



Schweizerische Eidgenossenschaft
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Eidgenössisches Departement für Umwelt, Verkehr,
Energie und Kommunikation UVEK
Bundesamt für Umwelt BAFU
Abteilung Wasser

Swiss strategy micropollutants

Saskia Zimmermann-Steffens, Federal Office for the environment

IAI PIETF, October 22, 2024



Switzerland in Summer

2024

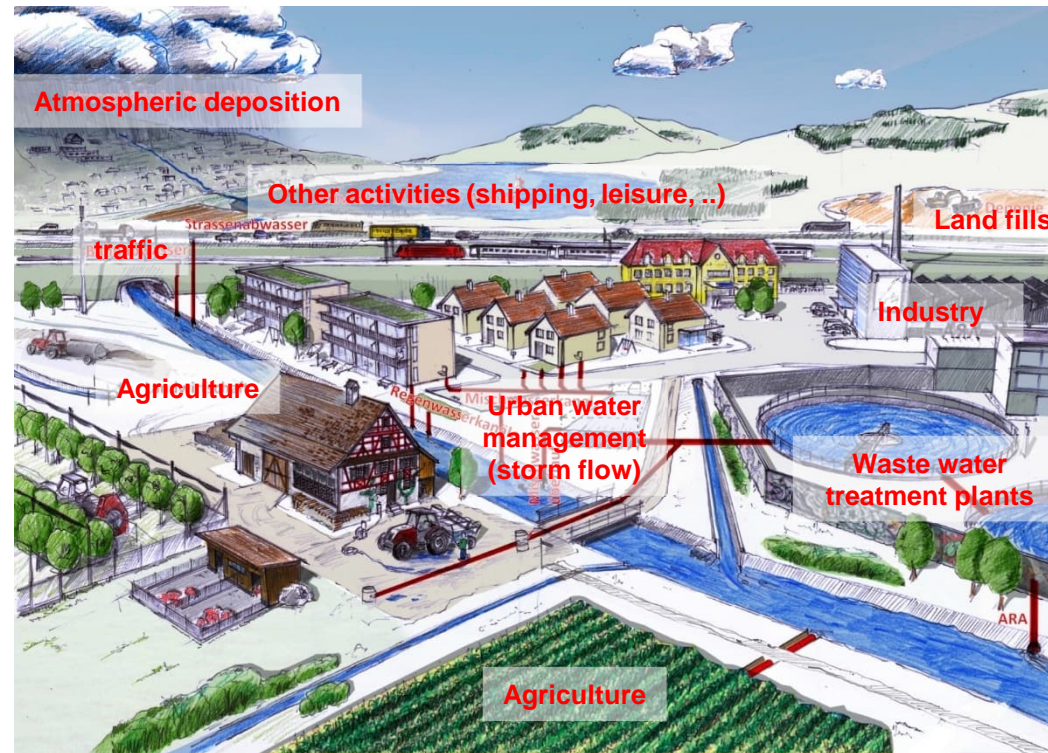


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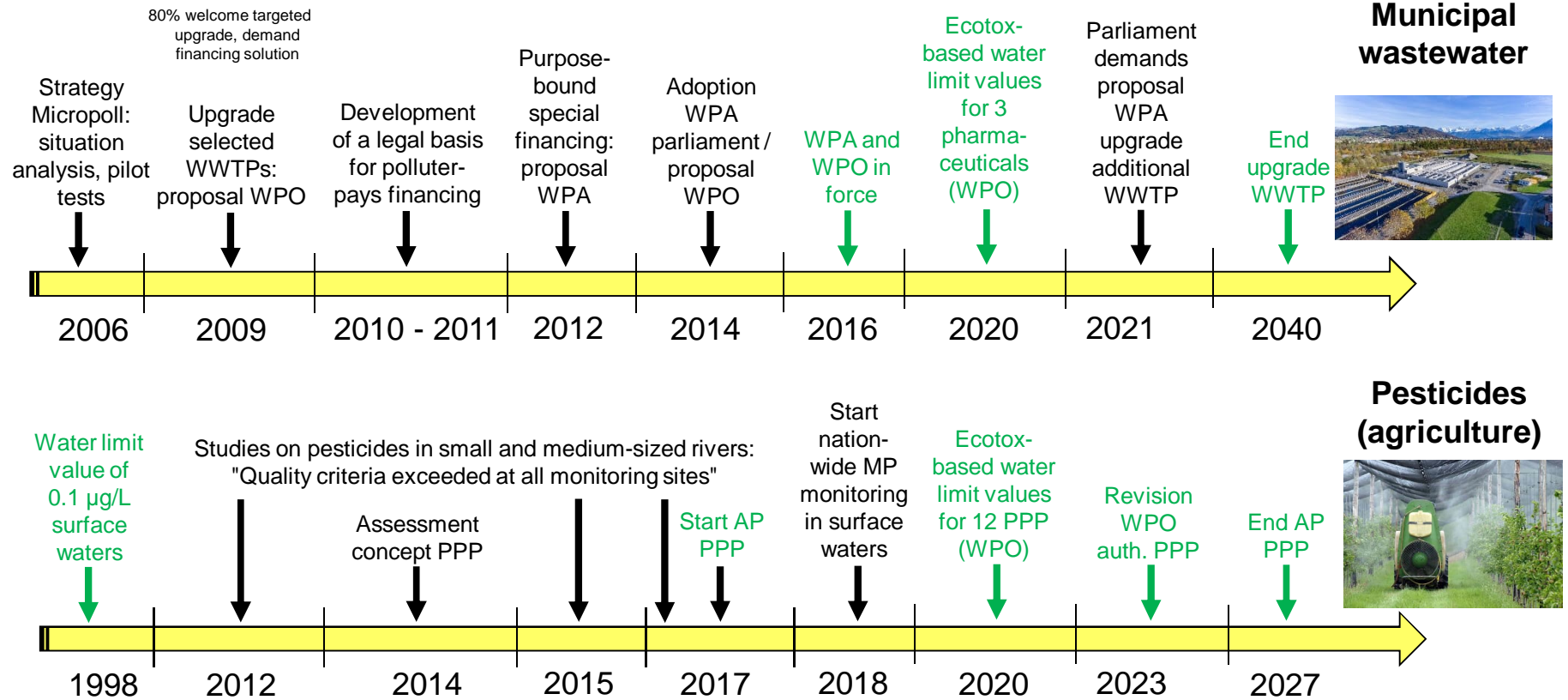


