

Global Chemicals Outlook: Scoping Document and Research Proposal

November 2009

UNEP Chemicals Branch

Introduction

UNEP, in close collaboration with OECD, WHO and other participating organizations of the International Organization of the Management of Chemicals (IOMC), is engaged in the development of a Global Chemicals Outlook.

The goals of the Global Chemicals Outlook are to:

- assess the status of health, environmental, economic and institutional factors related to the production, use, and disposal of chemicals, with a focus on issues relevant to developing and transition countries;
- examine chemicals management options in the context of the Millennium Development Goals;
- provide information on the economic costs of inaction on chemical hazards; and
- provide high-level guidance for the effort to achieve sound chemicals management by 2020.

As stated in the Dubai Declaration, “Progress in chemicals management has not, however, been sufficient globally and the environment worldwide continues to suffer from air, water and land contamination, impairing the health and welfare of millions. . . . The need to take concerted action is accentuated by a wide range of chemical safety concerns at the international level, including a lack of capacity for managing chemicals in developing countries and countries with economies in transition, dependency on pesticides in agriculture, exposure of workers to harmful chemicals and concern about the long-term effects of chemicals on both human health and the environment.”

The Global Chemicals Outlook will make a significant contribution to framing the current understanding of trends in chemicals production and use, economic implications, and policy options. It will aim at providing a coherent framework for assessing and setting priorities to stimulate further international attention and action in this field.

Objective of this Document. This document proposes the scope and research agenda for the two-year Global Chemicals Outlook project (2010-2012).

Background. This document is the result of a preliminary assessment of current knowledge on trends in chemical production, use, and disposal; health, environmental, and economic effects of chemicals; and instruments and approaches for sound chemicals management. The assessment was conducted by a Steering Committee composed of representatives of academia, government, intergovernmental organizations, industry and

civil society. The Steering Committee was convened by the UNEP Chemicals Branch in 2009 with a mandate to conduct an initial investigation of available information, and to make recommendations about the research agenda for the two-year project.

Layout. This scoping document provides an overview of the goals and approach of the Global Chemicals Outlook. It describes the value of this project in terms of anticipated contributions to the international processes on chemicals management, and sets out key milestones for the project. The document then presents a summary of the substantive findings of the preliminary assessment, along with a proposed research agenda. Detailed findings of the Steering Committee's initial investigations are documented in a Technical Annex.

Scope. The Global Chemicals Outlook will work within the scope of the Strategic Approach to International Chemicals Management (SAICM), specifically including:

“Environmental, economic, social, health and labour aspects of chemical safety,” and “Agricultural and industrial chemicals, with a view to promoting sustainable development and covering chemicals at all stages of their life-cycle, including in products.”¹

Overview of the Global Chemicals Outlook

The Global Chemicals Outlook will consider the full life cycle of chemicals, including production, use, and disposal, and will discuss sound management of chemicals management as an integral component of the effort achieve sustainable development. This analysis will follow the Driving-Forces-Pressures-State-Impact-Responses (DPSIR) framework to ensure that its findings are consistent in format and structure with those of the other complementary topics and policies covered in UNEP's upcoming edition of the Global Environmental Outlook (GEO 5). On the basis of this analysis, the Global Chemicals Outlook will make a convincing economic case for investing in sound chemicals management and will send a positive message about the economic benefits deriving from the sound management of chemicals.

The Three Pillars of the Global Chemicals Outlook. The Global Chemicals Outlook will cover three broad inter-linked areas, especially as they relate to developing countries and countries with economies in transition:

1. Trends and indicators for (i) chemical production, trade, use and disposal and (ii) associated health and environment impacts;
2. Economic benefits of sound chemicals management; and
3. Instruments and approaches for sound management of chemicals, including promotion of safer alternatives.

Existing studies. The Global Chemicals Outlook will take into account, and build upon, the findings of several existing or concurrent studies.

- The OECD *Environmental Outlook for the Chemicals Industry*, published in 2001, considered trends in the chemicals industry with a focus on OECD countries. The report highlighted the rapidly changing nature and composition of the chemicals industry. The report showed that the number of producers, overall production, and use of chemicals were all increasing in developing and transition

countries, while companies in the OECD countries were consolidating and shifting toward the production of life-science and specialty chemicals.

