



Decision making process

Training on the sustainable
management of PCB contaminated
sites

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Content of presentation

- Soil
 - Soil management
 - Soil policy triggers
 - Soil policy Instruments
 - Soil policy priorities
 - How to get started
-



The thin layer that lies below our feet holds our future*

- Provides us with food, biomass, fibres and raw materials
- Regulates the water
- Regulates the carbon and nutrient cycles
- Make life on land possible



It takes thousands of years to produce a few centimetres of this magic carpet

* EU Soil Strategy for 2030



Soil

But mankind is reckless



- Human health at risk
- Food safety not guaranteed
- Resource depletion (water, arable land)
- Ecological damage

Soil needs to be managed in a sustainable way for our future generations



1. Policies

- Plan, program and setting goals
- Organize, implement and monitoring
- Balance between soil management and available resources

2. Legislation

- Liabilities and accountabilities
- Responsibilities, tasks of public & private parties
- Land registration

3. Financing

- Polluters pay principle
- Funding mechanisms
- Financial instruments

4. Capacity building

- Training and education
- Communication

5. Technical aspects

- Soil quality standards & risk assessment instruments
- Guidelines
- Quality assurance and quality control



Economical

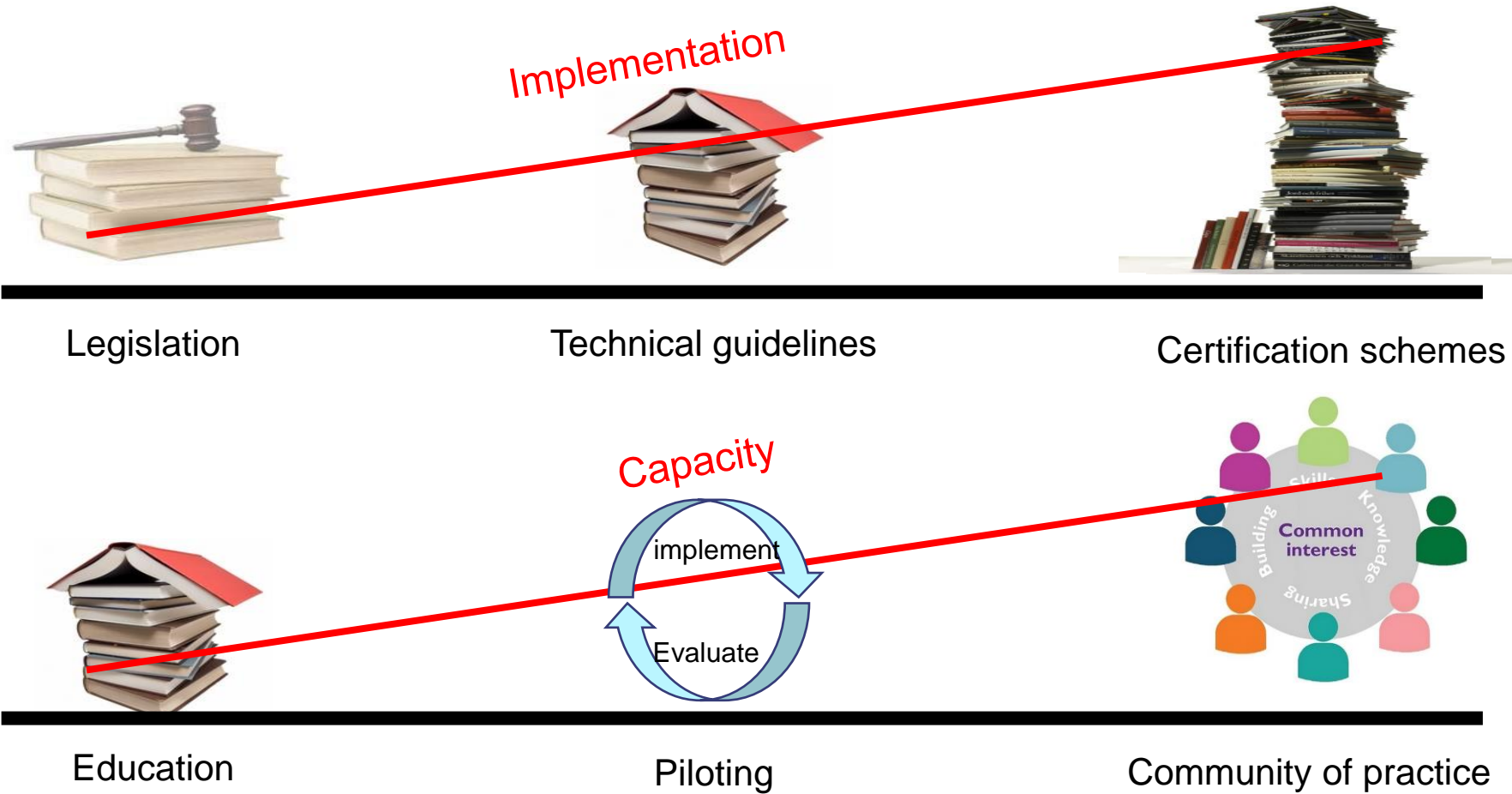
- Enable urban development
- Groundwater protection
 - Guarantee drinking water safety
 - Guarantee irrigation water safety
- Surface water protection
 - Guarantee surface water safety
 - Guarantee sea/river food safety
- Flood prevention
- Arable land protection
 - Guarantee food safety
 - Maintain area of cultivable land
- Promote (eco) tourism
 - Guarantee clean environment

