

OPPORTUNITIES AND CHALLENGES OF THE URBAN WASTEWATER TREATMENT DIRECTIVE (RECAST)

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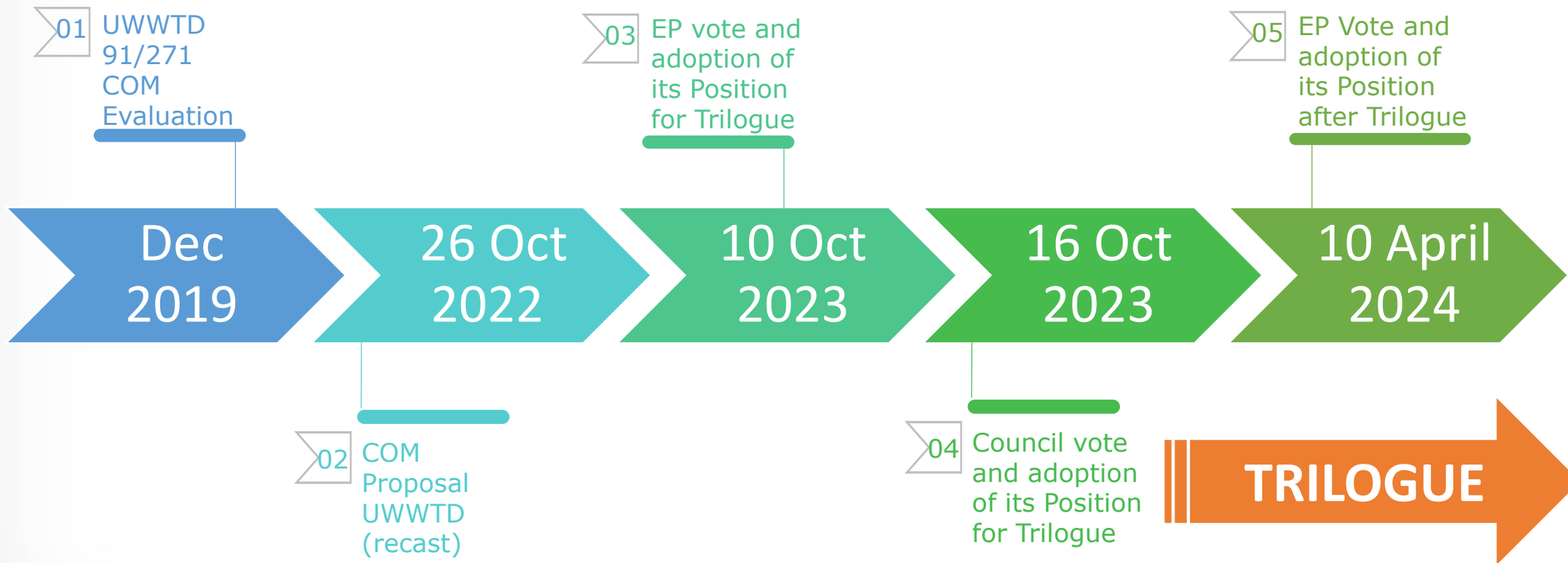
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1. Background – legislative process



What has happened so far



Where are we now and what is next



2. Subject matter of the UWWTD (recast)

Article 1



Subject matter of the UWWTD (recast)

Regulate collection, treatment & discharge of UWW to:

Protect **environment & human health** (One Health Approach) 

Progressively reduce **GHG**

Improve **energy** balance of UWW activities

Contribute to transition towards **circular economy**

Ensure **access to sanitation**

Improve **transparency** UWW sector

Regular **surveillance** public health relevant parameters in UWW

Implementation of the **polluter-pays principle**

- Extension scope (1.000 – 2.000 p.e.)
- More stringent treatment
- New treatment steps
- Integrated approach

