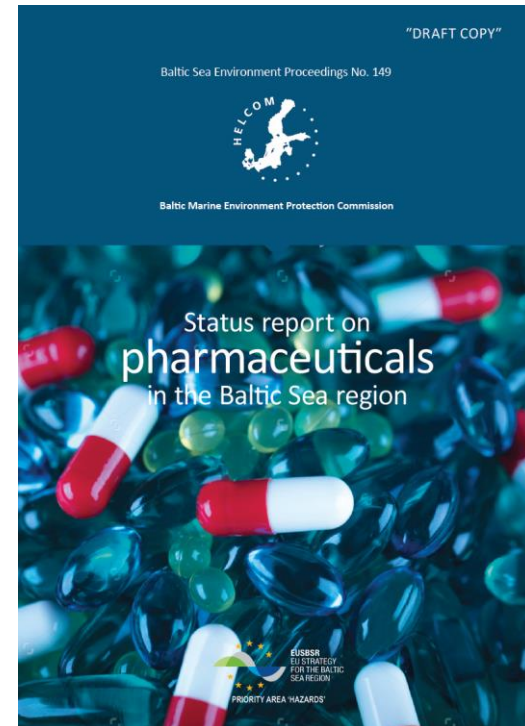


Pharmaceuticals in the Baltic Sea environment - joint process of HELCOM and PA Hazards

1. Outcome of the "Status report on pharmaceuticals in the Baltic Sea region"
2. Ways forward

Jenny Hedman
PAC Hazards
2016-10-26

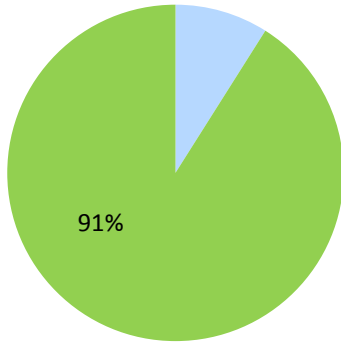




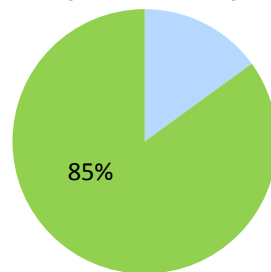
Outcomes

- Main pathway to BS is through MWWTPs (ca 1,800 tons/y)

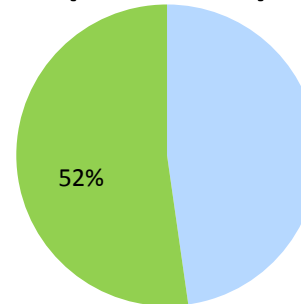
Waste water
(total 156+2)



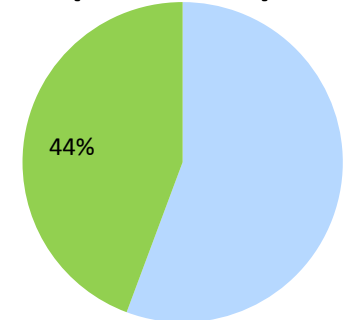
Sludge
(total 60)



Rivers
(total 111)



Marine environment
(total 167)



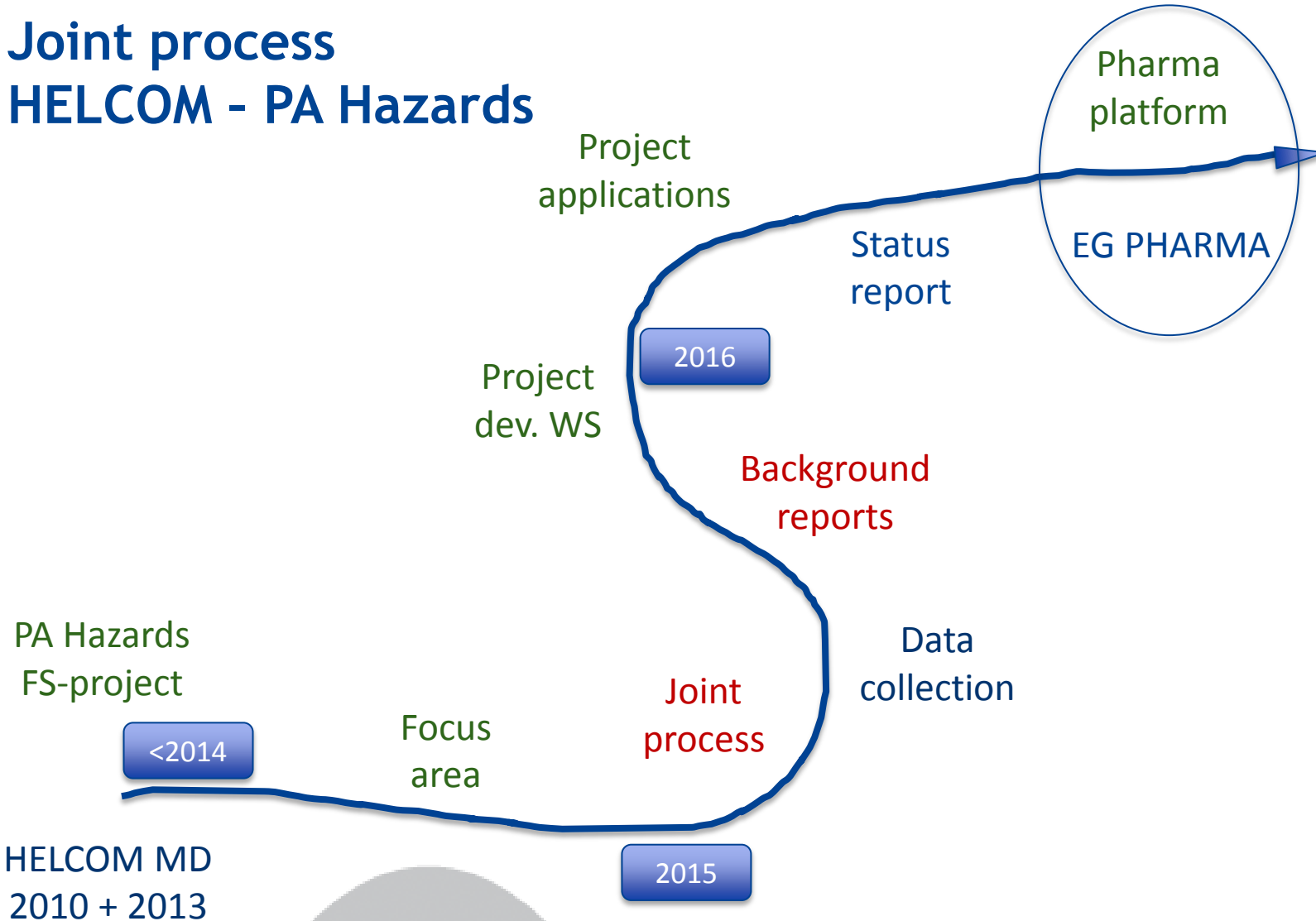
- Analytical methods underestimate environmental concentrations

