UNEP-led Consultative Process on Financing Options for Chemicals and Wastes
Second consultative meeting

Bangkok, 25-26 October 2009

DESK STUDY ON FINANCING OPTIONS FOR CHEMICALS AND WASTES

1. INTRODUCTION

Following the fourth meeting of the Conference of Parties to the Stockholm Convention (Geneva, 4-8 May 2009) and the second session of the International Conference on Chemicals Management (ICCM) (Geneva, 11-15 May 2009) a UNEP-led Consultative Process was launched on options for securing adequate financing in the areas of chemicals and wastes.

This initiative was taken in response to a growing recognition of the urgent need for securing adequate financial means, as well as providing strengthened capacity building and technical assistance towards the implementation of the chemicals and wastes agendas, and recognizing the importance of linking obligations to financial and technical assistance.

This link was highlighted at the fourth meeting of the Conference of the Parties to the Stockholm Convention, where developing countries and countries with economies in transition stressed the importance of adequate financial and technical assistance as essential requirements for the establishment of an effective compliance mechanism.

The objective of the Consultative Process is to contribute towards identifying existing, new and additional resources for supporting the sound management of chemicals and wastes, including but not limited to, ensuring compliance with the chemicals and waste-related conventions. The initiative is intended to assist the UNEP Executive Director in his reporting to the Extraordinary Meetings of the Conferences of the Parties to the Basel, Rotterdam and Stockholm Conventions, to be held in Bali, Indonesia, in February 2010.

To initiate this Process, a brainstorming meeting was held in Nairobi from 24-25 July 2009 for discussion among a small group of stakeholders, including 19 governments, four intergovernmental organizations, as well as two representatives from civil society.

The discussions produced a Roadmap, which among other things, called for UNEP to undertake a desk study to explore the funding and support needs of developing countries and countries with economies in transition, and relevant ways to support: a) compliance with chemicals and waste-related multilateral environment agreements (MEAs), and b) capacity building, including institutional strengthening and technical assistance for promoting the sound management of chemicals and wastes in broader terms.

This document is a preliminary desk study, providing the background for the consideration of options to secure adequate financing in the areas of chemicals and waste as requested by the Consultative Process. It is intended to feed into the second consultative meeting to be held in Bangkok in October 2009.

This document is organised as follows:
Section 1: Introduction;
Section 2: Background, providing background on the current context of challenges to secure adequate funding for chemicals management, the broader chemicals and wastes institutional landscape, and the chemicals and waste sector at large;
Section 3: Scope and strategic positioning of the chemicals and wastes agenda, which elaborates on changing the scope and strategic positioning of the chemicals and wastes agenda;
Section 4. overview of financial resources and relevant arrangements available for addressing financing needs, which presents main existing avenues for funding; and
Section 5: which explores options for addressing financing needs, divided under the main headings of enhancing synergies and leveraging new financing by combining different issues under common financing institutions; modifying structures, scope and working arrangements of existing financial mechanisms; and flexible instruments.
Section 6 then proposes organizing principles for moving forward, in the form of building blocks, identifying some of the roles that stakeholders at different levels could play in securing the necessary resources for the chemicals and wastes management needs.

The document also contains the following four annexes:
- ANNEX I - Building Blocks for Financing Chemicals Management
- ANNEX II - Key obligations of chemicals conventions/agreements
- ANNEX III - Aid distribution across sectors
- ANNEX IV - Break-down of aid distribution across environmental domains in reference to Eastern Europe, Caucasus and Central Asia

The report draws on draft papers from expert consultants, various studies and assessments, as well as inputs from the UNEP Chemicals Branch, the SAICM Secretariat, and the Secretariats of the Basel, Stockholm and Rotterdam Conventions.

Box 1 List of references and additional materials

References
- Long-term financing for implementation of the Strategic Approach to International Chemicals Management (SAICM/ICCM.2/12, 16 March 2009)
- UNDP-UNEP Partnership Initiative for the Integration of Sound Management of Chemicals (SMC) into Development Planning Processes (SAICM/ICCM.2/INF/46, 27 April 2009)
- Report of the Quick Start Programme Executive Board to the International Conference on Chemicals Management at its second session (SAICM/ICCM.2/5/Add.1, 28 April 2009)
- Report on the assessment of funding needs of Parties that are developing countries or countries with economies in transition to implement the provisions of the Convention over the period 2010–2014 (UNEP/POPs/COP.4/27, 22 January 2009)
- The GEO Year Book, 2007
- Draft GEF-5 Focal Area Strategies (GEF/R.5/Inf 3, 28 March 2009)
- UNEP Resources Mobilization Section Brief on Financing for Chemicals, prepared for the first meeting of the Consultative Process on Financing Options for Chemicals and Wastes, July 2009
- Report of the Global Environment Facility to the fourth meeting of the Conference of the Parties of the Stockholm Convention (UNEP/POPs/COP.4/25, 10 February 2009)
- UNEP-led Consultative Process on Financing Options for Chemicals and Waste Management: Thought Starter (Katharina Kummer Peiry, Executive Secretary, Secretariat of the Basel Convention and Matthias Kern, Senior Programme Officer, Secretariat of the Basel Convention)
- International Financial Mechanisms – Promoting Sustainable Development and Poverty Reduction – What makes them successful? (Katharina Kummer Peiry, 2006, in Environmental Policy and Law,

36/5)
- Building Blocks for Financing Chemicals Management. Internal thought started drafted in preparation for the Second Meeting of the Consultative Process on Financing Options for Chemicals and wastes.
- POPs, Canada, and the World Bank: Progress on Implementing the Canada POPs Trust Fund (The World Bank)
- Resource Mobilization: List of references to relevant material on resource mobilization prepared under the Basel, Rotterdam and Stockholm Conventions (UNEP/FAO/CHW/RC/POPS/JWG.2/INF/5, 6 November 2007)
- ICCA Review 2007-2008 (International Council of Chemical Associations, 2009)
- UNEP Resources Mobilization Section Brief on Financing for Chemicals, prepared for the first meeting of the Consultative Process on Financing Options for Chemicals and Wastes, July 2009

Additional studies to further consider the issues addressed in this study include:
- Resource mobilization and sustainable financing: review of the implementation of decision VIII/34 (UNEP/CHW.9/36)
- Study on financial considerations pertaining to a strategic approach to international chemicals management (SAICM/PREPCOM.3/INF/28, 20 July 2005)
- Note by the Secretariat on existing mechanisms for providing technical and financial assistance to developing countries and countries with economies in transition for environmental projects (UNEP/POPS/INC.2/INF/4, 26 November 1998)
- Study of possible options for lasting and sustainable financial mechanisms (UNEP/FAO/RC/COP.2/10)
- Study of possible options for lasting and sustainable financial mechanisms (UNEP/FAO/RC/COP.3/13, 18 July 2006)
- Note by the Secretariat on an examination of article 14 of the Basel Convention, with a view to determining the legal and institutional feasibility of appropriate and predictable financial mechanisms for the Basel Convention (UNEP/CHW.8/INF/25)
- Thought-starter paper prepared by the Government of Switzerland on financial arrangements for the implementation of the Strategic Approach (SAICM/RM/EUJ.2/3, 4 June 2007)
- Report of the preliminary assessment of the funding needs of Parties which are developing countries and countries with economies in transition to implement the provisions of the Convention over the period 2006–2010, prepared by the secretariat for the Conference of the Parties of the Stockholm Convention at its third meeting (UNEP/POPS/COP.3/19, 2 March 2007)
- DAC Report on Multilateral Aid, 2008 –OECD 2009
- Environmental Finance – Trends in Environmental Finance in Eastern Europe, Caucasus and Central Asia. EAP Task Force, OECD 2007.

For the purposes of this desk study, the "chemicals and wastes" agenda refers to:

- The three chemicals and wastes related conventions i.e. the Basel, Rotterdam and Stockholm Conventions, including decisions of the relevant Conferences the Parties and all activities needed to implement them;
- The Strategic Approach to International Chemicals Management (SAICM)
- The UNEP Global Mercury Partnership and the other work on mercury mandated by the Governing Council / GMEF, as well as the implementation of a legally binding instrument on Mercury which is currently being negotiated;
- Other aspects of UNEP's work on chemicals and wastes mandated by the UNEP's GC/GMEF, such as the recent decisions 25/5 on Chemicals Management, including Mercury and 25/8 on Waste Management[1].

[1] Additional decisions include: decisions 18/12, 19/13, 20/23, 21/5, SS.VII/3, 22/4, 23/9, SS.IX/1, and 24/3 concerning global policies related to chemicals management and the development of a strategic approach to international chemicals management as well as decisions 24/5 and SS.X/1 on waste management.

- The UNEP's programme of work contained in the thematic area Harmful Substances and Hazardous Waste as well as relevant aspects of the Resources Efficiency – Sustainable Production and Consumption and the Environmental Governance thematic areas of the UNEP's medium term strategy for 2010-2013 approved by the UNEP Governing Council at its 25th session.

2. BACKGROUND

2.1. Context and Challenge

The continued growth pattern of global production, trade and use of chemicals is exerting an increasing burden on developing countries and countries with economies in transition that often have the least capacities to deal with such complex challenges. In 2001, 80% of the world's total output of chemicals was produced by 16 countries, with production concentrated in OECD countries. However, by 2020, developing nations are expected to lead the world in growth rates for high-volume industrial chemicals (i.e. those produced at more than 1000 tonnes per year), increasing their share of the world's chemical production to 31% (OECD Environmental Outlook for the Chemicals Industry, 2001). Chemicals consumption in developing countries is likewise growing much faster than in developed countries and could account for a third of global consumption by 2020.

The global economy is simultaneously seeing a rapid increase in generation of hazardous waste. Reflecting the continued increase in global consumption, waste volumes are predicted to grow at a rate similar to GDP in the foreseeable future. Moreover, available figures do not reflect the true scale and impact of illegal waste movements and dumping. These effects can be particularly severe in developing countries.

An irrefutable link has been established between poverty and increased risks of exposure to toxic and hazardous chemicals and waste, as they predominantly affect the poor who routinely face unacceptably high risks because of their occupation, living situation and lack of knowledge about the detrimental impacts of exposure to these chemicals and wastes. While chemicals are a major contributor to national economies, sound management throughout their lifecycle is essential not only to avoid significant risks to human health and ecosystems along with their associated economic costs, but also to maximize the full benefits of their contribution to human well being.

The fundamental problem to be addressed by the Consultative Process is the status of chemicals and waste management as the "poor cousins" of more prominent issues such as poverty eradication, education, health, and climate change. Dealing with the issue of chemicals and waste management is often perceived as a necessary evil, an unwelcome burden that is costly and unrewarding. There is no glamour attached, and political and financial initiatives tend to focus on other issues that do promise recognition and visibility. Even with strong international advocacy since Agenda 21[2] was adopted, chemicals and waste management remains at the very bottom of any political agenda at the international, national and even local level, and consequently receives only limited financial support. Hence, the Consultative Process should take into account the root

[2] Chapters 19 and 20 address respectively Environmentally Sound Management of Toxic Chemicals, Including Prevention of Illegal International Traffic in Toxic & Dangerous Products and Environmentally Sound Management of Hazardous Wastes, Including Prevention of Illegal International Traffic in Hazardous Wastes.

cause of the problem, i.e. low priority and absence of political interest, and should start developing realistic options for financing chemical issues based on the current situation.

Unlike other environmental conventions, where engaging the general public is easier due to the focus of their work, like animals, plants, or climate change, the chemicals related MEAs face a more challenging task, as chemicals are generally perceived as less visible in our daily lives, unless there is broad press coverage of accidents involving chemicals, such as for example the accidents in Bhopal and Seveso, or more recently in Cote d'Ivoire. It is easier to understand that choosing to buy an ivory object may contribute to the decline of elephant populations than to understand the choices that need to be made to avoid the long term effects of exposure to POPs. Increased political appreciation of the importance of these MEAs may also be forthcoming if the fact that the effects of these chemicals on human health and the environment tend to be cumulative, and may therefore only become apparent after long-term exposure, is further highlighted.

2.2. Landscape of Chemicals and Waste-related MEAs and Processes

The intentional and unintentional transboundary movement of chemicals in the environment resulted in various efforts at the international level to agree that control regimes were necessary. Several international agreements, both binding and voluntary, are in place today as a result and an additional agreement on mercury is soon to be negotiated. Each agreement deals with a specific stage of chemicals and/or waste management lifecycle, and in some cases, differing groups of chemicals.

The following is a synopsis of the three chemicals and waste-related conventions and programmes covered by this study. While the 1987 Montreal Protocol on Substances that Deplete the Ozone Layer, that also addresses chemicals, is not included, its Multilateral Fund is often referred to in this document as it provides a possible avenue of financing for other chemicals and/or lessons that can be applied across the board to financing chemicals and wastes.

The **Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal** seeks to minimize the movement of hazardous wastes across international borders, through an agreed regime of rules and procedures. The oldest of the chemicals and wastes agreements, the Basel Convention entered into force in 1992. The Convention aims to minimize the generation of hazardous wastes in terms of quantity and hazardousness, to dispose of them as close to the source of generation as possible, and to reduce the movement of hazardous wastes. Each Party is required to introduce appropriate national or domestic legislation to prevent and punish illegal traffic in hazardous and other wastes. The Convention also commits to assist developing countries to manage hazardous waste in an environmentally sound manner. Implementation of the Basel Convention is funded by voluntary contributions to the Basel Convention Technical Assistance Trust Fund. In 2006-2007, contributions amounted to USD 3.1 million. There are currently 172 parties.

The **Stockholm Convention on Persistent Organic Pollutants (POPs)** entered into force in May 2004 and aims to protect human health and the environment from chemicals that persist in the environment for long periods, become widely distributed geographically, and accumulate in the fatty tissue of humans and animals. It is evident that exposure to POPs can lead to serious health effects including cancer, birth defects, dysfunctional immune and reproductive systems, greater susceptibility to disease, and even diminished intelligence. Parties initially agreed to phase

out nine of the "dirty dozen" chemicals, limit the use of DDT for malaria control, and curtail inadvertent production of dioxins and furans. The Convention recently expanded its scope when, in May 2009, Parties added nine chemicals to the Convention. The Global Environment Facility (GEF) is the principal entity of the financial mechanism of the Stockholm Convention and as of October 31, 2008, the GEF had committed US$ 360 million to projects in the POPs focal area since adoption of the Convention in May 2001. This cumulative GEF POPs allocation had leveraged some US$ 440 million in co-financing to bring the total value of the GEF POPs portfolio to US$ 800 million (UNEP/POPs/COP.4/25). The Convention currently has 165 Parties.

The **Rotterdam Convention on Prior Informed Consent** came into force in 2004 and aims to promote shared responsibility and cooperative efforts among Parties in the international trade of certain hazardous chemicals to protect human health and the environment from potential harm. It aims to contribute to the environmentally sound use of those hazardous chemicals by facilitating information exchange about their characteristics, providing for a national decision-making process on their import and export and by disseminating these decisions to Parties. The Rotterdam Convention is supported by contributions from countries into the Convention's Voluntary Trust Fund and activities can be implemented if sufficient resources are received from donors. The Convention currently has 130 Parties.

The **Strategic Approach to International Chemicals Management (SAICM)** was adopted by the International Conference on Chemicals Management (ICCM) in 2006 as a policy framework to foster the sound management of chemicals. SAICM was developed by a multi-stakeholder and multi-sectoral Preparatory Committee and supports the achievement of the goal agreed at the 2002 Johannesburg World Summit on Sustainable Development of ensuring that, by 2020, chemicals are produced and used in ways that minimize significant adverse impacts on the environment and human health. Support for the implementation of SAICM activities is provided by the time-limited Quick Start Programme (QSP). The objective of the QSP is to "support initial enabling capacity building and implementation activities in developing countries, least developed countries, small island developing States and countries with economies in transition." The QSP has approved 82 projects for total funding of approximately US$16,019,986.

At the 25th session of the UNEP Governing Council/Global Ministerial Environment Forum it was agreed to develop a **legally binding instrument on mercury**. Negotiations to develop a mercury convention are scheduled to begin in 2010, with a preparatory meeting scheduled for October 2009. The decision agrees to further international action towards a legally binding instrument on mercury, which could include both binding and voluntary approaches, together with interim activities, to reduce risks to human health and the environment. It mandated the Executive Director to convene an intergovernmental negotiating committee (INC) to commence work in 2010, with the aim of completing work by 2013. It agreed the INC is to develop a comprehensive and suitable approach to mercury, including provisions to: specify the objectives of the instrument; reduce the supply of mercury and enhance its capacity for environmentally sound storage; reduce demand in products and processes, international trade and atmospheric emissions; address mercury-containing waste; to specify arrangements for capacity building; and address compliance. The decision also requests the INC consider the need to achieve cooperation and coordination to avoid unnecessary duplication of proposed actions with provisions in other agreements.

As part of renewed efforts to bring coherence to international environmental governance, Parties to the Basel, Rotterdam and Stockholm Conventions established the Ad hoc Joint Working Group in 2008 to explored **synergies among the three conventions**. At the subsequent COPs, the respective Conventions agreed to focus on synergising activities in five areas: organizational

issues in the field, including coordinated use of regional offices and centres; technical issues, including national reporting, and compliance mechanisms; information management and public awareness issues; administrative issues, including joint managerial functions, resource mobilization, and financial management and audit functions; and decision making, including coordinated meetings, extraordinary meetings of the COPs and review arrangements. A key areas of focus for the synergy efforts is resource mobilisation, and cost savings through cooperation.

UNEP's Medium Term Strategy identifies harmful and hazardous substances as one of its priority areas. In this regard UNEP seeks to accomplish: increased capacities and financing to assess, manage and reduce risks to human health and the environment posed by chemicals and hazardous waste, for States and stakeholders; to provide States and other stakeholders with coherent international policy and technical advice for managing harmful chemicals and hazardous waste in a more environmentally sound manner, including through better technology and best practices; and that appropriate policy and control systems for harmful substances of global concern are developed and in line with States' international obligations.
Lastly, given the multi-sectoral and cross-cutting nature of the chemicals and wastes agenda a range of UN system agencies and bodies and related partners have work programmes related to chemicals, including FAO, ILO, OECD, UNDP, UNIDO, UNITAR, WHO, and the World Bank.

2.3. The Chemicals and Wastes Sector at Large

The chemical industry is a major driver for economic growth and leading indicator for economic development. In 2007 the global chemicals industry realised an estimated turnover value of about € 2320 (US$ 3180) billion.[3] More than 20 million people around the globe are employed directly or indirectly by the chemical industry.

