

# Assessment of the Garfield Foundation International Mercury Source Reduction Grantmaking Program



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## **EXECUTIVE SUMMARY**

This assessment was carried out between November 2008 and March 2009, and was informed primarily by responses to an initial survey of foundations and NGOs, interviews with key foundation staff, NGOs and bilateral funding organizations, a range of grant documents, and information provided by UNEP and bilateral funding agencies.

The objectives of the assessment are listed at the beginning of the main report. They concentrate primarily on understanding the context of, and major players involved in, international mercury source reduction (MSR) efforts, on evaluating the impact of Garfield Foundation's funding in this arena, and on formulating recommendations for moving forward.

### **The international scene**

In 2003, when GF took a direct interest in international MSR activities, the field was occupied by quasi-independent and inadequately coordinated international mercury initiatives spearheaded by the U.S., UNEP and the European Union pulled along by its Nordic member countries. Grounded in the scientific consensus that mercury presents a serious global challenge, GF-funded NGOs were determined to convince these diverse stakeholders to accept a set of common objectives, priorities and milestones that would maximize the benefits for all.

### **Main achievements of GF grantees**

This was a considerable challenge for GF's NGO team, whose main weapons were their collective insight enhanced by peerless networking skills, their experience on the ground, their firm commitment to shared objectives, and their willingness to think outside the box. They were aided by the fact that their contacts at UNEP, the European Commission and European Parliament, U.S. EPA and other national environmental agencies were well-intentioned, although any hope for a common vision was stymied by institutional and political constraints.

Scarcely five years later, there is virtually no important aspect of global mercury policy that has not been shaped or influenced by key NGOs, and GF grantees have consistently provided leadership. Considering the resources at their disposal, it would be safe to say that in at least some instances these NGOs have achieved results even beyond their own expectations. The twenty most remarkable have been summarized in Section 2.2.4 (text box) of this report. Chief among these achievements – and one the NGOs only dared to hope for – was the success at the recent UNEP Governing Council Meeting in February 2009 in building an international consensus around the need for a binding global mercury treaty, for which negotiations will soon begin.

Throughout these accomplishments, the NGO team routinely demonstrated its ability to adapt to changing circumstances and new challenges, to provide new information and arguments to influence the positions of other key individuals and stakeholders, to forge a consensus with other interested and influential NGOs, to leverage GF funding in order to secure financial commitments and support from other organizations, and to consistently identify novel ways of advancing global MSR objectives.

## The Way Forward

The question of what remains to be done to achieve the key international MSR objectives is a broad one, and revolves around further reductions in mercury supply, mercury demand and unintentional releases of mercury into the environment.

As detailed in Section 3 of the report, the way forward – for all NGOs working in this area – is marked mainly by the parallel tracks of:

- reducing the global supply of mercury, with the goal of a further 50% reduction by 2015;
- reducing the global consumption of mercury by 70% by 2017, concentrating on the massive use of mercury by artisanal gold miners and the PVC sector in China, but not ignoring such other major uses (and sources of widespread pollution) as the dental sector;
- fully participating in a direct and coordinated (among all NGOs) manner in the political process (2009-2013) of negotiating a global mercury treaty;
- ensuring that the global mercury treaty will include the critical scope, objectives, reporting obligations, monitoring possibilities, financial resources and sanctions against countries that may not meet their obligations; and
- to that end, providing all possible technical information and other support to delegates involved in the negotiation process, so as to ensure a broad-based and well-informed outcome.

At the same time, NGOs need to develop a strategy to aggressively deal with major sources of atmospheric emissions like coal combustion and non-ferrous metal smelters.

Finally, ongoing MSR activities need to be monitored as part of maintaining issue visibility, public awareness, momentum and pressure between UNEP Governing Council meetings, while not forgetting that a constant NGO presence on the Intergovernmental Negotiating Committee (INC) is critical, even though it adds another layer of networking and activities on top of what the NGOs are already doing. Needless to say, all of these are also excellent issues for which to seek funding partnerships.

## Conclusions

There is no doubt that GF grantees have made the most of the funding put at their disposal, and have probably achieved far more than they thought possible four years ago. One of the key insights to emerge from this assessment is that, despite the global importance of dealing with mercury, these GF grants are about a lot more than mercury. International policymaking is becoming increasingly important for dealing with major global issues, and more and more stakeholders are looking to leading NGOs for similar guidance in future negotiations and policy-making sessions.

Meanwhile, not only is the NGO network now recognized as a critical player on the international stage, but the NGOs – and especially those supported by GF – have helped to enhance the credibility of NGOs as part of this policymaking process.

In the opinion of the author, GF should be commended for its vision in supporting a mercury source reduction program in the first place, for its active involvement in the development and evolution of the program, and for staying the course during periods when it was not always clear whether success would be achievable.

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## ACRONYMS

<b>ACPO</b> – Associação de Combate aos POPs	<b>IMF</b> – International Monetary Fund
<b>ASGM</b> – artisanal and small-scale mining	<b>INC</b> – Intergovernmental Negotiating Committee
<b>BAT</b> – best available techniques	<b>IPEN</b> – International POPs Elimination Network
<b>BEP</b> – best environmental practice	<b>MPP</b> – Mercury Policy Project
<b>CFL</b> – compact fluorescent lamp	<b>MSR</b> – mercury source reduction
<b>CHE</b> – Collaborative on Health and the Environment	<b>NO<sub>x</sub></b> – generic term for mono-nitrogen oxides (NO and NO <sub>2</sub> )
<b>CIEL</b> – Center for International Environmental Law	<b>NRDC</b> – Natural Resources Defense Council
<b>CNIID</b> – Centre national d’information indépendante sur les déchets	<b>OEWG</b> – Open-Ended Working Group
<b>DG SANCO</b> – Directorate General for Health	<b>PAN</b> – Pesticide Action Network
<b>ECCA</b> – Eastern Europe, Caucasus and Central Asia	<b>POPs</b> – persistent organic pollutants
<b>EEB</b> – European Environmental Bureau	<b>PRTR</b> – Pollutant Release and Transfer Register
<b>EHF</b> – Environmental Health Fund	<b>PVC</b> – polyvinyl chloride
<b>EPA</b> – U.S. Environmental Protection Agency	<b>RCM</b> – (Civil Society) Regional Consultation Meeting
<b>FDI</b> – World Dental Federation	<b>REACH</b> – Registration, Evaluation, Authorisation and Restriction of Chemicals (European Community Regulation)
<b>GAIA</b> – Global Alliance for Incinerator Alternatives	<b>SO<sub>x</sub></b> – generic term for sulfur oxides
<b>GC</b> – (UNEP) Governing Council	<b>UNDP</b> – United Nations Development Programme
<b>GCSF</b> – Global Civil Society Forum	<b>UNIDO</b> – United Nations Industrial Development Organisation
<b>GEF</b> – Global Environment Facility	<b>UNITAR</b> – United Nations Institute for Training and Research
<b>HCWH</b> – Health Care Without Harm	<b>VCM</b> – vinyl chloride monomer
<b>HEFN</b> – Health and Environmental Funders Network	<b>WHO</b> – World Health Organisation
<b>Hg</b> – mercury	<b>ZMWG</b> – Zero Mercury Working Group
<b>IGO</b> – international governmental organization	

# Assessment of the Garfield Foundation International Mercury Source Reduction Grantmaking Program

## 1 Introduction

### **1.1 Focus of the assessment**

The following assessment of Garfield Foundation (GF) Mercury Source Reduction (MSR) program has been requested in order to:

- clarify the international MSR challenges and objectives, and to assess the impact of GF's MSR work in the international arena,
- describe the international scene – the main interactions, influences and networks;
- explore ways in which the effectiveness of the funding and implementing organizations may be further enhanced, and
- suggest GF priorities for the future in terms of its vision of mercury within the broader framework of environment, health and justice; the domestic/international balance; different forms of collaboration with other stakeholders; etc.

