



CWPharma Policy Recommendations

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EUROPEAN
REGIONAL
DEVELOPMENT
FUND



The intention....

1. Present the results at present stage
2. Condense results into a limited number of political relevant possibilities targeted to specific political decision-making arenas
3. Make it short, to the point and bold
4. Get feedback from you
5. To make a difference to the Baltic Sea



12 Political Recommendations

- Grouped into 3 categories
 - *Actions for avoiding API discharges*
 - *Actions for reducing API discharges from WWTPs*
 - *Actions for supporting future regulations*
- Relevant political level denoted:
 - EU
 - National (N)
 - Regional (R) (e.g. Regions and Federal States)
 - Local (L) (e.g. Municipalities)



Actions for avoiding API discharges

1. All countries should have a take back system for all unused human and veterinary medicines



EU
N
R

2. In all countries, national information campaigns should be conducted at least annually during the next five years to create awareness about the negative effects of pharmaceuticals in the environment amongst citizens, doctors, pharmacists, veterinarians and farmers



N
R

3. Farms, hospitals, medical clinics, elderly care homes and other healthcare institutions, should be obliged by law to collect their pharmaceutical waste and send it directly to waste treatment facilities.



R
L

Actions for reducing API discharges from WWTPs

4. All wastewaters emitted to the Baltic Sea directly or indirectly through rivers and/or streams meet the standards of both the existing Urban Waste Water Treatment Directive (UWWTD) (before 2022) and the revised UWWTD when released.



EU
N
R
L

5. WWTPs larger than 250 000 population equivalents (PE) should have an appropriate advanced wastewater treatment (AWT) technology removing APIs and other environmentally hazardous products no later than between 2025-2030.



EU
N
R
L

6. WWTPs larger than 50 000 PE should have an appropriate AWT technology removing APIs and other environmentally hazardous products no later than between 2035-2040



EU
N
R
L

Actions for reducing API discharges from WWTPs

7. All countries should be obliged to establish a **national knowledge platform** to **share technical information** on API removal to speed up and **improve uptake of WWTP and AWT upgrades**



EU
N

8. When deciding on **AWT options** for specific WWTPs, the **carbon footprint** of the options must be **considered on a country-by-country** basis.



N
R



Actions for supporting future regulations

9. Environmental permits should require **pharmaceutical plants** to estimate their API emissions and impacts on WWTPs and surface waters.



EU
N

10. When necessary, **environmental permit requirements** for **pharmaceutical plants** should be further **supplemented** with industrial wastewater contract requirements.



R
L

Actions for supporting future regulations

11. APIs posing environmental risks should be included in **regular national and regional environmental monitoring** programmes to:

- improve **knowledge and management of risk**
- enable **appropriate political actions** to further increase wastewater treatment efficiency by advanced methods.



12. Future **research programmes** should focus on:

- further development of **analytical methods for API detection**, especially for metabolites, hormones and antibiotics
- more comprehensive **quantification of API concentrations in the environment**
- assessments of **combined ecological risks** through more ecotoxicological data on single APIs and their metabolites, on **mixture toxicity**, on **toxic effects for different trophic levels**, and on **chronic/long term effects**



and then.....

1. Today - questions from you...
2. Possible further feedback from you by e.g. email: prth@kalfor.dk
3. Final version – OK'ed by the WP Leaders within a week.....
4. Political Recommendations as a Deliverable from CWPharma before end November 2020





Thank you !

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