- In 2008, OECD published an *Environmental Outlook to 2030*. This report again highlights the increasingly important role of the chemicals industry in developing and transition countries, drawing attention to the rapid rate of growth of the chemicals industry in emerging economies.
- In 2010 and 2011 the United Nations Commission on Sustainable Development (UNCSD) will address the themes of chemicals, transport, waste management, mining, and the ten-year framework of programmes on sustainable consumption and production patterns. Relevant international organizations, including UNEP, are jointly preparing a document on *Practices in the Sound Management of Chemicals*, highlighting successful practices and experiences in sound management of chemicals worldwide. The Global Chemicals Outlook will build on this process.
- The Global Chemicals Outlook will benefit from a WHO project on the global burden of disease attributable to chemicals, one aspect of which will be a publication in 2010, as well as a WHO project to develop a standard tool for estimating the cost of diseases due to environmental hazards, including chemicals.
- The Global Chemicals Outlook will also benefit from ongoing work at UNEP's Chemicals Branch on mainstreaming of chemicals into national development planning, costs of inaction, and economic instruments for financing Sound Management of Chemicals.

In addition, the project will make use of case studies as a means to develop certain concepts in greater depth while remaining within the confines of the two-year work plan.

The Added Value of the Global Chemicals Outlook

The Global Chemicals Outlook project will build on the existing work cited above and add new substantive value by framing chemicals management challenges, trends and solutions in the context of the wide-reaching benefits from improved chemicals management in developing countries. The Global Chemicals Outlook project will offer strategic value by contributing to a number of on-going and forthcoming processes and events.

Contribution to the SAICM 2020 Goal. The Global Chemicals Outlook will complement the findings of related studies by furthering the dialogue among science, policy, industry and civil society on how to promote the SAICM 2020 goal on Sound Management of Chemicals. It will include information on specific, achievable approaches that can be undertaken to facilitate achievement of the SAICM 2020 goal, progress on which will be reviewed at the ICCM3 in 2012. In this context, the Global Chemicals Outlook will contribute to mobilizing all relevant stakeholders toward a comprehensive policy approach in the eight-year period 2012-2020.

Contribution to the Commission on Sustainable Development (CSD). In 2010, the international community will review progress made in the implementation of Chapter 19 of Agenda 21, "The Environmentally Sound Management of Toxic Chemicals, Including

Prevention of Illegal International Traffic in Toxic and Dangerous Products.” The Commission on Sustainable Development (CSD) 18/19 cycle (2010/2011) will include chemicals and waste management as thematic areas.

Contribution to UNEP’s GEO 5. In accordance with its mandate to review the state of the global environment, the UN Environment Programme (UNEP) produces the Global Environmental Outlook (GEO) to provide information for decision-makers; support early warning activities; build capacity globally and regionally; and raise awareness of environmental issues and options. The Global Chemicals Outlook, in addition to being a free-standing document, will also serve as an input into the fifth Global Environmental Outlook, GEO 5.

Contribution to Green Economy Initiatives. Early in 2009, UNEP released a policy brief proposing a “Global Green New Deal.” In the policy brief, UNEP proposes investing in environmental quality and protection as a means to boost employment and jump-start the global economy.² The Global Chemicals Outlook responds to the UNEP Global Green New Deal’s call: to revive the global economy by motivating government and businesses to boost investment in the environment as an engine for economic recovery and sustainable growth, decent job creation and poverty reduction. In this context, the Global Chemicals Outlook will make the economic case for investing in sound chemicals management.

OECD Green Growth Declaration. In June 2009, ministers of OECD governments plus Chile, Estonia, Israel and Slovenia issued a Declaration requesting that the OECD develop a Green Growth Strategy. Such a strategy would bring together economic, environmental, technological, financial and development aspects into a comprehensive framework covering green growth measures in OECD as well as in major non-member countries. A first report will be delivered to the OECD’s Ministerial Council Meeting in 2010 and the final report will be prepared in 2011.

Key Milestones

The Global Chemicals Outlook will be carried out over the period 2010-2011, and will be completed by January 2012. The work for this project will be conducted in the context of a number of important upcoming milestones in the international agenda on chemicals management:

- The international community’s 2010 review of progress made in the implementation of Chapter 19 of Agenda 21
- The Commission on Sustainable Development (CSD) 18/19 cycle for 2010/2011
- UN International Year of Chemistry in 2011
- ICCM-3 in 2012
- UNEP’s next mid-term review of its medium-term work programme in 2013

Summary of Substantive Findings from the Preliminary Assessment

The Global Chemicals Outlook will provide a snapshot of the global chemicals industry, including its health and environmental effects, as well as options for sound chemicals management, with a view toward facilitating achievement of the SAICM goal of sound

management of chemicals by 2020. It will be carried out over a period of two years (2010-2011), covering three broad inter-linked areas:

1. Trends and indicators for (i) chemical production, trade, use and disposal and (ii) associated health and environment impacts;
2. Economic benefits of sound chemicals management; and
3. Instruments and approaches for sound management of chemicals, including promotion of safer alternatives.