Environmental

- Human health
- Nature preservation
- Bio diversity
- Carbon-rich ecosystem
- Water storage capacity
- Public awareness



Soil policy instruments



Soil policy priorities

1. Soil protection / prevention
2. Risk-based land management
3. Site remediation

“1”

“10”

“100”

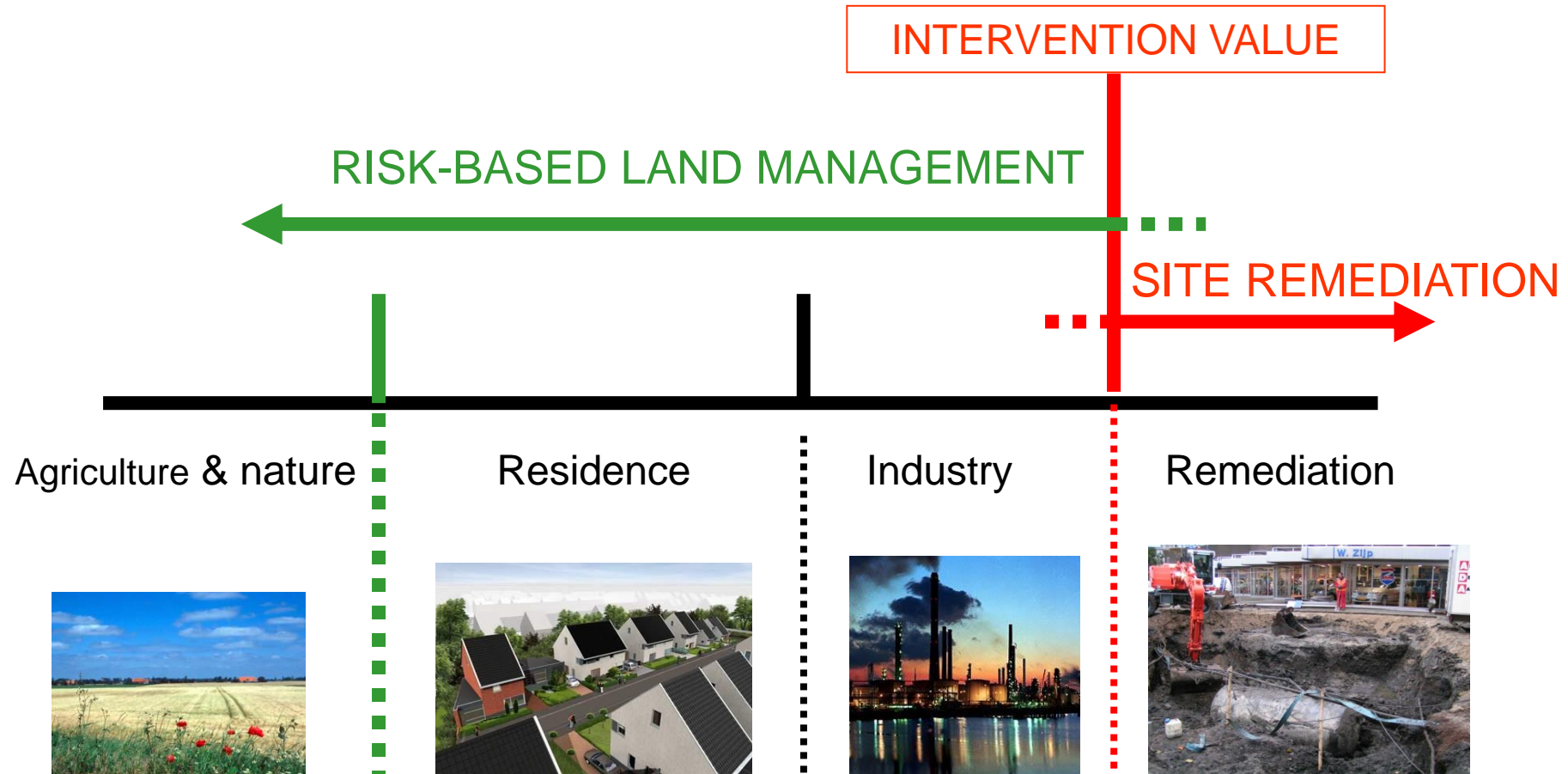
COSTS



Whilst maintaining economical and social activities



Risk based soil quality standards and land-use



Single food basket from contaminated site

Use single food basket

- Gives high exposure
- Target levels should be more strict
- Emergency measures high impact
 - Awareness raising
 - Restricted land-use
 - Restricted groundwater-use
 - Supply clean water



How to get started?