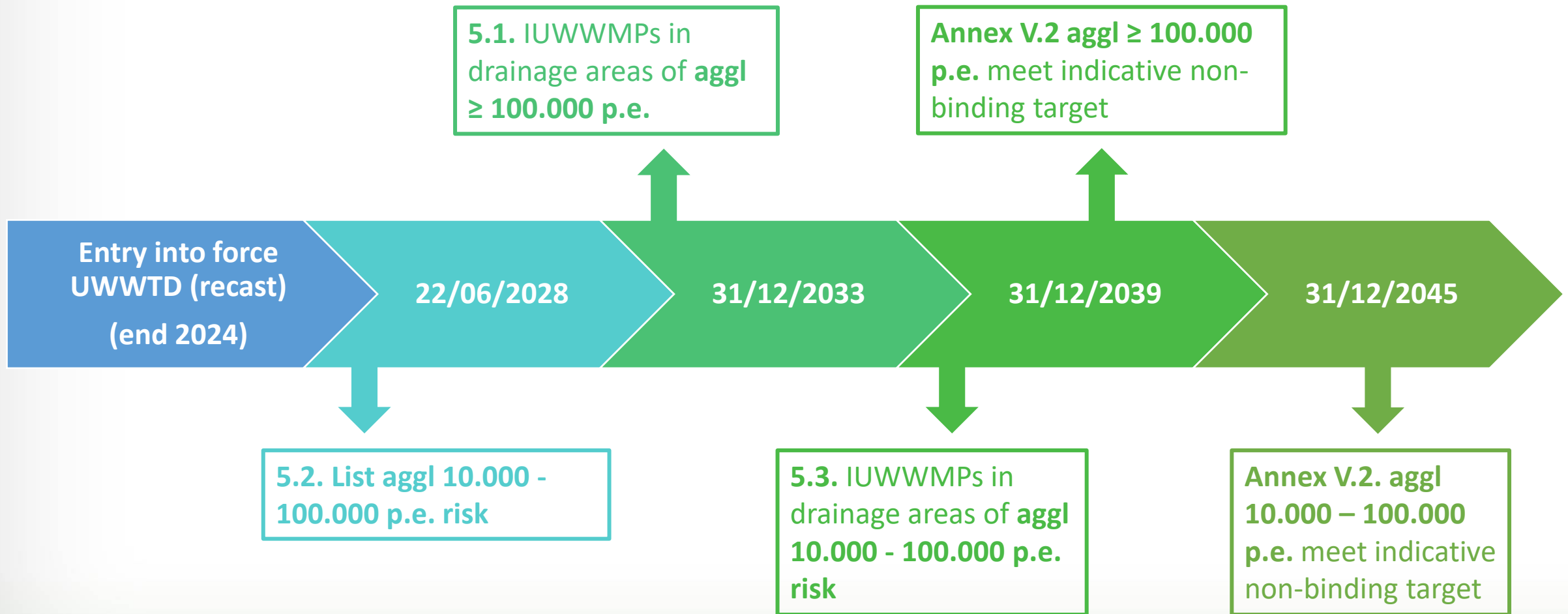


3. Integrated urban wastewater management plans (IUWWMPs)

Article 5 (articles 18 & 21), Annex V, Recitals 11, 12, 13



IUWWMPs - timeline



Content of IUWWMPs (Annex V)

1. **Analysis** of initial situation of the **drainage area of the agglomeration**
2. **Objectives for pollution reduction from SWO: an indicative non-binding target that SWO represent a small percentage that cannot be more than 2% of annual collected UWW load calculated in dry conditions – to be met by specific deadlines (as in previous slide)**
3. **Measures to achieve the objectives**, including implementation timeline.
4. Measures to be considered by competent authorities:
 - preventive measures to avoid entry of unpolluted rain in collecting systems
 - measures to better manage and optimise use of existing infrastructure
 - additional mitigation measures



Main concerns (due to Annex V.2.)

Reaching the target

- SWO cannot represent more than 2% of annual collected UWW load calculated in dry conditions
- Extremely challenging to reach (impossible in many cases)

Legal consequences?

- Indicative non-binding target (reduction pollution from SWO)
- Target to be met by specific deadlines
- Legal consequences if target is not met by deadlines?

