



Promoting the assessment of the full economic impact of chemicals:

Initial findings on the Cost of Inaction

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Overview

Cost of Inaction work programme at UNEP Chemicals Branch

- What are 'costs of inaction'?
- Why is knowing the 'cost of inaction' important?
- What is UNEP Chemicals doing on cost of inaction?
- Results to date and future work
- 'Cost of Inaction' and national-level financing options
 - National budget processes
 - Economic instruments:
 - What are economic instruments?
 - How can they be used in national level financing?
 - Lessons learned

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What are 'Costs of Inaction'?

What are the outcomes if nothing additional is done to prevent mismanagement of chemicals?

- Costs:
 - Economic assessments of the effects of chemicals on human health and environment
- Inaction:
 - Lack of improvement of management of chemicals from the country's baseline situation

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Why are 'Cost of Inaction' Important?

Knowing the cost of inaction enables policymakers to make more informed decisions

Problem Statement

Managing chemicals is a **low priority** for many governments

- due to the lack of information on the economic cost of not having chemicals management in place

Knowing the 'Cost of Inaction'

- Shows hidden costs
- Provides solid arguments in the language of key finance decision makers

...drives change in policy prioritizations



Increased priority given to chemicals management

The Work of UNEP Chemicals

4 year work programme aiming to support policymakers in identifying, measuring and reporting 'Costs of Inaction'

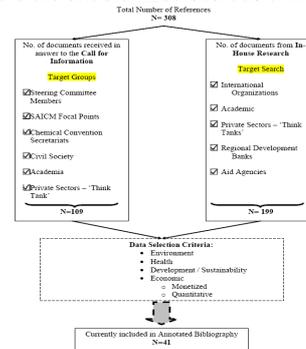
- Mandate
 - ICCM2 Resolution on Financial and technical resources
- Funded by the Governments of Sweden and Norway
- Steering Committee
- Drafting Process

Module A:	Baseline Assessment Report	Sept 2010-April 2011
Module B:	Methods for assessing Cost of Inaction	Late 2011
Module C:	Regional projects	2012/13
Module D:	Results Dissemination	2014

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Results to Date – Literature Search

An extensive systematic review of existing literature shows that there are underutilized sources of information



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Results to Date – Baseline Report

While there are many existing resources to draw from – mostly on health impacts – many gaps remain

- To date: 308 documents identified, 238 reviewed, and 41 found to include monetized and/or quantified data on the human, environmental, and economic development impacts of harmful chemicals.
- Cost data from 26 countries, 6 of which are OECD countries, in addition to regional (European Union and Africa) and some global data.
- Within the 41 documents referenced in the Annotated Bibliography (AB), another 59 sources are cited for primary cost data.
- 33 documents referenced in the AB present monetized data
- 8 documents referenced in the AB present quantified data
 - 3 of these documents present the data as percentage of GDP.
- Health cost data:
 - 38 of the referenced documents present human health costs
- Environmental cost data:
 - At least 8 documents referenced in the Annotated Bibliography present data on the costs of water pollution
 - At least 10 documents referenced present data on air pollution and/or respiratory illness
 - At least 1 document referenced presents data on soil quality;
 - At least another 6 documents referenced present data on agricultural productivity

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Costs of Inaction

Some examples from the literature review

- Global environmental external costs caused by harm to human activity amounted to an estimated US\$ 6.6 trillion in 2008. Pollution (SO_x, NO_x, PM, VOCs, mercury) accounted for US\$ 546 billion of this amount, and for 0.91% of global GDP in 2008. VOCs accounted for US\$ 236.3 billion and mercury emissions accounted for US\$ 22 billion.

Source: UNEP Finance Initiative and The Principles for Responsible Investment (PRI). 2010. Universal Ownership - Why environmental externalities matter to institutional investors.

- The total annual costs of lead poisoning from toxic chemicals of human origin in the environment in American children amounted to US\$43.4 billion.