### **1.2 Main information sources**

The main sources of information in this report, besides the author's familiarity with the subject, are a range of documents from UNEP and U.S. EPA; documents related to GF grants and projects of MPP, NRDC and EEB; telephone interviews; survey responses; and email correspondence. In support of this assessment, the individuals listed in Table 1 kindly granted interviews (typically 45-65 minutes, although some interviews were shorter and some longer) or otherwise provided useful information as indicated in the table. The greater emphasis on interviews with foundations and NGOs, and lesser emphasis on bilateral agencies and others, reflects the desired orientation of the assessment. The author greatly appreciates the time generously devoted by these individuals, and the wealth of information and wisdom offered by so many.

**Table 1 Interviews and other contributions to the assessment**

<b>Foundations</b>	<b>NGOs</b>	<b>Bilateral aid agencies</b>	<b>Others</b>
Pam Allen Richard and Rhoda Goldman Foundation	Leticia Baselga Ecologistas en acción (survey only)	Marianne Bailey U.S. EPA	Brenda Koekkoek UNEP (projects)
Beto Bedolf Marisla Foundation	Michael Bender MPP	Frank Jensen Danish EPA	Kathy Sessions HEFN
Theodoros Chronopoulos Sigrid Rausing Trust	Kevin Brigden Greenpeace International (survey only)		John Whitelaw UNEP (strategy)
Marni Rosen Jenifer Altman Foundation	Gary Cohen IPEN-HCWH		
Ruth Hennig John Merck Fund	Rico Euripidou groundWork – Friends of the Earth (survey only)		
Diane Ives Kendeda Fund	Linda Greer NRDC		
Pat Jenny New York Community Trust	David Lennett NRDC		
Heeten Kalan New World Foundation	Elena Lymberidi-Settimo EEB		
Leonardo Lacerda Oak Foundation (email only)	Rickford Vieira WWF Guianas (survey only)		
Michael Lerner Jenifer Altman Foundation	Glenn Wiser CIEL		
Kristian Parker Oak Foundation (survey only)			

### **1.3 Scope of the assessment**

The following report covers a lot of ground, and responds to a wide range of questions raised by the Executive Director of Garfield Foundation. It is not intended to provide a full and comprehensive summary of all projects funded or implemented by each organization identified. Nevertheless, every effort has been made to ensure the accuracy of the information presented.

**Furthermore, it should be kept in mind that this assessment was drafted largely pre-25<sup>th</sup> UNEP GC (Governing Council meeting 16-20 February 2009), and notes the importance of that milestone, but does not address in detail the events of the 25<sup>th</sup> GC meeting (February 2009) or details of the extensive preparatory work that took place before that event, all of which resulted in a global consensus to start working toward a legally binding instrument on mercury.**

Before looking at specific GF international initiatives, it is logical to ask why mercury should be the object of such intense interest, and why the international component is so important.

## **1.4 Why mercury?**

One might well ask why mercury should be such a focus of attention when there are so many other toxic substances to be dealt with as well. Considering the range of anthropogenic releases that are a threat to human health and the environment, mercury is quite likely the worst if one accounts for its global dissemination, its persistence, its toxicity and its bioaccumulative nature. Furthermore, it is widely present in the food supply, and generally considered a health risk (as evidenced by fish advisories) wherever fish have been tested. At the same time, we do understand mercury rather well, we know how to deal with it, we have substitutes for nearly all uses and virtually all countries agree it should be dealt with as a priority – especially after GC 25.

## **1.5 Why the interest in international MSR initiatives?**

It is also logical to question the need to devote foundation resources to international efforts, when there remains so much to be done at home.

Since mercury is a globally mobile pollutant, it is clear we can't solve the U.S. mercury problem without addressing the international situation. At the same time, progress on mercury trade, mercury-added products, emissions from coal combustion, etc., were all achieved in the U.S. before other countries were encouraged to follow suit. In recent years mercury policy advances in the European Union – most of them reflecting GF grantees' close links with EEB – have reaffirmed strong Western leadership, and spurred the U.S. and other countries to adopt similar measures.

And only in recent weeks has the UNEP Governing Council been given the mandate to pursue a global legally binding agreement on mercury, which will further fuel an effort to establish international objectives, and for countries to work in concert to deal with the mercury problem. NGOs cannot afford to ignore the work that remains to be done in the U.S. and the EU, but at the same time, there will be an intense international focus for at least the next four years of negotiations of a legally binding instrument (LBI).

It is only too clear that a focused NGO program of action in parallel with the negotiating process will facilitate and contribute to the (Intergovernmental Negotiating Committee) INC process, as well as to enhance the stature of all NGOs involved in the process.

## **2 The impact of GF's international MSR grants**

### **2.1 GF international MSR funding 2004-8**

Over the last five years Garfield Foundation has devoted much of its \$360,000 annual MSR budget to the grantees who are involved in international MSR work – MPP and NRDC ; and smaller amounts for new opportunities. In 2008 much of the "new opportunity" money was allocated to MPP for the Incinerator Study, and in 2009 to EEB for a European Conference on Mercury in Measuring and Control Devices.



While there is significant cross-fertilization between domestic and international activities, a review of these grantees' Activity Reports since 2005 suggests that probably two-thirds of the annual funds mentioned above has been devoted to international work, including such contributions as U.S.-based research in support of international initiatives; U.S.-based expertise and guidance provided in support of international initiatives; travel and presence of U.S. NGOs at international workshops, conferences and meetings; pass-through funding to international NGOs and consultants; etc. In comparison, other (mostly U.S.) foundations provide an additional estimated \$600-800,000 annually for international MSR activities.

If one were to estimate how the 2005-8 GF grant money devoted to international MSR activities were further divided among key areas of activity, the allocation would be as in Table 2 below.

**Table 2 Allocation of funds among key areas of international MSR activity (2005-8)**

<b>Key areas of activity</b>	<b>Allocation of Garfield Fnd. international grant money</b>	<b>Allocation of bilateral assistance funds</b>
International efforts to reduce the use of mercury in artisanal gold mining;	10%	20%
International efforts to reduce the use of mercury in chlor-alkali and PVC production;	15%	5%
International efforts to phase out the use of mercury in products such as measuring devices, dental amalgams, batteries, paints, etc.;	30%	20%
International efforts to better manage by-product sources of mercury, especially related to non-ferrous metals mining and natural gas cleaning;	10%	2%
International efforts to implement mercury export bans and/or promote storage of excess mercury;	15%	13%
Other international efforts related to MSR objectives, such as promoting voluntary or legally binding agreements, controlling mercury emissions from coal-fired power plants, etc.	20%	40%

The bulk of the remaining support of international MSR initiatives comes from bilateral assistance agencies – either directly or via the UN, the GEF, etc., who contribute an estimated additional \$3-5 million annually. The allocation of bilateral assistance funds to key areas of MSR activity is also indicated in Table 2. Overall, therefore, foundation support of MSR type activities is probably no more than 20% of the total. Nevertheless, because of the strategic insights of several key foundations (and especially Garfield Foundation) into how to leverage global change, the influence of targeted foundation grants has been far greater than the relative magnitude of those grants, as discussed below.

## **2.2 GF's NGO network and major MSR achievements**

### **2.2.1 Initial international foray of MPP**

MPP started its initial global mercury work in 2001 in response to a UNEP request to participate in the development of the UNEP Global Mercury Assessment report. MPP helped organize a coalition of NGOs from around the world to attend the Global Mercury Assessment meeting and provide input into the development of the report. The UNEP Report clearly demonstrated that anthropogenic mercury uses and releases present a risk to human health, wildlife and the environment, and underlined the need for global solutions since, due to long-distance transport, even countries with little or no mercury releases may be adversely affected. The UNEP Governing Council considered the Global Mercury Assessment Report at its 22nd session in February 2003 and agreed that “there is sufficient evidence of significant global adverse impacts from mercury and its compounds to warrant further international action to reduce the risks to human health and the environment.”