The chemical industry relies heavily on fossil fuel feed-stocks, is a high and intensive energy consumer and a ubiquitous generator of emissions. An important segment of the chemical industry (i.e. plastics), for instance, will continue to invest heavily in petrochemical assets and will remain heavily dependent on a massive inward flow of non-renewable natural resources, with a reverse flow of energy and undesirable chemicals back to nature.

While OECD countries are still the largest producers and consumers of chemicals, there has been a shift of chemical production to newly industrializing countries that, 30 years ago, had little or no chemicals industry (see figures below). This shift in production has not always been accompanied by control measures, increasing the risks of release of hazardous chemicals into the environment, as well as increasing quantities of hazardous wastes. It is estimated that there are 2 million contaminated sites in Europe, the US, and the Russian Federation alone.[4]

The dominant approach of reducing harm from chemicals has failed to reverse the trend of chemical and waste pollution globally. Waste treatment, control and disposal, pollutant monitoring, hazardous waste sites cleanup, reduction of emissions to air or releases to land have helped to improve the situation and absorb most of the process costs (liability, regulatory compliance, waste treatment, control and disposal costs and cleanups of industries, especially in developed countries). But they fall short of addressing the many facets of the problems.

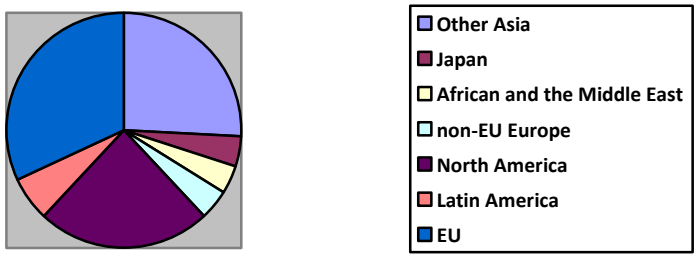
Pollution prevention at the level of the industry is becoming more important through better process controls, in-process-recycling, improved housekeeping changes and the emerging green

[3] See International Council of Chemical Associations, 2009, ICCA Review 2007-2008
[4] UNEP, 2007, The GEO Year Book

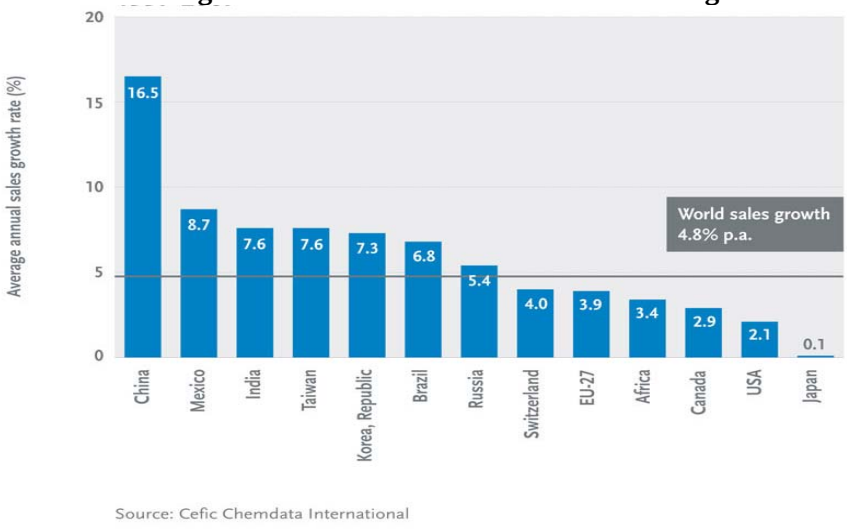
chemistry aimed at designing chemical products, and processes that reduce or eliminate the use or generation of hazardous substances, thereby reducing risk through reducing hazard.

To be effective, financing options must support both downstream activities to reduce exposure to chemicals and waste, and promote innovation to preserve resources, develop intrinsic safe chemicals and minimize waste generation. Options should also consider linking upstream and downstream activities to prevent the generation of waste. This could include extending innovative pilot programmes such as Chemicals Leasing (see Section 4).[5]

Global chemical production (Source ICCA, 2009)

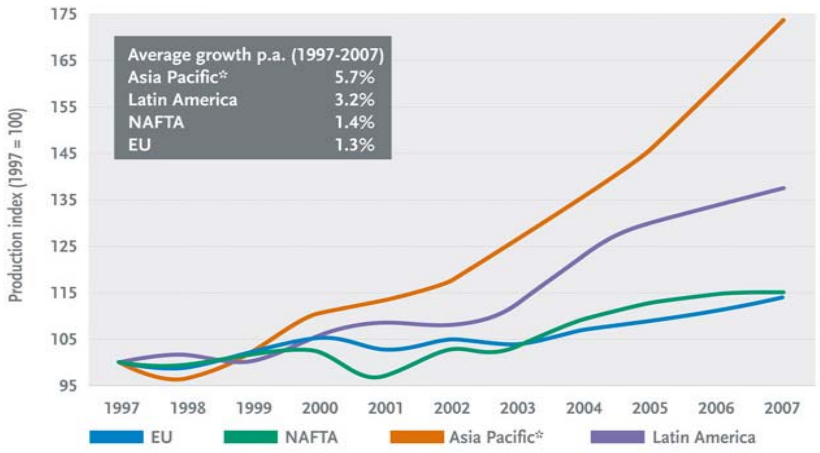


Chemicals sales growth rates of selected countries and regions 1997-2007



International comparison of production growth of the chemicals industry 1997-2007

[5]See http://www.chemicalleasing.com/



Source: Cefic Chemdata International
*Asia Pacific includes Japan, China, India, Korea, Malaysia, Philippines, Singapore, Taiwan, Thailand, Pakistan, Bangladesh and Australia

3. SCOPE AND STRATEGIC POSITIONING OF THE CHEMICALS AND WASTES AGENDA

The shortage of funding facing the sound management of chemicals and wastes is exacerbated by the low political priority afforded the issues, compared to high priority environmental issues like climate change, and the pressing development issues of poverty alleviation, health and education. Although often overlooked, all these issues are in fact inextricably linked. An important obstacle to integrating the sound management of chemicals and waste into the broader environment and development agenda is the tendency to address chemicals and wastes issues on a case-by-case or ad-hoc basis. The following section explores the interlinkages, the multi-pronged approach required to efficiently address the issues of chemicals and wastes, and argues for a change in perspective.

Chemicals and wastes management is a young field in development cooperation, but it is emerging increasingly as a cross-sectoral theme. Almost all fields of development cooperation and environmental policy are affected: protection of the environment and natural resources, health, education, women, agriculture, land rights, industrial policy, health and safety at work, trade unions, child labour, human rights, good governance, the fight against corruption, the efficiency of state institutions, and questions of international cooperation, such as those relating to the implementation of conventions, safety standards and industrial standards. In all of these areas the sound management of chemicals and waste can be seen as an indicator of successful development.

Improving the sound management of chemicals and wastes is also related to the achievement of the Millennium Development Goals (MDGs). Chemicals are an important part of our lives, helping produce food, clothing, and countless other items. Chemicals also cure and ease many of our ailments and purify water, helping to save millions of lives every year. The chemicals sector is one of the most globalized of all manufacturing and a strong contributor to economic growth. It is a precondition for healthy environments for human settlements and physical well being, including the provision of safe drinking water, air, food and healthy ecosystems in general. As such, sound chemicals management has strong links to MDG-7 on environmental sustainability. However, it also contributes to the achievement of practically all other MD''s. Chemicals can play a significant role in boosting crop yields and reducing health care costs, they can also help build the knowledge of science in primary and secondary grades to enable progress of nations in many areas of life. Women can play a significant role in sound management of chemicals and in minimizing the risks to them and their families from chemicals. Chemicals also play a major role in the control of vector borne diseases and at the same time are responsible for pollution and poisoning as well as contributing to mortality and paediatric disease in children, etc. Thereby sound chemicals management becomes a crucial component towards achieving all MDG's and ensuring significant headway in meeting the big developmental challenges of our times. However to enjoy the full benefits chemicals can potentially provide humanity, the double edge sword – that is the risks associated with chemicals and wastes, must be mitigated.

Misuse of chemicals and increasing amounts of solid and hazardous wastes negatively impact developing countries and exacerbate poverty. Being highly dependent on natural resources especially through agriculture and fisheries, developing countries are especially vulnerable to the negative impacts of chemical use (SAICM/ICCM.2/INF/46). Similarly, the aforementioned risks also negatively impact public health, and serve to undermine development gains made in the health sector. Chemicals and wastes are also inextricably linked with the agricultural sector. The Stockholm Convention is phasing out several agricultural chemicals, the Rotterdam Convention

addresses the import of many agricultural chemicals and the Basel Convention regulates the transport of hazardous waste, including waste agricultural chemicals.

The cross-cutting nature of the issue must be exploited and connections with the issues of poverty reduction, health, agriculture, and climate change made to ensure a more integrated and efficient approach to development interventions. There are opportunities to raise the profile of the sound management of chemicals and waste into the mainstream global environmental and development agenda. For example, sustainable agriculture, through integrated pest management (IPM), an approach to the management and control of agricultural pests which relies on site- and condition-specific information to manage pest populations below a level that causes economic injury and that minimises risks to humans and the natural environment, will directly reduce chemical use and subsequent chemical waste. In this connection, other interlinkages are necessary in order to prevent worsening of the chemicals and wastes situation. According to FAO the current challenge is feeding the steadily increasing world-population on surface areas that are declining. These trends will in any case require more efficient food production and that will inevitably result in increased use of pesticides and fertilizers. In addition to promoting the ideal agricultural production using organic or IPM approaches that require significant resources and time, countries require assistance to avoid pollution of and damage to the most sensitive ecosystems and environmental resources. In this case the chemicals and waste sector will have further work to do, to complement the traditional chemical safety control and regulations with more general environmental protection controls, e.g. prohibit pesticides and other chemical activities close to drinking water resources.

Even when governments recognize these interlinkages, management of these areas at the national level remains fragmented. As such, it may be more practicable for donors to promote this integration at the project/programme or activity level. This could be done by building consideration of waste and chemicals aspects into the project design stage, in the same way that links with climate change are considered, to encourage proponents to build in design aspects that address these impacts.

4. OVERVIEW OF FINANCIAL RESOURCES AND RELEVANT ARRANGEMENTS AVAILABLE FOR ADDRESSING FINANCING NEEDS

4.1. Financial Needs and Gaps

Many countries do not possess the capacity and know-how to manage harmful chemicals, waste and hazardous waste in a manner to protect human health and the environment. Furthermore many developing and emerging countries became party to the chemicals and wastes agreements with the understanding that assistance would be provided to address these constraints.

Developing countries' needs for assistance can be broadly divided into two categories. The first category is related to **building and enhancing capacity.** This includes activities such as policy/legislation development, development of enforcement tools, training of customs and other officers, data collection and reporting capability, and design and implementation of national compliance strategies. These can also be referred to as enabling activities since they bolster the capacity of the government and other relevant institutions to manage and implement the national compliance strategy under various conventions. The second category is investment activities which could include **economic and technical support** to restructure the affected industries as a result of implementing the conventions. In such cases, economic and technical support may be

needed to compensate for the closure of industrial plants and the displacement of labour, in other cases, environment-friendly technology may be transferred to produce new products.

Putting an exact dollar value to the overall financial needs of the broader chemicals and wastes agenda is a difficult task, partly because of the complex and interconnected nature of the challenge, and partly because data on all activities pursued and planned is not readily accessible. As detailed below, some estimates towards this dollar value exist, but to obtain a more comprehensive figure of the overall financial challenge would require a dedicated assessment. Work on this could build on methodologies already used in the context of specific financial mechanisms such as those used to determine the background information for negotiations of replenishment, e.g. of the GEF and the MLF for the Implementation of the Montreal Protocol.

However, several studies have provided informative estimates of the finance required. UNIDO estimated that it would require US$176 million to implement activities with regard to cleaner production, chemical leasing, water management, mercury and arsenic (SAICM/ICCM.1/12). According to the SAICM Secretariat it is currently impossible to offer an all-encompassing qualitative needs assessment beyond that provided in the Overarching Policy Strategy itself or to provide a comprehensive estimate of the associated financial needs in either quantitative or qualitative terms. It is estimated however that it could be in the order of hundreds of millions of dollars (SAICM/ICCM.2/12).

The needs assessment produced for the Fourth Conference of the Parties to the Stockholm Convention (COP-4) estimated the total needs of 68 parties (who had completed their National Implementation Plans) at USD9.2 billion to implement the requirements of the Stockholm Convention (UNEP/POPs/COP.4/27). According to the needs assessment it was frequently not possible to determine whether a particular activity was a “core” activity based on a submitted implementation plan. For example, many plans included several activities under a single broad heading with only one cost figure assigned for all activities within that heading. National Implementation Plans (NIPs) either identified programs, projects and resource estimates according to the provisions of the Convention, or developed discrete action plans for specific POPs issues (e.g., pesticide POPs, PCBs, DDT, unintentionally produced POPs, contaminated sites, etc.) which took into account the provisions of the Convention that were relevant to each issue. According to the assessment only a few Parties attempted to disaggregate costs into “baseline” and “incremental” categories.

Breakdown per region, based on needs assessment:

Region	Total regional financial need (2009-2015+) (USD mill)
Africa	2,068.04
Asia and the Pacific	6,195.85
Central and Eastern Europe	667.56
Latin America and the Caribbean	227.56
Total needs	9,159.37

It is clear from the above, that the needs for implementing the chemicals and waste agendas are significant. Further the estimated USD9 billion required to implement the Stockholm Convention is based on the needs of only 68 countries to implement just one of the agreements. This does not take into account the finance required to implement the obligations of Rotterdam, Basel, or SAICM, nor the new chemicals added to the Stockholm Convention. As such, despite the high figure, it must be acknowledged that the USD9 billion represents only a partial estimate of the finance needs. Further, POPs is the only agreement with a dedicated financial mechanism for

implementation. The Quick Start Programme under SAICM is limited to enabling activities, e.g. capacity building and its mandate is time-limited. These represent key gaps in funding. Therefore, ODA, multilateral resources, as well as new and additional resources, channelled through these or other mechanisms, will be required to ensure that the needs of implementing the obligations under the chemicals and wastes agreements can be met.

With specific reference to the three chemicals and wastes related conventions and SAICM, the following table shows the amount of financial resources received by the conventions and SAICM during the last three years of 2006-2008:

(USD million)

Convention/Trust Funds	2006	2007	2008
Basel	**5.439**	**5.678**	**6.635**
General (assessed)	3.800	3.616	4.565
Special (voluntary)	1.639	2.062	2.070
Rotterdam	**4.723**	**4.985**	**4.333**
General (assessed)	3.741	3.841	3.700
Special (voluntary)	0.982	1.144	0.633
Stockholm	**7.886**	**6.877**	**7.920**
General (assessed)	5.466	4.663	5.879
Special (voluntary)	2.420	2.214	2.071
SAICM	**6.782**	**8.976**	**6.953**
Special (voluntary)	6.782	8.976	6.953
Grand TOTAL	**24.830**	**26.516**	**25.841**

GEF: As of October 31, 2008, the GEF had committed US$ 360 million to projects in the POPs focal area since adoption of the Stockholm Convention in May 2001. This cumulative GEF POPs allocation had leveraged some US$ 440 million in co-financing to bring the total value of the GEF POPs portfolio to US$ 800 million. Until now there has been only one POPs window and all projects had to have a direct link to POPs chemicals. Following the discussions at the 1st meeting for the 5th replenishment of GEF (17-18 Mar 2009) there are indications that GEF5 might go in the direction of a broader chemicals window including PIC, POPs, Basel, SAICM, but nothing is decided yet. Also no indications from donors are available on potential amounts of the replenishment.

4.2. Available Funding Sources, Mechanisms and Arrangements

Different models of funding and arrangements available such as dedicated financial mechanisms tied to compliance; funding for global environmental benefits; mainstreaming of chemicals and wastes priorities into national development agendas and ODA funding whether through multilateral or bilateral arrangements. Below different sources are mapped and briefly described.

A. Convention Trust Funds

Financial arrangements for the Basel, Rotterdam and Stockholm Conventions follow the general trend for most MEAs, i.e. to rely on two types of trust funds: general trust funds to support the operation of the Convention and special or voluntary trust funds to support additional activities.

The general trust funds are used to meet the expenses of the conventions covering the ordinary expenditures of the secretariats, including staffing and administrative office costs and overhead, support for secretariat preparation and translation of materials, and staff members' attendance at meetings of the parties and subsidiary bodies (but not the attendance by the representatives of the Parties). In this respect the Vienna Convention and Montreal Protocol represent an exception. Contributions of the individual Parties are compulsory and based on the United Nations scale of

assessments for apportionment of the expenses of the Organization. These trust funds also receive in-kind contributions from UNEP, other organizations and host countries.

The second type of trust funds, also known as voluntary trust funds, are used mainly for the financing of activities, including technical assistance, and participation of developing countries and countries in economies in transition in convention meetings. Unfortunately, these funds are often insufficient to cover the participation of all developing country parties to the relevant meetings.

Only the Stockholm Convention relies on a dedicated financial mechanism managed by the GEF.

The Conferences of the Parties to the three chemicals and wastes related conventions have committed to a synergies process that has cost savings and resource pooling associated with the running of and implementation of the three instruments as one of its core motivation. Analysis of the implications of such process and its potential in the area of financing are addressed in Section 5.1.

B. The Global Environment Facility

Mandate: The GEF operates as a mechanism for international co-operation for the purpose of providing new and additional grants and concessional funding to meet the agreed incremental costs of measures to achieve agreed global environmental benefits in the following areas: biological diversity; climate change; international waters; ozone layer protection; land degradation; and persistent organic pollutants. It is also the designated financial mechanism for a number of MEAs, starting with the United Nations Framework Convention for Climate Change (UNFCCC) and the Convention on Biological Diversity (CBD), and later also the Stockholm Convention on Persistent Pollutants (POPs) and the United Nations Convention on Combat Desertification (UNCCD). As such, the GEF assists countries in meeting their obligations under the conventions that they have signed and ratified. The GEF also added two cross-cutting areas, one of which is sound chemicals management. The objective of this cross-cutting work is to promote sound management of chemicals practices in all relevant aspects of GEF programmes, and to contribute to the overall objective of SAICM) of achieving the sound management of chemicals throughout their life-cycle so that by 2020 chemicals are used and produced in ways that lead to the minimization of significant adverse effects on human health and the environment.