Investments

- Fulfilment of target – huge investments
- Diversion of investments needed for new treatment requirements



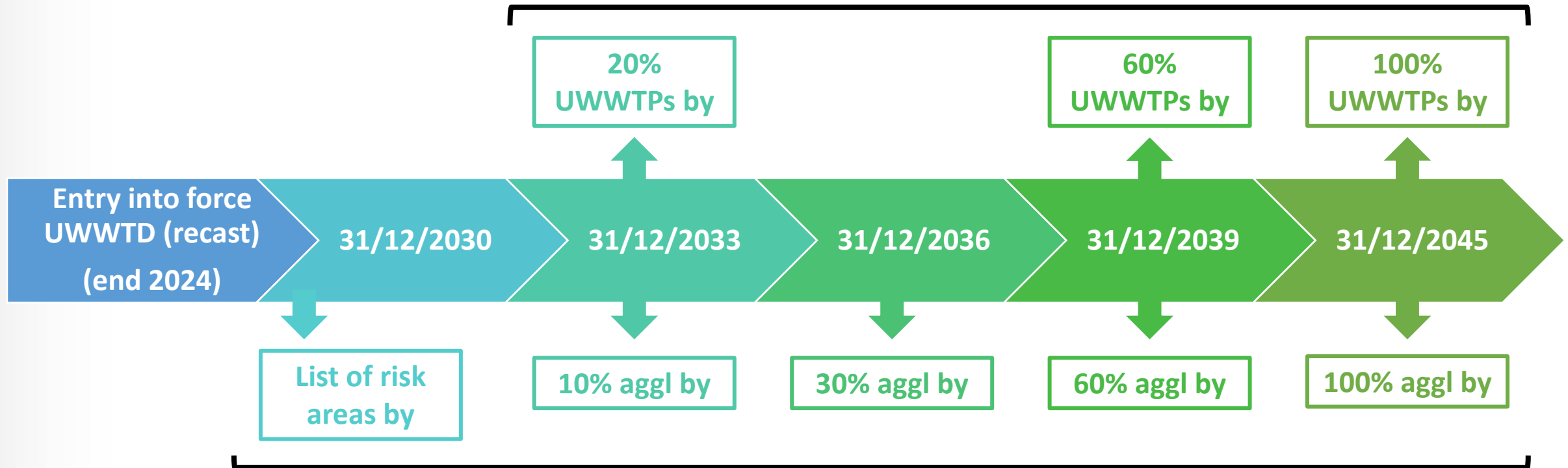
4. Quaternary treatment

Article 8 (articles 18 & 21), Annex I Table 3, Recital 18



Quaternary treatment - timeline

8.1. Quaternary treatment for UWWTPs ≥ 150.00 p.e.



8.4. Quaternary treatment for agglomerations ≥ 10.000 p.e. in areas where micro-pollutants pose a risk to human health and the environment

