

# *PIE – The Dutch Approach in Education*

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Dutch green deal

Chain approach

Planetary health guidelines

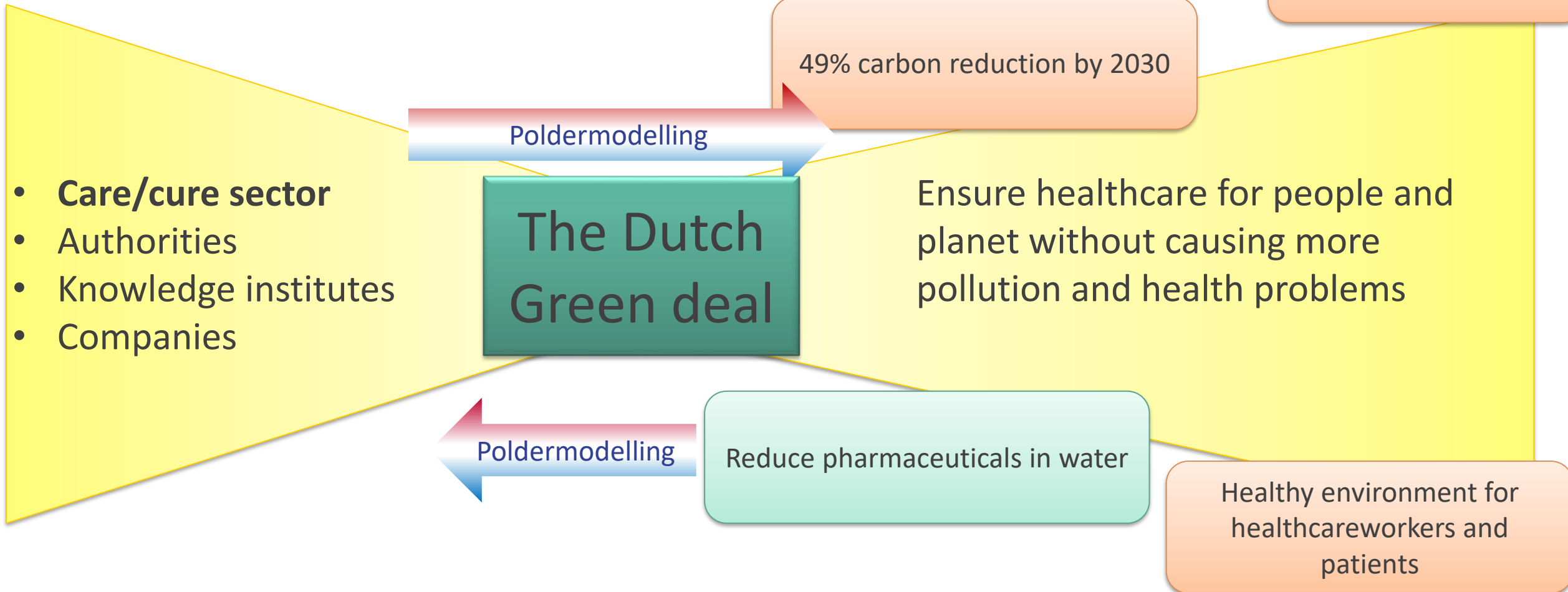
Chain approach to pharmaceutical residues in water