Source: Landrigan, P.J., Schechter, C.B., Lipton, J.M., Fahs, M.C., Schwartz, J., 2002. Environmental Pollutants and Disease in American Children: Estimates of Morbidity, Mortality, and Costs for Lead Poisoning, Asthma, Cancer, and Development Disabilities.

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Future Work

Work realized to date will provide a solid base going forward to Modules B, C and D

- Module B: Method guidance for further research
 - Assessment of existing methodologies
 - Design of additional methods
- Module C: Field Research Plan
 - Implementation of the methods in the UN regions
 - With the exception of the OECD countries as they have the financial and technical capacity to add their data to the final COI data set if they see fit
- Module D: Information dissemination

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Financing Options

The Costs of Inaction work seeks to drive change in the financing of policy implementation at international, as well as national level

International Level

- Bilateral and multilateral resources
 - Grants
 - Technical assistance

National Level

- Appropriation through parliament
 - National budget processes
- Revenue raising
 - Economic instruments
 - Cost recovery through environmental fees and charges
 - Partial
 - Total

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Economic Instruments

UNEP Chemicals Branch focuses on practical cost recovery measures

3 Roles of Economic Instruments

1. Recovering Costs of Public Chemicals Management Programmes
 - Capital, administrative
2. Creating Incentives to Change Chemicals Production and Consumption Trends
3. Raising Revenue for Central Budget

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Cost Recovery Measures

Cost Recovery measures generally include two broad type of charges that aim to recuperate costs to the government

- Charges
 - Price typically levied on a pollution source to finance the service provision, administration and enforcement of legislation concerning that particular pollution
- Fees
 - Price typically paid as remuneration for administrative services

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Key Lessons Observed

Overall, cost recovery measures are promising but there are a number of issues to be considered carefully

1. Ministries responsible for chemicals management do not have expertise in use of economic instruments
2. Those who pay should be receiving some kind of service in return
3. There are choices to be made vis-à-vis the design of the charges/fees
4. Deciding the amount to be paid is not always a straightforward task
5. Monitoring and enforcement of payments can be challenging
6. Many developing countries do not have sufficiently transparent methods/ infrastructures for collecting fees
7. Deciding how to allocate the revenue earned from cost recovery is key

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Guidance Under Development

A guidance on Legal and Institutional Infrastructures for SMC, including Cost Recovery Measures, is nearing completion

- What is being done?
 - The use of cost recovery measures integrated into guidance on the development of legislation and institutions for SMC
 - Expert Group for technical advice
 - Country workshops on the guidance
 - Country testing of the guidance
- Main goal of the Guidance
 - To provide a comprehensive package for DCs and CEITs to strengthen their national legislation and institutional arrangements for SMC, including sustainable financing options

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Conclusions

- Costs of inaction is about realizing and acting on the consequence of not doing anything more;
- The costs of inaction is a way to bring clear and consistent global economic evidence for improved chemicals management into the international chemicals management governance;
- Costs of inaction will strengthen the longer term strategies for financing chemicals management;
- Costs of inaction will harmonize the methodologies for assessing the cost of inaction;
- Costs of inaction will at the national level help to strengthen expertise in economic assessment, particularly in developing countries;

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Conclusions

- Improved knowledge on the costs of inaction will allow development of fairer cost-sharing arrangements between the public and the private sector at the national level;
- Cost recovery measures are one promising instrument for improved cost-sharing for chemicals management at the national level.

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UNEP DTIE Chemicals Branch Mainstreaming Activities

- UNDP-UNEP Partnership Initiative for the Integration of Sound Management of Chemicals (SMC) into Development Planning Processes.
- UNEP-WHO Health and Environment Strategic Alliance
- Costs of Inaction
- Global Chemicals Outlook
- Guidance on the Development of Legal and Institutional Infrastructures and Sustainable Financing Options for the Sound Management of Chemicals

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Additional information



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