Phase 1 Preliminary Site Assessment

Phase 2 Site Assessment

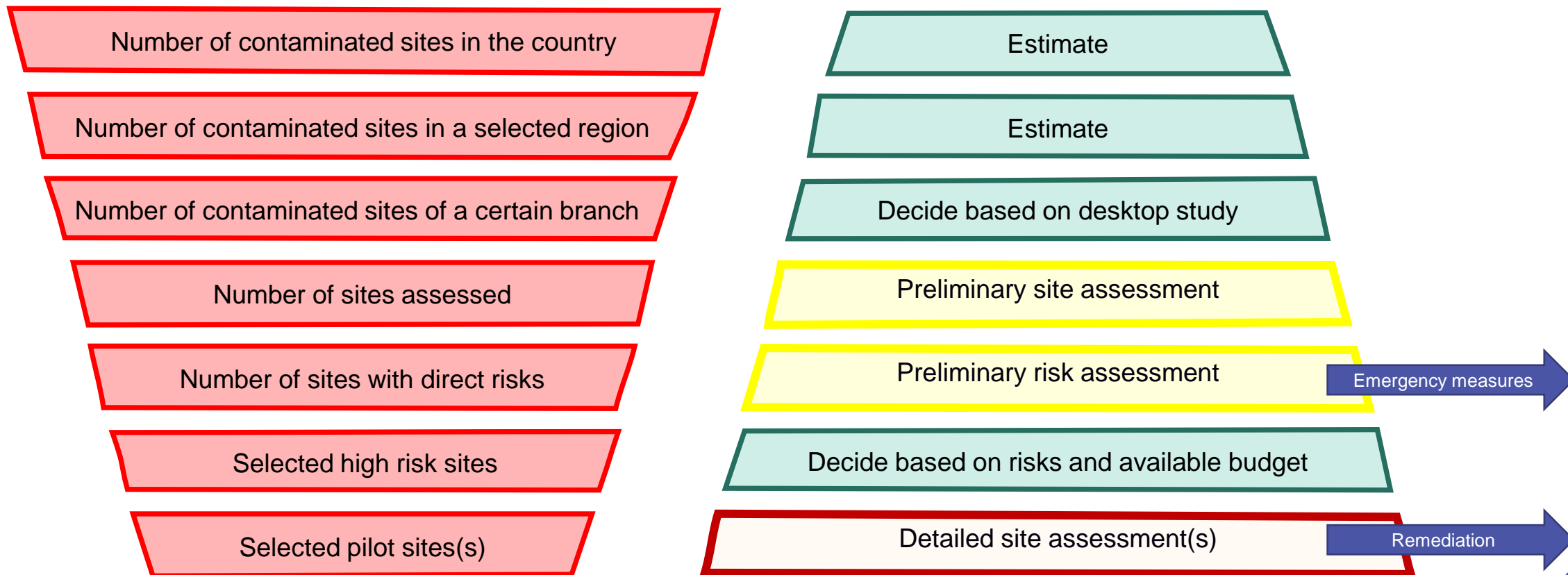
Phase 3 Site Remediation Assessment