The Governing Structure: The GEF's governing structure includes primarily two levels. The Assembly which is effectively the Conference of the Parties of the institution which meets once every three years. Among its major functions, the Assembly reviews the general policies of the Facility and considers, for approval by consensus, the amendment to the Instrument (its charter) on the basis of recommendations of the Council. The other level of decision-making of the GEF is the Council which meets no less than two times a year. Among other things, the Council is responsible for developing, adopting and evaluating the operational policies and programmes for GEF-finance activities; review and approve work programmes; direct the utilization of funds; and consider and approve co-operative arrangements or agreements with the Conference of the Parties to the conventions, and ensure conformity of GEF approved activities with the policies, priorities and eligibility criteria of the convention.

In exercising its responsibility for considering and approving co-operative arrangements/agreements with the Conference of the Parties, the Council is mandated to ensure that these arrangements are in conformity with the relevant provisions of the convention regarding its financial mechanism and include procedures for jointly determining the aggregate

GEF funding requirements for the purpose of the convention. However the GEF Council's membership is not always in line with the membership of the Conference of the Parties of the relevant MEAs. The relationship between the GEF governing structure and that of the relevant MEAs is outlined in paragraph 6 of the GEF Instrument as follows: "the GEF shall function under the guidance of, and be accountable to, the Conferences of the Parties which shall decide on policies, program priorities and eligibility criteria for the purposes of the conventions".

Major Funding Policies: These include paying for agreed incremental costs to generate global environmental benefits; funding projects and programmes which are country-driven and based on national priorities designed to support sustainable development; and being guided by and accountable to the COPs of the conventions which decide on policies, programme priorities, and eligibility criteria for the purpose of each of the conventions. Since 2005, the GEF has introduced the resource allocation framework (RAF) to provide each recipient country at the outset of each replenishment period an indicative level of resources available during that period. The RAF is based on the potential of countries to generate global environmental benefits and the capacity, policies and practices to successfully implement GEF projects. The RAF is currently only applicable to projects in the focal areas of biodiversity and climate change. Countries have the possibility to work with GEF implementing/executing agencies to develop projects to be financed from their indicative allocation. Only 5% of GEF resources in each focal area are excluded from the RAF and allocated to global and regional projects. Projects outside these two focal areas continue accessing GEF funding directly or through global and regional projects as before.

Major Activities Funded: Since 1991, the GEF has provided USD 8.6 billion in grants and leveraged another USD 36 billion for 2,400 projects in 165 developing countries and countries with economies in transition. Its funding covers both categories of activities.

The GEF is replenished every four years. The preparation of the fifth replenishment (for the period from 1 July 2010 to 30 June 2014 -GEF V) started in November 2008 and is expected to conclude by early 2010. Each replenishment is preceded by an independent review of the performance of the GEF in the current period and the results of the review are used as reference in the negotiations of the new replenishment. At the same time strategies for each focal area are developed to assess the funding needs of each area and reviewed by the conventions concerned, the GEF agencies and other stakeholders.

Only countries who indicate their intention to contribute no less than SDR [6] 4 million can participate in replenishment negotiations, whose outcome is endorsed by the GEF Council[7]. Under GEF V, the draft Chemicals Focal Area strategy proposes to consider chemicals activities in a "more systematic and comprehensive manner," in recognition of the fact that on-the-ground fragmentation of chemicals management issues is damaging at the international level. The proposed objectives are 1) Phase out of production and use of controlled chemicals, 2) Managing the use of chemicals in a controlled manner, 3) Reduce releases of POPs and other PTS to the environment, 4) Prevent ,manage and dispose of wastes, and manage contaminated sites. According to GEF, this set of objectives "also allows the GEF to be well positioned to respond to other international agreements, such as the SAICM or the mercury agreement that is being developed, should additional resources be available."

Up until GEF IV, the GEF has dedicated USD360 million to activities under the POPs focal area and most of these funds were used for enabling activities.

[6] SDR stands for Special Drawing Rights.
[7] Source: http://www.gefweb.org

In the negotiation for the fifth GEF replenishment, three scenarios are being considered, for a total of 5, 6.5 and 9 billion. 9-10% of the total replenishment (between USD 500 and USD 900 million) is currently earmarked for POPs (GEF/R.5/Inf4). Under the USD 5 billion scenario, the total allocation to chemicals is USD 500 million which is split into two allocations, USD 450 million for POPs and USD 50 million for ODS. This leaves nothing for other chemicals. The other two scenarios, that is USD 6.5 billion and USD 9 billion, include an addition of USD 100 million to fund work on the sound management of chemicals. This proposed USD 100 million is intended to fund projects for mercury on a pilot basis, as well as SAICM priority areas. Required co-financing may double this amount, assuming countries can identify relevant sources.

This is a significant increase in finance for work on POPs and chemicals. However it falls well short of the estimated funding requirements even for POPs management (approximately USD 9 billion), and therefore other funding sources will also be necessary. Furthermore, if USD 100 million is a significant improvement, it will only materialize with a replenishment of no less than USD 6.5 billion. Replenishment meetings are ongoing ahead of the GEF Council to be held in November 2009 (See GEF/R.5/Inf 3 for the Draft Focal Area Strategies for GEF V. Programming documents still being prepared for the 3rd Replenishment meeting in October).

C. The Multilateral Fund for the Implementation of the Montreal Protocol

Mandate: The Multilateral Fund (MLF) was established by the Parties to the Montreal Protocol to provide financial and technical co-operation, including the transfer of technology, to Parties operating under paragraph 1 of Article 5 of the Montreal Protocol to enable their compliance with the control measures set out in the Protocol.

The Governing Structure: The Governing Structure of the MLF is two-tier. The Meeting of the Parties of the Montreal Protocol which convenes once per year is responsible for deciding general policies such as the broad scope and categories of activities to be funded, the membership of the Executive Committee and the three-year replenishment of the MLF. The Executive Committee, the other level of Fund governance meets no more than three times per year and is in charge of developing and implementing operational policies of the Fund. It considers and approves projects and programmes, and exercises oversight on funded activities to ensure cost-effectiveness and consistency with the overall policies set by the Meeting of the Parties.

Major Funding Policies: The MLF's major funding policies include the principle of covering the incremental costs of phasing out the consumption and production of ozone-depleting substances (ODS) and performance-based fund disbursement where funds are paid out only upon independent verification of ODS reduction targets being achieved as planned.

Major Activities Funded: Between its inception (1991) and December 2008, about USD 2.5 billion has been disbursed to fund about 6,000 projects and programmes in 144 countries. These activities include providing institutional support in each recipient country, ozone networks covering seven regions, the preparation and implementation of national ODS phase out strategies, funding technology transfers to industries to convert from ODS-based to non-ODS technologies, and compensating for closing down ODS production.

The MLF also provides capacity support to countries. This includes providing to each country each year from USD 30,000 to USD 450,000, depending on the size and consumption of the country, to support of a national ozone unit (NOU) at the national level. This has significantly improved the rate of annual data-reporting by countries to the Montreal Protocol Ozone

Secretariat and facilitated the communication between countries and international organizations. In addition, the MLF also funds a regional ozone officers' network in South Asia, West Asia, French-speaking Africa, English-speaking Africa, Caribbean and Latin America, Europe-Central Asia, and Pacific-Island Countries (the South-East Asia and Pacific network has been funded by the Government of Sweden). These regional networks provide a platform for consultation, experience-sharing and conducting south-south co-operation among NOUs to promote the goals of the Montreal Protocol.

D. The Strategic Approach for International Chemicals Management and its Quick Start Programme

The recently developed Strategic Approach to International Chemicals Management (SAICM) sets out a comprehensive policy framework for the achievement of global chemicals management objectives, including in relation to multilateral environment agreements, and the financing of their implementation. Discussion of the need for additional financial resources and better use of existing resources to support chemicals management objectives featured prominently in the negotiation of SAICM. A full range of financial arrangements to support the broad chemicals management objectives of SAICM are set out in its Overarching Policy Strategy. These include supporting the initial capacity-building activities for the implementation of SAICM objectives under the new SAICM "Quick Start Programme" and its voluntary, time-limited trust fund [8].
Mandate of the Quick Start Programme: The Quick Start Programme (QSP) is a dedicated financial mechanism of the SAICM designed to support initial capacity-building activities in developing countries and countries with economies in transition for the implementation of Strategic Approach objectives through its QSP Trust Fund. The Programme is time limited with disbursement of funds due to cease by 2013[9].

Governing Structure: The QSP's governing structure is comprised of the Executive Board and the Trust Fund Implementation Committee. The membership of both reflects the multi-sectoral composition that corresponds to the multi stakeholder nature of the SAICM. The QSP Executive Board consists of two government representatives of each of the United Nations regions and all the bilateral and multilateral donors and other contributors to the Programme. The QSP Trust Fund Implementation Committee consist of representatives of participating organizations of the Inter-Organization Programme for the Sound Management of Chemicals (IOMC), and the United Nations Development Programme (UNDP).The Executive Board reports to the International Conference on Chemicals Management.

Major Funding Policies: The QSP Trust Fund, administered by UNEP, limits is funding to enabling activities. Although it currently provides a valuable source of finance for developing countries, particularly in the areas of developing national profiles and capacity assessment for the management chemicals, the QSP does not provide for implementation activities. Additional finance is required to fund SAICM implementation activities.

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[8] Other financial arrangements envisaged to support implementation of SAICM include:

- Actions at the national or sub-national levels to support financing of Strategic Approach objectives;
- Enhancing industry partnerships and financial and technical participation in the implementation of Strategic Approach objectives;
- Integration of SAICM objectives into multilateral and bilateral development assistance cooperation;
- Making more effective use of and building upon existing sources of relevant global funding, such as the Global Environment Facility and the Multilateral Fund for the Implementation of the Montreal Protocol.

[9] SAICM/ICCM.2/12.

Major Activities Funded: QSP resources can fund any of the following enabling activities:
(a) develop or update national chemical profiles and the identification of capacity;
(b) develop and strengthen national chemicals management institutions, plans, programmes and activities to implement the Strategic Approach, building upon work conducted to implement international chemicals-related agreements and initiatives; and
(c) undertake analysis, interagency coordination, and public participation activities directed at enabling the implementation of the Strategic Approach by integrating sound chemicals management in national strategies to inform development assistance cooperation priorities.

The SAICM QSP has proven to be a relatively fast disbursement mechanism, offering accessible resources. Over the first six rounds of applications to the Trust Fund the secretariat received 185 project proposals. Following screening for completeness and eligibility, 151 applications were appraised by the Trust Fund Implementation Committee. The Committee approved 82 projects for total funding of approximately $16,019,986. In addition, 51 projects were recommended for further development and resubmission. The approved projects will be implemented by 74 Governments and 12 civil society organizations and will involve activities in 76 countries, including 35 least developed countries and small island developing States (SAICM/ICCM.2/5/Add.1).[10]

E. Bilateral ODA

There is little disaggregated data available on the percentage of bilateral ODA (and multilateral ODA) that is directed to environmental management and especially for chemicals and wastes activities. Generally, ODA funding for environment remains low in comparison to funding available to other sectors. A table contained in the 2008 DAC Report on Multilateral Aid reflecting the distribution of aid among different broad sectors is reproduced as Annex III. Useful disaggregated data on the specific focus of aid assistance across different areas of environmental management are presented in a study conducted by OECD, but only with reference to Eastern Europe, Caucasus and Central Asia [11]. Some of the figures contained in that study are reproduced as Annex IV.

Experience shows that development aid rarely focuses on chemicals and wastes management [12] which are also seldom included in countries' requests. Funds for chemicals and waste activities may be more indirectly provided through funding for broader areas, such as natural resources management. In the specific case of the Australian Aid agency, one exception was the approximately USD5 million Persistent Organic Pollutants in Pacific Islands Countries project which collected over 100 tonnes of POPs and intractable pesticides from the Pacific region and destroyed them using a destruction facility in Australia. In addition the French Development Agency has committed EUR 1 million to the Pacific region in 2009, for the management of solid and hazardous wastes. The Japanese International Cooperation Agency (JICA) is also preparing its third regional waste project in the Pacific in 2010. The EU is currently designing activities for

[10] Funds raised for the year 2007 amounted to $7,678,000 million, exceeding the target range of $6.3–$6.6 million. Pledges for 2008 amounted to $5,342,000, falling short of the target range of $6.6–$7.25 million. Pledges received for 2009 total $386,000 to date. The 2009 target range is $6.9–$ 7.9 million. In 2006–2009, 60 per cent of donors made more than one contribution to the programme, meeting the plan's target in that regard. Two new donors made contributions to the Trust Fund in 2009 in addition to four new donors in 2007 and two in 2008. Broadening the donor base to include non governmental entities and industry has not yet been achieved.

[11] Environmental Finance – Trends in Environmental Finance in Eastern Europe, Caucasus and Central Asia. EAP Task Force, OECD 2007.

[12] Consultations with representatives of the Australian Government, Australian Agency for International Development.

the 10th European Development Fund and, at least for Pacific African Pacific and Caribbean countries, this includes a focus on sustainable development, with a reference to the eligibility of waste projects.

F. Flexible Instruments: Private Sector Partnerships and Economic Instruments

Private Sector Partnerships: Over recent years there has been increased recognition of the need to involve the chemicals industry in meeting the challenge of the sound management of chemicals. This has occurred to some extent in the SAICM, in which the chemicals industry associations actively participate and contribute in-kind. However, industry groups are reluctant to contribute money to the Quick Start Programme, or other such funds, despite various calls from governments. Creative and targeted engagement with the private sector is therefore necessary.

A number of avenues exist for doing this, including a shift to provide chemical services, rather than the sale of the chemicals, to reduce chemicals consumption and avoid stock accumulation. The concept of Chemical Leasing (ChL) involves the customer paying for the benefits obtained from the chemical, not for the substance itself. Therefore, the customer is no longer responsible for disposal of the chemical and the economic success of the supplier is not linked with product turnover anymore. Chemical Leasing is already practiced in many OECD countries and is being demonstrated in developing countries through the National Cleaner Production Centre (NCPC) network.

Another example of efforts to engage the private sector is the Solving the E-waste Problem (StEP) Initiative, established in 2007 to start up and foster partnerships between companies, governmental and non-governmental organizations and academic institutions on meeting the challenges that result from the production, usage and disposal of electrical and electronic equipment. As a public-private partnership initiative founded by various UN organizations, StEP is uniquely positioned to contribute to the formulation of basic principles, policies and strategies, and the development of technologies and projects for action. UNEP is represented on its Steering Committee. The Initiative comprises 50 members from around the world.

Two other initiatives have been initiated by the Basel Convention. At the sixth meeting of the Conference of the Parties in 2003 the Mobile Phone Partnership Initiative (MPPI) was established as a sustainable partnership on the environmentally sound management of used and end-of-life mobile telephones. In June 2008 the Partnership for Action on Computing Equipment (PACE), was launched at the Ninth Meeting of the Conference of the Parties to the Basel Convention. PACE is a multi-stakeholder partnership that provides a forum for governments, industry, non-governmental organisations and academia to tackle the environmentally sound management, refurbishment, recycling and disposal of used and end-of-life computing equipment. The Partnership is intended to increase the environmentally sound management of used and end-of-life computing equipment, taking into account social responsibility and the concept of sustainable development, and promoting the sharing of information on life cycle thinking.

The role of investment houses, banks and insurers in driving responsible investment, through due diligence and best practice, also requires consideration. The Insurance Working Group (IWG) is an alliance of leading insurers and reinsurers committed to integrating environmental, social and governance (ESG) factors into their core business strategies and operations. Risks posed by chemicals and wastes have received little if any attention and the profile of the severity of these risks needs to be raised among insurers.

Economic Instruments: In general, economic instruments use monetary incentives and deterrents, in additional to market forces, to influence behaviour. In terms of chemicals and wastes economic instruments can be used to internalise the environmental externalities and provide finance for the implementation of obligations under the relevant agreements. Economic instruments for chemicals and wastes include: waste generation fees, essentially similar to a utility charge; waste disposal/tipping fees; environmental product levy, on items that are difficult to dispose of including bulky or hazardous items; deposit refund programmes, involving a deposit/levy paid by the importer to the government, with a percentage of the deposit paid as a refund when the product is disposed of; and tax incentives and disincentives, including granting subsidies and concessions to environmentally sound products and alternatives.

The UNEP Chemicals Branch mainstreaming team is also working on producing guidance for national policymakers on cost recovery instruments for financing chemicals management that covers much of this discussion. The draft guidance on economic instruments for financing chemicals management has within a survey of SAICM national focal points, the results of which give an overview of the types of economic instruments in general being used for chemicals management. The report also details a selection of these instruments related specifically to cost recovery. The report is still being finalized.

In researching the current application of economic instruments for chemicals and wastes management, it was found that cost internalisation is not often a priority for the instruments being used – there is little indication that the fee or tax structures are designed specifically to internalise externalities from poor chemicals management. More often the concern is simply to charge fees that cover the cost of providing public chemicals management services, i.e. inspections, extension services.

It was further noted that earmarking of funds raised through these economic instruments, for financing chemicals management is not a given. A supplement on earmarking is currently being prepared by UNEP Chemicals, arguing for the earmarking of the funds generated through economic instruments, based on a programmatic approach and with funds flowing through the general budget procedures. This would mean that the funds generated through economic instruments would be earmarked for chemicals management programmes/ recurrent activities but channelled through the general budget process, thus enhancing accountability and responsibility of the chemicals management agencies for the investment of these funds.

G. Other mechanisms

With respect to new and additional sources of funding for the management of chemicals and wastes, the World Bank has supported a number of activities and is playing a number of different roles, including trustee of donor funds, financial contributor and implementing agency. For example, the World Bank administered the Canada POPs Fund that was in operation between 2000 and 2008. Canada established this Fund for POPs capacity building in developing countries and countries with economies in transition to reduce or eliminate releases of persistent organic pollutants and to assist these countries in implementing the Stockholm Convention. It was the first such specific funding commitment for POPs implementation bringing together UNEP Chemicals as principal Implementing Agency and the World Bank as Trustee (as well as implementing agency in select cases). The Fund operated on the principle of country ownership and supported projects that provide technical expertise, knowledge and access to technology needed to reduce or eliminate the presence of POPs in developing countries and CITs. The maximum amount per activity was US $250 000. The Fund closed in December 2008. A total of

88 projects in 25 countries were funded during its operation. There is currently no indication that this fund will be revived and replenished. However, it may serve as a model for new efforts to bring bilateral and multilateral aid together to strengthen implementation of the chemicals conventions.

At the regional level, the World Bank plays a key role in the African Stockpiles Programme, a multi-stakeholder initiative that was approved in 2005 to clean up obsolete pesticides, prevent future toxic threats; and provide capacity building and institutional strengthening on chemicals issues. The World Bank is also an implementing agency of the Multilateral Fund for the Implementation of the Montreal Protocol and of the GEF.
Regional development banks also fund some work in the chemicals and wastes cluster. The Asian Development Bank is implementing several chemicals and wastes projects including: a partnership on POPs pesticides management for agricultural production in Central Asian countries; and a clean waste-to-energy project in China.