### **2.2.2 MPP collaborates with NRDC and EEB**

In carrying out baseline research on domestic uses of mercury in the winter of 2003, NRDC observed that the United States was responsible for only 10 percent of global mercury consumption, and that a considerable percentage of mercury contamination of U.S. lakes, streams, and coastlines was attributable to mercury emitted abroad but deposited in the U.S. In light of this, it became clear that without an international strategy, any domestic victories that one could secure would in fact not result in substantial reductions of human exposure in the U.S. or anywhere else in the world. During the period 2003-5, therefore, NRDC worked together with MPP:

1. to better understand the global mercury trade (culminating in a widely disseminated article in *WorldWatch*);
2. to develop a global mercury reduction strategy in cooperation with the European Union, which included a grant proposal that subsequently funded EEB to work on mercury issues, as well as supporting developing country NGO work on mercury, both domestically and internationally via the creation of the Zero Mercury Working Group;
3. to create, in collaboration with EEB, an effective international NGO coalition representing many of the most important countries using mercury;
4. to take a leadership role with the United Nations negotiations on mercury; and
5. to undertake a mercury use inventory in China to illuminate some of the key aspects of use in that most important country.

The initial focus of the NRDC mercury campaign was the U.S. Congress which, during the previous Administration, declined to take action on mercury, as on other progressive causes. However, the European Union proved more open to progress, and NRDC, MPP and EEB worked extensively to influence the European Union mercury strategy (especially important since the EU was the major Hg exporter, Spain had the major Hg mine, and the EU was and is the largest global user of Hg in chlor-alkali) that went well beyond what was originally envisioned for the United States. Therefore, this accomplishment was even more significant than similar action in the U.S. might have been, given that Europe has a greater hand in the mercury marketplace than the U.S.

### 2.2.3 Creation of the ZMWG

After the EU mercury strategy was assured, as described previously, the ZMWG network was created for further coordinated action, including outreach to less developed countries and countries with economies in transition, mainly with pass-through grants via EEB from the Sigrid Rausing Trust. Some of the main achievements of the ZMWG – prior to the UNEP GC 25 Meeting – are listed in the box above.

Overall since 2002, the work of the MPP/NRDC/EEB, together with the many NGOs in the ZMWG network, both before and during the Zero Mercury Campaign, has led to:

- a strong, active and continuously growing NGO international network following and contributing to the MSR issue;
- an information source on technical and policy issues on mercury for NGOs and individuals, but also for governments and institutions;
- establishment of very good contacts/links at EU (EU institutions, agencies, Member states, etc.), U.S. and UNEP levels (UN bodies, world governments);
- NGO drafts of documents that became the starting point for government deliberations, such as: 1) the proposal for a global trade report in the UNEP GC 23 that was subsequently promoted by Canada, and was then adopted by GC 23; and 2) the proposed text on interim activities that Norway then put on the table, and that was adopted by GC 24;
- acknowledgment of the work of NGOs in developing countries, and an opening of the governance of these countries – inviting NGOs to provide input to national consultations, as well as providing input to conferences;
- new scientific and policy input to debates at EU, U.S. and UNEP level, and during UNEP GC meetings; and
- the catalytic role of NGOs in bringing together parties/governments for stronger coalitions and better support of NGO views, and to bring about realization of projects, conferences and awareness raising activities among governments and participants of the UNEP GC meetings.

### 2.2.4 Key international MSR achievements of GF grantees

During the last five years GF grantees, working closely with SRT grantee EEB and other key NGOs, have realized a remarkable number of achievements that demonstrate great progress toward the main objective of systemic reductions in global mercury supply, demand, and releases. In rough chronological order, the 20 most remarkable achievements of GF grantees in international MSR over the past five years are listed in the box below – highlighted due to their importance to global efforts to reduce human health and environmental risks related to mercury.

As may be seen from the list in the box below, there is virtually no important aspect of global mercury policy that has not been shaped or influenced by key NGOs, and GF grantees have consistently led this movement. Considering the resources at their disposal, it would probably be safe to say that these NGOs have achieved results beyond even their own expectations.

**Box 1 Twenty Garfield Foundation grantee achievements that shook the mercury world**

1. shaping the EU mercury agenda, both in Brussels and via an active NGO mercury network in EU countries, while raising awareness of dental issues, measuring devices, batteries, lamps, chlor-alkali and other key products and processes;
2. applying pressure to achieve closure of the world's largest mercury mine in Spain;
3. influencing substantive elements of the June 2005 EU Mercury Strategy, and the legislation/directives subsequently enacted to implement the Strategy, which subsequently served to inform and motivate global responses;
4. following finalization of the EU strategy, worked extensively for the adoption of an EU export ban of metallic mercury and certain mercury compounds that is wider and will be implemented earlier than initially proposed
5. conceiving of and creating the ZMWG, a coherent network of NGOs in both the industrialized and developing world to lobby individual governments for progress on mercury reduction and constructive participation in UNEP GC negotiations;<sup>1</sup>
6. impressing national governments and the global community with their expertise and policy proposals (see text box below);
7. strategically undertaking information gathering activities to help shape global policy, such as the inventories of global mercury use in China, which uncovered a substantial mercury use not previously well understood and provided a sufficient information base for China and other stakeholders to understand the scope of mercury use in that country;
8. ensuring active NGO participation at the UNEP international table and in other international fora;
9. establishing and securing broad international support for Hg demand reduction targets for mercury-added products and processes, especially ASGM;
10. significantly adding to the pressure on other countries to phase out mercury in key products by working with NGOs in the United States to achieve enactment of state legislation to phase out mercury in switches, measuring devices, etc. – and by promoting awareness of USA manufacturers' announced "voluntary" commitment to eliminate the use of mercury in button cell batteries;
11. promoting the critical importance of reducing the global mercury supply as a principal short-term global priority, through phasing out primary mercury mining and encouraging regional excess mercury storage, and then transforming this concept into a global mercury strategy through the adoption of priority "interim measures" in the GC 25 decision;
12. shaping the global mercury agenda, especially by building NGO capacity in South Africa, Brazil, India and China, disseminating information to others, and presenting NGO consensus positions at international meetings, etc.;
13. increasing the pressure on the industry in the EU, USA, India and Brazil to address mercury releases in the chlor-alkali industry through a strategic focus on phasing out mercury cell plants;
14. assisting UNEP in creating a critical resource document – the *"Mercury Awareness Raising Toolkit"* – for developing countries and countries with economies in transition (see: [http://www.chem.unep.ch/mercury/awareness\\_raising\\_package/default.htm](http://www.chem.unep.ch/mercury/awareness_raising_package/default.htm));
15. leveraging of GF grants in order to secure substantial additional funding from other sources, as described in Section 2.2.5;
16. encouraging the Governments of Switzerland and the United States to take a critical view of ongoing mercury mining in Kyrgyzstan, and collaborating with those governments, UNITAR, and other stakeholders on a radically new vision for dealing with the issue;
17. maintaining issue visibility by floating the idea of OEWGs between UNEP GC meetings;
18. playing the major role in promoting the U.S. mercury export ban;
19. working extensively to in reshape the U.S. international mercury agenda during the transition between the Bush and Obama Administrations., which catalyzed the international agreement at GC 25 (February 2009) to begin negotiations on a legally binding instrument to reduce the supply, demand, and emissions of mercury;
20. becoming an important communication bridge between key governments and facilitating the increased involvement of many governments in the developing world in the UNEP GC deliberations, particularly in the Latin America and African regions, which over time helped to build overwhelming support of proposals for an international consensus on a legally binding instrument at GC 25.

<sup>1</sup> Funding to NGOs in developing countries via EEB (i.e., Sigrid Rausing Trust) pass through grants has been very important to the work on the ground as well as in governance. NGO involvement would have been far more limited at the global level without these EEB (SRT) projects/grants.

To have progressed from a situation where the NGOs were not permitted to speak formally at GC 23, to engineering a global consensus to negotiate a mercury treaty (LBI) only four years later at GC 25 is nothing short of remarkable. Several typical examples of NGO influence on the global policymaking process are described in further detail in the following box.