Sources of micropollutants



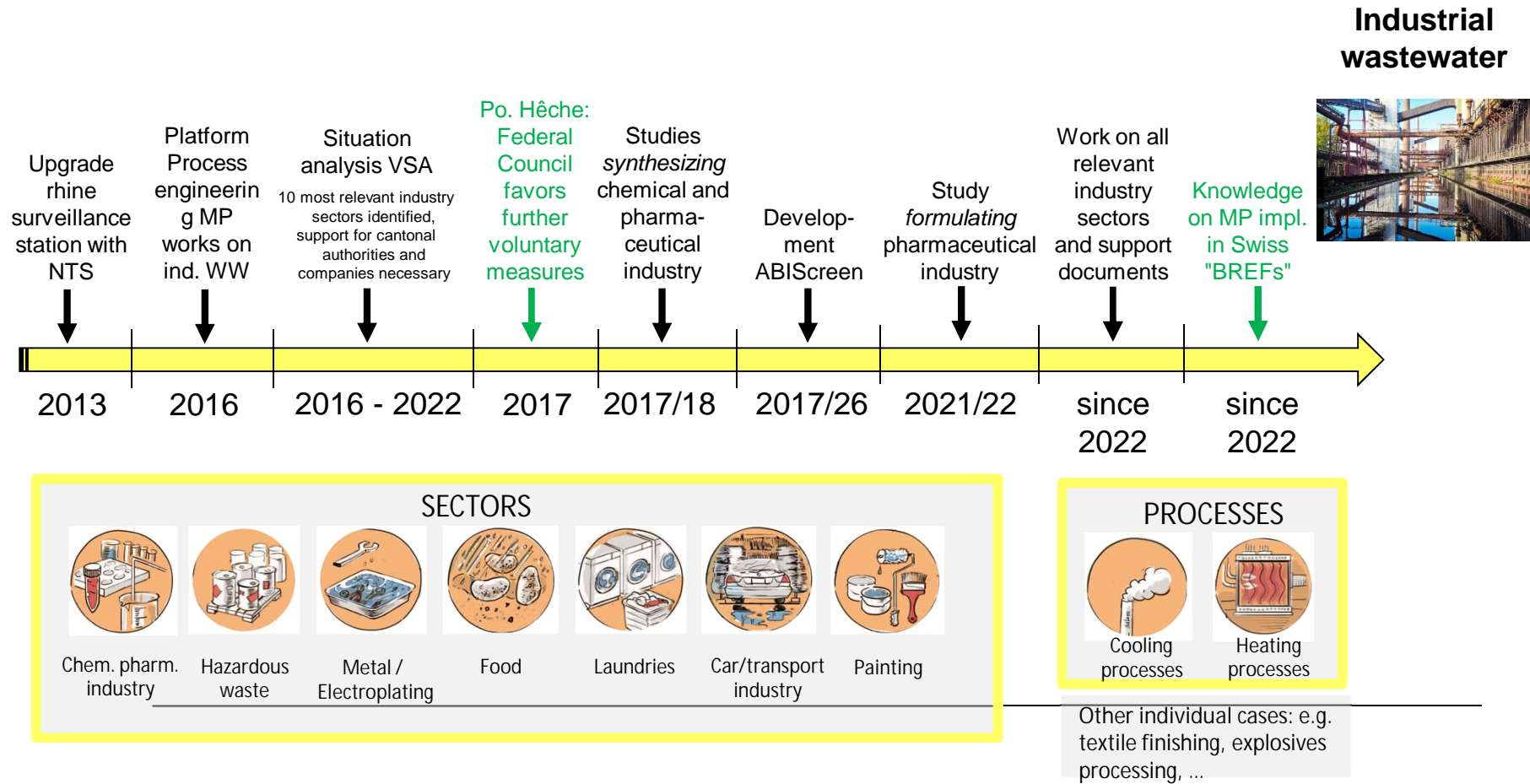


Milestones micropollutants regulation CH





Milestones micropollutants regulation CH





Status of WWTP upgrade in CH

- Implementation 2016 - 2040
- Cleaning effect of 80% required

Protection of aquatic life

- WWTP >8'000 connected persons
- >10% wastewater content in the watercourse

Protection of drinking water resources

- WWTP >24'000 conn. persons
- Catchment area of lakes

Load reduction / upstream responsibility

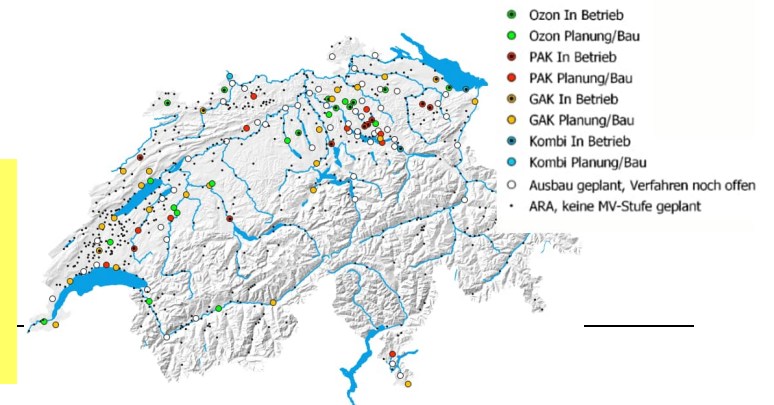
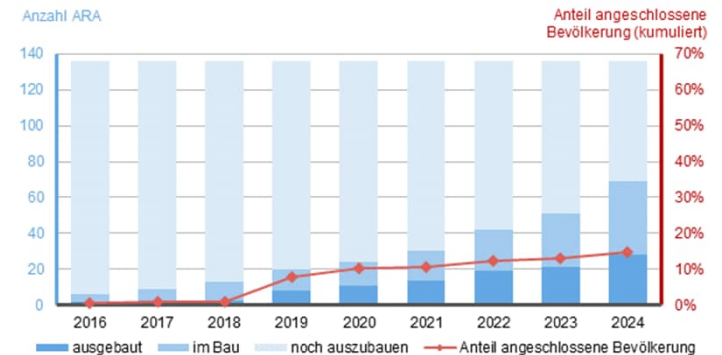
- WWTP >80'000 conn. persons