An example of bilateral funding is the Dutch supported project on the elimination of acute risks of obsolete pesticides in Moldova, Armenia and Georgia. Funded in part by the TMF programme (Thematische Mede Financiering) of the Netherlands Ministry of Foreign Affairs this project started in early 2005 and recognizes both the health benefits and the environmental benefits of pesticide elimination.

Besides public funds, there are also corporate and private foundations funding chemicals work. Yet, as with official development assistance, the percentage of foundation funds channelled to the chemicals agenda, and not to development and climate change, is rather small. Three foundations warrant mentioning here: the first is the Mitchell Kapor Foundation which has made POPs the focus of its grant-making. Since 2001, the Kapor Foundation supports the development of the International POPs Elimination Network (IPEN) since 2001. The second is the Ford Foundation which made a US$2.2 million grant to Vietnam in 2006 to bring critical health services to people living with dioxin-caused long-term disabilities. The third is the Wellcome Trust, the largest charity in the UK, which funded a film project on the presence of flame retardants in breast milk.

Lastly, a number of newer partnerships are emerging among donors and UN agencies that provide a model for resource mobilisation for chemicals and wastes work. One such partnership is the Global Alliance for Vaccine and Immunization (the GAVI Fund). The GAVI Fund, established in 2000 to give developing country children increased access to immunisation, is a public-private partnership with participation from donor governments of both developing and developed countries, international organizations such the World Bank, UNICEF, WHO, and also philanthropic partners, principally the Bill and Melinda Gates Foundation. The target countries eligible to receive funds from the GAVI Fund are those whose annual per capita income is less than U$$1,000. The total number of eligible countries currently stands at 72 and represent half the world's population.

The GAVI Fund is an interesting model for resource mobilisation for the chemicals and waste because it brings public and private partners together, and utilises novel fund raising mechanisms. The first is the Advanced Market Commitment where the donor commits money to guarantee the price of a vaccine when it is developed provided that the products meet pre-agreed standards and are demanded by developing countries. The first AMC programme was launched in 2009 to fund the vaccine against pneumococcal disease which claims the lives of 1.6 million people per year, including 1 million children before the age of 5. A total of US$1.5 billion was committed by a number of developed countries and the Gates Foundation. The guaranteed low price of the vaccine also provides the sustained use of the vaccine. The second mechanism is the International

Finance Facility for Immunisation (IFFIm), first proposed at the G7 meeting in 2005, where countries make firm long-term pledges which GAVI uses as security to raise funds at the security market. The IFFIm bonds issued in November 2006 raised US$1 billion for GAVI. As of January 2008, over US$800 million have already been disbursed to developing countries. Worth noting is also that the GAVI started by funding the development, production and delivery of vaccines to the recipient countries, but has subsequently expanded its assistance to strengthening health systems in recipient countries in order to overcome barriers to immunization delivery. Perhaps a similar initiative can be created to fund key tasks in sound chemical management such as clean up of contaminated sites that pose a risk to public health, including supporting the creation and/or strengthening of institutions to direct and manage the task. On a small scale some of this work is already being completed by the Blacksmith Institute (http://www.blacksmithinstitute.org/), this institute could potentially be scaled up.

Another partnership example for sound chemicals management is the Earth Fund launched at the end of 2007 by the Global Environment Facility (GEF) and the International Finance Corporation (IFC) to "support innovative solutions for the most pressing environmental challenges in developing countries". The Earth Fund was conceived to engage the private sector in its activities and particularly to link donor funds into private sector creativity, investment, and participation. It is set up to operate as a venture capital entity to provide grants, soft loans and equity participation to fund promising innovations in areas such as second-generation biofuels, water treatment and clean energy. It also partnered with Prize Capital LLC, a private company which uses inducement prizes and capital, to encourage innovations. Since this fund has only just begun, it is difficult to assess it. In principle though there is nothing in the Earth Fund's mandate to preclude it from considering chemicals and waste related issues. Competition and inducements have in fact been used to benefit chemicals work in the past. PCB test kits were developed in response to a competition and prize inducement. As such the further consideration of the more broad and technological challenges in the areas of chemicals and wastes should be given. As the Earth Fund attempts to form public and private partnerships to finance technology innovations in the interest of environment protection[13] there may be significant opportunity for chemicals innovations too.

5: EXPLORING OPTIONS FOR ADDRESSING FINANCING NEEDS

This section attempts to outline, based on the overview presented in Section 4, what may be options to be explored to secure sufficient resources for the chemicals and wastes agenda. It also includes an analysis of possible avenues for securing effective and sustained capacity building, including institutional strengthening, as well as technical assistance. The options explored here do not cover the full range of possibilities that could be pursued for this purpose.

5.1 Enhancing synergies and leveraging new financing by combining different issues under common financing institutions

A. Building on synergies across conventions and programmes

Synergies among conventions and programmes can help free up resources which can strengthen the implementation at the national level. While respecting the specificity of different conventions

[13] Source: http://www.ifc.org/ifcext/media.nsf/content/SelectedPressRelease. There may be significant opportunity for chemicals innovations too.

and programmes, there are areas where, for instance, the conduct of one activity can help achieve the goals of several conventions.

There are several opportunities in this regard. In addition to identifying administrative and secretariat functions to service the Conventions that can be streamlined to free up resources, there are also areas where resources can be pooled at the global, regional and national levels among the Conventions and with other multilateral, public and private partners for work plan and project implementation. This can range from short- or medium-term, ad hoc arrangements for specific projects and initiatives, to more considered long-term institutional arrangements for joint trust funds and perhaps an overarching financial mechanism.

The Conferences of the Parties to the three chemicals and wastes related conventions have committed to a synergies process that aims at, in the longer run, to freeing up and pooling resources associated with the running of and implementation of the three instruments as one of its core motivation. The decision on enhancing cooperation and coordination among the Basel, Rotterdam and Stockholm conventions adopted by all three conventions identifies enhancing co-operation and coordination in the following areas:

- organizational issues, including coordination at the national level, programmatic cooperation in the field, and the coordinated use of regional offices and centres;
- technical issues, including national reporting, compliance and non-compliance mechanisms, and cooperation on technical and scientific issues;
- information management and public awareness issues, including, joint outreach and public awareness, information exchange and a clearing-house mechanism on health and environmental impacts, and joint input into other processes; and
- administrative issues, including joint managerial functions; resource mobilization, financial management and audit functions, and joint services; and
- decision-making, including coordinated meetings, convening an Extraordinary meetings of the Conferences of the Parties, and review arrangements.

Regarding resource mobilization, the decision invites the UNEP Executive Director “in consultation with the Director General of the Food and Agriculture Organization, in providing the secretariat functions of the Basel, Rotterdam and Stockholm conventions, to establish, on an interim basis, through the Executive Secretaries of the three conventions, a joint resource mobilization service within the secretariats in Geneva”. The aim of the service is to support the implementation of the three conventions beyond that achievable through separate action.

In February 2010, the first simultaneous extraordinary meetings of the Conferences of the Parties to the Basel, Rotterdam and Stockholm Conventions will be held in Bali, Indonesia. These meetings will take the process forward towards implementation of the synergies decision.

In addition to building on the existing institutionalized synergies process, there are several opportunities to be explored, such as cost-sharing in respect of specific aspects of waste and chemicals management, as well as common systems for capacity building provision.

B. Cost-sharing to sustain the national capacity created by the MLF of the Montreal Protocol to support chemical and waste-related conventions

The MLF of the Montreal Protocol has invested hundreds of millions of dollars and established a global ozone network which includes a national ozone unit (NOU) in each of the 144 countries,

and eight regional networks of national ozone units which provide regional platforms to supplement national efforts in implementing the Montreal Protocol. This global network has greatly facilitated the implementation of the Montreal Protocol and the institutions and fora could be well utilized to advance the goals of the other conventions. The additional cost for doing so would be marginal and consist of mostly additional personnel and communication cost.

Pursuing such an option would present certain legal and administrative implications. To initiate action, the Conference of the Parties which sees merit in such an arrangement should file a request with the Meeting of the Parties of the Montreal Protocol, detailing the co-operation envisaged. It is the prerogative of the MOP to either accept or reject such a proposal.

This arrangement should not present any financial implications to the MLF, although it will expand its mandate[14].It would represent significant cost savings to those conventions which are seeking capacity-building financing. This option would also help sustain the capacity created under the Montreal Protocol. On the other hand, the process to expand the NOU to other conventions may present legal and administrative uncertainties which still need to be explored.

C. Leveraging external funding to advance convention goals

Opportunities lie not only in bringing greater coherence to the chemicals and wastes cluster, but also in seeking opportunities for synergy with climate change and other areas.

Opportunities can for instance be explored in the direction of leveraging funds available under a certain regime to cover needs not covered by that regime. In the context of the MLF studies have been carried out and are still underway to address the issue of unwanted ODS and financing of destruction issues and relevant funding[15]. The first study, aiming at identifying appropriate management systems for the collection and treatment of unwanted ODS, identified among options for funding the destruction of unwanted ODS the direct assistance by the MLF and the Clean Development Mechanism (CDM) or other carbon-trading platforms, if credits could be issued for ODS destruction. However it was also acknowledged that neither the MLF nor the CDM have mandates to fund these activities[16].

The second study, specifically focusing on the funding aspects of ODS destruction, is still ongoing and explores the opportunities that voluntary carbon markets could provide for

[14] Further analysis would be needed to identify the kind of legal arrangements required to regulate the relationship. The administration of such funding – which would have to be external to the MLF – also needs to be examined. One of the possible modalities could be a trust fund arrangement where the MLF is requested to manage a source of funds in accordance with the policies and criteria determined by the convention concerned and disbursed together with the funds of the MLF.

[15] In response to the concern of developing countries over the growing stockpiles of unwanted ODS a study was commissioned in 2008 to identify appropriate management systems for the collection and treatment of unwanted ODS both in developing and developed countries. Another study was initiated in November 2008 upon request by the World Bank on financing the destruction of unwanted ODS. The objective of the study is to describe opportunities for funding ODS destruction through voluntary carbon markets, explore a methodology for validation and verification of ODS disposal and develop specific case studies. The basis for such a study was the realization that emission of these unwanted ODS would not only pose a threat to the slowly recovering ozone layer but would also present threat to climate since these ODS all have high global warming potential (GWP).

[16] The MLF is mandated only to fund the phase out of ODS consumption and production and not disposal and the CDM is mandated to accept only projects that reduce emission of chemicals listed in Kyoto's basket of gases, which does not include ODS.

generating financing for ODS destruction [17]. This study will be completed for submission to the Executive Committee of the Multilateral Fund in November 2009. Elements of this study could be of interest beyond the specific area of ODS as some of the mechanisms for identifying synergies between destruction of ODS and carbon markets could apply also to chemicals wastes management in broader terms.

D. Synergies in delivery of capacity building and technical assistance

Capacity building is required for the implementation of all chemicals and waste-related conventions and programmes and therefore is an issue that cuts across all options presented in this paper. In addition, special attention could be devoted to devising approaches to secure effective and sustained capacity building, including institutional strengthening, as well as technical assistance across the board to the extent possible.

Possible avenues in this direction could build on the existing delivery systems. In the case of the three Conventions, the main regional institutional base upon which to build a coherent and effective delivery mechanism that could address the chemicals and wastes management needs in a coordinated way are:

- Basel Convention regional and co-ordinating centres;
- Stockholm Convention regional centres[18];
- UNEP Regional Offices; and
- FAO Regional Offices.

A functioning regional network, operating on the basis of a comprehensive and cooperative programme based on the life-cycle approach of materials, could support the three Conventions to build on each of their particular characteristics while valuing their commonalities. The regional network should support the implementation of individual Convention while enhancing what is common to the three instruments (to avoid duplication, gaps, institutional confrontation and legislative hurdles).

The Basel and Stockholm Conventions' regional and coordinating centres, following an assessment and review as necessary of their effectiveness, could be promoted as hubs or key delivery mechanisms for the waste and chemicals conventions, protocols or programmes at the regional level to achieve economies of scale, to enhance capacity for resource mobilisation and to develop stronger technical capabilities for addressing the life-cycle management of chemical, including issues like enforcement and compliance. The network of regional and coordinating centres could be mobilised to provide training courses regarding enforcement, especially customs requirements, in cooperation with UNEP Green Customs Initiative, the World Customs

[17] These markets are not bound to the compliance markets and the extremely high GWP value of these ODS could be an attractive source of emission reduction credits. To date only one market the Chicago Climate Exchange (CCX) issues credits for ODS destruction, however other markets such as the Voluntary Carbon Standards 2007 (VCS) are not necessarily restricted to the 6 gases under the Kyoto Protocol and could potentially become markets for ODS destruction credits if an appropriate methodology is found.

[18] These regional centres were established under the Basel and Stockholm Conventions as delivery mechanisms for the promotion of environmentally sound management of respectively chemicals and wastes and for assisting in the implementation of and compliance with the respective Conventions. The systems set up under the Basel and the Stockholm Conventions however are very different, especially in respect of how the regional centres are nominated. Based on a review of their effectiveness, efforts could be made to make them vehicles for creating synergies and addressing capacity building needs as well as technology transfer in a more integrated way and with a wiser use of resources.

Organisation (WCO), the International Network for Environmental Compliance and Enforcement (INECE), the Seaport Environmental Security Network (SESN), Interpol, the European Environment Agency, IMPEL/TFS programmes in Europe, Africa and Asia and the Organisation for the Prohibition of Chemical Weapons (OPCW) and many other organizations working in this field.

Strengthened regional centres and coordinated regional approaches could also increasingly focus on the use of economic instruments to internalise environmental externalities, on regional procurement programmes, on promoting opportunities for attracting investments in clean technologies, as well as in promoting knowledge and understanding of other ways to attract funding or generate resources that can in turn be re-invested in promoting sustainable waste and chemicals management. This would include project development training programmes. Strengthened regional centres could also work on practical activities such as regional import agreements with chemicals suppliers. In such cases take-back arrangements could be agreed upon, preventing the build-up of unused chemicals.

Additional avenues include the promotion of the establishment of a clearing house mechanism among the Basel, Rotterdam and Stockholm Conventions and with UNEP on best practices; and the development of a common (Conventions and UNEP) information, public awareness and knowledge management strategy.

F. Mainstreaming sound management of chemicals and wastes into other sectors

As mentioned previously in this document, there are clear links between chemicals and wastes and the health, basic services and agricultural sections. It is likely that some additional bilateral resources could be leveraged through making these links. In the absence of enhanced consideration of sound management of chemicals issues in development planning, it is likely that international support for chemicals and wastes will be intermittent and unpredictable, channelled on a project-by-project basis at the technical level.

The international development partnership that has emerged since the Monterrey Consensus and the Paris Declaration has emphasized the importance of country driven programming as put forward in national development policies and plans. Therefore, where the sound management of chemicals is a country priority of sufficient magnitude, i.e. because it impacts upon achieving major development goals and objectives including the MDGs, it is important for the country to mainstream sound management of chemicals priorities into development policies and plans. In addition to influencing national budgets, this is the basis for clear communication with the international community on aid priorities in support of the MDGs and other poverty reduction goals and targets. The UNDP-UNEP Partnership Initiative for the Integration of Sound Management of Chemicals into Development Planning Processes is working with representatives from various ministries of developing countries and countries with economies in transition to build capacity and awareness. Progress, however, has been slow.

To expedite progress countries have requested: capacity building in understanding development planning processes, linking the sound management of chemicals to development plans, and economic analysis; guidance tools; and case studies on cost benefit analysis .

In addition to the above initiatives, donors and multilateral organisations can promote the mainstreaming of sound chemicals and waste management through their own development activities. Bilateral donors are increasingly taking a programmatic approach to development

activities. There are opportunities in the design and negotiation of these programmes to make the link between the development activities and sound chemicals and waste management, in a similar manner to the links that are made to activity impacts on climate change. This would serve to raise awareness of developing country counterparts in various government sectors to the cross-cutting nature of chemicals and wastes[19].

Education and capacity building will be required across the public sector at national level to ensure that the interlinkages between chemicals and wastes and other sectors are well understood.

5.2 Modifying structures, scope and working arrangements of existing financial mechanisms

The financial mechanisms that have been set up to address the financial needs associated with implementing the chemicals and wastes related conventions only cover specific chemicals and or conventions, or are limited in their scope. These mechanisms however could be modified in their mandate, scope and operations to better the unmet financing needs in the area of chemicals and wastes management.

A. Upgrade the SAICM Quick Start Programme

The second session of the International Conference on Chemicals Management provided a first opportunity to evaluate the performance of the financing of SAICM. While progress under all financial arrangements was apparent from the partial reporting received,[20] it was clear that securing the resources envisaged under each arrangement would be an ongoing challenge. Responses to a survey of stakeholders revealed that in the initial three years of SAICM implementation considerable efforts had been made by many Governments and organizations to support the financing of SAICM objectives at the national or sub-national levels. In the case of Governments, this often involved the integration of SAICM objectives into formal planning documents. Some developed country Governments indicated that existing plans and assessments relating to chemicals management adequately reflected SAICM objectives. Many of the Governments of developing and transition economy countries that responded appeared to be relying on projects under the SAICM Quick Start Programme as a means of assessing needs and integrating SAICM objectives. The use of economic instruments to support the cost of chemicals management was reported by many of the developed country Governments that responded.

With specific reference to the Quick Start Programme, comments on the adequacy on the effectiveness of the Programme were generally positive, though some respondents noted that administrative delays had affected the commencement of projects. Some respondents were of the view that more resources were needed and that restrictions on the number of projects for which individual countries were permitted to apply should be lifted.[21]

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[19] SAICM/ICCM.2/INF/46. UNDP-UNEP Partnership Initiative for the Integration of Sound Management of Chemicals into Development Planning Processes.

[20] See meeting documents for the second session of the International Conference on Chemicals Management at www.saicm.org, including SAICM/ICCM.2/6, SAICM/ICCM.2/INF/37.

[21] In addition to document SAICM/ICCM.2/6 and SAICM/ICCM.2/INF/37, see the report of the Executive Board of the Quick Start Programme and supplementary information materials in documents SAICM/ICCM/2/5, SAICM/ICCM/2/5/Add.1, SAICM/ICCM/INF/30 and SAICM/ICCM/INF/30/Add.1, and information on the Quick Start Programme business plan in document SAICM/ICCM/INF/24.