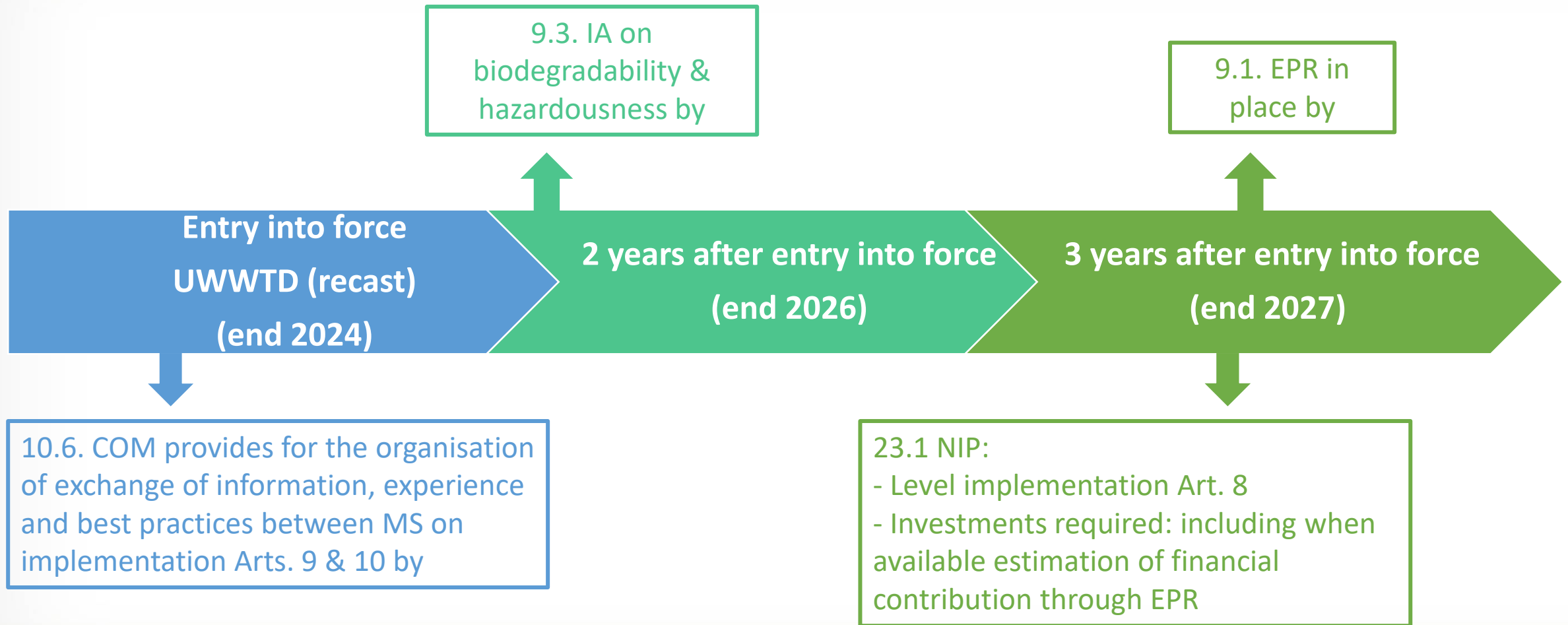


5. Extended producer responsibility (EPR)

Articles 9 & 10 (articles 23 & 30), Annex III, Recitals 20, 21, 22 & 23



EPR - timeline



EPR (Article 9)

- EPR: producers placing on the market products in Annex III (Art. 9.1)
- Producers to cover (Art. 9.1):
 - **at least 80% of full costs for 4T** (including investments & operational)
 - Any other cost to exercise EPR
- Possibility of **exemptions** for producers (Art. 9.2):
 - Quantity substances in products placed on EU market < 1 tonne/year
 - Substances rapidly biodegradable in WW or do not generate μ pollutants end life
- Clear **definition of roles & responsibilities** of all relevant actors
- **Reporting system**

