

Input Major Group of NGOs for CPR - UNEA3

Pollution

The root causes of pollution

Pollution is not a natural disaster, but a consequence of our high-consuming, throw-away lifestyles, fueled by a growth-driven economic system and exacerbated by poor regulation and enforcement. We can only battle pollution by re-thinking our development model and growth based economic system; we need to establish and enforce effective regulatory and financial frameworks which disincentivise pollution and incentivise environmentally-friendly alternatives, designing and implementing sustainable lifestyles.

Even if we immediately focus on incremental steps, the NGO Major Group stresses that we will only solve the overall pollution with major systems change, including the internalisation of environmental costs in the price and phasing out excess consumerism. Raising awareness about drivers for pollution and involving youth and other stakeholders in finding solutions is key.

In all we do, it remains paramount to balance power relations and promote environmental justice in international decision-making processes addressing pollution, to ensure that an undue burden is not placed on poorer countries and marginalised communities across the world. These commitments are already established in the principles of the 2030 Agenda of Sustainable Development, Article 8 and 9 of Paris Agreement, and in the foundation of the interlinked and universal 17 SDGs and should be maintained.

Challenges and solutions for tackling (several types of) pollution

Air pollution

Air pollution is the single largest, deadly and detrimental pollution impact that prematurely kills almost 8 million people annually, mostly in developing countries. We are supportive of the recommendations of the recent scientific report of UN Environment “Towards a Pollution Free Planet” and would like to stress that different types of air pollution needs to be tackled: **Air pollution in cities**, known as the silent killer, and caused by unsustainable transport systems and industries close to urban zones. **Indoor air pollution** from burning solid fuels has been ranked as the fourth most important health-risk factor in least developed countries (LDCs) where 40 percent of the world’s population live. Air quality degradation is also critical in and **around factory farms** due to localised releases of toxic gases, odorous substances, particulates, and bioaerosols containing a variety of microorganisms and human pathogens and disproportionately affects low income communities.

Solutions:

Air pollution in cities:

- Phase out coal by 2030 in developed nations and by 2040 in developing countries, given that coal is the single largest source of carbon and air pollution;
- Phase out diesel fuels in the next two decades in all transport and other usages as a main source for deadly particulate emissions and NOx that are particularly impacting large and densely populated cities;
- Reduce global vehicle emissions by at least 90 per cent through the introduction of advanced vehicle emissions standards (e.g. at least Euro 4 level) in 5 years, and a move to only electric vehicles being added to fleets by 2030;

- Offer effective and affordable public transport and non-motorised transport infrastructure in all cities above 500,000 inhabitants by 2030;
- Increase the share of non-polluting renewable energy sources such as solar, wind, and tidal to 36 per cent by 2030, while addressing related production and waste stages of such (notably, batteries);
- Expand green spaces in urban areas to improve ambient air quality in cities;

Indoor air pollution:

- Adopt the World Health Organization air quality guidelines, including those for indoor air quality, as a minimum for national standards and invest in strong air quality monitoring systems and make the data publicly available;
- Rapidly develop national legislative and implementation plans to overcome, by 2030 at the latest, the high dependence of a large portion of developing countries' poor households to locally sourced and very inefficiently combusted biomass like animal dung and firewood and promote, fund and support much less polluting and clean cooking practices such as efficient woodstoves, biogas digesters and sustainable agroforestry schemes for producing fuel wood;
- Increase access of households to clean cooking fuels and technologies;

Factory farms:

- Meet World Health Organization air quality guidelines through the reduction of emissions from major industrial sources including particulate matter, sulphates, nitrogen oxides, persistent organic pollutants and heavy metals;
- Require large livestock operations to file an annual pollution management and reduction plan.
- Provide incentives for agro-ecological farming and markets.
- Protect and restore ecosystems to avoid air pollution in drylands, rangelands and other areas prone to erosion, fire, desiccation and other forms of degradation;

Soil pollution

The extent of soil pollution is largely unknown, though data are slowly improving. According to the Toxic Site Identification Program of Pure Earth and the UN Industrial Development Organization, more than 3,000 highly contaminated sites have been identified in nearly 50 countries - with more than 80 million people at risk at these sites alone. These sites represent only a small portion of the overall estimated number of sites.

Solutions:

- Require pollutant release and transfer registries and inventories of land and soil pollutants, including for mining
- Careful monitoring and improving pesticide regulations and enforcement (REACH like regulations) in developing countries. Enforcement requires adequate funding, which in turns require cost recovery mechanisms from polluters and stronger penalties.