**Box 2 Prime examples of GF grantees' influence on the global policy-making process**

- 1) At the GC 23 meeting in February 2005, a ZMWG proposal to generate a global report on mercury trade flows was endorsed and offered by Canada and ultimately adopted in the GC decision. The report became the basis for subsequent policy directions regarding reductions in global supply and demand.
- 2) The decision text adopted by the GC 25 regarding priority activities to be conducted by UNEP while the INC discussions are underway is largely a shortened version of text originally drafted and circulated by NRDC/MPP several months before the GC meeting. To promote this text in the three weeks prior to the GC 25 meeting, ZMWG held a series of conference calls/meetings with UNEP and many governments and NGOs explaining the text in detail. ZMWG then released reports on mercury in fish in several key countries, and on mercury emissions from incineration and waste disposal. As a direct result of the NGO expertise and preparation, at the beginning of the GC meeting, several governments offered proposals identical or similar to ZMWG's as the starting point for further deliberations on this issue, thus leading to adoption of very similar wording in the final GC decision text. Through this series of activities, ZMWG largely initiated the priority list of global mercury activities to be performed over the next five years, in parallel to INC negotiations.
- 3) ZMWG took the lead in the development of an Asian Mercury Storage meeting which resulted in the formation of an Asian Advisory Committee of country representatives from the region. MPP received a grant from the Japanese government's consultant to organize the meeting, and NRDC funded a consultant study of mercury trade flows in the region. UNEP adopted this model and initiated a very similar process for the Latin America region. Therefore, in conjunction with the EU and USA export bans already in place, ZMWG efforts substantially influenced much of the architecture necessary for the global mercury trade policy to be considered during the upcoming treaty deliberations.

### **2.2.5 Leveraging GEF and other resources.**

It is important for foundations to recognize that when they demonstrate trust in certain NGOs, and the NGOs continue to produce high quality work, then UNEP and other International Governmental Organizations (IGOs) will be more ready to support these NGOs as well. There are a number of cases where this has already happened with Garfield Foundation grantees doing MSR work.

As noted above, NRDC put up money from its own discretionary funds to do preliminary work on the storage of mercury in the Asian region. With the initial product in hand, ZMWG was able to convince the Japanese government to contribute funds to help bring together regional stakeholders around the issue of mercury storage, which UNEP then decided to co-sponsor. Then UNEP (with Norwegian funds) decided to set aside \$250,000 for a Phase 2 feasibility study of the Asian storage project, as well as supporting an analysis for a South American storage project in collaboration with the ZMWG.

MPP and NRDC also facilitated UNEP funding of certain Asian ASGM projects as a priority since ZMWG member NGOs were in place to ensure good progress on the ground, and

because it was clear that there would be more regional political impact than in other countries being considered. Meanwhile U.S. EPA had already invested in ASGM partnerships with various Amazon and African countries, and has further expanded that commitment to include a francophone Africa regional project.

In a large-scale example of leveraging other funding, HCWH, in collaboration with WHO, has leveraged foundation support to secure a large GEF grant (\$10 million) to promote mercury- and dioxin-free health care. This was not easy to accomplish, requiring demonstration and pilot projects over several years, the ministries of participating countries had to sign off on the project, etc. Nevertheless, it is a good example of the funding that may be made available to NGOs that demonstrate a history of responsible project management and effective use of available funding. IGOs recognize that a well functioning NGO network is able to implement projects in the field better and far more cost-effectively than any other organization.

### **2.2.6 Specific mercury reductions**

During the initial period of work, it may be observed that many of the ZMWG initiatives were not, and were not intended to be, marked by specific mercury reductions. However, related work on product phase-outs implemented by some of the same NGOs in the USA, and additional product work in the EU, did produce significant mercury reductions during this period. Simultaneously, still further reductions were obtained through the efforts of HCWH and its worldwide network, which have done extremely valuable work in diffusing information and raising awareness around the world, especially with regard to mercury use in health care. With those awareness-raising successes in parallel, ZMWG was able to achieve far more through its own projects than might otherwise have been possible during this period. Most importantly, however, GF grantees made the strategic decision, which is absolutely crucial over the medium to long term, to design the agenda, focus the various agencies and NGOs, and set in motion – technically, politically and legally – the many elements that will lead to the really significant and long-term reductions in mercury supply, demand and emissions necessary to solve the global mercury pollution problem. For example, ZMWG efforts have put in place the various policy initiatives that could realistically reduce the global supply of mercury by 50% over the next 5-6 years.

### **2.3 Achievements of other NGOs in the ZMWG**

A number of NGOs in the ZMWG network have been instrumental in MSR progress with their own governments, as well as in international fora. Several of these are mentioned below, although this is by no means a complete list.

In India, Toxics Link already had good expertise in measuring devices, but ZMWG through EEB pass-through funding, as well as HCWH, have helped to broaden their knowledge of MSR, brought them to meetings, helped them get involved in new issues, etc. The studies carried out by Toxics Link have generated new data on mercury handling, usage and pollution. Likewise, report dissemination through various media led to higher levels of awareness at all levels of society, and to questions being raised on issues of mercury usage and its effect on human health and environment in the Parliament of India. The state of Delhi came out with the first public notice on mercury, giving guidelines for safe disposal in case of spillage and

therefore preventing exposure. The study on parad (religious statues typically containing mercury that are present in perhaps the majority of houses in India) had a wide coverage by the media and raised awareness among people using these objects.

In China, EEB pass-through support to Global Village Beijing, GVB, has helped to raise awareness of mercury problems in China. It has also led to more regular involvement of GVB in discussions with the national authorities, and enhanced communications between Chinese and other authorities, even though government officials are loath to be seen communicating with GVB at international meetings. The position of NGOs in China remains politically sensitive.

Concrete success was achieved when a motion promoted by ACPO in Brazil was adopted by the Ministry of Environment – meaning that Brazil will have to take concrete action to reduce emissions, demand and use of mercury in the country. ACPO is now invited to all government meetings as an NGO expert as an acknowledgement of their involvement and importance at international level.

In South Africa, recommendations by groundWork-FoE were approved phasing out the use of mercury-containing products in hospitals. GroundWork is now the Africa focal point and part of the mercury assessment team in South Africa.

AGENDA (Tanzania) organized a recent (November 2008) meeting in Dar Es Salaam called “NGO Skillshare: Strategies Towards Heavy Metals Phase-Out,” sponsored by the Swedish Society for Nature Conservation and ChemSec, and has become a very active presence at international meetings.

Ban Toxics! have developed very good contacts with the Philippine government, and are recognized as regional leaders in MSR matters and were also instrumental in assisting ZMWG in co-hosting a successful Asian Mercury Storage meeting in Bangkok (March 2009).

The Swedish Society for Nature Conservation has a long and strong reputation for capacity-building with many NGOs, and the ZMWG has worked hard to develop a good working relationship with the society with regard to mercury issues.

## ***2.4 Importance of the individuals involved***

While various aspects of NGO organization, financial support and networking have been discussed, more than one interviewee pointed out that the importance of individuals should not be overlooked. In fact, it has been estimated that there are no more than 50-100 talented, passionate and often visionary individuals who really drive the environmental health movement internationally. Foundations should make every effort to ensure these people do not have to worry about financial support, although one interviewee pointed out that most of them would probably continue fighting the fight even if they had inadequate financial support.

## ***2.5 Areas of limited GF effectiveness***

In the process of prioritizing international activities, there are some areas that may not be the most effective use of GF's limited resources.

For example, NGOs may be less effective dealing with issues like the management of mercury in waste, and especially dealing with mercury contaminated sites. These are issues where solutions are much larger than the mercury issue, often reflecting shortcomings in national governance, infrastructure and resources. The reality is that the resources available to address mercury problems are not great enough to make substantive progress on the broader infrastructure needs of waste management and site remediation. Thus the NGO challenge will be to find a way to make strategic progress in these areas while ensuring that most of the available resources are devoted to mercury issues where NGOs can have the greatest impact.

## **2.6 Areas for improvement**

Not to take away from the many accomplishments previously described, there are always things that GF and its grantees could do better.

There are a number of other very committed, passionate and effective individuals either running NGOs or independent, some with relatively little familiarity with mercury issues. One could make an effort to identify more of them and either find a way to bring them into the network, or at least to make sure they are more aware of mercury issues so they can take advantage of potential synergies even with other ongoing work.

It is mentioned elsewhere that GF could consider a broader definition of its MSR mandate, but it could also be argued that if GF were to define its remit even as broadly as environmental health, then one might end up with insufficient emphasis being placed on mercury problems. It is difficult to argue, in light of the many achievements of GF grantees, that GF's MSR grants might have been more effective had the scope of the program been more broadly defined. At the same time, they have been able to develop and field a large and impressive team of geographically diverse NGOs at UNEP Governing Council and other important international meetings such as the upcoming INC meetings.