In reviewing the effectiveness of financinal arrangements for SAICM, the International Conference on Chemicals Management at its second session (ICCM2) adopted a wide ranging resolution on financial and technical resources for implementation.[22] Among other things, the resolution further encouraged the mainstreaming of chemicals management in national development planning, called for adequate priority to be given to SAICM objectives in development assistance, invited the private sector and institutions such as the World Bank to strengthen their support for activities contributing to SAICM implementation, welcomed the consideration of chemicals management during the fifth Global Environment Facility replenishment process, initiated an evaluation of the Quick Start Programme and invited stakeholders to report on implementation of overall SAICM financial arrangements[23]. SAICM financial arrangements will be further evaluated at the third session of the International Conference on Chemicals Management in 2012.

Based on evaluation of effectiveness of the Quick Start Programme, this programme or its model could be expanded to cover a wider scope of activities, including under the three chemicals and wastes related conventions.

Advantages that could be associated with this option include reliance on fast procedures, use of an existing mechanism that was recently created and could easily be upgraded, adequacy of a similar mechanism for addressing new chemicals, ad hoc issues, situations requiring rapid responses. Disadvantages could include the fact that the present time-bound nature of the QSP mechanism does not lend itself, in absence of changes in this respect, to long term durable financing.

B. The creation of a multi-donor Voluntary Trust Fund

This option would entail establishing an additional multi-donor, multi-year thematic voluntary trust fund for financing activities by three conventions and SAICM and developing joint programme actions at a bigger scale.

Advantages would include the possibility of following a step by step approach, introducing increasing programmatic and financial collaboration. A single voluntary trust fund may be more attractive to donors and assist developing countries in implementing their commitments, followed by the joint implementation activities. Disadvantages would include the limited impact on the image and capacity of the three conventions, which continue focusing on their individual programmes and actions.

This option would need to be further analysed, to examine possible hosting organization, legal and administrative arrangements, and funding policies among others. These aspects could be drawn from the other options, such as the upgrading of the SAICM Quick Start Programme just discussed above or importing some of the operational features of other financial mechanisms.

C. Introduce safe chemicals management as a new focal area under the GEF

In terms of the needs of the chemicals and wastes-related conventions as analysed in section II, the GEF is fully capable technically of financing and managing both capacity building programmes and investment projects which the Conventions require to achieve their goals. The GEF is designated as the key financial mechanism for the POPs Convention and has funded enabling activities through the preparation of national implementation plan in more than 100

[22] Resolution II/3 is reproduced in the report of the session, document SAICM/ICCM.2/15.
[23] Full details of the content of the Resolution are provide din Annex I to this document.

countries. However provisions in its Instrument prevent it from entertaining requests in the chemical management area outside the six focal areas. Any attempt to go beyond the allowed areas would need an amendment to the Instrument which requires the GEF Council proposing it and the Assembly considering and approving it by consensus.

Adding a new focal area requires the introduction of an amendment to be proposed by the GEF Council for the approval of the Assembly by consensus. This option has been reviewed and analysed in a number of papers, most recently in Long-term Financing for Implementation of the Strategic Approach to International Chemicals Management (SAICM/ICCM.2/12), a document prepared for the 2nd Session of the International Conference on Chemicals Management in May 2009. The analysis is comprehensive and provides latest development on the subject. Paragraphs 54, 55, 58, 59 and 60 in particular examine the legal steps and procedures to follow and a summary of the discussion is provided below.

The amendment to the Instrument could either introduce an additional chemicals focal area or expand the existing POPs focal area since the GEF has already included the latter, a chemical-related convention as a focal area. In the case of an expansion, the amendment has to ensure that the existing arrangements with the Stockholm Convention are mentioned in both substantive and financial terms. Evidently a number of governments already made submissions in support of a broad GEF focal area on sound chemicals management in the context of the upcoming GEF replenishment. Similarly a request has also been made by the 3rd meeting of the Rotterdam Convention.

Section 4.2 (B) includes an analysis of the GEF replenishment process indicating that a possible amount could be devoted directly to the sound management of chemicals in addition to what is allocated to POPs and ODS.

As far as the process is concerned, the ICCM of the SAICM should adopt a resolution requesting the GEF to consider the establishment of the new focal area by amending the Instrument. It should be noted that although some countries proposed this at ICCM2 in May 2009, this was not agreed, with some major countries preferring not to direct the GEF. It would be up to the policy organs of the GEF, specifically the Assembly and the Council to consider accepting. Or an understanding would need to be entered into between the GEF and SAICM on the arrangement between the two institutions. It could include for instance the policies, strategies and priorities decided by the ICCM, which adopts resolutions related to SAICM.

D. Expand the mandate of the Multilateral Fund of the Montreal Protocol to finance compliance with the chemicals and waste-related conventions

By design, the MLF is a single-purpose funding mechanism and it offers an excellent model for assisting compliance with the MEA it serves. Analysis has repeatedly confirmed that the overwhelming majority of the Article 5 countries have so far complied with the various interim control measures under the Montreal Protocol and are well-positioned to comply with the complete phase out of CFCs by 2010, the most potent and most widely used ODS.

Given that experience of the MLF in assisting countries to comply with the requirements of the Montreal Protocol has been a successful one and being a chemical-related convention, discussion on the MLF is relevant to the subject at hand. The MLF covers all the activities for which countries may need assistance in complying with the requirements of the other chemicals and waste-related conventions. It has the experience, the infrastructure and the global network to do so.

However, nothing in the Terms of Reference of the MLF gives any indication that it may open itself to entertain funding requests other than those related to the Montreal Protocol. Any proposal to place other chemical and waste-related conventions on its funding list would need consideration and approval of the Meeting of the Parties to the Montreal Protocol. Specifically it would require amending Article 10 of the Protocol which defines the mandate of the MLF. This may also require amending the Terms of Reference of the MLF and the Indicative List of Categories of Incremental Costs, which set out the basic operating parameters of the MLF.

It is worth noting however that there have been some recent developments that indicate a new possible level of flexibility under the Protocol. Firstly, at the Workshop on the management and destruction of ODS and open-ended dialogue on high GWP alternatives for ODS which convened in Geneva in July 2009, immediately prior to OEWG-29, in presentations on funding possibilities the MLF noted that it was collaborating with other funding mechanisms. Secondly, Parties are also currently considering proposals to include HFCs, a non-ODS, in the Montreal Protocol, so there is already some internal examination of expanding the scope of the fund in some quarters.

In sum, the MLF could manage to meet all the needs of the chemicals and waste-related conventions, as it has the experience, the infrastructure and the global network to do so. In the following paragraphs a few initial possibilities are explored which if deemed interesting would require closer examination.

- ***Add chemical and waste-related conventions to the funding list of the MLF***

Pursuing this option would need consideration and approval of the MOP of the Montreal Protocol and amending the mandate (Article 10 of the Protocol) as well as the Terms of Reference and the Indicative List of Categories of Incremental Costs.

To initiate the action, the COPs of the three conventions (and ICCM/SAICM) should each need to adopt a resolution to request the MOP of the Montreal Protocol to consider funding the compliance needs of countries under the Basel, Rotterdam and SAICM conventions through the MLF.[24] It would be the prerogative of the MOP of the Montreal Protocol to accept or reject the requests. Should the outcome be positive, a memorandum of understanding would be entered into between the MOP of the Montreal Protocol and the COP of each of the Conventions which would define the specifics of the arrangement between the various Parties.

Expanding the mandate of the MLF may need changes in the governing structure and decision-making process both at the MOP and the Executive Committee. Two governance possibilities have been put forward: the first is a governing structure based on multi-convention consultation, which would require consultation and consensus among all Conventions for decision-making. The second is to keep the existing structure, which would require consultation among conventions but would leave decision making with the existing organs under the Montreal Protocol. At the MOP level where general policy matters such as the replenishment are decided, the first possibility may involve the consultation among the COPs of each of the Conventions to achieve consensus. Although this could be more equitable, it is also time-consuming.

The first possibility may also call for changing the composition of the Executive Committee which is currently composed solely of representatives of Governments that are Parties to the

[24] Each of the resolution should include a description of the policies, strategies and priorities and a list of categories of incremental costs eligible for funding for the purpose of the convention.

Montreal Protocol. This may have to be amended to include representation from the other conventions. Under the second possibility the Executive Committee maintains its current make-up and is delegated to act on behalf of the other conventions in exercising authority on fund management in accordance with the policies and project eligibility criteria decided by the conventions.

The two possibilities on the governing structure of the expanded MLF are likely to have an impact on assessing its financing needs. Under the second possibility a single unified and integrated assessment of funding needs of all the conventions will have to be undertaken, taking into account the synergies across conventions. There could be savings in this regard as compared to a separate assessment done for each convention under the first possibility.

Advantages of pursuing this option, whether possibility one or two, include providing a stable source of funding for the various chemical and waste-related conventions to facilitate compliance; reducing chances of repetitive and duplicative funding as compared to the existing separate funding under each convention; enhancing the possibility of generating real synergies and better chance of sustaining project results. Disadvantages of this approach include possible incompatibility of the organs and institutions of the MLF designed for a single convention for the purposes of a financial mechanism for servicing multiple conventions.

- ***Transform the MLF of the Montreal Protocol to the MLF for the safe management of chemicals***

Another possibility is transforming the MLF to become responsible for the overall funding of sound chemicals management. This is tantamount to establishing a new financial mechanism. Since it will involve several existing conventions and steps towards it will fall within the responsibility of different departments at the country level, internal coordination within each country among these departments would be necessary to demonstrate interest in such a concept and agree to a lead department to explore the concept in global negotiations. If interest is demonstrated in a sufficient number of countries, the UNEP Governing Council could give the Executive Director a mandate to develop the concept into a draft legal framework, taking as reference the terms of reference of the MLF of the Montreal Protocol and the Instrument of the GEF.

Since such a new MLF will be the financial mechanism for a number of conventions, it is envisaged that the governing structure would be modelled on that of the GEF. That is, it would have an independent policy-making organ like the GEF Assembly and its own Executive Committee for managing the funding operations. Like the GEF, the new MLF will enter into agreements with the COP of each of the conventions, through its Executive Committee to coordinate and agree on the funding priorities of each convention and an indicative funding level of each funding cycle.

It is envisaged that resources which are currently dispersed at different funding sources for the various conventions would be centrally pooled. These could include funding under the existing MLF, the GEF funding for the Stockholm Convention, funding pledges made for the Basel Convention, the Rotterdam Convention and SAICM. It should also include the planned funding from bilateral sources for these conventions. Replenishment of the new MLF could follow the pattern of the existing MLF at a three-year interval and should be based on the careful analysis of the funding requirements of each convention in light of its compliance needs in the upcoming cycle, taking into consideration the potential for savings derived from synergies across conventions.

As with the previously described option, a key advantages of pursuing this approach is to provide a stable source of funding for the various chemical and waste-related conventions to facilitate compliance; reducing chances of repetitive and duplicative funding as compared to the existing separate funding under each convention; enhancing the possibility of generating real synergies, and a better chance of sustaining project results. For example, a national chemicals unit taking care of all conventions at the national level would not have to be dissolved with the completion of the Montreal Protocol work, while a national ozone unit would probably disappear with valuable capacity created during Montreal Protocol implementation being lost.
Disadvantages include the possibility of long, complicated and potentially difficult negotiations to agree on a new financial mechanism. Another concern is that moving the MLF from a single focus financial mechanism to a broader mandate would in some way compromise and disrupt the smooth and orderly operation of the MLF and ultimately reduce commended effectiveness.

Another option that could be explored under the MLF operations relates to cost-sharing to sustain the national capacity. More details about this option are outlined under synergies in Section 5.1.

5.3. Flexible Instruments: Private Sector Partnerships and Economic Instruments

There is a need to internalise negative externalities of chemicals and waste management. Therefore, the following section aims to explore innovative and financial approaches that may serve to internalise the costs of externalities and also provide funding. It also looks at the potential of commercial partnerships between the supplier and the client as a way to finance the needs of countries for safe management of chemicals and wastes.

A. Private sector partnerships to advance conventions and other programmes goals

Import/export control or fiscal incentives/disincentives: The chemical industry is unevenly distributed with a high concentration of production in a limited number of countries. Trading chemicals between countries helps meet the demand. For instance, only seven of a total of more than 140 developing countries were producing CFCs, the most widely used and most potent ozone depleting substances (ODS) under the control of the Montreal Protocol while the rest of the countries received their supply through imports. The limited sources of supply could be advantageous to the implementation of the chemicals conventions. The traditional supply chain between the supplier and its clients could contribute to the control of the chemicals if awareness and action could be initiated at the supplier end. For instance, the supplier of CFCs could advise its clients in advance of its intention not to sell CFCs any more but to supply replacements /substitutes. In order to maintain the business, it is in the interest of the supplier to provide the technical support to its clients to use the new chemical. Such partnerships are business-driven and sustainable. Any cost differentials in the switch-over will be smoothed out by supply and demand at the market.

However, such partnerships may not happen of its own accord solely on account of the environment benefits of the conventions and would require the intervention of the government both in the country of the supplier and the country of the clients. Such intervention could be in the form of import/export control as have been under the Montreal Protocol, or fiscal incentives /disincentives. Strictly speaking it is not a new avenue but rather a traditional business model for the development of the chemical industry where more efficient and safer products replace the less advantageous chemicals.

B. Economic instruments

Integration of waste minimization strategies into low carbon path mitigation/adaptation measures: Efforts of the past two decades have fallen short of responding to environmental needs and demand in general, and especially in the chemicals and waste sectors. Because climate change issues have become pressing and popular, huge efforts and a large array of innovations have seen light. The idea is for the chemicals and waste cluster to benefit from all these efforts and ideas. Taking into account that there is one atmosphere it would make sense to bring synergies among the measures to mitigate the increase in greenhouse gas emissions with those measures to reduce atmospheric pollution by hazardous chemicals such as mercury, dioxins, furans or heavy metals. Additionally, taking into account that the major emitters of greenhouse gas are also major generators of hazardous waste, why not combine mitigation measures to protect both the domestic and global environment.

Climate change and unsound management of chemicals and wastes both increase both increase vulnerability. Under the climate change regime developing countries are undertaking vulnerability and adaptation assessments, however vulnerability is not limited to climate change. For example, a vulnerable population could be assisted, as part of a programme on climate change, to improve its agricultural production through enhancing fresh water access and management. But if the water is contaminated by leachates from mining waste or obsolete stocks of pesticides containing lead, heavy metals or mercury, people may suffer from poisoning or other health handicaps that may affect their ability to cultivate and grow food. Without the sound management of chemicals and wastes communities, water supplies are at risk. There may be opportunities to consider a more comprehensive approach to vulnerability.

Thus, there is a parallel between climate change and sound chemicals and waste management in that most of the emission increase in developing or emerging countries, is likely to come from the exploitation and consumption of fossils fuels, mainly coal, gas and petrol, which are the same sources generating harmful chemicals and waste. By integrating waste minimization into low carbon path mitigation measures in key industrial sectors and deploying cleaner production processes as a complement to low carbon technologies dual benefits for climate and chemicals and wastes can be achieved. This would have dual climate change and chemicals and wastes benefits. Chemical industries operating in developed countries are being allowed to purchase offsets in developing countries through the Kyoto Protocol Clean Development Mechanism (CDM). It facilitates developed countries abatement at lower cost in developing countries while channelling resources to developing countries that build greenhouse gas abatement capacities. This carbon market is, however, under scrutiny and there are voices calling for it to be changed.

How much such market-based processes would enable governments, people, industry, business and services to respond effectively and adequately to immediate, pressing and urgent problems' and to the long term changes essential to cope with global environmental problems remains to be seen. Central to any financial strategy is the capacity to anticipate, an ability that is questionable with the current innovative financial mechanisms. The current market structures are not very effective in fostering substantial and timely reduction of environmental burden whether in the case of reducing CO_2 emissions or pollution loads.

Integration of sound chemicals and waste management into the Global Green New Deal: There are also important links with the green economy concept. Managing or minimizing consumption will decrease the burden of destruction requirements. As will take back schemes for unused chemicals and national efforts to match the amount of chemicals ordered, to the amount of chemicals used. This is particularly relevant to the case of pesticides – where unused pesticides

are often stockpiled because they were over-ordered. Many of the bigger obsolete pesticide arising are the result of the vagaries of the centrally planned economies and of large aid donations.

As chemical production is unevenly distributed with a high concentration of production limited to a small number of countries, the limited sources of supply could be advantageous to the implementation of the chemicals conventions, if developing countries worked together on a regional basis to form economies of scale and negotiate regional procurement programmes with suppliers and distributors. These could be coordinated by the regional coordinating centres and would provide the opportunity to negotiate take-back schemes for disused chemicals. Such regional procurement programmes may also provide the opportunity to support green chemistry initiatives. Many national policies discount the hazardous properties of chemicals relative to their function, price, and performance. Regional programmes may serve to overcome these market barriers to support green alternatives.

Green chemistry is not new but it allows the industry to investigate new paths, especially in the design of molecules. As such, it would make great sense that such up-stream consideration be promoted in a more forceful way within UNEP, SAICM and the MEAs. It is the objective of the Basel Convention, for instance, to help reduce the generation of hazardous waste. To do it, it is less costly and more efficient to make it happen at the design stage; less costly to companies in particular, to the society in general.

If the green chemistry agenda is left to industry alone, the progressive reduction of harmful chemical components would be dictated by business considerations alone. This agenda needs to be opened up in intergovernmental forums for which the common good is the ultimate objective.

6. ORGANIZING PRINCIPLES FOR MOVING FORWARD: BUILDING BLOCKS

Needs of countries are varied and specific, although many commonalities exist. Focusing on a single mechanism will not solve the problem, but a wide range of measures and mechanisms need to be engaged to provide sufficient financial resources for chemicals management on the long term.

A strategy therefore has to be devised, building on the possible role of different stakeholders, i.e. the private and NGO sectors, as well as stakeholders at the national, regional and international levels and in the donor community. The starting point for bridging the gap between growing challenges and inadequate resources should be the much more efficient use and systematic strengthening of already existing capacities and structures. A huge variety of stakeholders are involved in the production, handling, use and disposal of chemicals and wastes, as well as the respective legal, control and enforcement structures. Each stakeholder group has its own incentives to engage in environmentally sound chemicals management. There is a common, but very much differentiated responsibility among the stakeholders involved. The process of looking for a more sustainable financial basis for chemicals and waste management should take into account not only the responsibilities, but should also acknowledge and systematically support the interests and potential incentives for stakeholders to engage in environmentally sound chemicals and waste management.

The following building blocks can be seen as organizing principles for moving forward, as they identify some of the roles that stakeholders at different levels could play in securing the necessary resources for the chemicals and wastes management needs.