Freshwater pollution

Groundwater around the world is threatened by pollution from agricultural and urban areas, solid waste, on-site wastewater treatment, mining, manufacturing and other industrial sources. Agriculture is the single largest user of freshwater on a global basis and a major cause of degradation of surface and groundwater resources through erosion and chemical runoff.

Agriculture alone consumes globally about 70 percent of the accessible freshwater, compared to 23 per cent for industry, and 8 percent of municipal use. Excessive irrigation and animal breeding contributes to soil salinity and water quality deterioration by releasing sediments, nitrates, pathogens, pharmaceutical products, and other chemicals and

contaminants into groundwater and rivers. This damages natural ecosystems and species, including coral reefs and fish breeding downstream. Furthermore, we want to stress that both the volume and the level of wastewater treatment is inadequate. Globally over 80% of wastewater is released to the environment without adequate treatment.

Solutions:

- Adopt strong legislation, including financial disincentives and mandatory internalisation of costs and ensure strict enforcement to prevent dumping of all inadequate disposal of waste that pollutes ground water.
- Establishment and operation of water quality monitoring systems for water uses with in with biological, physical and chemical water quality criteria for all water users, incl. for agriculture, and for marine and riverine ecosystems; make the data publicly available.
- Research, training and extension for water-wise and agro-ecological solutions and incentives.

Marine pollution

80 % of **marine pollution** comes from land-based sources. Bilge water, oil, and oily mixtures, sewage, and exhaust emissions from ships pollute the marine environment. Also, factory farming is damaging our seas and oceans: Studies using satellite imagery have shown massive algal blooms in the sea, with evidence linking large-scale coastal farming and agricultural runoff. Fish farming has significant detrimental impacts on our oceans and seas. Fish waste and left-over food spill out from nets into the ocean, causing nutrient pollution, which can lead to oxygen depletion, which can stress or kill aquatic creatures. In addition, antibiotics or pesticides used in livestock production and on farmed fish can affect other marine life or human health. Discarded or abandoned fishing nets (ghost nets) devastate marine life and fishing communities.

Intense **marine noise** is generated by marine activities including oil and gas exploration, shipping, offshore construction, navigation and military sonar. This marine noise now threatens the survival of many marine species and fishing communities.

Solutions:

- Establish Marine Protected Areas (MPAs) in line with CBD Target.
- Regulation and enforcement to prevent/reduce run-off/discharges into water sources; including regulatory limits, financial disincentives (more than just “polluter pays” as must both internalise costs and work towards prevention).
- Better utilise legal instruments such as MARPOL Annex V to deal with waste generated by ships and the fishing industry,
- Promote extended producer responsibility for fishing nets, with deposits and free or cheap disposal at end of life.
- Regulation and enforcement to ensure lost fishing gear is reported to relevant authorities with a GPS point so it can be retrieved
- Establish monitoring of fish for mercury, industrial chemicals, pesticides, and plastics and make the data publicly available
- Adopt policies which stem the proliferation of large livestock and fish production facilities which release waste into marine environments.
- Strictly regulate all marine noise-generating activities by keeping noise from areas rich in sensitive marine life, by using quieting technologies, and other mitigation tools.
- Require thorough environmental impact assessment for all marine noise-generating activities before granting approvals near any fisheries, local communities or important marine ecosystems.

Chemicals and Waste

Industrial chemicals and chemicals in products: Chemicals and wastes are a cross-cutting source of pollution. Industrial production and use of chemicals is shifting to developing and transition countries. This shift is accompanied by increased use of pesticides, products and processes containing hazardous chemicals, including those that disrupt reproduction, cause birth defects and persist in the environment and human bodies causing irreversible damage. Poor national legislation, lack or no information on environmental and health effects, lack of funding, and poor technological and human resources result in disproportionate impacts on developing and transition economies. The private sector has a key responsibility to internalise its own costs, provide comprehensive information on its products, and utilise green chemistry to design chemicals that reduce and eliminate hazard. The presence of toxic substances in products is one of the greatest hazards to human health and environment and creates a major obstacle for developing a cost-effective resource efficient circular economy. Today more than 100 million chemical substances have been identified, most of them expected to have been released into the environment, including flame-retardants in computers, preservatives in foods and softeners in plastics. Hundreds of synthetic chemicals are found in human breast milk and even in the umbilical cord of newborn children.

Agro-chemicals: A wide variety of chemical products are used in agriculture (agricultural chemicals), such as pesticides (including insecticides, herbicides and fungicides), as well as synthetic fertilisers, hormones and antibiotics. These are used for crops, especially monocultures, and in industrial livestock farming/fish farming. Many approved agricultural chemicals contain carcinogens, while others cause severe allergies, birth defects and various health problems. Ultimately, the dangerous compounds found in agricultural chemicals end up as pollutants when wind and rain disperse them into the environment.