Planetary Health: ter bescherming van de menselijke gezondheid en de planeet

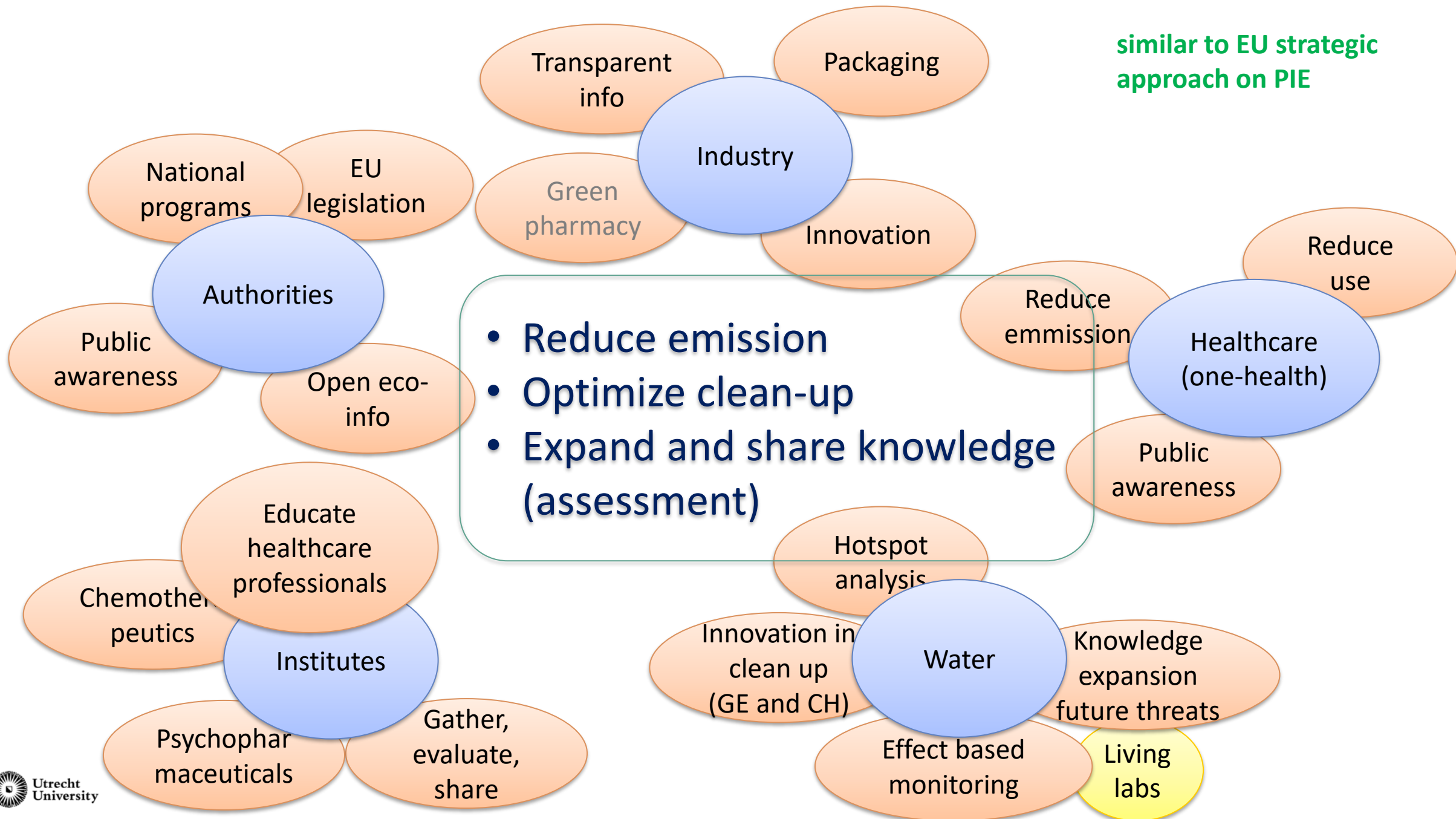
All stakeholders represented

Poldermodel

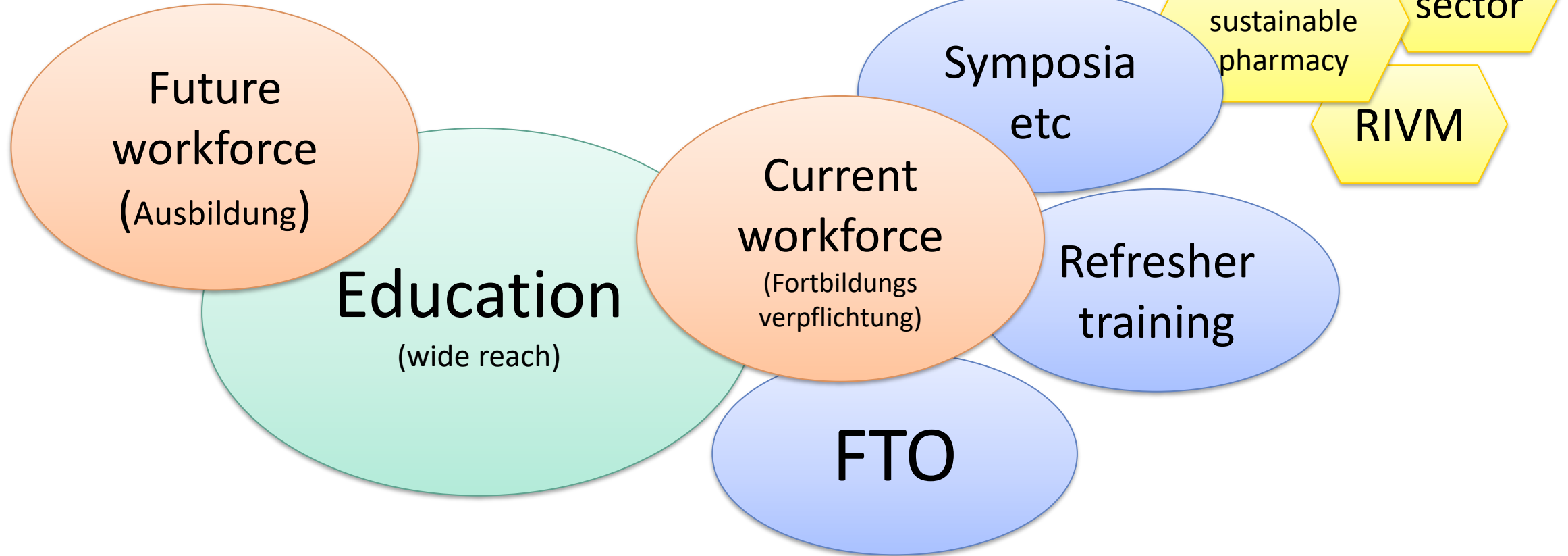
Mutual consensus



similar to EU strategic approach on PIE