It would appear that the ZMWG network is now mature enough to consider a somewhat more formalized management structure, while maintaining its flexibility and its ability to respond quickly to crises or unforeseen challenges. The upcoming negotiations of a mercury treaty will present coordination challenges that would benefit from a clearer decision-making line of authority. While coordination and consensus with regard to MSR issues within the larger NGO community have greatly improved during the last several years, it has been observed that such effective networks as ZMWG, HCWH and IPEN can present a massive and powerful united front when they join hands behind specific issues such as the push for a legally binding instrument. As one interviewee pointed out, there will always be certain points of disagreement between NGOs and between networks, but these are far outweighed by the many common interests and objectives, and ZMWG, HCWH and IPEN have developed a good working relationship as evidenced, e.g., at the recent GC 25 meeting in Nairobi, as well as the earlier OEWG meetings in 2007 and 2008.

Moving forward, it would be valuable for these three networks, in particular, to explore a greater range of issues on which they might collaborate. The most important, of course, and already widely anticipated, is collaborating on NGO input to the Intergovernmental Negotiating Committee (INC) charged with negotiating a mercury treaty (LBI), but they could



also perhaps rally behind a range of issues related to mercury products such as dental amalgams, for example, where progress in many countries has so far been slow. GF could also perhaps identify additional international foundation networks and contacts (specific bilateral donors?) through which to keep other foundations informed of what GF is doing, while keeping track of how GF initiatives fit into the bigger picture. Understanding that demands on program management are many, if this could be done with a minimal extra investment of time, it would seem to make sense.

### **3 Achieving key international MSR objectives**

#### **3.1 Main international objectives**

The question of what remains to be done to achieve the key international MSR objectives is a broad one, and revolves around reducing mercury supply, reducing mercury demand and reducing unintentional releases of mercury to the environment. In particular, the recent focus has been on reducing the mercury supply – partly because it is easier to make progress in this area than in dealing directly with mercury demand, and partly because reductions in the mercury supply will set the course for parallel reductions in demand.

Nevertheless, the main international MSR objectives are appropriately broad:

- foremost, negotiating a solid international legally binding instrument to address mercury.
- reducing the global mercury supply through key “supply-side” measures such as:
  - halting primary mining for export, except where mercury is produced as a by-product of other ore processing;
  - restricting mercury exports from developed nations;
  - managing (sequestering) mercury from decommissioned chlor-alkali facilities, by-product mercury and similar key sources.
- reducing the global consumption of mercury by 70% by 2017, which will depend mostly on the following “demand-side” initiatives:
  - banning the use of mercury in electronics, button cell batteries, thermometers and other non-electronic measuring equipment, while increasing pressure on dental uses;
  - phasing out the use of mercury in the production of chlor-alkali;
  - developing a roadmap for increased use of mercury-free technologies in small-scale and artisanal gold mining, including targets for sector-specific demand and an overall goal of 50% reduction in mercury use by 2017 (this is consistent with the objective of the United Nations Industrial Development Organization as reported at OEWG 2 in the context of the artisanal and small-scale gold mining Partnership);
  - dealing proactively with the increasing use of mercury in PVC production (particularly a Chinese problem).
- reducing unintentional (trace) mercury releases from coal fired power plants, smelters, cement kilns, etc.; in this case the NGOs will need to frame the upcoming emissions report to make sure it will address more than simply control devices designed to capture SO<sub>x</sub> and NO<sub>x</sub>, and not mercury.
- generating new and additional financial resources to support these activities, especially in developing countries and countries with economies in transition.

It has been generally agreed that the elements of a global mercury framework related to supply (including storage and trade), emission reductions (through the use of BAT or otherwise), and product/process phase-outs in particular, would require a legal instrument to be effective for a number of reasons, including the following:

- It is the only way to control supply and eliminate global mercury trade while minimizing possibility of conflicts with international trade law.
- It will ensure the required substantial global coordination and a level playing field in effectively phasing out the use of mercury in products and processes, and otherwise reducing mercury emissions from industrial sources.
- The legal instrument is the most direct and effective vehicle for prohibiting new undesired activities.
- It can elevate the importance of mercury as a priority issue in countries and regions, and facilitate implementation of relevant national legislation.

Now that a legal instrument is in the pipeline, however, NGOs will need to make sure the above elements are included in the details of the instrument.

As mentioned above, much of the recent international work supported by GF has had the objective of restricting the mercury supply, especially to put pressure on artisanal and small-scale miners to reduce their consumption. The efforts with regard to the Kyrgyzstan mine, the U.S. and EU export bans, the Asian and South American mercury storage projects, etc., have all been intended to help reduce the mercury supply. While all of these efforts are either in early stages (Kyrgyzstan mine, Asian storage, Latin American storage) or will require close attention during implementation (mercury export bans), the NGOs need as well to devote more attention to converting the manufacturing base to mercury-free products and processes, with special attention to:

- maintaining and/or increasing pressure on the European chlor-alkali sector;
- figuring out a way forward for China to reduce its use of mercury in VCM manufacturing; and
- moving forward more concretely on the very difficult issue of artisanal and small-scale gold mining (ASGM).

Meanwhile, NGOs need to aggressively deal with major sources of atmospheric emissions like coal combustion and non-ferrous metal smelters.

And finally, a constant NGO presence on the Intergovernmental Negotiating Committee (INC) or NGO negotiating team is critical, although it adds another layer of networking and activities on top of what the NGOs are already doing. The NGOs have discovered that it is extremely important to maintain visibility, momentum and pressure between UNEP GC meetings.

For the future, GF and the NGOs should keep in mind that climate issues are sucking up a lot of the financial resources devoted to environmental issues. For example, UNEP has been asked by the GEF to participate in a well-funded project on climate issues, that happens to have a relatively small component to promote energy efficient light bulbs. GF and the NGOs need to think more about the various links between global climate issues and mercury – such as the Arctic sunrise phenomenon, energy efficient light bulbs (esp. CFLs), multi-pollutant

controls on coal-fired power plants, etc. With regard to the latter, ZMWG may have an important strategic and policy role to play, while leaving others to the more technical details, although it would be a mistake to divorce the two elements completely.

In general, however, from the viewpoint of strategy, networking, etc., it is very difficult to argue against GF and its grantees continuing to do precisely what they have done so successfully. The investment has not been great, the impact has been enormous although much remains to be done, they have gained great respect at the international level, and there has been a major transfer of knowledge and skills to other members of the large and growing NGO network.

### **3.2 Main challenges**

The various challenges to further and faster progress on MSR issues include the need for better information and data, the never-ending struggle to increase public awareness, the need for further capacity building, the need for consistent and appropriate legislation, adequate enforcement, properly trained personnel, adequate mercury waste treatment and disposal facilities, etc.

Therefore, among the various elements that will be addressed in the international legally binding instrument that is to be negotiated, NGOs should pay particular attention to making sure the instrument:

- Covers a broad scope that includes all human activities that release mercury, and that also addresses the entire lifecycle of those releases.
- Addresses the issue of mercury containing products, and in particular the development and promotion of suitable alternatives.
- Establishes sufficient new and additional financial resources to enable developing countries and countries with economies in transition to control mercury sources effectively, including mechanisms for technology transfer.
- Identifies and encourages the use of BAT and BEP for existing plants using or emitting mercury.
- Enhances knowledge sharing in areas related to mercury.

### **3.3 Domestic/international synergies**

It is understandable to ask whether U.S. domestic MSR activities need to be kept up as more and more attention is devoted to international initiatives. However, one should keep in mind that there has been a strong connection between domestic and international on issues of trade, mercury-added products, etc., all of which developed a solid domestic basis before going international. Furthermore, it should be noted that the U.S. has long exercised leadership – rightly or wrongly – on a broad range of issues, and many countries wait for the U.S. to take the lead, as we are seeing now with regard to mercury emissions from coal-fired power plants, and as we have just seen at GC 25.

But the fact of moving substantively ahead on a given MSR issue does not necessarily mean it can be left alone. Take the recent example of methylmercury in fish. Just when we thought the public was getting the message, and even fish in the marketplace were increasingly accompanied

with warnings, the FDA has proposed removing any warnings from its website that deal with limiting the consumption of certain fish due to mercury concerns. The conclusion is that NGOs (and their grantors) must always be vigilant, and at least some domestic fights need to be carried on. If NGOs lose the present fight about fish consumption advisories, there will certainly be big international repercussions.

