‘Towards a Pollution Free Planet’

Presentation for the Joint Bureau Meeting
Costa Rica

Structure of the report

- **Introduction**
- **Section 1- Evidence of a polluted planet: the science, impacts and economic costs**
  - ✓ Air; marine and coastal; land and soil; freshwater; cross-cutting sources: chemicals and waste
  - ✓ Economic costs
- **Section 2- A Pollution Free Planet: Agenda 2030 and Multilateral Environmental Agreements**
  - ✓ Opportunities for achieving the 2030 Agenda for Sustainable Development and Sustainable Development Goals
  - ✓ The pollution mandates of the Environmental Agreements
  - ✓ Multiple benefits of actions
  - ✓ Towards a strengthened multi-stakeholder governance
- **Section 3- A Framework for Transition to a Pollution Free Planet**
  - ✓ Gaps
  - ✓ Principles
  - ✓ Key system wide areas of change (transformative actions and enablers)
  - ✓ Targeted interventions
- **Conclusion**

Key milestones

15 May (2 weeks consultation)	• 2nd draft of the report sent to Multilateral Environmental Agreements and UN agencies, and key experts for comments and feedback. • Virtual meetings with 1) key technical experts, 2) MEAs 3) UN Agencies
24 May	Presentation of key finding of the report to the Committee of Permanent Representatives
Mid June	Commitments platform available on line (UN Environment Assembly 3 website)
26 June	Draft report of the Executive Director sent to Member states for information
August - September	Final review, sign off by Head of UN Environment, final editing, design and layout
30th September and 30th November	Reporting and analysis of the commitments received

Growth and the pollution paradox

The world has achieved impressive economic growth over the past few decades

- Poverty levels have reduced
- Fewer people sleep hungry
- People are better educated, live longer, and have more choices due to technological advances
- People consume more and have higher aspirations

This improved economic and social well being is however accompanied by an increased pollution and impacts on health and wellbeing

Pollutants and Pollution Dashboard

Substances hazardous to human health & ecosystems

Ambient concentrations of pollutants – exposure thresholds at risk of being crossed with potential long term impacts on human health and ecosystem

Exposure sufficiently understood to cause harm and damage

Pollution impacts (1/2)

AIR POLLUTION

- 6,5 million people die due to poor air quality including 4.3 million due to household air pollution
- Lower respiratory infections:
  - 51 million years lost or lived with disability due to household or ambient air pollution
- Chronic obstructive pulmonary diseases:
  - 32 million years life lost or lived with disability because of household air pollution and workers' exposure

Global costs: $ 5,322 billion; 7.2% GDP

WATER POLLUTION

- 58 % of diarrheal disease due to lack of access to clean water; sanitation
- 57 million years life lost or lived with disability due to poor water, sanitation, hygiene

Global Costs: $ 306 billion; 0.4%GDP

MARINE AND COASTAL POLLUTION

- 3.5 billion people depend on oceans for source of food which are used as waste and waste water dumps
- Close to 500 'dead zones', regions that have too little oxygen to support marine organisms, including commercial species
- Plastics (75% of marine litter) carry persistent bio accumulative and toxic substances

Source: WHO (2016) for global burden of disease; costs from various sources

Pollution impacts (2/2)

LAND POLLUTION

- Open waste dumps and burning affect lives, health and livelihoods and affect soil chemistry and nutrition
- Health impacts of chronic exposure to use of pesticides for men, women and children
- Salinization of land and ground water affects health, especially of pregnant women and infants

CHEMICALS

- Over 100,000 die annually from exposure to asbestos
- Lead in paint affects children's IQ
- Impacts of some chemicals such as endocrine disruptors, developmental neurotoxicants and exposure to pesticides and biodiversity are still to be fully assessed

Global costs: $ 480,4 billion; 0.4% GDP

WASTE

- 50 biggest active dump sites affect the lives of 64 million people: health, loss of lives and property when collapses occur;
- 2 billion people without access to solid waste management and 3 billion lack access to controlled waste disposal facilities