Data gaps

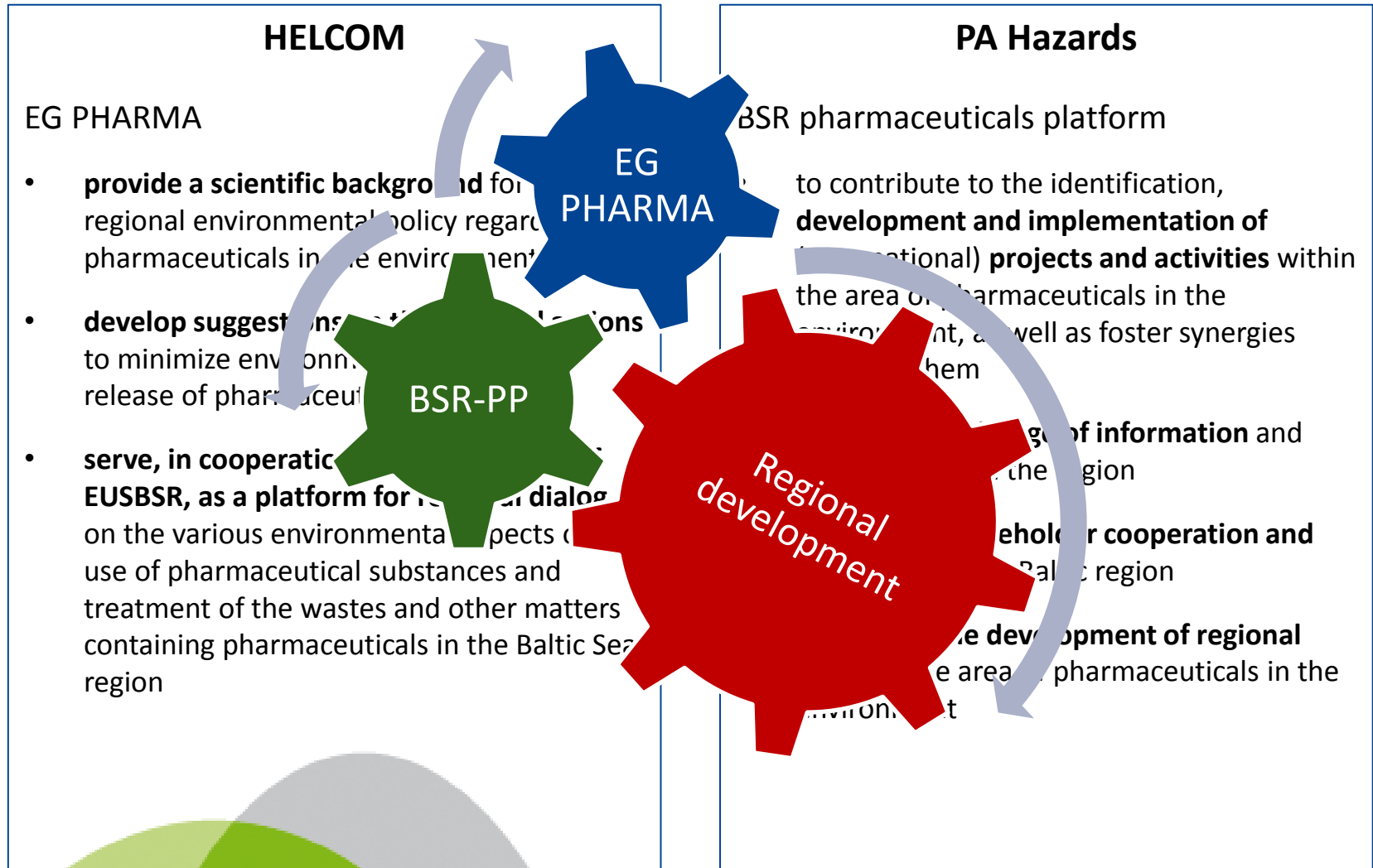
- Veterinary pharmaceuticals
- Monitoring in MWWTPs and rivers
- Sales and consumption
- Metabolites
- Sludge and soil
- Analytical methods
- Concentrations in biota and impacts on ecosystem

Elaboration of measures to reduce input

Joint process HELCOM - PA Hazards



Objectives





EUSBSR
EU STRATEGY
FOR THE BALTIC
SEA REGION