# Educate healthcare professionals (Pharmacy focussed)



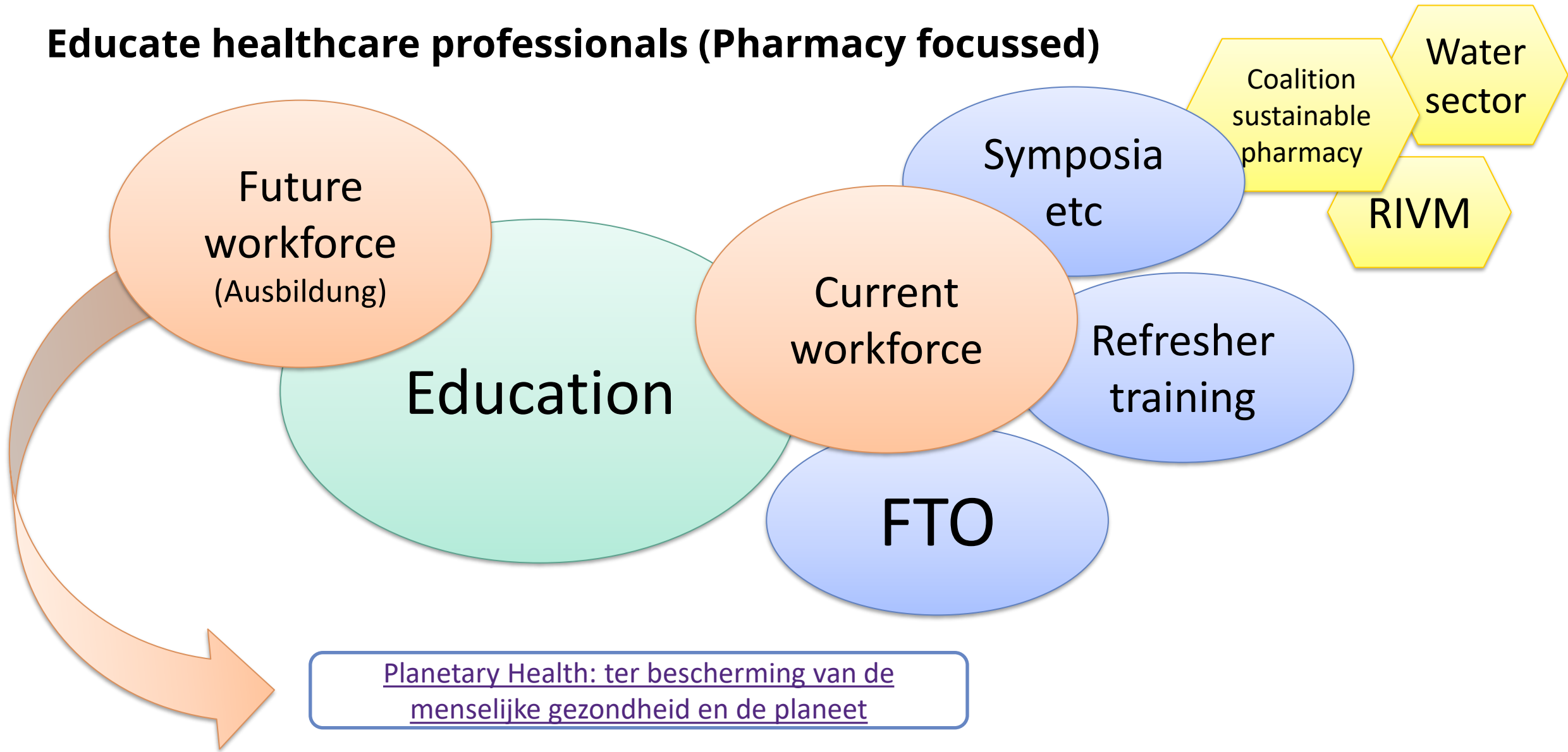
# FTO

- Pharmaco Therapeutic Consultation (PTC)
- Regional consultation GP, pharmacist and other professionals, 6 times/year
- Goal: Exchange knowledge, discuss issues, set clear agreements
- Content: pharmacotherapeutic and communication
- IVM in 2020: FTO module 'Responsible use of Medicine'.
  - Lively discussions
  - Increase awareness
  - Evaluation of own practice
  - Practical targets/projects