135 WWTPs implement measures by 2040

approx. 120 WWTPs upgrade with a MP treatment step

approx. 15 mergers

70% of CH wastewater will be treated





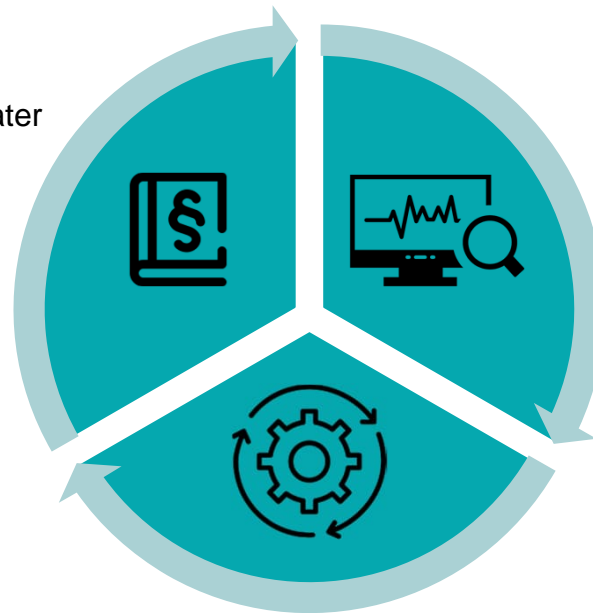
Conclusion on substance emissions from industry (situation analysis VSA)

1. Enforcement of legislation works for substances with limit values.
2. The large number of micropollutants used is a challenge. Focusing on substances with limit values does not do justice to existing deficits in water bodies:
pay more attention to micropollutants!
3. ***Relevant industries and processes identified.***
4. Different situation:
 - **Large direct and indirect dischargers**, primarily from the synthesizing chemical and pharmaceutical industries (complex industrial sites e.g. Schweizerhalle, VS) - challenging special cases with large substance loads
 - **Indirect dischargers (SMEs)** - further develop cantonal enforcement where necessary



Knowledge of new substances in wastewater advances state of the art

Discharge limits
for substances in wastewater



Monitoring
for substances in
wastewater, including
unknown substances

**Identify wastewater-relevant
substances (incl. reaction
and transformation products)**

**Develop toolbox for
monitoring concept, e.g. via
tox-tests, prioritization of
substances, etc.**

State of the art

for substances in wastewater; check adaptation if:

1. new substances in wastewater (>threshold value?)
2. further development of process engineering



State of the art and associated substance emissions



**Working with the industry sectors:
Get in touch**



What wastewater-related processes are there in the industry?

What is the state of the art?

Which products are used? Which substances are included?

Select the most relevant processes and substances for a measurement campaign

**Measurement campaign,
possibly feasibility study first**

Inform stakeholders about the state of the art and associated substance emissions

Adapt state of the art to substance emissions





International Commission for the Protection of the Rhine



Objective "Rhine 2040" program: Good water quality

- **Reduce micropollutant inputs** into water bodies from municipal wastewater treatment plants, agriculture, **industry and commerce by 30 %** (compared to 2016-2018)
- Industry & Commerce" expert group **chaired by CH**
 - Situation analysis of relevant sectors and micropollutants and regulatory practice for substances in industrial wastewater (including best-practice enforcement)
 - Recommendations for effective measures and assessment of the measures





Thank you very much!