The following discussion sets out the research agenda for the three pillars of the Global Chemicals Outlook based on a preliminary analysis of existing literature.

1. Trends and Indicators

1.1. Production, trade, use, and disposal of chemicals

The Global Chemicals Outlook will describe quantitative and qualitative changes in the production, use and disposal of chemicals, with a focus on developing countries. As appropriate, the report will rely upon import and export data as a proxy for use. It will also assess the health and environmental effects of exposure to chemicals in developing and transition countries. The Global Chemicals Outlook will present the latest available data on regional trends in production, use, and disposal of key categories of chemicals. The background research in the scoping phase of this project highlighted important elements to consider including the number of chemicals on the market, trends in the chemicals industry, and other topics including toxic metals, pesticides, nanomaterials, illegal use, transport, and disposal of chemicals, and products containing toxic chemicals.

In addition, it may be possible to examine trends for certain chemical sub-categories that are of particular interest from a health and environmental standpoint, such as the persistent organic pollutants targeted for phase-out under the Stockholm Convention, or chemicals listed by the International Agency for Research on Cancer (IARC) as Category 1 or 2a carcinogens.

The full Global Chemicals Outlook will also include an examination of trends in illegal use, transport and disposal of chemicals, including trade in ozone depleting substances, as well as an examination of trends and patterns in use and disposal of products containing chemicals of high concern.

A number of sources are available for this trend analysis. Aggregate sales data on trends in basic and specialty chemicals are compiled annually by the International Council of Chemical Associations (ICCA). It should be noted, however, that sales data are not necessarily a good surrogate for production volume. To the extent possible, the Global Chemicals Outlook will obtain and use production volume data.

Data on metals may be available from the International Council on Mining and Metals, and some global production data on metals are also available from national government sources, such as the United States Geological Survey. Data on pesticide sales and consumption are available from industry sources such as the CropLife International, and from the Food and Agriculture Organization (FAO). A recent study by OECD provides an initial look on nanomaterial production, research and development activities.

Information on illegal use, transport and disposal of chemicals or products containing chemicals will be drawn from data sources managed under existing multilateral environmental agreements (the Basel, Rotterdam, and Stockholm Conventions, and the Montreal Protocol), among other sources.

In addition to publicly available data from these and other sources, the project may also draw upon more detailed sources that are available for a fee. Examples of these sources include the Chemical Economics Handbook, which provides detailed information on the volume of production of basic and specialty chemicals worldwide; the industry source Agrow, which provides detailed reports on pesticide trends; and the proprietary Research and Markets reports, including Global Strategic Business Reports for individual substances.

Preliminary background research was also conducted on the amount of information that is available on chemicals and their health and environmental effects; the number of chemicals on the market; and trends in the adoption of green chemistry approaches. These topics will be considered further in the full Global Chemicals Outlook.

1.2. Environmental and Human Health Impacts:

With the information on chemical production and sales trends as context, the next major component of the Global Chemicals Outlook will be to provide information on the environmental and human health impacts of chemicals worldwide. The Outlook will provide general overall estimates of such impact, supplemented with examples based on more specific data from case studies.

Environmental impacts:

The Global Chemicals Outlook will provide an analysis of each category of environmental impact: atmosphere, water, soil, biodiversity, agriculture, and fisheries.

The findings of the environmental section will feed directly into the economic analysis of the costs of inaction on chemicals. Specific types of environmental damage that are likely to have impacts with quantifiable economic implications include loss of specific ecosystem services such as ozone depletion (with resulting costs of damage from ultraviolet rays); loss of water resources; depletion of agricultural resources; loss of endangered species; loss of fishery resources; and impacts on human health. To the greatest extent possible, the Global Chemicals Outlook will provide quantitative information on these impacts. Case studies will also be selected for detailed examination. For example, the full Global Chemicals Outlook study may include a detailed review of studies on ecosystem effects of persistent organic pollutants.