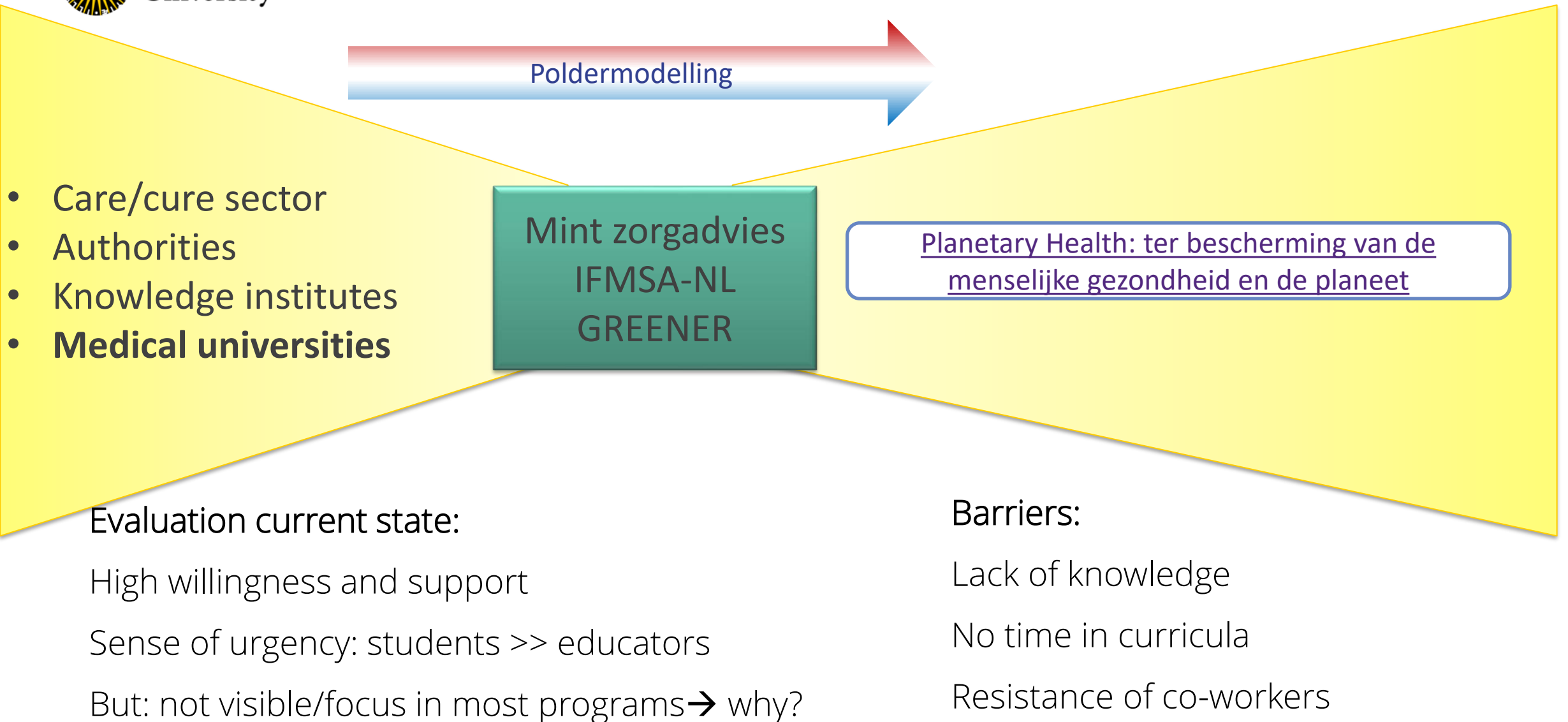
## FTO - special edition

- Pharmaceutical residues **from** water
- Chain partners: VEWIN (Dutch association of drinkingwater companies) and VanWaarde.
- 50 water experts trained
- Goal
  - Increase awareness issue under professionals AND patients
  - Understand issues in complete chain
  - Evaluation of own professional behaviour
  - Set mutual targets/develop projects
- Target: 10% total FTO's by 2020
- Extended due to popularity (and COVID-19)

