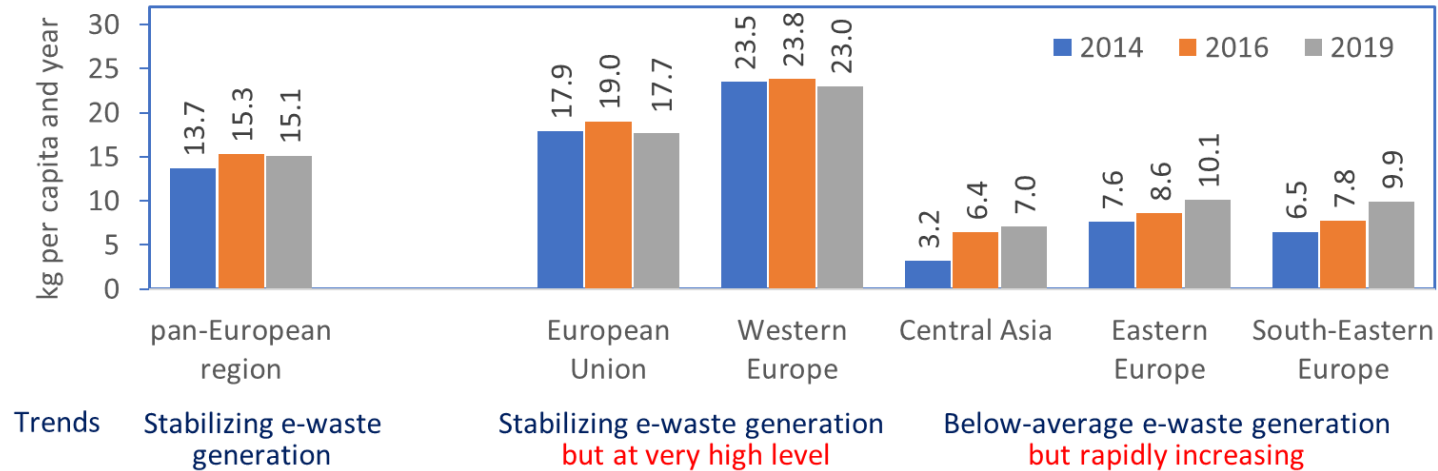
Multilateral environmental agreements represent a powerful framework to help countries with the related efforts, but the full potential of MEAs can only be unlocked if universal ratification is achieved across the pan-European region.

	Out of 54 pan-European countries...
Montreal Protocol on Substances that Deplete the Ozone Layer	... all are Party.
Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal	... nearly all (53) are Party.
Stockholm Convention on Persistent Organic Pollutants (POPs)	... 49 have ratified it + 2 signed it.
Rotterdam Convention on the prior informed consent procedure for certain hazardous chemicals and pesticides in international trade	... 45 have ratified + 1 signed it.
Minamata Convention on Mercury (<i>in force since 2017</i>)	... 36 have ratified it + 8 signed it.
UNECE Convention on Long-range Transboundary Air Pollution	... 48 have ratified it + 1 signed it.
UNECE Convention on the Transboundary Effects of Industrial Accidents	... only 39 are Party.
UNECE Kyiv Protocol on Pollutant Release and Transfer Registers (PRTRs)	... only 37 are Party.

- Despite commitments to foster waste prevention, **waste generation is growing** across the region and all subregions.
 - Increase total waste by 31% in period 2012-2018.
 - By 7% when excluding major mineral waste.
- **Benchmarks required**
 - assess waste quantities which can be prevented in sectors
 - set target levels for maximum waste generation
- **Waste prevention policy instruments still limited**, and more difficult to formulate compared to resource recovery schemes. Economic instruments should be explored with priority.
 - E.g. tax reductions or other fiscal incentives for innovative businesses; EPR (extended producer responsibility).