Finally, it is important to mention that the EU is also seen as a frontrunner on many mercury issues, and the EEB, largely due to its own network and expertise, has become a trusted player, source of information, and an important bridge to many developing country NGOs and their efforts. At the same time, EEB and ZMWG have also gained the trust and respect of UNEP, UNIDO, UNITAR, UNDP, WHO, the World Bank, etc.

### **3.4 Strategic opportunities**

Various innovative and strategic areas of opportunity have already been mentioned in the previous text. A few further comments are offered here, especially with regard to areas where a strategic approach and targeted funding might have a large impact.

#### **3.4.1 Coal-fired power plants**

There is increasing discussion (and increasing pressure on industry) and attention to CO<sub>2</sub> emissions, waste ash and sludges, mercury emissions and other pollutants from coal-fired power plants (CFPPs). While this area of interest does not fit squarely in the original GF definition of MSR initiatives, it is clearly a very important area that will be a key “element of a comprehensive framework” for the LBI, and about which NGOs will need to develop further expertise. Initially, reducing mercury emissions from CFPPs will often be regarded as a co-benefit of reducing CO<sub>2</sub> emissions. But even in this context there are CO<sub>2</sub> controls and techniques that may have a large impact on mercury emissions – depending on other variables – and other CO<sub>2</sub> controls and techniques that will have a much smaller impact on mercury emissions.

#### **3.4.2 Dental amalgam**

With regard to dental mercury, national governments (other than Norway and Sweden, and very recently, Denmark) have not yet been able to put in place bans on dental uses of mercury, which is all the more reason that it is a key area where NGOs could make a big difference. At the same time, the World Dental Federation expressed at OEWG 2 (October 2008) its desire to join the Global Mercury Partnership, at the same time as mentioning its fear that the shift to mercury-free dental practices could be more abrupt than it could reasonably handle. Such an abrupt shift does not seem to be in the cards at present, but the way forward is clearly to ensure that the dental industry (and eventually the patient) pays the full environmental cost of using amalgam, including the cost of wastewater screens and separators, proper hazardous waste disposal options, appropriate health checks for dental personnel, removal of mercury from crematorium flue gases, etc. – not to mention adequate warnings for dental patients. If all of these costs were included in the treatment, we would see a natural and rapid shift to mercury-free alternatives.

Through their recent actions, the Nordic countries (most recently Sweden's total mercury ban) are demonstrating that amalgam is an outdated application that is no longer needed. Furthermore, the recent settlement of a court case against the FDA in the U.S. demonstrated that, from a precautionary perspective, Federal health officials now acknowledge the potential risks of amalgam – at least in certain segments of the population. In turn, as the news of that settlement spreads around the world, the ramifications gradually become clear, and will ultimately influence what other countries do as well. In parallel we are starting to see significant changes in how governments deal with dental clinic wastewater discharges, and further regulation will be one of the options.

In May 2007 the EEB organized an international conference supported by the Sigrid Rausing Trust, “The Dental Sector as a Source of Mercury Contamination,” to address the environmental impacts, reported health effects and the way forward with regard to dental amalgam.<sup>2</sup>

Overall, however, the NGO work in this area remains challenging, given the reluctance of the dental industry to give up the use of mercury, and the institutional support they continue to receive. A recent effort in the U.S. involves working with shareholder groups in order to bring the issue to the attention of amalgam manufacturers. Most recently, working collaboratively with shareholder groups, one amalgam manufacturer has offered to engage in a dialogue on the use of mercury amalgam.

### 3.4.3 Other initiatives

Other initiatives that could have a large impact could include, just as examples:

- An NGO team could request a mandate from Euro Chlor to visit every mercury cell chlor-alkali plant in the EU with the objective of discussing the importance of phasing out the mercury cell process, and fixing a date for each plant to do so.
- NGOs could identify all remaining manufacturers or distributors of certain products, especially in cases where the number of manufacturers or distributors is limited, and get their agreement to stop producing or selling certain mercury products by a given date. The most obvious targets would be manufacturers of medical devices. However, until the WHO takes a firm position on this issue, progress may be slow.
- An NGO team could help to secure financial support for (initially pilot plant) investments to replace the mercury catalyst system for producing VCM with mercury-free technology. For example, NGOs could promote a low-interest umbrella loan to the Chinese government by the Global Environment Fund (GEF) or World Bank, or smaller loans directly to industry by the International Monetary Fund (IMF). A typical investment in a mercury-free system might cost up to \$500,000. After the mercury-free technology is proven at several sites, the Chinese government could continue the shift to mercury-free technology through further incentives and legislation.

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<sup>2</sup> Conference and related documents are available at [http://www.zeromercury.org/EU\\_developments/070525\\_EEB\\_Dental\\_Amalgam\\_conference.html](http://www.zeromercury.org/EU_developments/070525_EEB_Dental_Amalgam_conference.html)

## 4 Future programming for MSR international objectives

### 4.1 Pre-UNEP GC 25 perspective

For the NGO survey carried out by the author (pre-GC 25), seven NGOs were asked about the relative importance of a range of mercury issues over the next 5-10 years, and they were also asked about the relative importance of NGO involvement in these efforts. Their interesting responses are summarized in Table 3 below. It appears that NGOs prioritized the importance of the issues largely on the basis of their contributions to mercury emissions and mercury consumption. The importance of NGO involvement, on the other hand, rather reflects the areas where NGOs believe they can contribute most. It is clear that in the area of coal combustion, for example, fewer NGOs feel they presently have the technical capacity to contribute effectively.

**Table 3 Importance of the issues and active NGO participation over the next 5-10 years**

Main areas of international activity with regard to mercury	Importance of the issues*	Importance of NGO involvement*
Issues of mercury <b>supply, trade and storage</b> – such as phasing out primary mercury mining, dealing with mercury from decommissioned chlor-alkali plants, restricting mercury exports, improving transparency in mercury trade, storage of excess mercury, etc.	10.0	9.0
Issues related to supporting the <b>international process</b> – such as improved funding mechanisms to support the above actions, improved coordination of international efforts dealing with the above actions, further efforts to promote partnerships dealing with the above issues, further efforts to secure a comprehensive legal framework, better enforcement of environmental commitments, improved monitoring and reporting, etc.	9.2	9.3
Issues of <b>atmospheric emissions</b> of mercury – such as better controlling emissions from coal combustion, ore processing, waste incineration, cement production, etc.	9.0	7.3
Issues of mercury <b>demand</b> – such as phasing out the production and/or use of mercury-containing products, reducing the use of mercury in VCM and chlor-alkali processes, reducing the use of mercury in artisanal and small-scale gold mining (ASGM), etc.	8.9	8.4
Issues of mercury <b>waste management</b> – such as improved collection and treatment of mercury wastes from dental uses and other mercury product wastes, improved management of chloralkali wastes and other industrial wastes, etc.	7.4	6.9
Issues related to improving our <b>understanding of mercury in society</b> – such as country emission inventories, contamination of the food chain, impacts on human health and the environment, mercury trade flows, mass balances, etc.	6.6	8.7
Issues related to remediation of <b>contaminated sites</b> – such as promoting inventories of contaminated sites, an improved legal framework for remediating such sites, researching remediation options, etc.	6.3	6.3
* Average score on a scale of 1 (“not at all important”) to 10 (“extremely important”)		

Among others, NRDC and MPP responded that they are likely to be involved in all of the above areas of activity (except for waste management and contaminated sites), as well as following up the legally binding agreement, strategic work on mercury emissions from coal-fired power plants, continuing work in China to inventory mercury use, and continuing work to reduce use and release of mercury in the manufacture of vinyl chloride in China.

In its own response to the survey, and reflecting similar priorities to those of the NGOs, UNEP listed as well the two highest priorities mentioned by the NGOs: 1) reducing the global mercury supply, such as through the phase-out of primary mining, storage of mercury, etc., and 2) the international process, especially negotiations around a legally binding instrument.

