Vlaanderen
is bodembewust

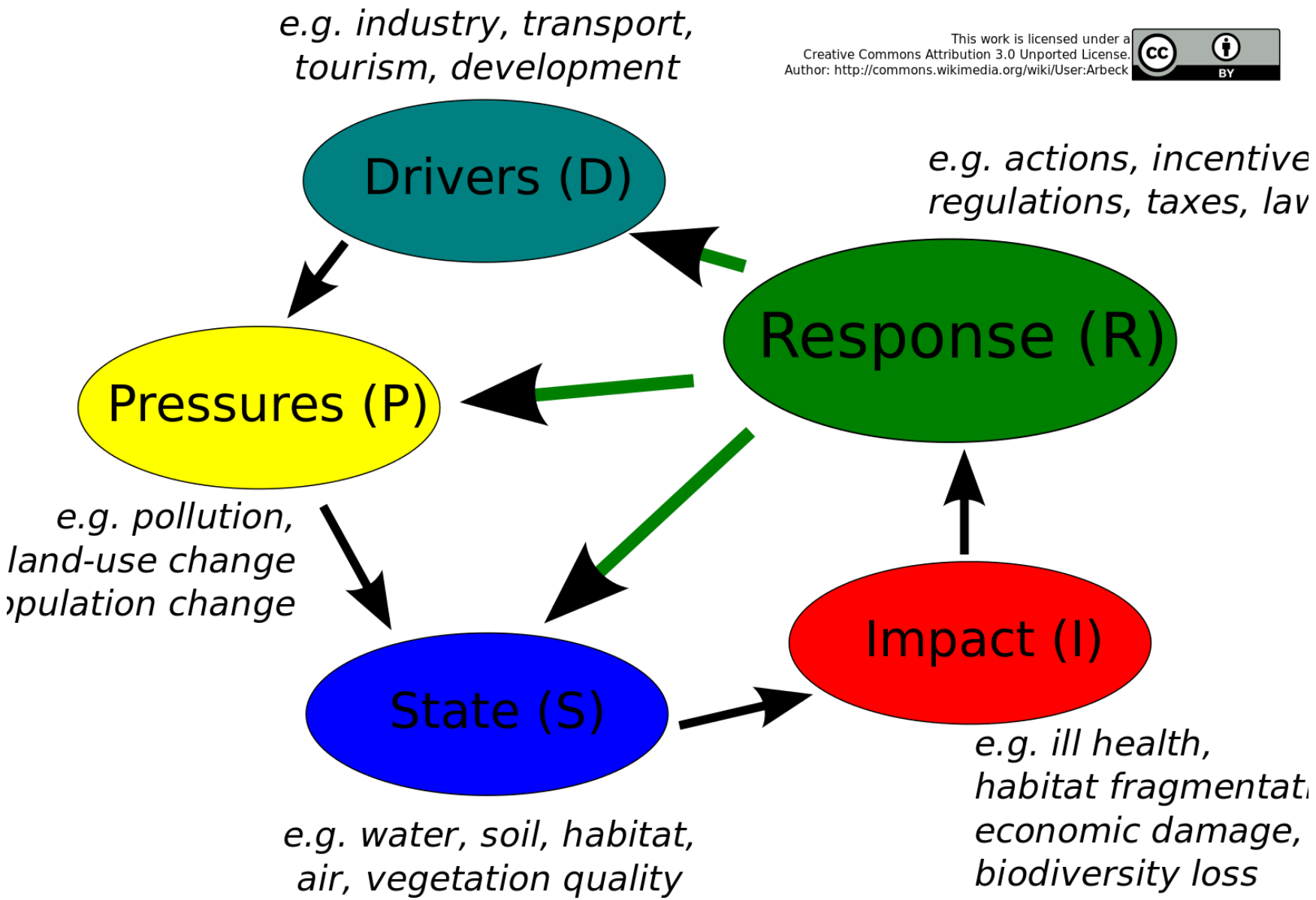
TOPIC 1
Knowledge for policy

Workshop Ensor

Karen Van Geert (Arcadis)
Jörg Frauenstein (German Environment Agency)
Wim Van Den Driessche (VEB)

SAMEN MAKEN WE
MORGEN MOOIER

OVAM



Source: https://en.wikipedia.org/wiki/File:DPSIR.svg

Driving forces

Why are contaminants of emerging concern important for policymakers?
How are you impacted?

- Protect current and future generation from impacts
- Scientific community – start of research- scientific progress
- Priority list for compounds to start monitoring (based on different criteria e.g. toxicity x mass x use) – do we need a list?
- Biomarkers – red flags
- Economy versus consumer (convenience versus harm)

- Public emotion – trigger for policy makers
- Weakest link (e.g. ecosystem- bioaccumulation for PFAS)

Pressures

Media- soil/groundwater/sediment
Main hotspots/diffuse pollution

- Presence in Sediment
- Soil re-use / economic development
- Drinking water quality
- Natural background
- Diffuse contamination
- Food safety

State of knowledge

What are knowledge gaps?
Which gaps are prior or urgent?
What is the status of analytical methods/investigation (low conc)

- Knowledge of producers and possible effects (industry has more info)
- Toxicity ➔ scientific community
- Environmental fate
- Other criteria : volume, use, …
- Knowledge gaps
  - Monitoring data = GAP – make indicators that makes you start measuring CEC
  - Sampling analysis- cross contamination (PFAS) - uniformity in methods over countries to compare data + validation of results
  - Cocktail effects, metabolites, …
- Scattered information about state of emerging pollutants in soil and groundwater
- Time gap: it takes time until science reaches policy level

Impact

- Conceptual site Model – Source-pathways-receptors
  - Where is the impact? Which data are needed to define behavior, toxicity, risk assessment, impact on receptors, …
- Costs

Probabilistic approach (likelyhood that a compound would have an impact)- sensitivity analysis – which parameter is defining risk and focus on that pathway

Weight of evidence

Impact of humans and households on soil (where does it come from)

Heterogeneous dispersion

Responses

What do we need? Solutions? threshold values and framework?
What are known bottlenecks and challenges?

- Preventive approach version curative approach
  - REACH + prevent exposure
  - Focus on good house keeping (industry)
  - Government: guiding role
- Easier acces to data
- Common strategy on priorities on different levels (EU member states and regional levels)

- Treshold values/guidelines
  - Weight of evidence as basic principle
  - Define levels – not “the” best level - precautionary approach
  - Common principles for assessment of emering pollutants or issues

- Criteria for proportionality (what is proportional in measures and management options- what can we reach with this measures)
- Awareness campaign to change our daily consumption/use of products ..