Waste: Minimization of waste at source, zero waste approaches, and bio-destruction should play the key roles in waste management strategies. Waste to energy, cement kiln burning of wastes and incineration are sources of toxic chemical emissions and releases. These are especially serious for countries where waste segregation does not function properly or does not exist and should not be encouraged or utilised.

Waste generation, of all kinds, hazardous or not is a failure of the system that instead of keeping the natural circulation became a linear pattern. Waste prevention therefore plays a primary role to tackle those gigantic amount of waste, looking at how some of this waste could be prevented (both qualitative and quantitative) and only afterwards examine what could be recycled, bio-digested and composted. Those positive circular processes also need energy input in order to deliver, so ultimate pollution reduction should mean waste prevention.

Waste management processes that generate by far the largest amount of pollution are incinerators and landfills. Incineration produces highly concentrated toxic fumes, and leads to bottom ashes that still need to be treated or safely disposed. Landfills, in practice worldwide are most of the time not prepared to treat leachates and emissions to water and air. Organic fraction, if disposed on a landfill generates methane directly into the atmosphere. This is therefore of crucial importance to develop separate collection different waste treat including biowaste in order to treat them in a most appropriate circular way.

Solutions:

Industrial chemicals and chemicals in products

- Better Implement the Stockholm, Basel and Rotterdam convention: (PCBs, phase out of highly hazardous pesticides, limitation of trade of highly hazardous substances such as Asbestos and paraquat etc.)
- Speed up chemical safety assessment, the identification of substances of very high concern in the REACH candidate list and restrictions

- Ensure a systematic disclosure of chemical contents in products
- Private sector publicly provides comprehensive information on adverse effects for all chemicals in commerce by 2030, including mutagenicity, carcinogenicity and adverse effects on the reproductive, developmental, endocrine, immune and nervous systems.
- By 2025, establish a living, publicly available global inventory of nanomaterials on the market. Nanomaterials must be carefully monitored, regulated and enforced in Agri-food and fiber (cloths) especially in developing countries. Precautionary principle shall apply with new technological innovation related to nanomaterials, as well as its disposal once end-of-life.
- By 2030, publicly available monitoring shows that no varnishes, lacquers, stains, enamels, glazes, primers or coatings that are being produced, sold, exported, imported or used for any purpose contain lead.
- By 2020, UN Environment assembles a list(s) of endocrine disrupting chemicals (EDCs) and potential EDCs and sources of exposure from the UNEP/WHO State of the Science report and other sources and makes it publicly available on its website
- Use best regulatory practices to adopt and enforce EDC regulation.
- Chemicals leasing instead of buying chemicals/ solvent by industrial companies.
- Following concepts of sustainable chemistry and green chemistry by chemical industries to decrease number of hazardous chemicals.
- By 2030, establish and enforce occupational health and safety regulations that provide meaningful right to know to workers, in particular for Electronic industry workers, including subcontractors, prioritise prevention, establish exposure limits protective of the most vulnerable populations, and provide equal protection in the workplace and the community in 150 countries.

Agro-chemicals

- Provide guidance on safer alternatives to highly hazardous pesticides with priority to non-chemical alternatives and ecosystem approaches to sustainable food and fiber production to 50 countries by 2025; 150 countries by 2030.
- Phase out the manufacture, import, sale and use of 20 highly hazardous pesticides in 50 countries by 2025; 150 countries by 2030
- Stricter approval criteria for agricultural chemicals
- Regulation and enforcement to prevent/reduce agricultural chemical leaching; including regulatory limits, financial disincentives
- Careful regulations and enforcement for pharmaceutical in the environment in particular veterinary drugs like diclofenac which resulted in vanishing most vulture populations.
- Regulation and enforcement of industrial livestock and fish farming to prevent contamination of the environment by excessive wastes from these operations and phasing out the use of sub-therapeutic antibiotics.

Waste:

- Require the same rules and hazardous substance thresholds in recycled material as for virgin material to avoid re-injecting toxic substances into the economy through recycling
- Eliminate derogation which allow hazardous waste to be disposed of in conventional landfills or incinerators. Hazardous waste must be disposed of in purpose-built incinerators or landfills which can safely destroy or embed the hazardous material.
- By 2025, all major cities containing more than 1 million inhabitants conduct a waste audit to find out the amount and type of waste being produced, imported, and exported.
- By 2030, implement segregation of waste at source for reuse, recycling and composting in all major cities.
- By 2030, facilitate circular economy/cradle to cradle systems without toxic chemical recycling in 100 countries in 5 UN regions.