6.1. Private and NGO sector

A. Building Block: Green Economy

The launch of the Global Green New Deal and the Green Economy Initiative present a unique opportunity to rethink the perception of chemicals and waste management. In the framework of these initiatives, efforts should be made by UNEP and the MEA Secretariats to promote a shift from a mere "recipient mentality", i.e. viewing chemicals and waste management as a costly operation for which funding has to be raised, to focusing more on the economic opportunities provided by the relevant operations. This is especially true for recycling and recovery of certain types of wastes, which generates secondary raw materials with a market value. Such waste streams should increasingly be perceived as a resource and economic opportunity. The fact that a market exists for certain types of recycled materials is evidenced by the existence of informal sectors for recycling specific waste streams (notably electrical and electronic wastes, and obsolete ships). Such informal sectors would not exist if there were no income to be derived from the operations. Opportunities should be sought to upgrade these informal sectors so as to make them consistent with the protection of human health and the environment. If improved procedures and infrastructure will also allow the extraction of larger quantities and/or better quality of secondary raw materials and thus yield more economic benefit, there is an incentive for investing in such procedures and infrastructures. There is thus a potential for creating business and employment opportunities (we should acknowledge here the commodities crash and that viability of these sectors fluctuate).

Expected outcomes could include:

- Identified areas in which economic opportunities already exist;
- Proposals for further enhancing such opportunities, and promoting additional ones;
- A strategy for engagement with relevant entities in the private and public sectors.

B. Building Block: Public-Private Partnership

Public-private partnerships could be used as a vehicle to engage the knowledge and financial capacity of industry in areas of mutual interest. Rather than merely approaching the private sector with requests for funding, such partnerships should be based on engaging the expertise and capacity of private companies in a way that is also beneficial for them. Benefits could include public recognition gained for private sector activities that contribute to improved management of chemicals and wastes in concrete ways, and economic benefits to be gained, which may be identified in the framework of the Global Green New Deal /Green Economy. The Basel Convention currently has two such partnerships, both in the area of electronic wastes, comprised of representatives of personal computer manufacturers, recyclers, international organisations, academia, environmental groups and governments. One of these partnerships has recently introduced the concept of membership contributions from industry – another avenue to raise funds.

Expected outcomes could include:

- Product life-cycle approach with the aim to avoid use of harmful substances during production and uncoupling of production and use from waste generation (green product design, chemical leasing);
- Chemical accident prevention, preparedness and response;

- Introduction of chemical safety and environmentally sound waste management in small and medium size enterprises in developing countries, and establishment of alternative income for the informal sector handling hazardous chemicals.

6.2. Stakeholders at the national level

A. Building Block: Integration of the sound management of chemicals into national policies and plans

An important step on national level is to integrate sound management of chemicals into development plans such as poverty reduction strategy paper and strategy to meet the Millennium Development Goals. This involves establishing the links between poverty and sound management of chemicals, such as improved human and environmental health, and increased economic securities and income opportunities for the poor, and identifying the policies and programmes needed to bring about pro poor chemicals management. It also involves looking at potential chemicals risks arising from implementing section of development plans, and trying to mitigate such risks at the planning stage. Further, national funding through a greater and more systematic use of economic instruments should be considered as well. This approach should be followed on recipient and donor site likewise.

Governments are the immediate stakeholders of the chemicals conventions. For the purposes of public awareness, there may be a need to expand the user-base of the conventions to a wider audience. Messages should be also targeted at sectors such as environment, industry, agriculture, and health as well as to public interest NGOs, donors, the media, educational institutions, other UN or international agencies and even at specific groups such as mothers, children, customs officers, etc.

Expected outcomes could include:

- Governments incorporate in their national development plans and strategies measures to implement the chemicals and waste related MEAs in order to ensure coherence in their national priority setting and to facilitate the provision of aid by donors in accordance with the Paris Declaration on Aid Effectiveness and in response to country and regional demand;
- Consideration and introduction of national funding through a greater and more systematic use of economic instruments;
- Better understanding of the general public on the risk of chemicals through information campaigns and what the public user/consumer can do about it will strengthen public support for introduction of safety measures.
- Bilateral funding of sound management of chemicals should be integrated into donor countries aid programmes and consideration of the cross-cutting issue of sound chemicals management should be given by donors at the programmatic level;
- Measures to integrate sound chemicals management have to ensure on one hand a holistic approach on national level; on the other hand they need to serve the objectives and decisions of the conventions and COPs to contribute to the global environment protection goals.

B. Building Block: National coordination

In most developing countries and countries with economies in transition at least a basic administrative infrastructure exists with designated national authorities and focal points for

chemicals and waste related conventions and institutions, as well as industry, trade, and import/export control. The chemicals and waste related infrastructure is summarized in many countries in the respective National Profiles or more specific in the National Implementation Plans for the Stockholm Convention. However, in many cases the legal framework for comprehensive control and enforcement as well as the governmental institutions are weak, have insufficient staff and logistical support and are not well connected to other national, regional and international institutions. To increase the efficiency of the scarce resources available, governments should establish or strengthen, as necessary, national processes or mechanisms for coordination.

Expected outcomes could include:

- Strengthened and efficient national cooperation and coordination among relevant sectors, ministries and programmes at the national level with respect to, among others, the following:
  - Protection of human health and the environment for the harmful impacts or adverse effects of hazardous chemicals and wastes;
  - Prevention of accidents and emergency response in case of accidents;
  - Combating illegal traffic and trade in hazardous chemicals and wastes;
  - Information generation and access;
  - Technology transfer and transfer of know-how;
  - Preparation of national positions for meetings of the Conferences of Parties and other bodies of MEAs;
  - development cooperation.
- Promotion of cooperative activities at the national and regional level as far as possible.
- Facilitation of the listing of new substances under the chemicals related conventions.
- Governments promote coordination between bilateral and multilateral donors to ensure consistent and non-duplicative assistance to the recipient countries in their implementation of chemicals and wastes related MEAs.

6.3. Stakeholders at the regional level

A. Building Block: Regional coordination

Regional economic integration organizations are already established in many regions. Similar to the processes on national level, it is also important on regional level to integrate sound management of chemicals into regional development plans and strategies to meet the Millennium Development Goals. Existing regional institutions with respective mandates need to become involved and advocate for chemicals management issues of relevance to the region, e.g. trade, health and pollution issues which reach beyond national borders. Regional Convention Centres and Regional IGO offices can support the process by raising the profile of the chemicals management agenda in regional political discussions and negotiations.

Expected outcomes could include:

- Mainstreaming the chemicals agenda in policy approaches of Regional Economic Organizations;
- Chemical issues being discussed and decided upon at regional environmental ministerial conferences.
- Regional Convention Centres synergised into Regional Centres for the Sound Management of Chemicals and Wastes

- Regional Centres resourced and capable of: developing regional procurement plans for chemicals procurement; and providing training in the development of economic instruments for chemicals and wastes.

6.4. Stakeholders at the international level

A. Building Block: Responding to the call for policy integration

The sound management of chemicals and of hazardous waste remains a critical factor in achieving sustainable development objectives and Millennium Development Goals. As such it has been high on the international political agenda since 1972 with the United Nations Conference on the Human Environment during which pollution with toxic and dangerous substances was a central issue. It was specifically addressed in 1992 by the United Nations Conference on Environment and Development with the adoption of Chapter 19 (on Environmentally sound management of toxic chemicals, including prevention of illegal international traffic in toxic and dangerous products) of Agenda 21 and again at the WSSD in 2002 paragraph 4 where the 2020 goal of producing and using chemicals in ways that lead to the minimization of significant effects on human health and the environment was established in the Plan of Implementation of the Johannesburg Summit, paragraph 23.

In response to the need for a comprehensive framework to chemicals management, the international community adopted at the International Conference on Chemicals Management in Dubai 2006 the Strategic Approach to International Chemicals Management (SAICM). With the rapid development of a significant number of international legal instruments and policies for the environment, there has been an increased competition for funds. The success of adequate policies will therefore be dependent on the capacity to continue raise awareness and maintaining a political and technical focus on the importance of sound management chemicals while demonstrating the contribution and relevance of its programme to the "UN Delivering as One" new set of priorities particularly within the context of the implementation of sustainable development policies.

Increasing political and financial support could possibly be best achieved by "packaging" the issues in a more attractive manner than is currently the case, e.g. through the link with human health, livelihood, and poverty reduction, and the related MDGs. Causes that are emotionally appealing stand more chance of receiving political and financial support than those without such emotional appeal. This is evidenced, for example, by the success of the Global Fund to Fight AIDS, Tuberculosis and Malaria, and the Vaccine Fund of the Global Alliance for Vaccines and Immunization (GAVI). Both these funds are devoted to fighting deadly diseases in developing countries, and both are funded through voluntary contributions from governments, private foundations, corporations and individuals. Arguably, the health effects and human suffering caused by hazardous chemicals and wastes can be just as serious as the diseases targeted by the Global Fund and the GAVI Fund. Emphasizing this aspect of the problem, and the link to the relevant MDGs, could serve to enhance public concern and hence political and financial support. As developing countries play a rapidly increasing role in the manufacturing and use of chemicals, strengthening of their chemical safety and toxic waste management frameworks will have economic, environmental and health advantages for all concerned.

Expected outcomes could include:

- Explicit links of chemicals and waste management should be established with issues that already benefit from a high level of political and financial support, such as poverty reduction strategies, health, climate change, energy, and biological diversity, by

highlighting the contributions of chemicals and waste management to these issues and thus providing access to some of the funding available for these issues.
- Less overlapping directions from different Conferences of Parties affecting implementation of the different but interlinked regimes.

B. Building Block: Public-Public Partnership

It is necessary that the stronger partner support the weaker partner, not only on a project basis where implementation responsibility lays on one side only, but with the understanding that joint efforts have to continue as long as necessary to achieve the common goal. Partners with shared responsibilities are needed, not donors providing financial resources only.

Bearing in mind the limited resources available and the low priority of chemicals and waste management, institutions in developing countries that enforce chemical management regimes, e.g. Convention Focal Points, and the International Network for Environmental Compliance and Enforcement (INECE), need assistance on a long-term basis. In this special field of enforcement support, it should be considered to move away from 3-5 year projects, to support of long-term partnerships of 10-15 years between competent authorities in developed and developing countries.

Respective institutional interactions already exist, but they work on time-limited project basis and have mainly advisory function when it comes to concrete actions in partner countries. The institutions need a stronger enforcement mandate with a financial and institutional commitment from developed country governments and a cooperation commitment from developing country institutions to structure their international networks and enforcement cooperation programmes on a long-term basis. This could be organized by bilateral or multilateral cooperation agreements, or by memoranda of understanding at the operational level.

Expected outcomes could include:
- Establishment of a permanent international communication infrastructure (phone, internet) for exchange of enforcement data;
- Routine exchange and training of officers (North-South, South-South cooperation), access to and use of databases that facilitate joint and mutually agreed enforcement actions.

6.5. Donor Community

A. Building Block: Existing financial mechanisms

All sources of financing for chemicals have to be taken into account, i.e. national funding, bilateral funding and multilateral funding. All those sources should be mobilized and coordinated to provide adequate responses to the challenges of managing chemicals and hazardous waste soundly. It is emphasised that the quantitatively the bulk of funding will come from national and bilateral funding, with multilateral funding only supplementing national, bilateral and regional efforts.

UNEP and the MEA Secretariats could assume a leading role in strengthening waste and chemicals management in the agendas of competent UN Agencies and International Financial Institutions that have the resources, capacity and expertise for large-scale infrastructure projects, such as UNDP, UNIDO, GEF, ITU, UNESCO, the World Bank, and regional development banks. UNEP and in particular the MEA Secretariats should play a facilitating role in proposing areas of

intervention and providing the necessary technical and legal expertise on the international legal rules provided by the respective Conventions, which relevant projects should adhere to.

Expected outcomes could include:

- Hazardous chemicals should not be procured with financial support of donors, even if the alternative products and measures might be more expensive. For example, DDT is still allowed in certain countries for malaria vector control, but should no longer be purchased under development assistance programmes, because alternatives are available.
- Investments in plants producing or handling dangerous substances must ensure fulfilment of the highest international standards with respect to chemical accident prevention, preparedness and response, and environmental protection.
- Energy efficiency programmes which involve modernization of grid equipment including transformers should always include provisions for take-back systems and environmentally sound disposal of the old equipment, e.g. PCB contaminated transformers.
- Bridging the digital divide initiatives and institutional strengthening programmes including procurement of electronic equipment should always include provisions for take-back systems and environmentally sound disposal of the old computer.
- Transport programmes including the procurement of ships, cars and other machinery should include provisions for take-back systems and environmentally sound disposal of the old transport systems that might contain harmful substances.
- Project designs should routinely consider risks associated with chemicals and wastes in the same manner that climate change risks are considered, and include mitigation measures, in the design framework.

B. Building Block: New and additional multilateral financial resources

New and additional multilateral financial resources should be seen as supplement to the international development agenda, carefully considering other support programmes and avoiding duplication or overlap of projects. One possibility to be considered is the creation of a new fund, which could be either an intergovernmental mechanism or a mechanism to which non-governmental entities could also contribute. In order for such a mechanism to be successful, there would need to be widespread political support for its creation; the prospect of a broad, stable and predictable financial basis; and a clearly defined, focused and realistic objective. The question of possible duplication with existing mechanisms (most notably the GEF) would also need to be considered. A possibility could be to aim for expanding the GEF POPs Focal Area to the Rotterdam and Basel Conventions and SAICM, as a longer-term objective of the synergies process.

Expected outcomes could include:

- New and additional resources are available for management schemes in developing countries and countries with economies in transition to supplement the international developments, partnerships and existing other support programmes to avoid duplication or overlap of projects.

C. Building Block: Foundations

Increased efforts should be made to attract funding from private foundations (e.g. Gates, Bloomberg), following the successful approach of WHO Tobacco Free Initiative and the 2003 Framework Convention on Tobacco Control, for example. In order to attract the interest and

support of such foundations, the issues would need to be perceived as emotionally appealing and hence worthy of support, as outlined above.

Expected outcomes could include:

- Individual foundations becoming lead sponsors for certain chemicals and waste topics, e.g.
  - Gates Foundation not only supporting the fight against malaria, but taking on board also lobbying and supporting introduction of alternatives to DDT in malaria control measures;
  - Foundations supporting children vaccination programmes (involving millions of syringes) in developing countries to include issues of environmentally sound disposal of hospital waste in their aid programmes.

ANNEX I

Building Blocks for Financing Chemicals Management

1. Introduction

This document aims at supplementing the desk study which is under preparation in response to a request from the 1st Meeting of the Consultative Committee on Financing Options for Chemicals and Wastes, held in Nairobi on 24-25 July 2009. The points raised have the nature of a thought starter and do not claim to be a comprehensive assessment and conclusive analysis.

Section 2. provides some background on chemicals and waste issues in the global context, and describes challenges with financing chemicals management. Sub-section 2.2. draws in particular the attention to the SAICM process which already sets out a comprehensive policy framework and a full range of financial arrangements to support the broad chemicals management objectives of SAICM in its Overarching Policy Strategy. In Section 3. the bridging of the gap between growing challenges and inadequate resources is discussed and main points for consideration are summarized.

Section 4. describes some Building Blocks of potential responses to the challenge of increasing the financial basis for environmentally sound chemicals management. The Building Blocks address different stakeholders in the private and NGO sector, at national and international level, and the donor community.

2. Background

2.1. Context and challenge

The continued growth pattern of global production, trade and use of chemicals exerts an increasing chemicals management burden on the developing countries and countries with economies in transition that often have the least capacities to deal with such complex challenges. By 2020, developing countries are expected to lead the world in growth rate for high volume industrial chemicals, increasing their share of world chemicals production to 31%. Chemicals consumption in developing countries is likewise growing much faster than in developed countries and could account for a third of global consumption by 2020. At the same time, these are often the countries with the weakest capacities to deal with the complex challenge posed by sound management of chemicals.

The global economy is simultaneously seeing a rapid increase in generation of hazardous waste. Reflecting the continued increase in global consumption, waste volumes are predicted to grow at a rate similar to GDP the foreseeable future. Moreover, available figures do not reflect the true scale and impact of illegal waste movements and dumping. These effects can be particularly severe in developing countries. An irrefutable link has been established between the condition of poverty and increased risks of exposure to toxic and hazardous chemicals and waste, as they predominantly affect the poor who routinely face unacceptably high risks because of their occupation, living situation and lack of knowledge of sound chemicals or waste management. While chemicals are a major contributor to national economies, their sound management throughout their lifecycle is essential not only to avoid significant risks to human health and ecosystems along with their associated economic costs, but also to maximize the full benefits of their contribution to human well being.

The fundamental problem to be addressed by the Consultative Process is the status of chemicals and waste management as the “poor cousins” of more prominent issues such as poverty eradication, education, health, and climate change.

The undesired side effects of chemicals, and all aspects of waste management, are generally considered unattractive. Dealing with these issues is often perceived as a necessary evil, an unwelcome burden that is costly and unrewarding. There is no glamour attached, and political and financial initiatives tend to focus

on other issues that do promise recognition and visibility. Even with strong international advocacy since Agenda 21, Chapters 19 and 20, respectively on Environmentally sound management of toxic chemicals, including prevention of illegal international
traffic in toxic and dangerous products and environmentally sound management of hazardous wastes, including prevention of illegal international traffic in
hazardous wastes, were adopted, chemicals and waste management remains at the very bottom of any political agenda at the international, national and even local level, and consequently receives only limited financial support.

Hence, the Consultative Process should take into account the root cause of the problem, i.e. low priority and absence of political interest, and should start developing realistic options for financing chemical issues based on the current situation.

Unlike other environmental conventions, where engaging the general public is easier due to the focus of their work, like animals, plants, or climate change, the chemicals related MEAs face a more challenging task, as chemicals are generally perceived as less visible in our daily lives, unless there is broad press coverage of accidents involving chemicals, such as for example the accidents in Bhopal and Seveso or more recently in Cote d'Ivoire. It is easier to understand that choosing to buy an ivory object may contribute to the decline of elephant populations than to understand the choices that need to be made to avoid being delivered with a life-load of POPs. General understanding of these MEAs may also be linked to the fact that the effects of these chemicals on human health and the environment tend to be cumulative and may only become apparent after long-term exposure.

2.2. SAICM setting out a comprehensive policy framework

Most of the chemicals related MEAs have a strong scientific basis justifying the need for their conclusion but generally, they are still confronted with insufficient financial and/or market based mechanisms necessary for their implementation**.** The recently developed Strategic Approach to International Chemicals Management (SAICM) sets out a comprehensive policy framework for the achievement of global chemicals management objectives, including in relation to multilateral environment agreements, and the financing of their implementation.