Health impacts:

The Global Chemicals Outlook will provide information on a variety of health endpoints linked to chemical exposures, with a particular focus on impacts in developing and transition countries. As with the research agenda for the environmental component of the work, the health data compiled and synthesized in this project will serve as a key input into the economic analysis. In this context, the World Health Organization's research on the global burden of disease attributable to chemicals, along with the development of a standard tool for estimating the cost of diseases due to environmental hazards, including chemicals will be of particular significance.

The Global Chemicals Outlook will compile existing data on diseases and deaths attributable to chemicals from a broad range of middle and low-income countries and from different regions. It will review additional data sources with a view to increasing knowledge about ill-health and disease attributable to chemicals, including occupational exposures. Health endpoints of interest include acute poisonings, birth defects, neurodevelopmental disorders, reproductive/developmental disorders, and cancer.

2. Economic implications: Making the economic case for sound chemicals management

As stated in the Dubai Declaration, "The sound management of chemicals is essential if we are to achieve sustainable development, including the eradication of poverty and disease, the improvement of human health and the environment and the elevation and maintenance of the standard of living in countries at all levels of development."

This section identifies possible methodologies for exploring the economic development benefits of the sound management of chemicals, as well as the potential costs of inaction and benefits of action on chemical hazards, again with a particular focus on developing countries.

Debates about resource allocation frequently posit a trade-off between the economic gains associated with industrial development, on the one hand, and the economic costs of environmental regulation or clean-up, on the other. What is lost in this formulation is recognition that the failure to adopt sound chemicals management can impose large economic costs and conversely, sound chemicals management can yield significant economic benefits in terms of economic development, poverty reduction and reduced human health and environmental risks.

A key contribution of the Global Chemicals Outlook will be to help document and synthesize the economic case for investing substantial resources in sound chemicals management. There are two broad tasks involved in making this case. The first is to provide information on the ways in which specific sound chemicals management activities can promote sustainable economic development and improve human welfare. The second is to quantify the economic costs of the failure to achieve sound chemicals management.

2.1. Economic costs of the failure to achieve sound chemicals management

Demonstrating the economic benefits of sound chemicals management helps to make the case that this is a valid area for investment, alongside education, transport infrastructure,

direct health care services and all the other essential public services competing for support. The Global Chemicals Outlook will collect data, review empirical studies, and conduct analysis to quantify the direct and indirect costs of illness, disability, and loss of ecosystem services due to chemicals in the environment.

As described above, a number of existing studies from developed countries have attempted to calculate the economic costs of specific categories of health and environmental damage associated with chemicals. (Conversely, the avoided costs of damage to health and the environment can also be described as benefits from protecting health and the environment through sound management of chemicals.) The Global Chemicals Outlook will develop a similar calculation for developing countries and transition countries.

Based on the background research conducted in the preliminary assessment phase of the Global Chemicals Outlook project, the Steering Committee has provisionally recommended an economic analysis composed of three components. Because of the complex nature of this portion of the analysis, it will be essential to review remaining methodological questions and refine this work plan further within the first three months of the two-year project. The three components of the economic analysis will be organized as follows.

- The first component will be an overview analysis of the costs of production, use and disposal of chemicals in industry, agriculture, and products, taking account of both environmental and health related costs.
- In the second component, the Global Chemicals Outlook will select a limited number of key interventions that can be undertaken in developing or transition countries in the period 2012 – 2020 that could potentially be supported by funds from donor countries. The Global Chemicals Outlook will estimate the cost to donor and/or recipient governments of these interventions. Examples of such interventions include sponsoring ecological agriculture extension services; supporting technical assistance to businesses; or funding the creation of permanent national infrastructure for enforcement, border inspections, or environmental monitoring.
- Finally, using the findings of the cost of chemicals analysis in part 1, the Global Chemicals Outlook will estimate the net economic benefits of the interventions selected in part 2. A possible model for this component is the European Commission's estimate of the potential benefits of REACH. Other possible models include existing analyses of expected economic benefits of reducing mercury exposure in the United States.

2.2. Economic benefits of sound chemicals management

The review conducted for the preliminary assessment indicates two key areas for research on the economic benefits that accompany sound chemicals management: economic benefits of pollution prevention, and economic benefits of ecological agriculture practices. The full Global Chemicals Outlook will expand upon this preliminary overview, examining a broad range of relevant case studies illustrating the economic impacts of these approaches.