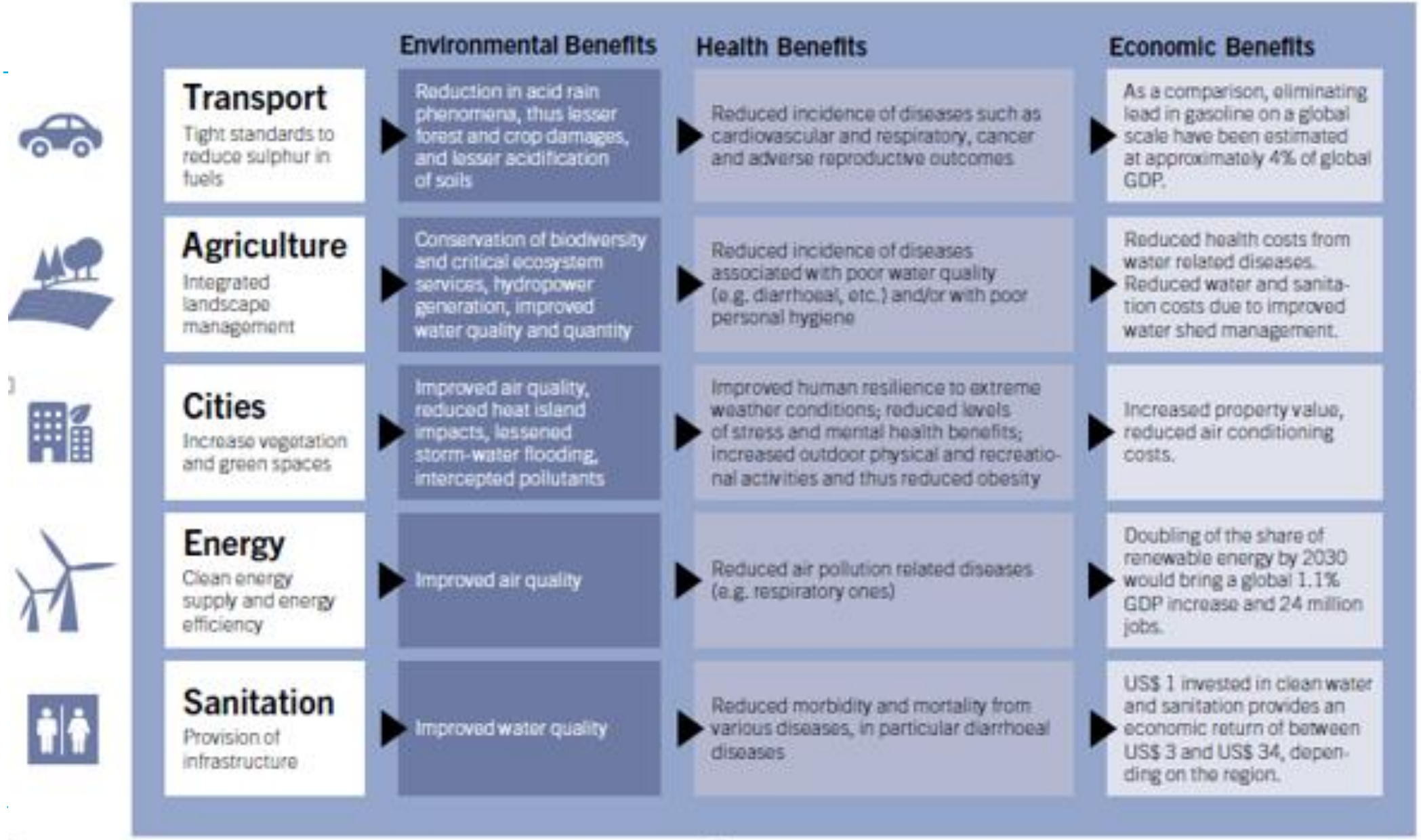
Global Costs: $ 216 bn; 0.3% GDP

Source: WHO (2016) for global burden of disease; costs from various sources

Action on Pollution can contribute to achieving multiple Sustainable Development Goals

Actions towards a pollution free planet would help address our health and well-being at various levels and be central to achieving 10 SDGs Linkages with some goals are direct:

Action on pollution can have multiple benefits



Source: UN Environment (2016)

MEAs and Pollution actions:

The Multilateral and Regional environment agreements provide a framework for time bound actions, and some include compliance related actions, monitoring and reporting.

They provide for the exchange of resources and information, for the sharing of technologies and best practices, for international trade, and for promoting international partnerships on addressing pollution, including among non-state actors.