- Immediate widespread regulations and enforcement for E-Waste and as mentioned above occupational safety issues for related workers most in developing countries and stopping toxic trade.
- We need education/awareness to change our consumerist, throw-away society. We need to popularise the vocabulary of degrowth and wide global implementation of the 3R (Reduce, Reuse, Recycle), Recover concepts, and promote zero-waste strategies.
- Development of incentives to encourage proper waste management and disposal
- Development of grassroots networks of individuals with shared values such as NGOs, private sector alliances, professional bodies and so on to advocate for personal, household, and national waste management

Plastic pollution:

Plastic is a ubiquitous material. It can be found in almost any application and has the weakest recycling rates in quantity and quality when compared to metals, paper and glass. When it escapes into the environment it poses a major health and environmental threat with dramatic societal and economic costs.

The vast majority of plastic pollution is collected along beaches and shorelines and is accumulating in the world's landfills, creating a waste crisis, especially for small island and developing nations with significant amounts of coastal land, ill-equipped waste management infrastructure, or both.

SIDs and LDCs are facing an enormous waste crisis because of the overwhelming import into local markets of single-use plastic in food packaging and consumer products, with limited resources to develop the waste management needed for these imports. Much of this packaging is difficult or impossible to recycle or process, even in the most developed waste management infrastructure systems worldwide.

A total ban on all or certain single use plastics is constructive, and therefore we applaud those countries (Kenya, Rwanda, Ethiopia, France, ...) for their leadership in doing so.

Solutions:

- National governments need to introduce legislation that will reduce the use of single-use plastic items, top littered items, plastics containing hazardous substances and microplastics;
- Establish market related policy mechanisms that incentivise re-design for manufacturing and market growth, including phasing out non-recyclable multi-layer packaging;
- Establishing worker, health and environmental standards for the plastic waste and recycling trade globally and explore how international treaties can support this process;
- Eliminate problematic additives and hazardous substances in plastic that are potentially harmful to environment, human health or cause issues to reuse or recycling operations
- Require a circular economy approach across industries using plastics, where all plastic products and packaging material are intentionally designed for longevity, reusability, recyclability, incorporating recycled content and free from toxic substances;
- National governments must empower and ensure responsible plastic management by all actors (producers, retailers and municipalities) to achieve maximum collection and recycling.
- The plastic pellet issue should be addressed by increasing uptake and implementation of internationally recognised Operation Clean Sweep (OCS), reinforced by regulation, including:
 - Mandatory sign up for all pellet handling companies;

- Improved transparency through annual OCS progress reports;
- Introduction of third-party audits to verify the progress of industry actions.

Conflict and military pollution

Armed conflicts generate pollution; they create and sustain the conditions that allow polluting practices to flourish, and they severely degrade the capacity of national authorities to address health and environmental threats. These problems affect conflicts globally, and are driven by increasing industrialisation and the trend towards conflicts in urban and industrial areas.

Severe pollution can result from deliberate scorched earth tactics, such as the targeting of oil facilities. Where fighting occurs in industrialised areas, damage to infrastructure such as petrochemical installations or waste storage facilities may be sufficient to trigger acute environmental emergencies. Such threats can also emerge through damage to essential services, such as water, sewage and electricity production facilities and distribution networks. Urban conflicts produce vast quantities of rubble, wastes that may contain hazardous materials such as asbestos or munitions residues; inappropriately disposing of such wastes, and the collapse of waste management, can leave a legacy of contamination. The immediate remnants of military operations also create pollution risks. Threats from the toxic constituents of munitions such as heavy metals and explosives can be widespread but particularly acute where military facilities have operated or have been damaged. Destroyed or abandoned military materiel is rarely managed effectively; nor is the waste or operational pollution generated by military operations.

Conflict pollution occurs at a time where the capacity of the state to manage it is at its weakest. Weak governance during or after conflicts impacts a range of pollution issues, be they on implementing international obligations on toxics and waste, preventing illicit waste shipments, oversight of industrial emissions or the collation of pollution data vital for identifying public health risks. Weak governance during conflicts is also associated with the growth of environmentally hazardous coping strategies by the civilian population, such as large-scale artisanal oil refining.

Solutions:

- Address military practices that generate pollution in peacetime and conflict.
- Strengthen structural monitoring systems for emerging pollution threats during conflicts.
- Clarify post-conflict obligations on states for tackling conflict pollution.
- Increase support for research into the health and environmental consequences of conflict pollution.

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