Phase 4 Site Remediation Management

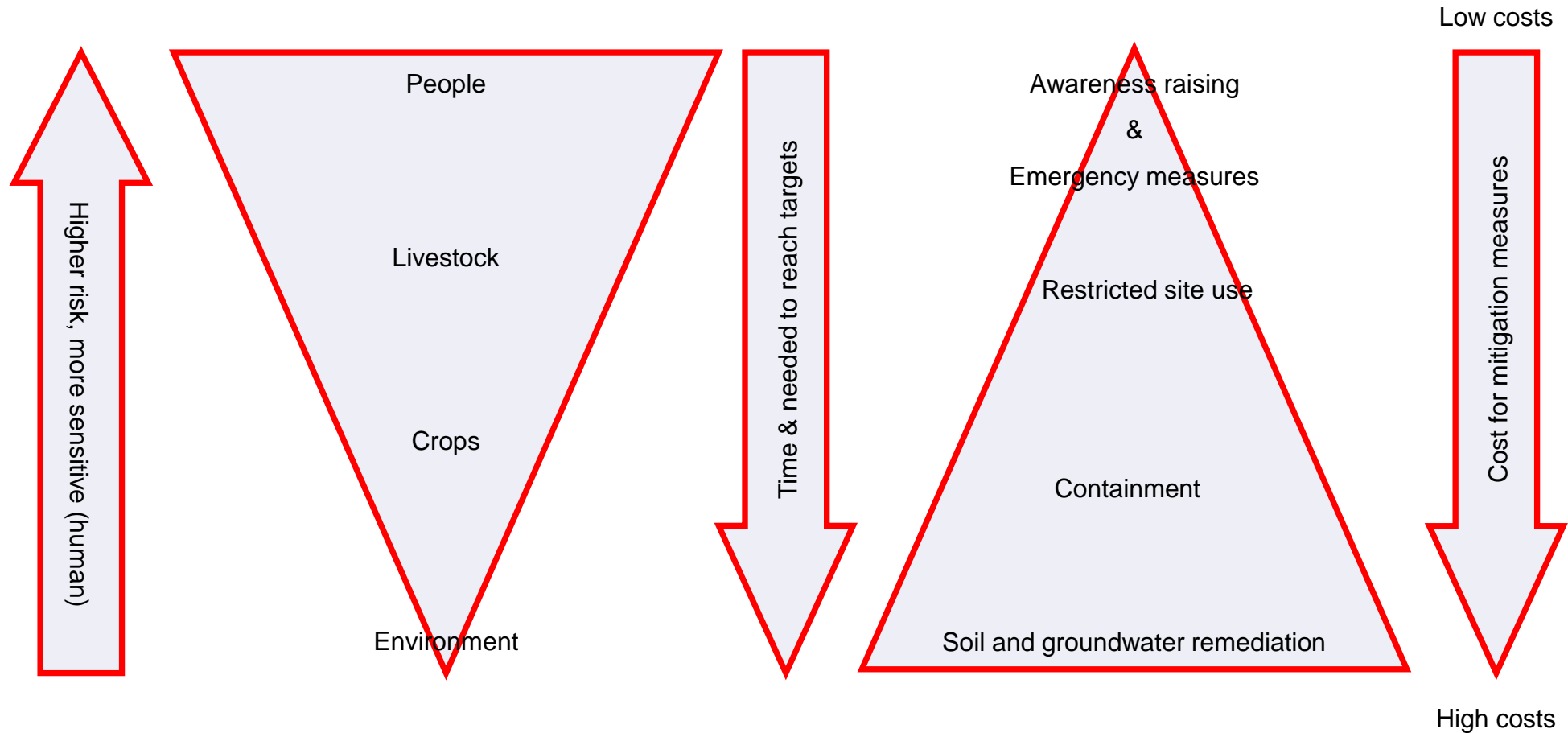
Phase 5 Site Monitoring & Aftercare



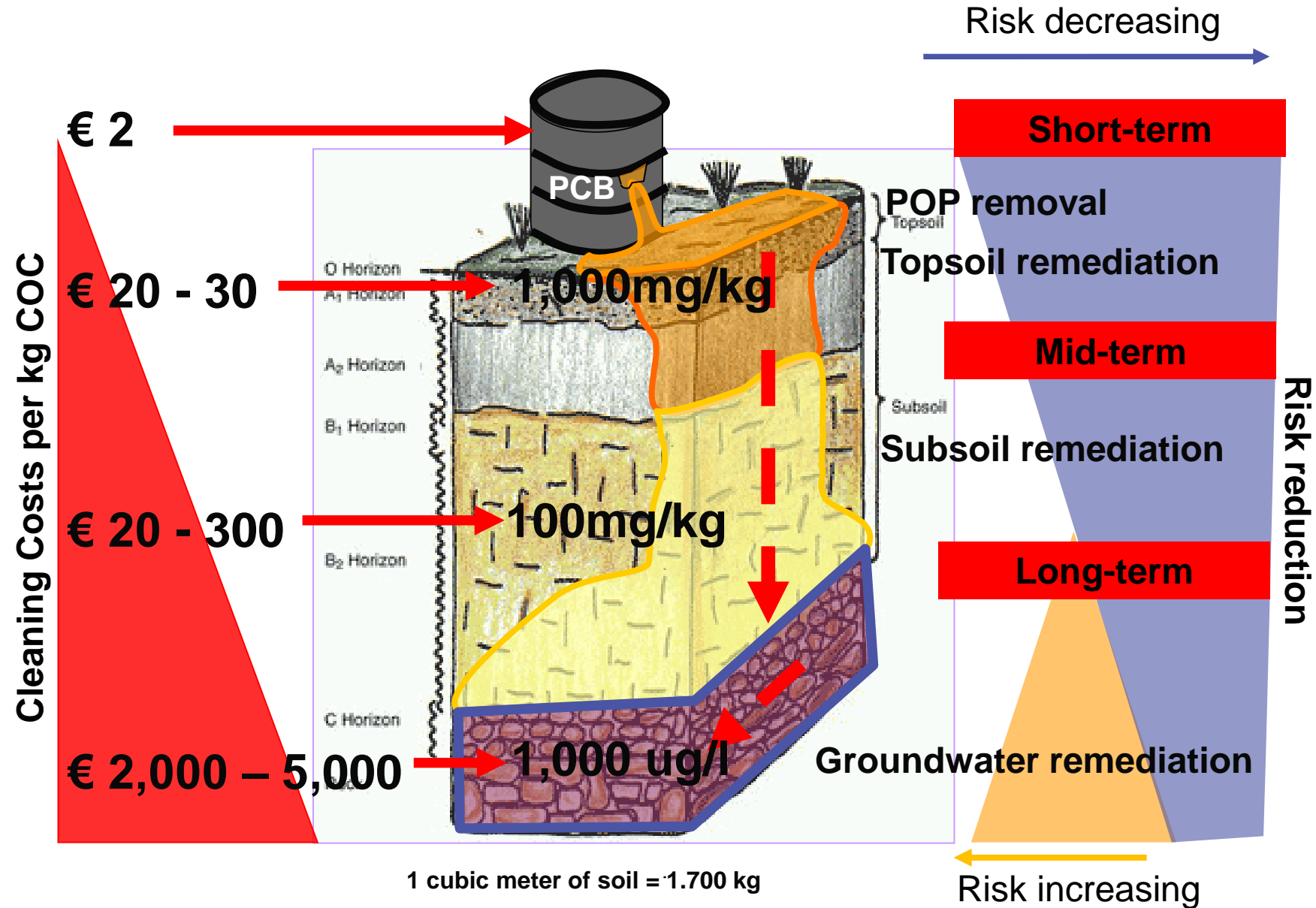
Risk-based implementation



Focus on protecting the people



Why focus on hazardous waste/source removal?



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