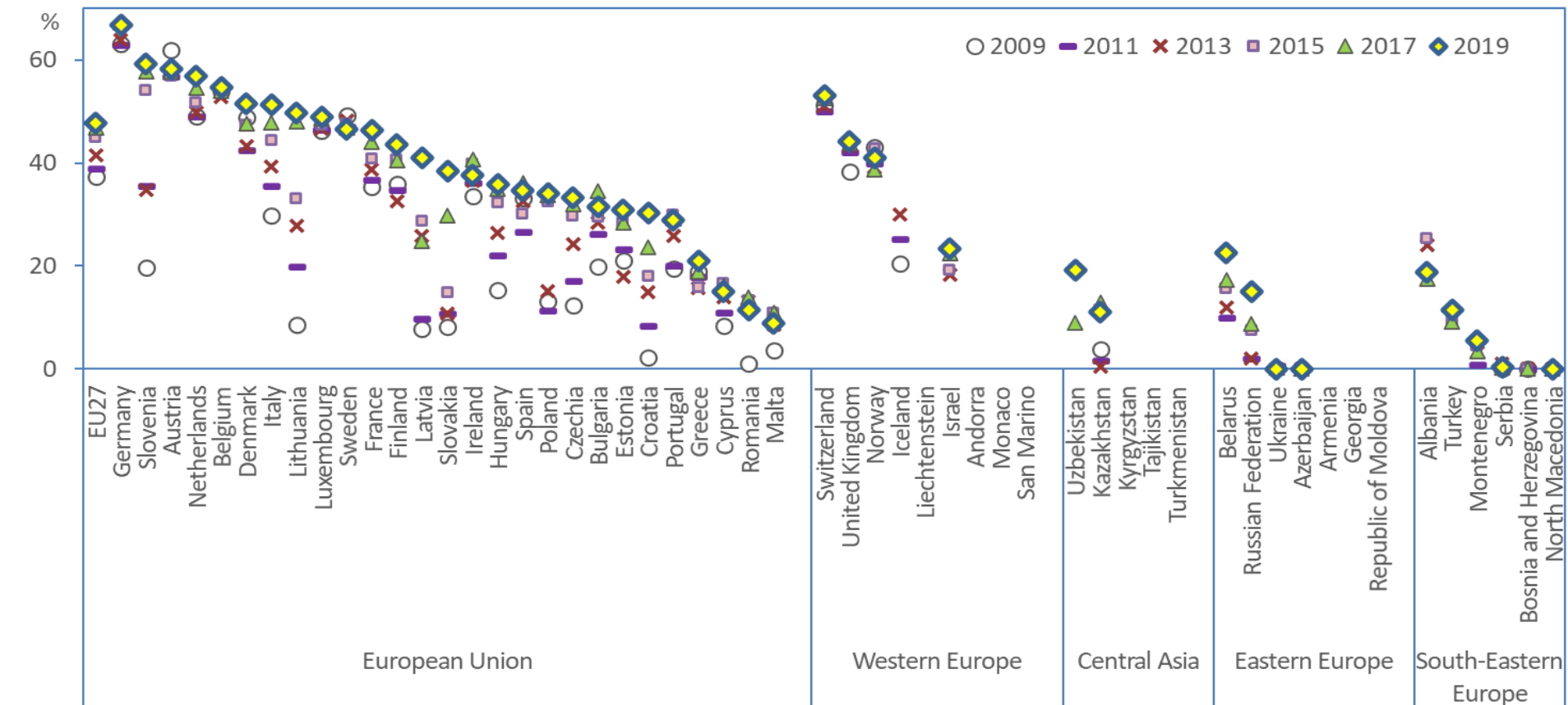


E-waste generation (waste electrical and electronic equipment) per capita and year in the region and the subregions



A resource-oriented pan-European e-waste management partnership could harness economic value for the region and reduce the dependency from other regions regarding the sourcing of CRM (critical raw materials).

- Hazardous components (mercury, cadmium, brominated flame retardants, polycyclic aromatic hydrocarbon, etc.)
- Precious resources such as **critical raw materials** (rare earth elements, titanium, magnesium, indium, platinum group metals, etc.), which are potential bottlenecks in the transition to a green economy (e.g. needed for renewable energy technologies, electric mobility, digital technologies).
- **Collection and valorisation are strongly deficient.** Even in the European Union, where advanced schemes are in place, < 45% of the generated e-waste volume was collected for recovery in 2017 (Eurostat).



Recycling rate Municipal Solid Waste (MSW)

Progress is
achieved in all
subregions,
but too slowly.

Status, Trends

Average recycling rate EU27 >45%, with 7 countries >50% (up to 67%); increase average EU27, with good improvement in most countries and strong improvement in some countries; 5 countries still <25%

Mixed picture; only 1 country >45%

Mixed picture; some countries good progress; all still <25%; for some no data available

Slow change; all countries still <25%

Notes: 2018 instead of 2019 data for Bulgaria, Montenegro, Serbia, United Kingdom; for Ireland 2012 instead of 2013, 2014 instead of 2015, 2016 instead of 2017, 2018 instead of 2019 data; for Israel 2014 instead of 2013; for Belarus 2012 instead of 2011; for Russian Federation and Turkey 2016 instead of 2015; Albania: urban waste only

- The region on one hand comprises global best-performers in MSW recycling and on the other hand countries with still rather limited engagement in this area.
- Several countries have demonstrated the feasibility of building up highly effective recycling infrastructures within less than ten years.

The Way Forward

- Well organized and efficient public administrations, equipped with skilled work force and ready to engage with all sectors of society are required.
- A region-wide impact-oriented monitoring scheme should be advanced as a cooperation between science and policy → chemicals with their combined effects
- To reduce waste arising: repair, refurbishment, remanufacturing → support e.g. through financial incentives (e.g. tax reliefs), regulatory measures (e.g. right for repair)
- Treating waste as a resource = important opportunity to strengthen the position of countries and the region in the context of a competitive global market for resources
- There is a need to plan more in advance for the countries and the whole region (→ international expert groups: analyse future needs and options)
- Foster multilateral cooperation across countries and sectors → identify and share good practices across the region more easily; strengthen engagement of industrial sector