Success stories exist. The Montreal Protocol being among the most successful

Learning from what has worked well suggests the following:

- ✓ Need to strengthen the science policy- society- interface
- ✓ Complement multilateral and regional agreements with more voluntary initiatives
- ✓ Engagement of diverse actors and stakeholders early on
- ✓ Engagement of business and industry in solutions
- ✓ Integrated innovations for transitions and social safety nets, job

The problem of pollution, however, is more complex than what can be resolved solely through improved and more coherent environmental governance

The phenomenon is closely connected with technology choices, production and consumption practice, industrial processes, pricing policies, behavioral choices and (absent) ecosystem valuation

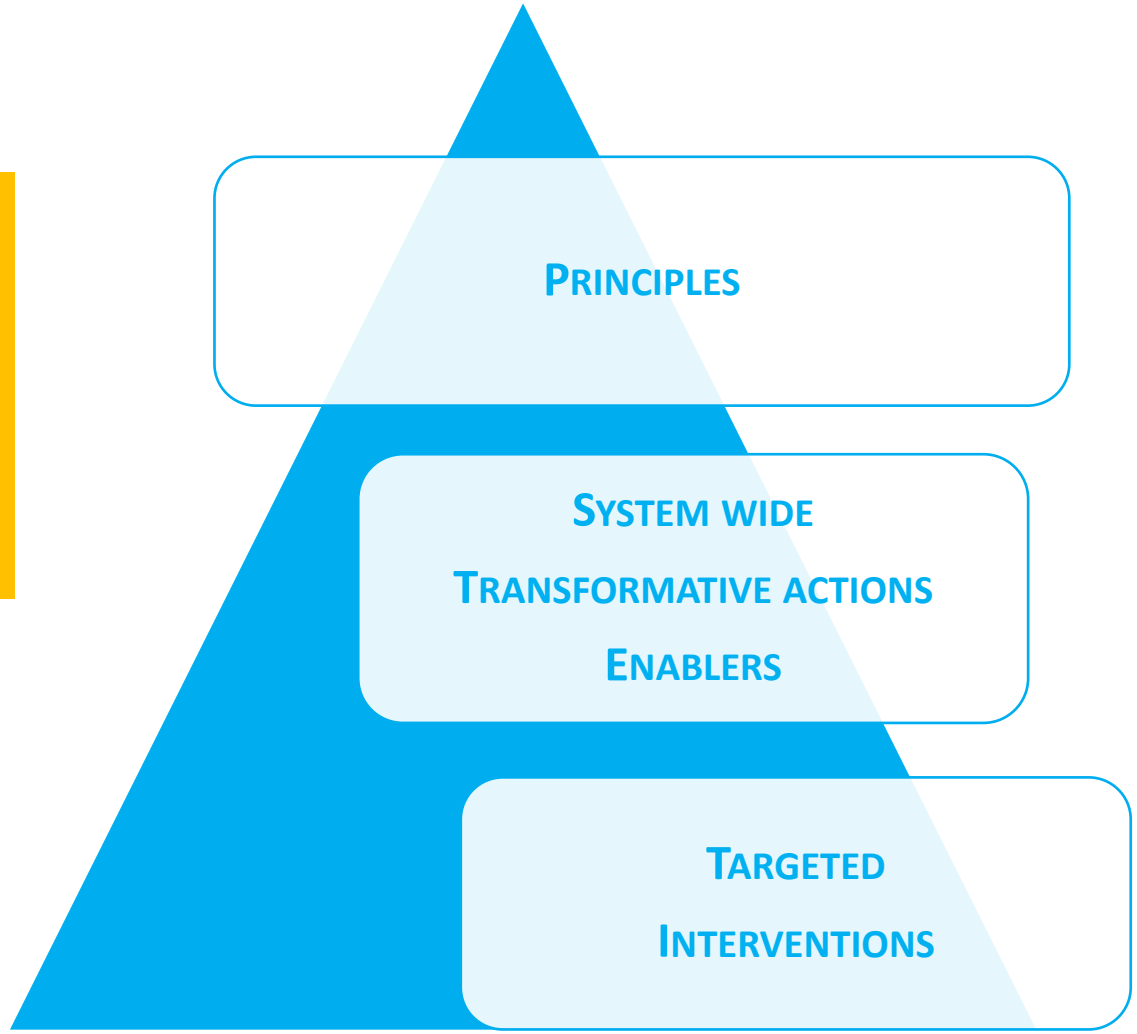
Gaps

Issues/gaps have been identified which require attention which is both system wide and targeted to the pollution areas through transformative actions and enablers