For the examination of economic benefits of pollution prevention, case studies have been compiled by UNEP and UNDP in conjunction with National Cleaner Production Centres. Other useful sources include national and state-level resources.³ The economic benefits of ecological agriculture are widely documented in the academic literature as well as by NGOs and intergovernmental agencies. The Global Chemicals Outlook will compile and synthesize these findings. As appropriate, the study may also explore opportunities for investment in resource conservation technologies; techniques for organic and low-input systems and bio-control of pests; and reduction of air and water pollution.

Methodological Issues of Note

The methodological decisions that underlie an analysis of the economic costs of inaction are complex. The Global Chemicals Outlook will include a detailed examination of the methodological options, as well as the implications of these options.

For instance, the Total Economic Value framework can be one useful way to map the variety of economic values associated with a loss or retention of a healthy environment. This methodology distinguishes among three main types of economic value: use value, non-use value, and option value. The Global Chemicals Outlook will consider all these categories of value.

The Global Chemicals Outlook will also examine methodological issues related to the use of cost-benefit analysis in environmental policy decision-making. A key methodological difficulty with economic analyses of the costs of health and environmental damage is that the goods that are most highly valued by individuals and communities, such as healthy children, do not have a directly measurable monetary value. For this reason, it is always important to be explicit about the limitations of such analyses.

The Global Chemicals Outlook will also take account of recent efforts in the European Community and its Member States to better measure national progress by complementing gross domestic product (GDP) measurements with new macro-economic approaches. One important model is the pilot version of a comprehensive environmental index that will be presented by the European Commission in 2010. This index is designed to “assess progress in the main fields of environmental policy and protection,” and “will cover areas such as greenhouse gas emissions, loss of natural landscapes, air pollution, water use and waste generation.”⁴

3. Instruments and Approaches

This portion of the project identifies useful methodologies and decision making tools for the management and prevention of toxic chemical pollution and the promotion of safer alternatives. This includes identifying legal, economic, technical and voluntary instruments and decision-making tools for minimizing toxic chemical pollution and related waste and promotion of safer alternatives including green and sustainable chemistry.

Many nations have established competent authorities for managing chemicals. Many businesses have instituted effective processes and practices for using chemicals appropriately and effectively managing them as emissions and wastes. There is also a growing body of international agreements, treaties and conventions that seek to address chemicals globally. However, there remains a need for a broad and comprehensive

approach to the sound management of chemicals that recognizes the significant differences in capacities, authorities and commitments of the diversity of governments, institutions and industries that today manage chemicals.

The sound management of chemicals, which was first articulated in 1992 in Agenda 21 of the UN Conference on Environment and Development, places significant responsibilities on both governments and industries. The Rotterdam and Stockholm Conventions directly address the regulation of chemicals as commodities, with the Basel Convention addressing the problems and challenges posed by hazardous waste. The adoption of the Strategic Approach to International Chemicals Management (SAICM) in 2006 was intended to coordinate, facilitate and catalyze existing institutions and mechanisms, taking due account of instruments and processes that have been developed to date, and being flexible to deal with new ones without duplicating efforts. To carry out these responsibilities there exist a broad range of legal, professional and program instruments and approaches which may be regulatory, economic, technical or voluntary.

In recent years, a new approach to the manufacture and use of chemicals has emerged: Green or Sustainable Chemistry, which rather than deal with the potential impacts of chemicals downstream, looks to reduce risk by designing chemicals that are inherently safer. While the greatest concentration of green chemistry activities is taking place in the developed nations, efforts are being made to implement green chemistry in developing and transition countries.

3.1. Range of instruments and approaches

The Global Chemicals Outlook will provide a comprehensive menu of instruments and approaches available for sound chemicals management. The study will also show the ways in which these instruments and approaches can be used to further economic development goals. This information will be useful for both developing and transition countries, and for donor countries interested in supporting sound chemicals management activities. It will place particular emphasis on instruments and approaches that can be put in place within the period 2012-2020, with a view to achieving the SAICM 2020 goal.

First, this component will include a review of the status of adoption of proven approaches to reducing pollution, ranging from pollution release and transfer registries (PRTRs) to the establishment of cleaner production centres.

Second, the Global Chemicals Outlook will provide information on the cost effectiveness of specific sound chemicals management interventions.