{ Pharmaceuticals
Cosmetics }

{ COM IA on
biodegradability
& hazardousness }

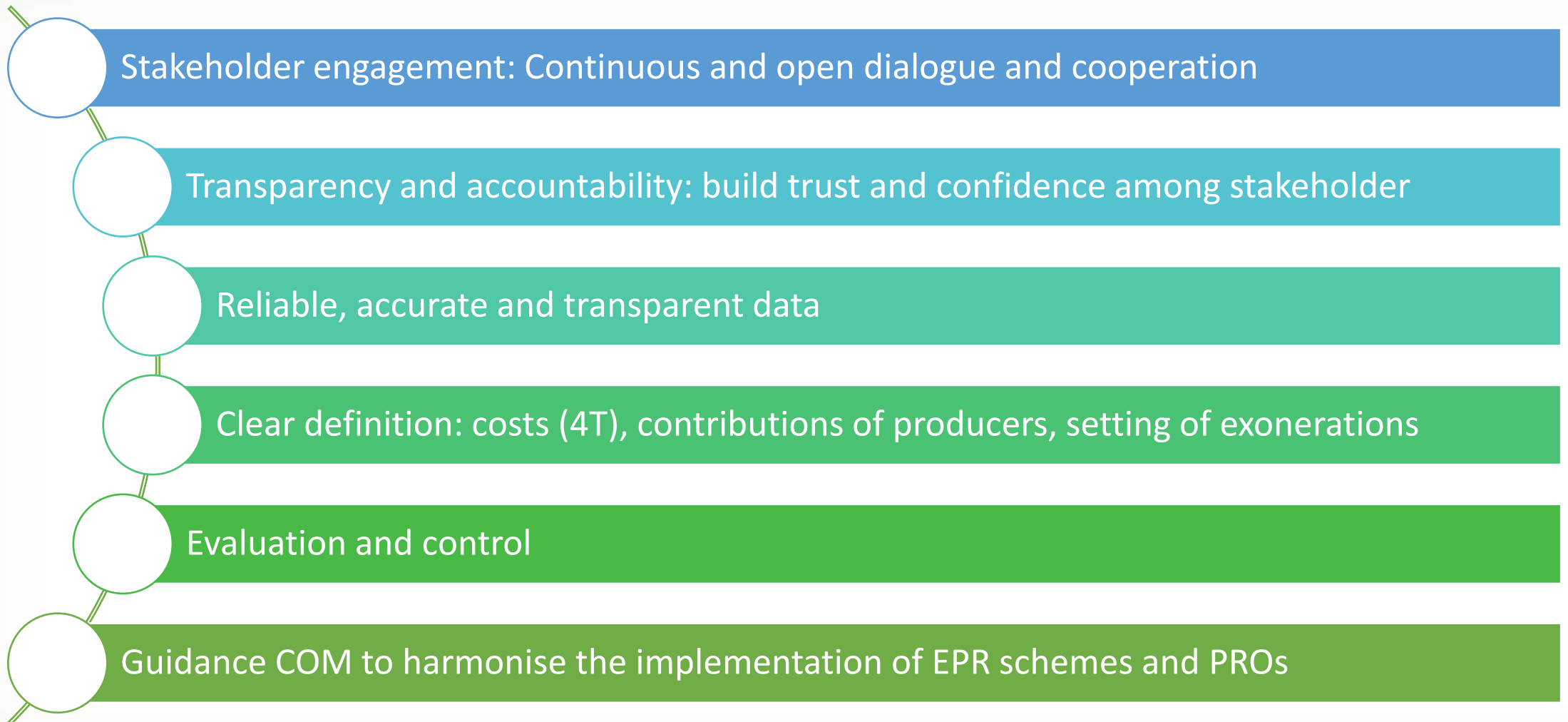


EPR: exercise of EPR (Art. 9.4)

- **Producer responsibility organisation** (PRO) (complying with requirements of Art.10):
 - Have necessary **financial & organisational means to meet EPR obligations** (including **financial guarantees to ensure continuity 4T**) (Art. 10.1)
- Producers contribute financially to PROs
- **Contributions** of producers to EPR based on **quantities & hazardousness of substances in products**
- PROs subject to **independent audits**