1. Inadequate awareness, data, & information on pollution sources, pathways, impacts, alternatives
2. Poor regulatory & institutional functioning and absence of infrastructure to monitor, manage and control pollution:
3. Limited finance & industry leadership on pollution matters
4. Inadequate investment in research and development for safe alternatives to pollutants
5. Limited understanding of pollution's social dimension
6. Capacity, knowledge sharing, funding and technologies
7. Mispricing and invisibility of ecosystem values and Absence of Internalization of pollution costs
8. Behavior of citizens, industry and governments and the non-recognition that choices have pollution consequences

A Framework for a Transition towards a Pollution Free Planet

A pollution free planet is one without direct or indirect alterations of the biological, thermal, physical or radioactive properties of any medium in such a way as to cause a hazard or potential hazard to human health or health, safety and welfare of the living species
(adapted from Eionet)



- Has both a preventive and curative slant, based on opportunity and innovations.
- Requires political leadership and high level champions and commitments, but with action at the local level in cities, villages, beaches, slums.
- Requires interminsterial coordination
- Needs to engage governors, mayors, civil society organizations, business leaders and the citizen at large

Principles

Draw from the Rio Principles and the 2030 Agenda for Sustainable Development

- **universal, integrative, and leaving no one behind**

1. **All sections of society have the responsibility to ensure a pollution free planet**. While national governments have a clear role in enabling and guiding actions an including pollution management into development agendas, the state and local authorities, communities, businesses, multi stake holder partnerships and citizens have a clear responsibility to act
2. **A preventive approach is central given the multiple risks to human health and well-being and to ecosystem health**. The Precautionary Principle and the Polluter Pays Principle are key to guide change, as these ensure not just responsibility but stewardship by different societal actors
3. **Multiple benefits of action on pollution need to be recognized** for political leadership to prioritize action on pollution given many demands on scarce political and administrative resources and short time horizons in which to make the case. This will require a 'whole-of-government' and integrated approach
4. **Decision making needs to take into account multiple risks to health and ecosystems** of pollutants, reduce policy uncertainty, centre stage innovation and recognize economic opportunity
5. **Access to environmental information and data, education and public participation** are key to effective actions and environmental justice

Enablers and Transformative Actions for change in the medium and long term

TRANSFORMATIVE ACTIONS

(TO SHIFT THE ECONOMY)

- Finance and Investments
- Innovations and Technology
- Production and Supply chains
- City level Actions: Sectoral integration to tackle pollution
- Sustainable Consumption practices

ENABLERS

(TO CORRECT MARKET & POLICY FAILURES AND FACILITATE CHANGE)

- Evidence-Based Decision-Making
- Enhanced Governance
- Economic Instruments
- Education for Change

Possible near term interventions on pollution risk areas

Air Pollution:

- Establishment and enforcement of advanced vehicles emissions and fuel standards (e.g. at least Euro 4 level) need to be established and enforced; Addition of electric vehicles only to fleets as of 2030.
- Shift to cleaner coal- and gas-fired power plants, and increasingly to non-polluting renewable energy sources such as solar, wind, and tidal
- Expansion of natural, petroleum gas or biogas for cooking, along with cleaner cook-stoves to reduce household air pollution

Water pollution

- Provision of clean water and toilets for improved sanitation
- Investment in low-cost technologies for the management of wastewater. Appropriate technologies and innovative solutions to transform wastewater to valuable products,

Land pollution

- Identification and remediation of highly contaminated sites in densely populated areas
- Expansion of market availability of new fertilizer formulations that enhance plant uptake efficiency (reduce excess/leakage and soil mining/degradation)
- Increase of use of natural alternatives to fertilizers and pesticides
- Improvement in nutrient use efficiency in crop and animal production:

Possible near term interventions

- **Marine and coastal pollution**
- Phasing- out of single use-plastics; Upgrade/modification of manufacturing processes around plastics in order to reduce packaging and phase out non-recoverable plastic materials, as they potentially accumulate in marine environment;
- **Chemicals and waste**
- Commitment to minimize waste, mandate collection and separation
- Elimination of open-burning of waste
- Reduction of exposure from lead pollution taking into account national priorities (e.g. battery recycling, pottery and paint) and establishment and enforcement of relevant legal limits by 2020 in order to eliminate lead pollution by 2030
- Phasing out of the production and use of asbestos
- Acceleration of the production and use of mercury-free products (e.g. medical devices, lamps, batteries)
- Identification of pollution/ chemicals-related hotspots (e.g. chemical stockpiles, polluted sites) to decontaminate them and minimize exposure.
- Extend the use of products through sustainable design, maintenance and upgrades and recovery of broken products
- Provision of reliable and effective consumer information, especially on the presence of chemicals in products.

Thank you

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