# Educate healthcare professionals (Pharmacy focussed)

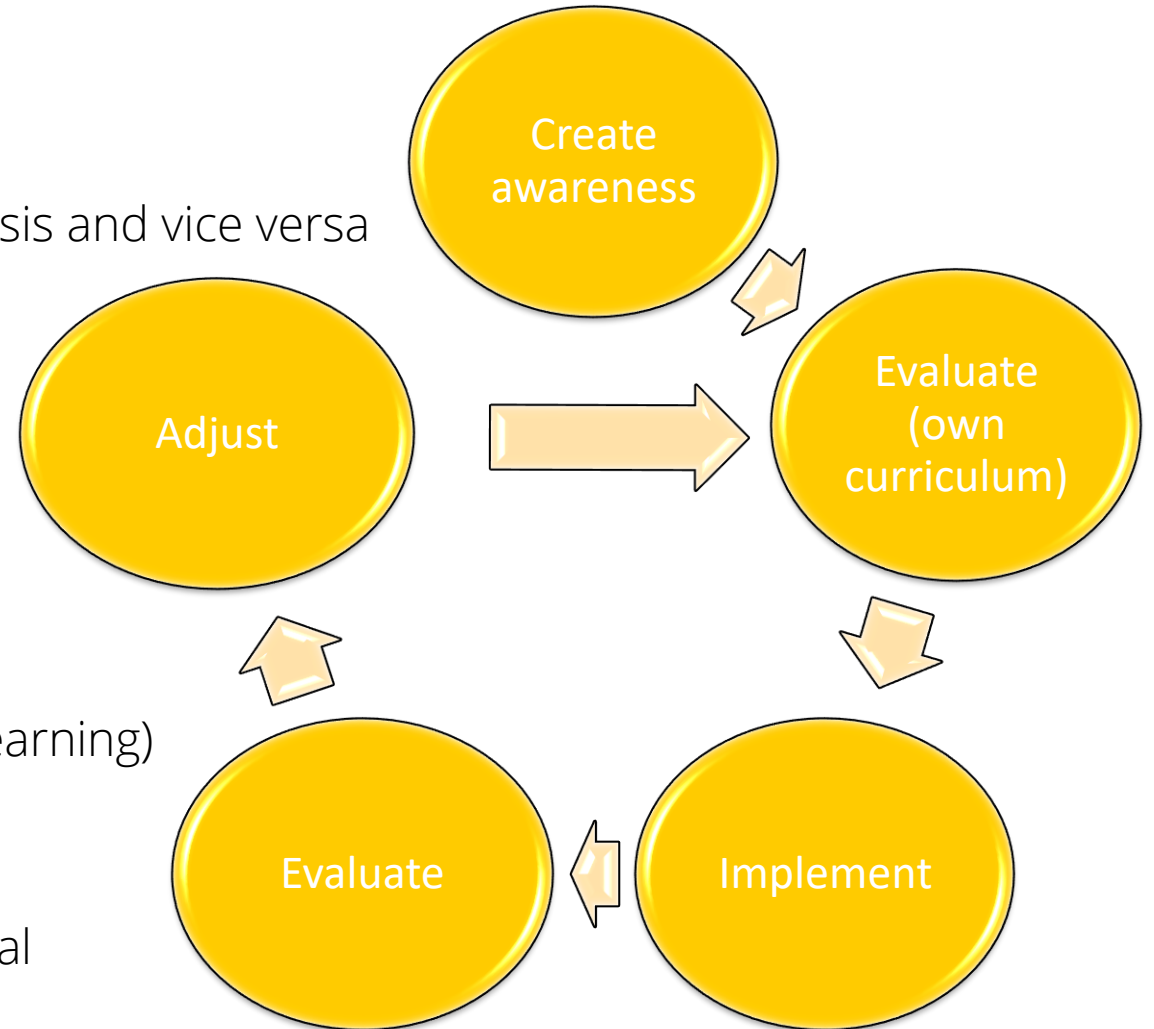






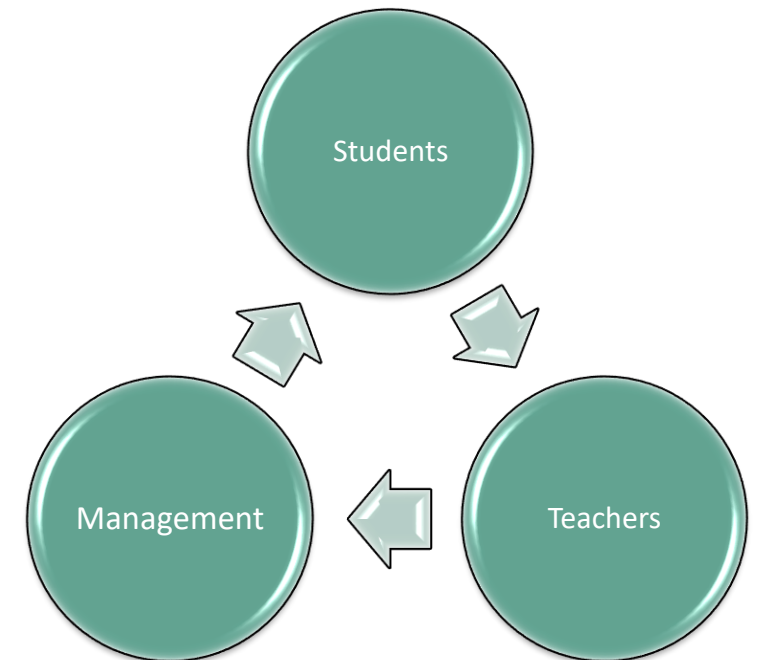
# Consensual strategic approach: Targets/recommendations

- Create awareness and acknowledgement:
  - Acknowledge health crisis is caused by climate crisis and vice versa
  - Prioritize planetary health in education
- Increase knowledge:
  - Educate all alumni 23-24 in planetary health
  - Invest in experts (students and staff)
  - Teach the teachers in planetary health (life long learning)
- Facilitate multidisciplinary
  - Use co-creation for development teaching material
  - Collaborate with institutes, chain parties, other medical educators, etc