Discussion of the need for additional financial resources and better use of existing resources to support chemicals management objectives featured prominently in the negotiation of SAICM. A full range of financial arrangements to support the broad chemicals management objectives of SAICM are set out in its Overarching Policy Strategy. The financial arrangements envisaged to support implementation of SAICM include:

(a) *Actions at the national or sub-national levels* to support financing of Strategic Approach objectives;
(b) *Enhancing industry partnerships and financial and technical participation* in the implementation of Strategic Approach objectives;
(c) Integration of SAICM objectives into *multilateral and bilateral development assistance cooperation*;
(d) *Making more effective use of and building upon existing sources of relevant global funding,* such as the Global Environment Facility and the Multilateral Fund for the Implementation of the Montreal Protocol;
(e) Supporting initial capacity-building activities for the implementation of SAICM objectives under the new SAICM "*Quick Start Programme***"** and its voluntary, time-limited trust fund.

The second session of the International Conference on Chemicals Management provided a first opportunity to evaluate the performance of the financing of SAICM. While progress under all financial arrangements was apparent from the partial reporting received, it was clear that securing the resources envisaged under each arrangement would be an ongoing challenge. Options for the long-term financing of SAICM implementation were canvassed in.

The evaluation and reporting on SAICM financial arrangements will be taken up at the third session of the International Conference on Chemicals Management in 2012. This will be an occasion to review what is hoped will be a period of consolidation and accelerated implementation following the start-up phase (2006-2009) (for more details see Annex A).

3. Bridging the gap between growing challenges and inadequate resources

Starting point should be the much more efficient use and systematic strengthening of already existing capacities and structures on national, regional and international level. Increased visibility of inter-linkages between chemicals on the one hand, and health, trade, production, consumption and waste disposal on the other hand is needed as well as political support to make this linkage operational on national and regional levels and in international fora.

A huge variety of stakeholders is involved in the production, handling, use and disposal of chemicals and wastes, as well as the respective legal, control and enforcement structures. Each stakeholder group has its own interests to engage in environmentally sound chemicals management. There is a common, but very much differentiated responsibility among the stakeholders involved. The process of looking for a more sustainable financial basis for chemicals and waste management should take into account not only the responsibilities, but should also acknowledge and systematically support the interests and potential incentives for stakeholders to engage in environmentally sound chemicals and waste management.

Chemicals management is still a young field in development cooperation, but it is one that is emerging more and more as a cross-sectoral theme. Almost all fields of development cooperation and environmental policy are affected: protection of the environment and natural resources, health, education, women, agriculture, land rights, industrial policy, health and safety at work, trade unions, child labour, human rights, good governance, the fight against corruption, the efficiency of state institutions, and questions of international cooperation, such as those relating to the implementation of conventions, safety standards and industrial standards. In all of these areas the sound management of chemicals and waste can be seen as an indicator of successful development – and this is true everywhere, in industrialized countries just as much as in threshold countries and developing countries.

Indeed, it has become increasingly clear, as reported in a number of intergovernmental and COP decisions, declarations and summits, that not only continued deteriorating environmental trends have far reaching economic, social and health implications and affect the world ability to meet its development goals, but also that the many root causes of chemicals and other environmental problems cannot solely be solved through strictly environmental and regulatory policies alone. Chemicals management and hazardous waste management intersect other important national and international objectives related to sustainable development including protection of vulnerable groups, protection of water supplies and drinking water and poverty eradication. The decisions and activities taken regarding the sound management of chemicals and hazardous waste should be viewed within these broader issues.

The international instruments and processes successfully agreed upon are still confronted with a set of common challenges including the insufficient use of market based mechanisms, inadequate legal and technical capacity, lack of access to affordable and safer technologies and alternatives, the need for prioritizing and integrating chemicals and waste strategies and plans into national development plans, and the lack of national coordinating framework of programme in implementing international agreements and processes. The need to reconcile chemicals and waste strategies and plans with macro economic policies and other sectoral policies that drives chemicals production and use and impact on the environment and human health has never been so great. It is in this context of responding to the call for increased policy integration that international chemicals and waste strategies and plans will have to bridge the increasing gap between developed and developing countries in their capacity to manage chemicals soundly as production and use of chemicals are rapidly increasing in countries that lack adequate capacities, including administrative infrastructures.

There is a need to continue to provide substantive backing to the chemicals and waste related MEAs while exerting greater influence on the behaviour of the public, the private sector and government policy makers**.** To overcome the fragmentary and case by case based approach that has characterised the development of the Chemicals related MEAs, there is a need for a more holistic view of chemicals and waste management in line with the WSSD objectives which can be delivered through a more balanced use of intervention channels.

Main points for consideration are:

- Environmentally sound chemicals and waste management has a huge potential for economic benefits when applying life-cycle approaches, e.g. minimisation of harmful substances in production, recycling, etc. Strengthening the systematic introduction of green economy approaches through partnerships between suppliers and clients will substantially reduce costs of undesired side-effects.

- Increasing political and financial support could be achieved by linking chemicals and waste management with issues that already benefit from a high public and political recognition, such as climate change, energy, and biological diversity. Better coordination on national level and less overlapping directions from different Conferences of Parties will positively affect the synergies between the different but interlinked regimes.

- In the case of legal measures, control and enforcement, partners with shared responsibilities are needed, not donors providing financial resources only. It is necessary that the stronger partners support the weaker partners with the understanding that joint efforts have to continue as long as necessary to achieve sufficient control and enforcement worldwide.

- Additional financial resources will be needed to establish comprehensive chemicals and waste management schemes in developing countries and countries with economies in transition, but should be seen as supplement to the international development agenda, carefully considering other support programmes and avoiding duplication or overlap of projects.

This compilation puts forward a number of possible Building Blocks for financing chemicals management which address the different stakeholder groups and build on existing structures. The Building Blocks are derived from the current state of affairs in financing chemicals issues in the context of development strategies and technical assistance in developing countries and countries with economies in transition.

4. Potential responses by stakeholders

This Section describes some Building Blocks of potential responses to the challenge of increasing the financial basis for environmentally sound chemicals management. The Building Blocks focus on, but are not limited to, different stakeholder groups in the private and NGO sector, at national and international level, and the donor community. It is important to stress that focussing on a single mechanisms will not solve the problem, but a wide range of measures and mechanisms will have to be engaged to provide sufficient financial resources for chemicals management on the long term. The Building Blocks describe some approaches which can be followed but do not represent a comprehensive analysis of all available options. The section is rather to serve as a thought starter.

4.1. Private and NGO sector

4.1.1. BUILDING BLOCK: Green Economy

The launch of the Global Green New Deal and the Green Economy Initiative present a unique opportunity to rethink the perception of chemicals and waste management. In the framework of these initiatives, efforts should be made by UNEP and the MEA Secretariats to promote a shift from a mere “recipient mentality”, i.e. viewing chemicals and waste management as a costly operation for which funding has to be raised, to

focusing more on the economic opportunities provided by the relevant operations. This is especially true for recycling and recovery of certain types of wastes, which generates secondary raw materials with a market value. Such waste streams should increasingly be perceived as a resource and economic opportunity. The fact that a market exists for certain types of recycled materials is evidenced by the existence of informal sectors for recycling specific waste streams (notably electrical and electronic wastes, and obsolete ships). Such informal sectors would not exist if there were no income to be derived from the operations. Opportunities should be sought to upgrade these informal sectors so as to make them consistent with the protection of human health and the environment. If improved procedures and infrastructure will also allow the extraction of larger quantities and/or better quality of secondary raw materials and thus yield more economic benefit, there is an incentive for investing in such procedures and infrastructures. There is thus a potential for creating business and employment opportunities.

Expected outcomes could include:

- Identified areas in which economic opportunities already exist;
- Proposals for further enhancing such opportunities, and promoting additional ones;
- A strategy for engagement with relevant entities in the private and public sectors.

4.1.2. BUILDING BLOCK: Public-Private Partnership

Public-private partnerships could be used as a vehicle to engage the knowledge and financial capacity of industry in areas of mutual interest. Rather than merely approaching the private sector with requests for funding, such partnerships should be based on engaging the expertise and capacity of private companies in a way that is also beneficial for them. Benefits could include public recognition gained for private sector activities that contribute to improved management of chemicals and wastes in concrete ways, and economic benefits to be gained, which may be identified in the framework of the Global Green New Deal /Green Economy. The Basel Convention currently has two such partnerships, both in the area of electronic wastes, comprised of representatives of personal computer manufacturers, recyclers, international organisations, academia, environmental groups and governments. One of these partnerships has recently introduced the concept of membership contributions from industry – another avenue to raise funds.

Expected outcomes could include:

- Product life-cycle approach with the aim to avoid use of harmful substances during production and uncoupling of production and use from waste generation (green product design, chemical leasing);
- Chemical accident prevention, preparedness and response;
- Introduction of chemical safety and environmentally sound waste management in small and medium size enterprises in developing countries, and establishment of alternative income for the informal sector handling hazardous chemicals.

4.2. Stakeholders at the national level

4.2.1. BUILDING BLOCK: Integration of the sound management of chemicals into national policies and plans

An important step on national level is to integrate sound management of chemicals into development plans such as poverty reduction strategy paper and strategy to meet the Millennium Development Goals. This involves establishing the links between poverty and sound management of chemicals, such as improved human and environmental health, and increased economic securities and income opportunities for the poor, and identifying the policies and programmes needed to bring about pro poor chemicals management. It also involves looking at potential chemicals risks arising from implementing section of development plans, and trying to mitigate such risks at the planning stage. Further, national funding through a greater and more systematic use of economic instruments should be considered as well. This approach should be followed on recipient and donor site likewise.

Governments are the immediate stakeholders of the chemicals conventions. For the purposes of public awareness, there may be a need to expand the user-base of the conventions to a wider audience. Messages

should be also targeted at sectors such as environment, industry, agriculture, and health as well as to public interest NGOs, donors, the media, educational institutions, other UN or international agencies and even at specific groups such as mothers, children, customs officers, etc.

Expected outcomes could include:

- Governments incorporate in their national development plans and strategies measures to implement the chemicals and waste related MEAs in order to ensure coherence in their national priority setting and to facilitate the provision of aid by donors in accordance with the Paris Declaration on Aid Effectiveness and in response to country and regional demand;
- Consideration and introduction of national funding through a greater and more systematic use of economic instruments;
- Better understanding of the general public on the risk of chemicals through information campaigns and what the public user/consumer can do about it will strengthen public support for introduction of safety measures.
- Bilateral funding of sound management of chemicals should be integrated into donor countries aid programmes;
- Measures to integrate sound chemicals management have to ensure on one hand a holistic approach on national level; on the other hand they need to serve the objectives and decisions of the conventions and COPs to contribute to the global environment protection goals.

4.2.2. BUILDING BLOCK: National coordination

In most developing countries and countries with economies in transition at least a basic administrative infrastructure exists with designated national authorities and focal points for chemicals and waste related conventions and institutions, as well as industry, trade, and import/export control. The chemicals and waste related infrastructure is summarized in many countries in the respective National Profiles or more specific in the National Implementation Plans for the POPs Convention. However, in many cases the legal framework for comprehensive control and enforcement as well as the governmental institutions are weak, have insufficient staff and logistical support and are not well connected to other national, regional and international institutions. To increase the efficiency of the scarce resources available, governments should establish or strengthen, as necessary, national processes or mechanisms for coordination.

Expected outcomes could include:

- Strengthened and efficient national cooperation and coordination among relevant sectors, ministries and programmes at the national level with respect to, among others, the following:
  - Protection of human health and the environment for the harmful impacts or adverse effects of hazardous chemicals and wastes;
  - Prevention of accidents and emergency response in case of accidents;
  - Combating illegal traffic and trade in hazardous chemicals and wastes;
  - Information generation and access;
  - Technology transfer and transfer of know-how;
  - Preparation of national positions for meetings of the Conferences of Parties and other bodies of MEAs;
  - development cooperation.
- Promotion of cooperative activities at the national and regional level as far as possible.
- Facilitation of the listing of new substances under the chemicals related conventions.
- Governments promote coordination between bilateral and multilateral donors to ensure consistent and non-duplicative assistance to the recipient countries in their implementation of chemicals and wastes related MEAs.

4.3. Stakeholders at the regional level

4.3.1. BUILDING BLOCK: Regional coordination

Regional economic integration organizations are already established in many regions. Similar to the processes on national level, it is also important on regional level to integrate sound management of chemicals into regional development plans and strategies to meet the Millennium Development Goals. Existing regional institutions with respective mandates need to become involved and advocate for chemicals management issues of relevance to the region, e.g. trade, health and pollution issues which reach beyond national borders. Regional Convention Centres and Regional IGO offices can support the process by raising the profile of the chemicals management agenda in regional political discussions and negotiations.

Expected outcomes could include:

- Mainstreaming the chemicals agenda in policy approaches of Regional Economic Organizations;
- Chemical issues being discussed and decided upon at regional environmental ministerial conferences.

4.4. Stakeholders at the international level

4.4.1. BUILDING BLOCK: Responding to the call for policy integration

The sound management of chemicals and of hazardous waste remains a critical factor in achieving sustainable development objectives and Millennium Development Goals. As such it has been high on the international political agenda since 1972 with the United Nations Conference on the Human Environment during which pollution with toxic and dangerous substances was a central issue. It was specifically addressed in 1992 by the United Nations Conference on Environment and Development with the adoption of Chapter 19 of Agenda 21 and again at the WSSD in 2002 paragraph 4 where the 2020 goal of producing and using chemicals in ways that lead to the minimization of significant effects on human health and the environment was established in the Plan of Implementation of the Johannesburg Summit, paragraph 23.

In response to the need for a comprehensive framework to chemicals management, the international community adopted at the International Conference on Chemicals Management in Dubai 2006 the Strategic Approach to International Chemicals Management (SAICM). With the rapid development of a significant number of international legal instruments and policies for the environment, there has been an increased competition for funds. The success of adequate policies will therefore be dependent on the capacity to continue raise awareness and maintaining a political and technical focus on the importance of sound management chemicals while demonstrating the contribution and relevance of its programme to the "UN Delivering as One" new set of priorities particularly within the context of the implementation of sustainable development policies.

Increasing political and financial support could possibly be best achieved by "packaging" the issues in a more attractive manner than is currently the case, e.g. through the link with human health, livelihood, and poverty reduction, and the related MDGs. Causes that are emotionally appealing stand more chance of receiving political and financial support than those without such emotional appeal. This is evidenced, for example, by the success of the Global Fund to Fight AIDS, Tuberculosis and Malaria, and the Vaccine Fund of the Global Alliance for Vaccines and Immunization (GAVI). Both these funds are devoted to fighting deadly diseases in developing countries, and both are funded through voluntary contributions from governments, private foundations, corporations and individuals. Arguably, the health effects and human suffering caused by hazardous chemicals and wastes can be just as serious as the diseases targeted by the Global Fund and the GAVI Fund. Emphasizing this aspect of the problem, and the link to the relevant MDGs, could serve to enhance public concern and hence political and financial support. As developing countries play a rapidly increasing role in the manufacturing and use of chemicals, strengthening of their chemical safety and toxic waste management frameworks will have economic, environmental and health advantages for all concerned.

Expected outcomes could include:

- Explicit links of chemicals and waste management should be established with issues that already benefit from a high level of political and financial support, such as poverty reduction strategies, health, climate change, energy, and biological diversity, by highlighting the contributions of

chemicals and waste management to these issues and thus providing access to some of the funding available for these issues.
- Less overlapping directions from different Conferences of Parties affecting implementation of the different but interlinked regimes.

4.4.2. BUILDING BLOCK: Public-Public Partnership

It is necessary that the stronger partner support the weaker partner, not only on a project basis where implementation responsibility lays on one side only, but with the understanding that joint efforts have to continue as long as necessary to achieve the common goal. Partners with shared responsibilities are needed, not donors providing financial resources only.

Bearing in mind the limited resources available and the low priority of chemicals and waste management, institutions in developing countries that enforce chemical management regimes, e.g. Convention Focal Points, and the International Network for Environmental Compliance and Enforcement (INECE), need assistance on a long-term basis. In this special field of enforcement support, it should be considered to move away from 3-5 year projects, to support of long-term partnerships of 10-15 years between competent authorities in developed and developing countries.

Respective institutional interactions already exist, but they work on time-limited project basis and have mainly advisory function when it comes to concrete actions in partner countries. The institutions need a stronger enforcement mandate with a financial and institutional commitment from developed country governments and a cooperation commitment from developing country institutions to structure their international networks and enforcement cooperation programmes on a long-term basis. This could be organized by bilateral or multilateral cooperation agreements, or by memoranda of understanding at the operational level.

Expected outcomes could include:
- Establishment of a permanent international communication infrastructure (phone, internet) for exchange of enforcement data;
- Routine exchange and training of officers (North-South, South-South cooperation), access to and use of databases that facilitate joint and mutually agreed enforcement actions.

4.5. Donor community

4.5.1. BUILDING BLOCK: Existing financial mechanisms

All sources of financing for chemicals have to be taken into account, i.e. national funding, bilateral funding and multilateral funding. All those sources should be mobilized and coordinated to provide adequate responses to the challenges of managing chemicals and hazardous waste soundly. It is emphasised that the quantitatively the bulk of funding will come from national and bilateral funding, with multilateral funding only supplementing national, bilateral and regional efforts.

UNEP and the MEA Secretariats could assume a leading role in strengthening waste and chemicals management in the agendas of competent UN Agencies and International Financial Institutions that have the resources, capacity and expertise for large-scale infrastructure projects, such as UNDP, UNIDO, GEF, ITU, UNESCO, the World Bank, and regional development banks. UNEP and in particular the MEA Secretariats should play a facilitating role in proposing areas of intervention and providing the necessary technical and legal expertise on the international legal rules provided by the respective Conventions, which relevant projects should adhere to.

Expected outcomes could include:
- Hazardous chemicals should not be procured with financial support of donors, even if the alternative products and measures might be more expensive. For example, DDT is still allowed in certain countries for malaria vector control, but should no longer be purchased under development assistance programmes, because alternatives are available.

- Investments in plants producing or handling dangerous substances must ensure fulfilment of the highest international standards with respect to chemical accident prevention, preparedness and response.
- Energy efficiency programmes which involve modernization of grid equipment including transformers should always include provisions for take-back systems and environmentally sound disposal of the old equipment, e.g. PCB contaminated transformers.
- Bridging the digital divide initiatives and institutional strengthening programmes including procurement of electronic equipment should always include provisions for take-back systems and environmentally sound disposal of the old computer.
- Transport programmes including the procurement of ships and cars should include provisions for take-back systems and environmentally sound disposal of the old transport systems that might contain harmful substances.