#### **4.2 Post-UNEP GC 25 perspective – “marching orders”**

Under the timetable stipulated in this GC decision, a pre-INC organizational meeting will be held in the fall of 2009, the formal INC deliberations will begin in 2010, and the INC must complete its work by February 2013. Including the pre-INC, six to eight negotiation meetings can be expected, each lasting about one week and each requiring significant preparation time.

The GC decision also specified “interim activities” to be performed while the INC deliberations are underway. These interim activities will inform or otherwise influence the INC deliberations, in addition to reducing mercury uses and releases over the short-term. Significantly, many of these interim activities reflect NGO priorities, since NGOs drafted the original proposal that ultimately led to the GC decision text.

Therefore, this GC Decision presents both enormous opportunities and challenges for Garfield Foundation grantees over the next four years. Both the interim activities and the INC deliberations offer complementary paths to achieving substantial progress in reducing global mercury uses and releases, but an appropriate strategy must be developed to take full advantage of both tracks.

Reducing the global supply of mercury by a further 50% by 2015 should remain one of the highest priorities. While already underway, this task will further build upon the recent export ban legislation in both the EU and USA – two of the largest global mercury exporting regions – through near-term initiatives such as:

- Working to close the last primary mercury mine (Kyrgyzstan) that exports mercury by advising the UN-led project looking at various options.
- Participating as members of Asia and Latin America Executive Committees created by UNEP to facilitate the collection and storage of excess mercury in those regions of the world.
- Monitoring the implementation of export ban legislation in the EU and USA, including the deliberations about extending the ban to mercury compounds.
- Providing technical and financial support to Japan NGOs to encourage export ban legislation in Japan – one of the larger remaining exporting countries.

Similarly, NGOs should continue to promote policies and practices to reduce the use of mercury in products and processes, focusing on the largest global mercury uses. This work can

be seen as an important complement to the supply activities above, by providing a path forward as various sectors see their supply of mercury reduced, and the price increased. Worthwhile initiatives in this area, to which NGOs may make crucial contributions, include:

- Continued and enhanced involvement in partnerships and other forums working to reduce mercury use in small-scale gold mining, which now accounts for over 25% of annual global mercury demand.
- Continued work in China to reduce mercury use in the VCM/PVC sector, now also estimated to account for over 25% of annual global mercury demand. This could be greatly aided by a successful UNEP/China Ministry of the Environment workshop now scheduled for June 2009.
- A concrete strategy for moving ahead with regard to dental uses of mercury.

#### **4.2.1 INC deliberations**

These negotiations will be challenging – especially making sure they are sufficiently comprehensive, and at the same time, that they include the necessary technical detail and monitoring requirements to ensure the effectiveness of the eventual LBI.

Participation in the INC process will require background research into potential approaches and texts in areas such as emissions control, financial support, and enforcement; drafting of proposed text; ongoing outreach and consultation with UNEP and governments; global NGO coordination; technical information and other support to delegates involved in the negotiation process, so as to ensure a broad-based and well-informed outcome.; and participation in the INC deliberations themselves.

While organizational in nature, the 2009 pre-INC meeting will nevertheless be important because it will set the ground rules for future INC discussions, including the critical questions of negotiation schedules and priorities, procedures for participation, etc. The two 2010 INC meetings can be expected to be largely substantive in nature, focusing on the initial priority areas identified at the pre-INC meeting. These areas will very likely include the NGO priorities of reducing global mercury supply and trade, and the phase out of mercury use in products and industrial processes.

Based upon the extent of NGO influence prior to and during UNEP GC 25, it may be anticipated that NGOs can continue to wield significant influence during this process if they continue to do the hard preparatory work.

#### **4.3 Other possible foundation partners**

During discussions with various contributors to this assessment, other foundations than those mentioned in Appendix A were suggested as possibly being interested in supporting future MSR and related initiatives, including the JMG Foundation, Goldsmith Foundation, and Prince Albert II Foundation in Europe, and the Forrest & Frances Lattner Foundation (which funded Oceana's *Campaign to Stop Seafood Contamination*) and the Charles Stewart Mott Foundation (which gave 211 international grants in 2004 totaling over \$25 million, among which



“strengthening of civil society” – including NGO capacity building – and “protecting and conserving the environment” figured prominently) in the U.S.

#### **4.4 Better communication with bilateral funding agencies and UNEP**

The main bilateral assistance agencies funding MSR projects are discussed briefly in Appendix B, although many others have also contributed in a variety of ways. While interviews with bilateral funders were not a key focus of this assessment, two in particular offered their perspectives on closer collaboration with foundations.

In its response to the survey, the Danish EPA reported that it is happy to collaborate with foundations, but typically divides a project into pieces that can be separately funded.

For its part, U.S. EPA noted that it could not accept direct funding from foundations, but would welcome co-funding of projects by foundations (with foundation funding going directly to the recipient country/organization). U.S. EPA would also welcome sharing project ideas with foundations.

## **APPENDIX A**

### **Foundations supporting MSR programs or similar**

#### **Health and Environmental Funders Network**

While not a foundation itself, HEFN does have significant influence (expert input, working groups, information sharing, etc.) with a large number of foundations dealing with mercury in one way or another. HEFN presently comprises about 200 members, of which 120-130 are mostly private, grant-giving foundations. Since HEFN encourages networking among its members around certain issues, it sees the mercury problem appearing time and again in all sorts of fora, such as chemical policies (extremely active), consumer guides to Hg in fish, marine ecosystems, women's health, air pollution issues, etc. One might envision GF participating as the "mercury expert" in any or all such networks. With regard to specific foundations, Jenifer Altman, Marisla, New World and various other HEFN members, not to mention foundations outside the U.S. such as Sigrid Rausing Trust, have demonstrated a special interest in international initiatives regarding toxics.

At the same time, there are some surprising opportunities within HEFN. For example, a large number of grant-makers have funds that may be devoted to oral health issues, but so far they have rarely raised the issue of mercury in dental amalgams.

HEFN has observed that the European Union has had a big influence on U.S. policy with regard to chemicals, toxics and other environmental issues, and sees a clear need for ongoing and improved dialogue between the U.S. and the EU, for which there is now more opportunity within the present Administration. Therefore, the need for international awareness and collaboration is only going to expand.

#### **Jenifer Altman Foundation**

Several years ago, JAF, Mitchell Kapor Foundation, and Marisla Foundation collaborated in a scoping of the broad international environmental health and justice arena. Questions asked about the environmental health and justice field included: Where is the field weak geographically? What are the strategic opportunities we need to prepare and build for? Where do we see strong and strategic leadership that needs additional capacity? How can we increase effectiveness and connectivity? Working with a group of NGO networks, a list of key grantees was developed, as well as valuable relationships with such networks as GAIA, HCWH International, IPEN and PAN (Pesticide Action Network) – all of whom have dealt in one way or another with mercury issues.

Building on the above initiative, ten percent of one senior staff person's time at the Jenifer Altman Foundation (JAF) is now allocated to managing a grantmaking program that includes approximately 25 NGO grantees active in environmental health and justice issues. Each of these grantees is active in at least two (often three to four) of the networks/coalitions mentioned above, and core funding is provided by the Marisla Foundation.

There is general awareness that the environmental health and justice arena now needs to grow and strengthen especially in such regions as China and the Middle East, or at least to improve its connectivity to NGOs in other regions. Among others, the Rockefeller Brothers Fund is doing some grantmaking on environmental health in China.

JAF staff also have routine contacts with the Sigrid Rausing Trust, and they have suggested that GF may wish to contact Richard Fuller at Blacksmith (among other initiatives, presently compiling a global list of the most heavily contaminated sites), or the Goldsmith Foundation (UK) to share ideas.

## **John Merck Fund**

JMF started working on mercury about 10 years ago, motivated by the fact that mercury is an endocrine disruptor and neurotoxicant, and one part of JMF is interested in developmental difficulties e.g. in children. Over the years, JMF gradually homed in on mercury emissions from coal-fired power plants, which were not only unregulated but also had serious climate implications.

The John Merck Fund originally supported the New England Zero Mercury Campaign (six NGOs and over \$300,000 in funding each year, to promote policies to phase mercury out of products), which included collecting and recycling end-of-life mercury-added products. To a large extent, the subsequent support of the U.S. mercury export ban was an extension of earlier work. Very simply, why would one want the mercury collected in New England to be exported elsewhere and eventually end up back in the atmosphere and transported back to the U.S.?