EPR & PRO: principles for successful implementation



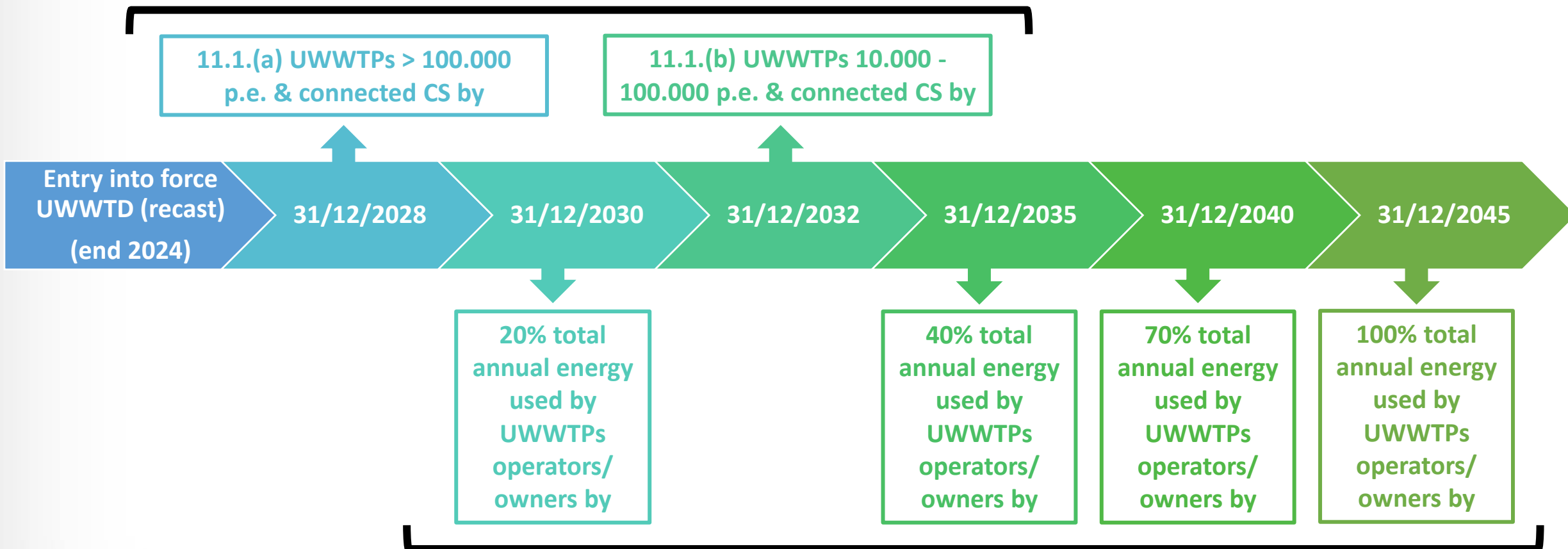
6. Energy neutrality

Articles 11 (articles 21 & 30), Recital 24, 25



Energy neutrality - timeline

11.1. Energy audits for UWWTP and connected CS

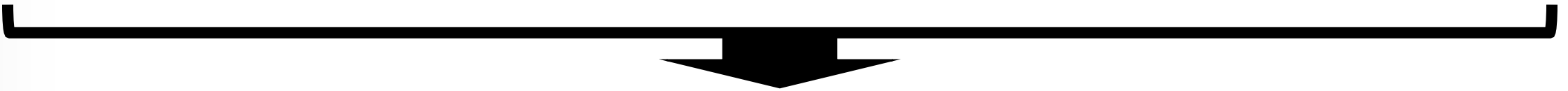


11.2. Total annual renewable energy generated (national level) on- or off-site by or on behalf of the owners or operators of UWWTP ≥ 10.000 is equivalent to at least:



Energy neutrality targets (Art. 11.2)

At national level, the total annual energy from **renewable sources generated on- or off-site by or on behalf of the owners or the operators of UWWTPs** treating a load of 10.000 p.e. and above, and **independently of whether this energy is used on- or off-site of the UWWTP by their owners or operators**, is equivalent to at least...



limiting the use of the produced renewable energy to the owners/operators of UWWTPs may restrain current and future practices of the use of such energy (injection of biomethane into a gas grid, use of biogas for vehicles and public transport, district heating, energy communities...)



Possibility to purchase non-fossil energy from external sources (Art. 11.3 & 4)

Possibility to **purchase non-fossil energy up to 35% of the total objective energy neutrality**

Only if

all **measures** for energy efficiency and to enhance renewable energy production (**according energy audits**) have been implemented and yet it is not possible to produce all energy needed



7. Conclusions



Final conclusions

Contribution WW sector to SDGs and EGD

Integrated approach of WW management (IUWWMPs)

Successful implementation if challenges are faced by all stakeholders involved

Sets milestone implementation polluter-pays principle (EPR)

Article energy neutrality is a missed opportunity to realise the full potential of WW sector to broad energy neutrality



8. Glossary



Glossary

4T: quaternary treatment	NIP: National Implementation Programme
Aggl: agglomeration	OJEU: Official Journal of the European Union
COM: European Commission	p.e.: population equivalent
CS: collecting system	PRO: Producer Responsibility Organisation
EGD: European Green Deal	SDGs: Sustainable Development Goals
EP: European Parliament	SWO: storm water overflow
EPR: extended producer responsibility	UWW: urban wastewater
IA: Implementing act	UWWTD: Urban Wastewater Treatment Directive
IUWWMPs: Integrated Urban Wastewater Management Plans	UWWTP: urban wastewater treatment plant
MS: Member State	WW: wastewater



Thank you for your attention!

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