4.5.2. BUILDING BLOCK: New and additional multilateral financial resources

New and additional multilateral financial resources should be seen as supplement to the international development agenda, carefully considering other support programmes and avoiding duplication or overlap of projects. One possibility to be considered is the creation of a new fund, which could be either an intergovernmental mechanism or a mechanism to which non-governmental entities could also contribute. In order for such a mechanism to be successful, there would need to be widespread political support for its creation; the prospect of a broad, stable and predictable financial basis; and a clearly defined, focused and realistic objective. The question of possible duplication with existing mechanisms (most notably the GEF) would also need to be considered. A possibility could be to aim for expanding the GEF POPs Focal Area to the Rotterdam and Basel Conventions and SAICM, as a longer-term objective of the synergies process.

Expected outcomes could include:

- New and additional resources are available for management schemes in developing countries and countries with economies in transition to supplement the international developments, partnerships and existing other support programmes to avoid duplication or overlap of projects.

4.5.3. BUILDING BLOCK: Foundations

Increased efforts should be made to attract funding from private foundations (e.g. Gates, Bloomberg), following the successful approach of WHO Tobacco Free Initiative and the 2003 Framework Convention on Tobacco Control, for example. In order to attract the interest and support of such foundations, the issues would need to be perceived as emotionally appealing and hence worthy of support, as outlined above.

Expected outcomes could include:

- Individual foundations becoming lead sponsors for certain chemicals and waste topics, e.g.
  - Gates Foundation not only supporting the fight against malaria, but taking on board also lobbying and supporting introduction of alternatives to DDT in malaria control measures;
  - Foundations supporting children vaccination programmes (involving millions of syringes) in developing countries to include issues of environmentally sound disposal of hospital waste in their aid programmes.

ANNEX A:

Background information on SAICM

Most of the chemicals related MEAs have a strong scientific basis justifying the need for their conclusion but generally, they are still confronted with insufficient financial and/or market based mechanisms necessary for their implementation**.**

The recently developed Strategic Approach to International Chemicals Management (SAICM) sets out a comprehensive policy framework for the achievement of global chemicals management objectives, including in relation to multilateral environment agreements, and the financing of their implementation. It responds to the goal articulated in the Johannesburg Plan of Implementation that, by 2020, chemicals are produced and used in ways that lead to the minimization of significant adverse effects on human health and the environment.

Adopted by the global community in 2006 at the first session of the International Conference on Chemicals Management,[25] SAICM is comprehensive in its scope, which includes agricultural and industrial chemicals, with a view to promoting sustainable development and covering chemicals at all stages of their life-cycle, including in products. It addresses environmental, economic, social, health and labour aspects of chemical safety. In addition to having been endorsed twice by Heads of State and Government during its development phase,[26] SAICM has been formally acknowledged by the governing bodies and incorporated in the work programmes of seven main intergovernmental organizations active in the field of chemical safety, namely FAO, ILO,OECD, UNEP, UNIDO, UNITAR and WHO.

Discussion of the need for additional financial resources and better use of existing resources to support chemicals management objectives featured prominently in the negotiation of SAICM. As recognized in the Dubai Declaration in SAICM, "the existing international policy framework for chemicals is not completely adequate and needs to be further strengthened; in addition, the implementation of established international policies is uneven. Coherence and synergies between existing institutions and processes are not completely developed and should be further improved. There is often limited or no information on many chemicals currently in use and often limited or no access to information that already exists. There is a lack of capacity to soundly manage chemicals at the national, sub-regional, regional and global levels. It was recognized that "there are inadequate resources available to address chemical safety issues in many countries, particularly to bridge the widening gap between developed countries on the one hand and developing countries and countries with economies in transition on the other." At the same time it was noted that "there is a need in many countries for enhanced coherence, consistency and cooperation to ensure efficient and effective use of available resources at the national, regional, and international levels."

A full range of financial arrangements to support the broad chemicals management objectives of SAICM are set out in its Overarching Policy Strategy. This provides, in paragraph 19, that, "SAICM should reflect national, regional and global efforts to advance the sound management of chemicals recognizing Principle 7 of the Rio Declaration on Environment and Development. SAICM should call upon existing and new sources of financial support to provide additional resources and should build upon, among other things, the Bali Strategic Plan for Technology Support and Capacity-building. It should also include the mobilization of additional national and international financial resources, including through the Quick Start Programme and other measures set out in this paragraph, to accelerate the strengthening of capabilities and capacities for the implementation of SAICM objectives. The extent to which developing countries, particularly least developed countries and small-island developing States, and countries with economies in transition can make progress towards reaching the 2020 goal depends, in part, on the availability of financial resources provided by the private sector and bilateral, multilateral and global agencies or donors." The financial arrangements envisaged to support implementation of SAICM include:

[25] Dubai, United Arab Emirates, 4-6 February 2006

[26] World Summit on Sustainable Development, Johannesburg, 2002; United Nations World Summit, New York, 2005

(a) **Actions at the national or sub-national levels** to support financing of Strategic Approach objectives;

(b) **Enhancing industry partnerships and financial and technical participation** in the implementation of Strategic Approach objectives;

(c) Integration of SAICM objectives into **multilateral and bilateral development assistance cooperation**;

(d) **Making more effective use of and building upon existing sources of relevant global funding**, such as the Global Environment Facility and the Multilateral Fund for the Implementation of the Montreal Protocol;

(e) Supporting initial capacity-building activities for the implementation of SAICM objectives under the new SAICM "**Quick Start Programme"** and its voluntary, time-limited trust fund.

The second session of the International Conference on Chemicals Management provided a first opportunity to evaluate the performance of the financing of SAICM. While progress under all financial arrangements was apparent from the partial reporting received,[27] it was clear that securing the resources envisaged under each arrangement would be an ongoing challenge. Options for the long-term financing of SAICM implementation were canvassed in

Responses to a survey of stakeholders revealed that in the initial three years of SAICM implementation considerable efforts had been made by many Governments and organizations to support the financing of SAICM objectives at the national or sub-national levels. In the case of Governments, this often involved the integration of SAICM objectives into formal planning documents. Some developed country Governments indicated that existing plans and assessments relating to chemicals management adequately reflected SAICM objectives. Many of the Governments of developing and transition economy countries that responded appeared to be relying on projects under the SAICM Quick Start Programme as a means of assessing needs and integrating SAICM objectives. The use of economic instruments to support the cost of chemicals management was reported by many of the developed country Governments that responded.

Relatively few new initiatives to enhance industry partnerships were reported. Developed country Governments tended to indicate that existing initiatives or responses to other developments such as regionally-applied legislation were sufficient. No response to the survey was received from industry associations. Expectations remain high among Governments for substantially increased financial contributions from industry to support international chemicals management objectives while industry itself points to its existing voluntary programmes, such as Responsible Care, and to the taxes already paid by corporations at the national level.

Work to integrate SAICM objectives into national planning for development assistance cooperation was reported under way in a significant number of developing and transition economy countries and the Quick Start Programme had been a key facilitator in this regard. A small but important group of donor Governments also confirmed that chemicals management, and sometimes specifically SAICM, objectives were being reflected in development cooperation planning.

The secretariat of the Global Environment Facility[28] noted the recent adoption of its cross-cutting strategy on chemicals management which, like SAICM, aimed to achieve the Johannesburg Plan of Implementation goal of sound chemicals management by 2020. It observed that under its various focal areas, notably the focal area for persistent organic pollutants, substantial resources had been provided for overall chemicals management work. Many SAICM stakeholders expressed support for the establishment of a dedicated

[27] See meeting documents for the second session of the International Conference on Chemicals Management at www.saicm.org, including SAICM/ICCM.2/6, SAICM/ICCM.2/INF/37.
[28] See document SAICM/ICCM.2/INF/23.

chemicals management focal area in the context of upcoming negotiations for the next replenishment of the Global Environment Facility. The secretariat of the Multilateral Fund for the Implementation of the Montreal Protocol[29] similarly reported that, while its resources were dedicated specifically to projects addressing ozone depleting substances, they nevertheless contributed to broader chemicals management objectives.

Given that the Quick Start Programme is the only new mechanism specifically dedicated to supporting initial enabling activities to implement SAICM, responses to the survey on this arrangement were relatively extensive. Comments on the adequacy on the effectiveness of the Programme were generally positive, though some respondents noted that administrative delays had affected the commencement of projects. Some respondents were of the view that more resources were needed and that restrictions on the number of projects for which individual countries were permitted to apply should be lifted.[30]

Following extensive discussion on financing issues during its second session, the International Conference on Chemicals Management adopted a wide ranging resolution on financial and technical resources for implementation.[31] Reaffirming the priority accorded to financial matters in the original SAICM negotiations, the resolution "recognized the need for sustainable, predictable, adequate and accessible funding for activities in support of the sound management of chemicals and the achievement of the objectives set forth in the Strategic Approach, taking into account the priorities identified by developing countries and countries with economies in transition." Among other things, the resolution further encouraged the mainstreaming of chemicals management in national development planning, called for adequate priority to be given to SAICM objectives in development assistance, invited the private sector and institutions such as the World Bank to strengthen their support for activities contributing to SAICM implementation, welcomed the consideration of chemicals management during the fifth Global Environment Facility replenishment process, initiated an evaluation of the Quick Start Programme and invited stakeholders to report on implementation of overall SAICM financial arrangements.

The above mentioned evaluation and reporting on SAICM financial arrangements will be taken up at the third session of the International Conference on Chemicals Management in 2012. This will be an occasion to review what is hoped will be a period of consolidation and accelerated implementation following the start-up phase (2006-2009).

[29] See document SAICM/ICCM.2/INF/26.
[30] In addition to document SAICM/ICCM.2/6 and SAICM/ICCM.2/INF/37, see the report of the Executive Board of the Quick Start Programme and supplementary information materials in documents SAICM/ICCM/2/5, SAICM/ICCM/2/5/Add.1, SAICM/ICCM/INF/30 and SAICM/ICCM/INF/30/Add.1, and information on the Quick Start Programme business plan in document SAICM/ICCM/INF/24.
[31] Resolution II/3 is reproduced in the report of the session, document SAICM/ICCM.2/15.

ANNEX II

Key obligations of chemicals conventions/agreements

Basel Convention	Rotterdam Convention	Stockholm Convention	SAICM (Objectives of the Overarching Policy Strategy)
Production			
		Eliminate the production and use or import or export of chemicals listed in Annex A and restrict production and use of Annex B.	Promote and support the development and implementation of, and further innovation in, environmentally sound and safer alternatives, including cleaner production, informed substitution of chemicals of particular concern and non-chemical alternatives.
Trade (import and export)			
Prevent the import of hazardous wastes and other wastes if it has reason to believe that the wastes in question will not be managed in an environmentally sound manner.	Ensure that the chemicals listed in Annex III are not exported from its territory to an importing Party contrary to the import decision notified by the Party.	Ensure that a chemical listed under Annex A or B is only imported for the purpose of environmentally sound disposal or for a permitted use.	Ensure that national institutional frameworks address the prevention of illegal international traffic in chemicals.
Each Party that intends to export hazardous or other waste shall ensure that the waste will be managed in an environmentally sound manner at the place of its destination.	Each party which has banned or severely restricted a chemical shall provide an export notification to the importing Party unless the chemical is already listed on Annex 111.		Strengthen mechanisms and domestic and regional implementation supporting existing multilateral agreements that contain provisions relating to the prevention of illegal international traffic.
Each Party shall not permit hazardous wastes or other wastes to be imported from a non-Party unless these is a bilateral, multilateral or regional agreement allowing this import.			
Require that hazardous wastes and other wastes that are being transported to another country to be properly labelled according to international rules and standards			
Each Party shall require that any person who takes charge of a transport of hazardous wastes or other wastes from			

one country to another to sign the movement document.			
Each Party shall require that any person who takes charge of a transport of hazardous wastes or other wastes that pass through (transits) another country to inform the transit country in writing.			
Use			
		Take measures to reduce the release of chemicals listed in Annex C (dioxins and furans).	Minimize risks to human health, including that of workers, and to the environment throughout the life cycle of chemicals.
			To implement transparent, comprehensive, efficient and effective risk management strategies.
Remediation of waste stockpiles and contaminated sites/disposal of chemicals			
		Develop strategies for identifying stockpiles of chemicals in Annex A and B and manage stockpiles in a safe, efficient and environmentally sound manner.	
		Identify contaminated sites and develop remediation measures in an environmentally sound manner.	
		Develop appropriate measures to dispose of POPs in such a way that the persistent organic pollutant content is destroyed or irreversibly transformed, or dispose of the POPs in an environmentally sound manner when destruction or transformation is not an environmentally preferred option.	
Information exchange			
Notify the Secretariat of any bilateral, multilateral or regional agreements or arrangements it has agreed upon for the purposes of moving hazardous or other wastes.	Designate a National Authority and notify the Secretariat of their identity	Identify a National Focal Point to facilitate the exchange of information on POPs	Ensure that knowledge and information on chemicals and chemicals management are sufficient to enable chemicals to be adequately assessed and managed safely throughout their life cycle.

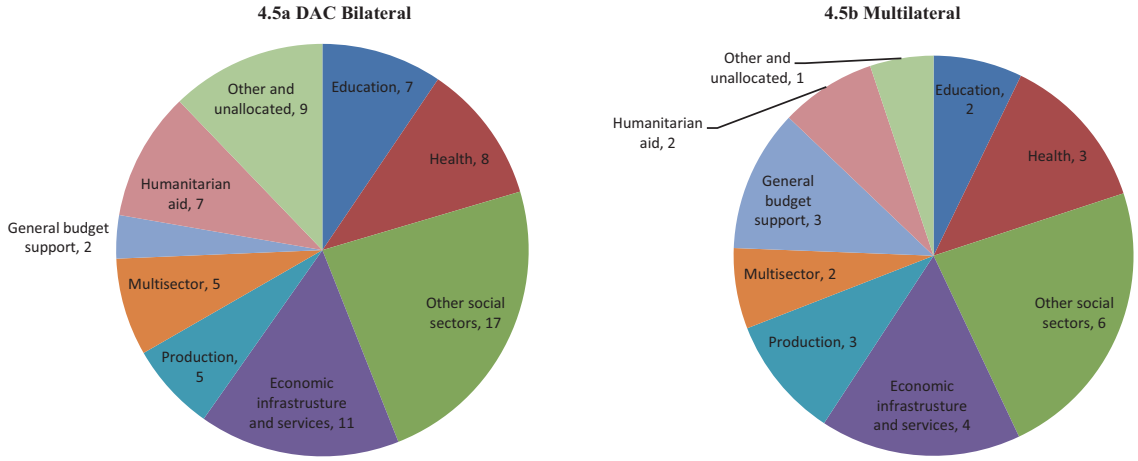
	Notify the Secretariat if a chemical has been banned or severely restricted.		Ensure that science-based standards, risk assessment and management procedures and the results of hazard and risk assessments are available to all actors.
	Each Party shall require that both chemicals listed in Annex III and chemicals banned or severely restricted in its territory are subject to labelling requirements that ensure adequate availability of information with regard to risks and/or hazards to human health or the environment.		Promote implementation of the common definitions and criteria contained in the Globally Harmonized System of Classification and Labelling of Chemicals.
	Each Party shall ensure that the public has appropriate access to information on chemical handling and accident management and on alternatives that are safer for human health or the environment.		
Technical Assistance and capacity building			
	Each Party shall provide information to other Parties on domestic regulatory actions they have taken that substantially restricts one or more uses of chemicals. Some confidential information can be protected.	Provide information and develop education and training programmes for policy makers and the public about POPs.	Establish or strengthen partnerships and mechanisms for technical cooperation and the provision of appropriate and clean technology to and among developing countries and countries with economies in transition.
		Provide financial support and incentives for national activities under the Convention	
Proposing new chemicals			
	Developing country Parties may propose to the Secretariat a listing of a severely hazardous pesticide for inclusion in Annex III.	Each party may propose new chemicals	
Governance (including national planning)			
Prohibit all persons under its national jurisdiction from transporting or disposing of hazardous wastes or other wastes unless such persons are	Each Party shall implement appropriate legislative or administrative measures to ensure timely decisions with respect to the import of chemicals listed in Annex	Develop, use and review an Implementation Plan	To strengthen enforcement and encourage the implementation of national laws and regulations regarding chemicals management, including those

authorized to do so	III.		that serve to implement international agreements.
	Each Party shall take measures to establish and strengthen its national infrastructures and institutions for the effective implementation of this Convention.		

ANNEX III

Figure 4.5. **Distribution of bilateral and multilateral aid by sector 2004-06**

Gross commitments (excluding debt relief) average 2004-06, constant 2006 USD billion

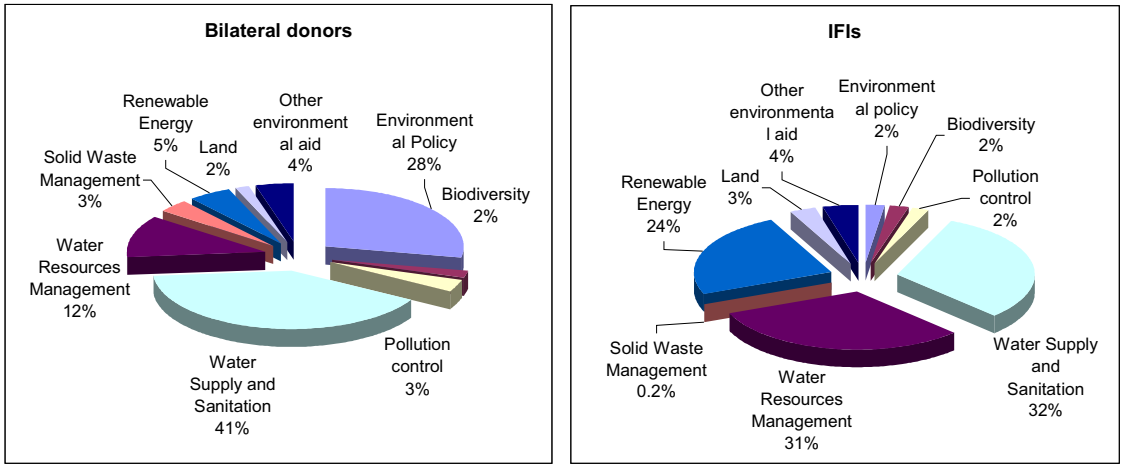


Source: Creditor Reporting System.

Note: Sectoral data on multilateral aid are incomplete. The data cover the EC, the World Bank, the regional development banks, IFAD, The Global Fund, UNAIDS, UNFPA and UNICEF. Data are missing for other UN agencies.

ANNEX IV

Figure 19. Donors' and multilateral environmental assistance by domain, total 2001-05



Source: OECD, CRS Aid activities database, donors and IFIs reporting. . Bilateral donors include EC.