Third, the Global Chemicals Outlook will help to demonstrate the link between innovation and chemical risk reduction. Specifically, the Global Chemicals Outlook will compile information on chemicals management instruments and approaches that promote economic development and innovation as they also promote chemical risk reduction, and will develop case studies and examples of chemical policies promoting new chemicals and technologies.

Fourth, the Global Chemicals Outlook will compile information on opportunities for funding sound chemicals management activities, via cost internalization mechanisms and other economic instruments that reduce government policy costs, reduce the generation of hazardous chemical wastes and emissions, and, potentially, improve the efficiencies and

economic effectiveness of industries. The final report will help to document how fees, taxes and regulations internalizing the true costs of chemicals improve chemical management.

Fifth, the Global Chemicals Outlook will include information on options for promoting green chemistry in developing and transition countries, such as introducing green chemistry principles and methodologies in existing secondary and tertiary science curricula, partnering local universities and industries with existing green chemistry research programs in developed countries, and identifying alternative chemical synthesis and processes for priority chemicals (e.g. agricultural chemicals, disinfection chemicals, and heavy metals) in developing and transition countries. This will include consideration of green or sustainable chemistry as well as new approaches such as REACH and eco-design measures (also known as the top runner principle).

Sixth, the Global Chemicals Outlook will compile and disseminate information on best practices for chemical management decision making, such as alternatives assessment, tools for promoting substitution and programs for the adoption of safer alternatives to toxic substances. This will include developing screening and analytical comparison methods for identifying safer alternatives to chemicals of high concern.

Finally, the Global Chemicals Outlook will include information on supply chain information management. Because this is an area of active research by UNEP, this component will not require additional research within the Global Chemicals Outlook project itself. However, the full Global Chemicals Outlook document will include information gathered by UNEP on options for promoting the efficient flow of information up and down global supply chains.

An important component of the Global Chemicals Outlook's consideration of options and approaches for sound chemicals management will be an examination of specific monetary costs of interventions that can be undertaken within the period 2012 – 2020. This analysis will serve, in essence, as a menu of options for use in making funding decisions, including, where possible, estimates of the cost to governments of implementing individual interventions. This information will be combined with information on expected economic benefits of such interventions, in order to show the expected return on such investments.

3.2. Financing Sound Chemicals Management Instruments and Approaches

A significant barrier to progress on sound management of chemicals is the fact that the sound management of chemicals is not prioritised in many countries⁵ and financial resources for sound management of chemicals are limited. The SAICM Secretariat notes⁶ that many developing countries currently rely on external funding coming from the Quick Start Programme Trust Fund, the Global Environmental Facility (GEF), the Multilateral Fund, and other international and regional mechanisms.⁷ While government spending through regulation, direct investment, bilateral and multilateral funding rightly plays a significant role in chemicals management, other sources of long term financing may also be important.

a. Integration of Sound Chemicals Management with Development Strategies

Mainstreaming the sound management of chemicals into economic development strategies opens new sources of funding from national budgets, including General Budget Support (GBS) development assistance programmes that prioritize chemicals management in national development planning. The Global Chemicals Outlook will examine the barriers to fulfillment of the international commitment to integrate the sound management of chemicals into development strategies, and will develop recommendations for actions that will ensure its rapid implementation. Components of this effort include:

- Tracking aid flows to assess the number of donors including sound chemicals management in their development assistance portfolios;
- Assessing the obstacles and opportunities in developing and transition countries for including sound chemicals management in development assistance; and
- Assessing communication strategies for use by donor countries to signal interest in including sound chemicals management in development assistance funding.

b. Establishing Cost Recovery for Public Chemicals Management Services

Cost recovery systems for public sector provision of particular environmental management services, including chemicals management, are common in many countries. Cost recovery instruments appear to hold some potential as a first step for securing development of a more continuous legal and institutional framework for chemicals management in countries seeking to move toward sound management of chemicals. In addition, financially viable integrated chemicals management systems – where the operational or recurrent costs of providing public chemicals risk management services are recovered – are crucial in ensuring effective implementation of sound management of chemicals policy goals. Accordingly, UNEP Chemicals is currently engaged in generating information on economic instruments for financing sound management of chemicals at the national level. This work will also contribute to the Global Chemicals Outlook.

c. Internalizing Chemicals Management Costs

To further the state of knowledge on cost internalization, the Global Chemicals Outlook will include the following activities:

- Compiling case studies of internalization in countries in different stages of economic development.
- Reviewing reports on demonstration projects involving economic instruments for sound management of chemicals.
- Analyzing national, regional, and global internalization schemes.