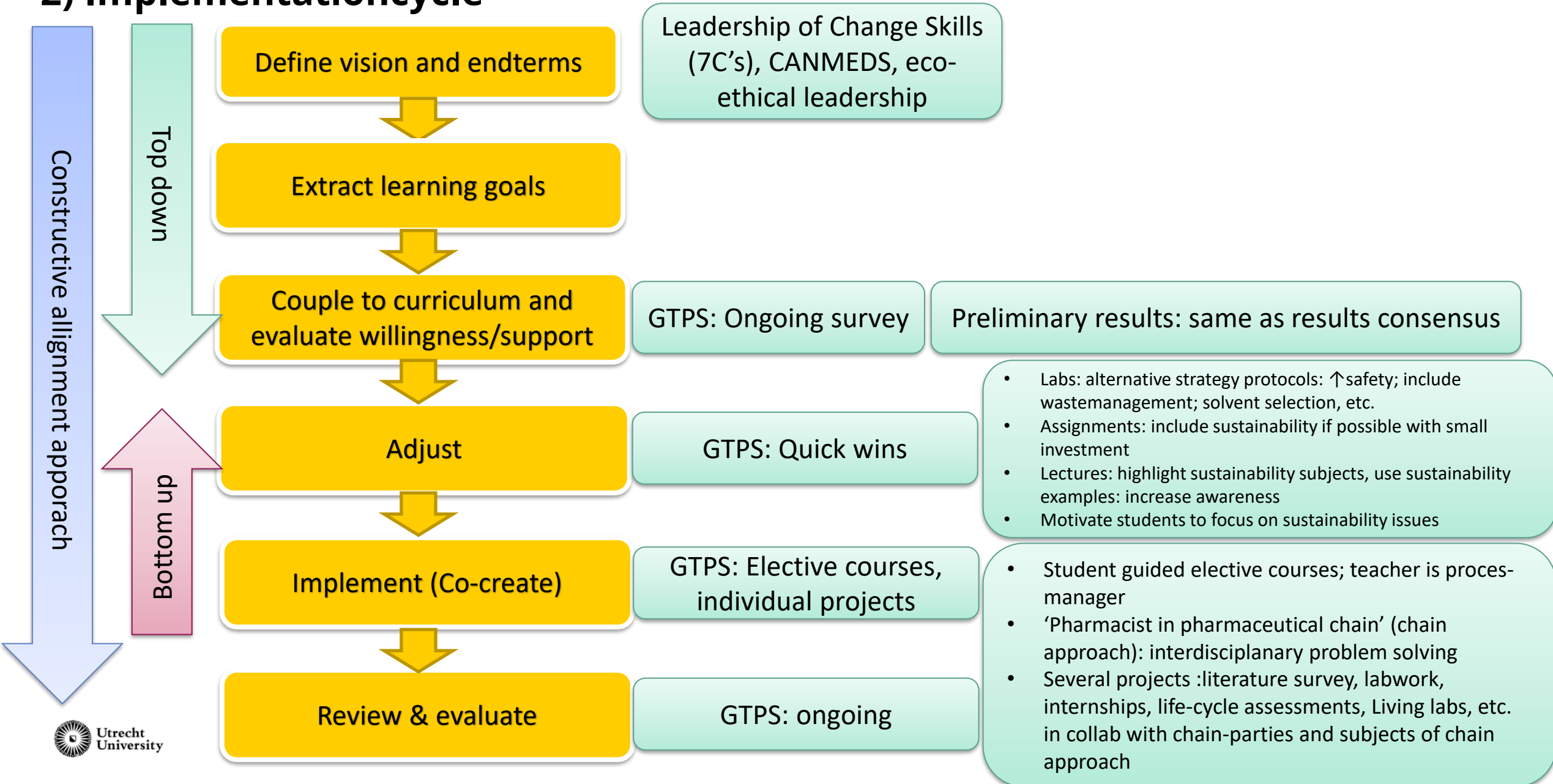


# 1) Create awareness and sense of urgency

- Bottom up AND top down simultaneously
- Positive approach: inspiration sessions, progress sharing
- Examples: Green Team Pharmaceutical Sciences (GTPS) Sustainability & Resilience UU
  - GTPS (after 9 months): 3 educators, 3-5 students, Green Office, staffmembers, 1 boardmember, other parties → multilevel
  - Collaboration: parties Chain Approach, Green Deal, Universities, departments, etc.
  - Share knowledge:

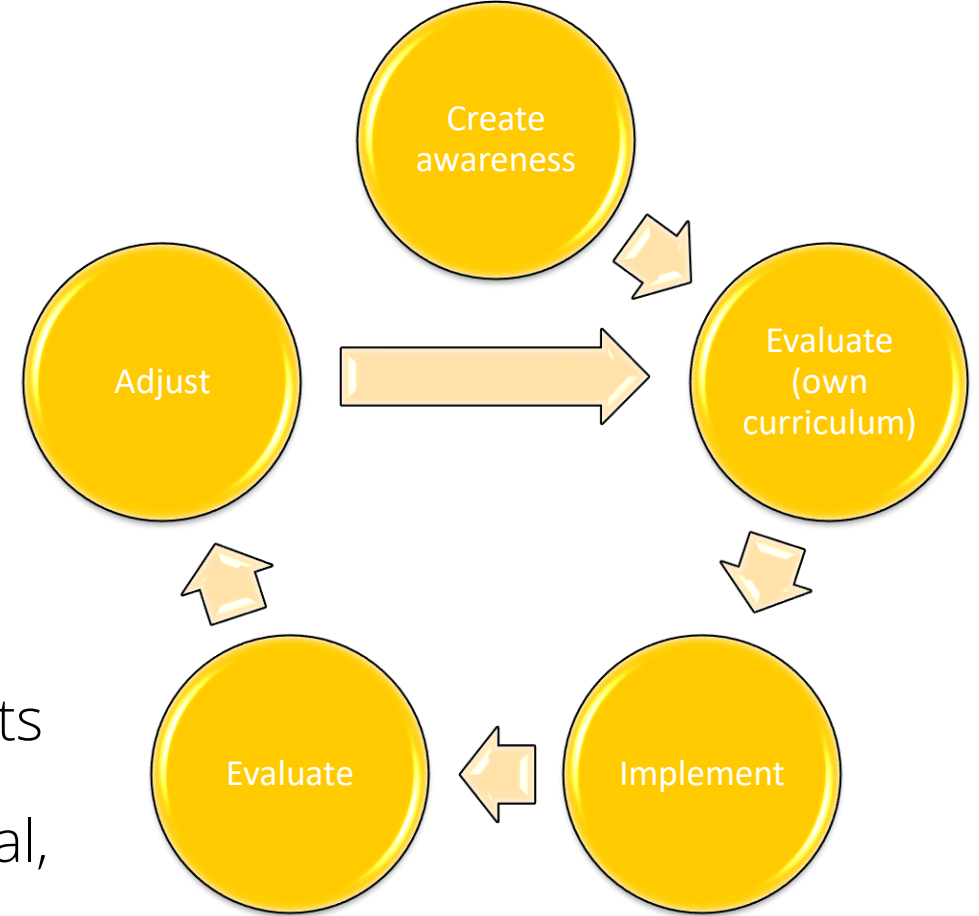


## 2) Implementation cycle



## Timeplan (parallel)

- Short term → Quick wins:
  - Fast and easy to implement, not structural
  - Raising awareness
  - Use results to gather support
- Medium term → more time-consuming adjustments
  - Elective courses, educational supporting material, educate workforce, share knowledge, inform stakeholders, etc
  - Implementation cycle: money and time
- Long term → institutionalization



# Suggestions for content

## General end-term examples

- Understand relation health and nature (planetary health)
  - Provide a useful set of knowledge/skills in planetary health.
  - Share knowledge/experience for societal and planetary benefits
  - Act as a sustainable healthcareprovider
- 
- **Ethics:** role and responsibilities as healthcareprovider in society and nature; planetary boundaries; Equity in access to healthcare; understanding (geo)political, geographic and cultural issues
  - **Existing subjects:** extrapolate existing skills and knowledge (one-health); relations between health and nature; reaching planetary boundaries, etc
  - **Multidisciplinary:** issues and interests in chain approach; multidisciplinary collabs; leadership skills; the SDGs in general; systematic thinking in general

# Threads and opportunities

Thread	Solution
Lack of knowledge	Co-creation, collaboration, sharing
No time/room	Integrate, small actions
Behavioural resistance	Positivity, awareness, studentpopulation, inspiring pioneers, leadership
Getting started	Combined didactical approach, positivity, transdiscipinarity, just start somewhere
Examination	Constructive alignment: procesthinking, understanding and reflection
Political interest	? (formal endorsement, multilevel support)

Opportunity	Example
New research opportunities	New fields of expertise, collabs, extrapolation
Knowledge use	Wider network fills in knowledge gaps, open science → efficient use of knowledge
Teaching	Co-creation is different way of thinking→ higher motivation students? Opportunities for teachers? Faster implementation in curricula.
Co-benefits	Shift towards prevention instead of curing in healthcare
Social equity awareness	Access to medicine, geopolitics, cultural and political differences

# Conclusions

- PIE as a part of planetary health is a wicked problem and needs a wicked solution → multistakeholder
- In NL the poldermodel has worked for the development of the Green deal, the Chain Approach and the consensus for planetary health in education.
- Consensus for education:
  - Create awareness and acknowledgement → responsible professionals
  - Increase and extrapolate knowledge and skills
  - Transdisciplinary approach → more conscious professionals with network
  - Didactical approach: co-creation; procesthinking; extrapolation; hands-on
  - Facilitated by all layers: dual approach possible
- Not only create sustainable healthcare providers but also responsible leaders of change



# Differences between NL and GER

- More similarities than differences
- Size: poldermodel in GE?
- Different educational approach and structure
- Integration of all parties
- Local – nationwide → regional differences
- Different focal points (NL watersector) and interests

# Acknowledgements

- All chain partners and consensus partners
- UU
  - Dept of Beta Sciences and other departments (GEO, MED, UMCU), other universities (Groningen, Amsterdam, Leiden, Nijmegen, Gent)
  - Green Teams, Green Office
  - Prof. Dr. Robbert Jan Kok, Prof. Dr. Aukje Mantel-Teeuwisse

Thank you for your attention!



**Utrecht  
University**

Sharing science,  
*shaping tomorrow*