Road map for the Global Chemicals Outlook Project

The road map for the Global Chemicals outlook Project presented here defines the timeline, structure and functions of the steering committee and the secretariat in line with the main conclusions extracted from the experience of the preliminary outlook and recommendations of the Steering Committee.

Time line

Pillar I

Work begins January 1, 2011

Final report complete and approved by September 2011

Pillar II

Work begins February 1, 2011

Incorporate baseline findings from COI in October 2011

Final report complete and approved by December 2011

Pillar III

Work begins April 1, 2011

Final report complete and approved by January 2012

Organizational arrangements

Steering committee and task forces

The Steering Committee for the Global Chemicals Outlook will build upon the existing Steering Committee set up for the preliminary assessment. It will be expanded to include more intergovernmental organizations, private sector and civil society representatives, taking into consideration the recommendations by the Steering Committee at its last meeting for the preliminary assessment.

To advance the work of the Steering Committee, special Task Forces (TF) will be created focusing on the following specific issues:

- data sampling and compatibility;
- mapping health and environmental effects of chemicals in developing countries and countries with economies in transition, with WHO leading on the health aspects and UNEP leading on environment aspects; and
- development of the economic model.

The Steering Committee will focus on changes, drivers and environmental, health and economic impacts in the field of chemicals management, as well as on the integration of the sound management of chemicals into macro-economic and sectoral policies at the country level and behavioural changes within the private sector and civil society.

The Steering Committee will also provide guidance on how best to establish a dialogue between the private sector and policy makers on specific chemicals environmental

challenging issues and to define solutions and responses as well as needs and conditions to implement them. It will also provide guidance and facilitate the synthesis and dissemination of science and evidence-based tools and approaches.

The new Steering Committee functions, taking into consideration the recommendations of the preliminary report, will be to:

- define the detailed work plan;
- establish working groups for doing the analysis on the themes;
- identify suitable consultants;
- discuss the results of analysis of the working groups;
- develop a detailed working plan for the economic assessment and other activities, including the establishment of working groups and identification of suitable consultants;
- ensure the substantive coherence, consistency and comprehensiveness among the three parts of the report; and
- agree on the final conclusions of the analysis and on the best avenues to disseminate them.

Secretariat

UNEP secretariat with the support of a senior consultant will coordinate and facilitate the achievement of the main objectives of the project through the following functions:

- Define an adequate budget to achieve the development of the Outlook report in accordance with its objectives;
- Facilitate the resource mobilization for the project;
- Support the work of the steering group and enlargement of its membership, including organizing, preparing and arranging Steering Committee meetings;
- Coordinate the work of the task forces and ensure good communication and overall coherence of their work in line with the main objectives of the Outlook (including assisting and facilitating collection of additional data needed for the analysis as well as collecting, reviewing and commenting draft papers of the three sections of the Global Chemicals Outlook); and
- Coordinate editing, publication and dissemination of the report.

¹ SAICM Overarching Policy Strategy: Section II, paragraphs 3a, 3b.

² “Powering a Global Green New Deal,”
<http://www.unep.org/Documents.Multilingual/Default.asp?DocumentID=579&ArticleID=6124&l=en>

³ These resources are reviewed in Rachel Massey, *Building a Healthy Economy: Chemicals Risk Management as a Driver of Development*. Swedish Chemicals Agency Report No. 2/05 (September 2005). Available at http://ase.tufts.edu/gdae/Pubs/rp/KemiReport_05.pdf.

⁴ This initiative is described in a web page managed jointly by the European Commission, the European Parliament, the Club of Rome, WWF, and OECD, “Beyond GDP: Measuring Progress, True Wealth, and the Well-Being of Nations,” available at <http://www.beyond-gdp.eu/>. Also see the European Commission communication, COM 2009 0433, “GDP and Beyond: Measuring Progress in a Changing World,” available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2009:0433:FIN:EN:HTML>, and the Commission press release IP/09/1286, “Environment: Measuring progress in a changing world,” 8 September 2009.

⁵ See UNEP (2009) *Mainstreaming the Sound Management of Chemicals into National Development Planning: A Review of Needs and Options for Developing and Comprehensive Work Programme*, UNEP Chemicals Branch, Geneva. *Forthcoming*.

⁶ SAICM/ICCM.2/6

⁷ SAICM/ICCM.2/12: 7-9 and para. 28,31