With similar reasoning, JMF realized that mercury exported by the EU could follow the same pathway, and decided to pay increased attention to EU policy-making. EU NGOs helped U.S. policy to develop in this area because they networked with U.S. organizations (especially CIEL, Lowell Center for Clean Technology, Clean Production, etc.) and put pressure on industry to make changes everywhere. While the JMF mostly does domestic grants, in the case of mercury the majority of the projects are now outside the U.S. as they have observed a greater impact when working internationally to address such a global pollutant.

JMF had good success raising awareness about mercury issues, but ultimately had to admit they were dealing with only one (albeit important) chemical, and they felt the need to address the full range of chemicals and especially their effects on health and environment. This led to a broader focus on persistent, bioaccumulative, and toxic (PBT) chemicals.

JMF has suggested that GF look to HEFN for other foundations doing similar international funding, and noted that there are lots of other chemicals that need attention, prevention, precaution, etc. Meanwhile, in order to communicate more effectively, JMF has recently modified its message to emphasize environmental/human health and disease prevention rather than merely “chemicals.”

## **Kendeda Fund**

The Kendeda Fund has a broad mandate to improve the capacity of communities to address environmental health issues. It is not issue-specific, although various projects have dealt with

mercury issues. Rather, the KF sees its main value in organizational development and capacity building.

Moreover, KF does not directly fund overseas NGOs, preferring to work through trusted U.S. NGOs, who are in turn linked to overseas NGOs. For example, some KF funding to overseas NGOs flows through GAIA (Global Alliance for Incinerator Alternatives) and Global Greengrants Fund, both of which deal with mercury-related issues. For other international work, KF funds primarily two organizations with offices in Cambridge, MA – the Ecological Development Fund (CA) and Root Capital (global), who sometimes pass through money to a specific community for a specific project. Overall, about 25% of KF grants go to international projects.

In the area of environmental health, the U.S. now needs to reengage with the rest of the world, to catch up to the European Union's achievements with REACH, etc. The public needs to understand that the U.S. sends toxic waste to China, China sends contaminants (including in food) back to the U.S., and we need to think seriously about how to deal with those problems. The KF realizes there is lots of environmental health expertise in the European Union, but LDC cultural values are also very important, so local NGOs in less developed countries and countries with economies in transition need to be more engaged.

## **Marisla Foundation**

The Marisla Foundation got involved with mercury through its original interest in POPs, and then toxics more broadly. It continues to support a large number of overseas NGOs (in close collaboration with the Jenifer Altman Foundation) working on a range of toxics including mercury.

Marisla has had the wisdom to attack toxics from the “top” and from the “bottom” (the author's characterization) at the same time, although it is not always easy to keep participating donors involved and focused. At the “macro” level Marisla supports networks such as GAIA, HCWH, PAN and IPEN, and promotes the general objective of getting toxic chemicals out of the environment, describes the effects of toxic chemicals in broad terms, and then tries to interest other funders in a broad frontal attack such as REACH in the EU or something similar in the U.S. But at the same time, at the “micro” level Marisla supports a large number of individual NGOs, some of which are involved in mercury issues such as measuring mercury in fish, getting mercury thermometers out of hospitals, etc. This combined “top” and “bottom” support strategy appears to be critical to sustained support of (and development of) a healthy coalition or network.

Marisla sets priorities in the area of health and environment based on the input of key advisors, trusted NGOs, and the knowledge shared through networks such as HEFN and the Collaborative on Health and the Environment (CHE).

MF considers the present level of collaboration between GF and Marisla in related mercury projects to be good, although Marisla tends to be more hands off, trusting NGOs and other foundations, to a great extent, to do what they know is in the best interest of a given project. MF views the general NGO collaboration (setting priorities, strategizing, sharing funding, etc.) on international mercury issues as particularly “enlightened” and effective.

## **New World Foundation**

The New World Foundation (NWF) has long had a strong international Environmental Justice program, which is especially focused on NGOs outside the U.S. and Europe, especially because the better NGOs from developing countries and countries with economies in transition have exceptional influence on their own governments, play a critical role within civil society to keep a check on government, and are increasingly influencing regional and global debates. The NWF puts particular effort into finding the most dynamic NGOs, helping them build capacity by working with and learning from each other, and then helping them to play their respective roles in the international debate.

The NWF has funded projects dealing with mercury emissions and mining, for example, but pointed out that it may be a mistake to define one's agenda too narrowly. For example, Environmental Justice, in the view of NWF, includes climate work through such issues as air quality, waste, etc. One might ask whether mercury initiatives that include mining, coal-fired power plants, etc., are also gathered under the larger umbrella of climate and/or environmental justice issues.

The NWF continues to work through the Health and Environmental Funders Network (HEFN) and the Funders Network on Trade and Globalization (FNTG), but they have discovered that there are relatively few foundations comfortable with funding NGOs outside the U.S., and at this point they are well acquainted with most members of this small club.

In addition to their own resources, the NWF accepts and manages funds from other foundations – various family foundations, Sigrid Rausing Trust, etc., – interested in the same objectives. They currently disburse \$400-500,000 annually outside the U.S., but could easily disburse that much again if it were available.

## **New York Community Trust**

The NYCT devotes most of its national environment grants program to U.S. NGOs, but it has provided some support for international environmental initiatives via its U.S.-based NGOs. For example, NYCT continues to support CIEL in its work to advance international chemicals (including mercury) treaties, and especially to influence the new U.S. Administration to properly prioritize (and fund) a range of green issues. NYCT has also supported IPEN's international mercury work over the years through grants to Environmental Health Fund.

NYCT has also supported a number of other international environmental initiatives, such as in the areas of wildlife health, protection of critical biodiversity, certification schemes, and the like.

## **Oak Foundation**

Oak Foundation (OF) has not identified mercury as a strategic priority for its grant-making, but it has supported (sometimes in cooperation with the Sigrid Rausing Trust) Health Care Without Harm's work to eliminate mercury from the healthcare industry, Oceana's work to eliminate mercury from the chlor-alkali/paper industry, the indirect work of other organizations that are focused on preventing the construction of new coal-fired power plants, as well as the monitoring of heavy metals, including mercury, in the MesoAmerican Reef. The Oak

Foundation grant to HCWH is not part of an established OF program but is a “special” grant requested by an individual trustee. Similarly, the grant to Oceana is part of Oak’s broader program to conserve the marine environment, and was requested by one of Oak’s trustees.

The Oak Foundation does not at present have specific commitments to support mercury work in the future; at the same time, such grants are certainly not ruled out, and would be strongly influenced by any support coming from one of the foundation trustees. Oak works in partnership with many other foundations, sometimes simply sharing information about a project and/or a grantee’s performance. Some of Oak’s most successful grants have been the result of collaboration among donors working together to reach a certain goal. They suggest that other European foundations with a possible interest in mercury issues may include V Kann Rasmussen, and perhaps Baltic 2020 as well.

In terms of future strategy, and reflecting similar comments by the New World Foundation, OF pointed out that environmental health issues, while being of great importance on their own, can offer other environmental issues significant traction. “It’s a field that can provide a lot of leverage to almost every other environmental concern – climate change (for example, where it relates to particulates and air pollution), healthy communities, marine conservation and wildlife conservation (for example, the issue of endocrine disruptors), fresh water issues, etc. – by making the issues personal to people so they are willing to take action.”

### **Richard and Rhoda Goldman Fund**

The introduction of the Richard and Rhoda Goldman Fund to mercury projects was fairly straightforward. NRDC demonstrated that its proposal was consistent with Goldman’s “reducing impact of industry” practice. Goldman was familiar with NRDC’s reputation and ability to draw on networks in the U.S. and overseas, so the proposal received funding. The Goldman Board of Directors views mercury as an important area of work; however, they consider their grants for mercury work to comprise a relatively small commitment, and the program is clearly achieving systemic change, which is very important to Goldman.

Goldman is not very strict about the allocation of funds between domestic and international activities. They want most to see their grantees, who also include CIEL, use funds in the most effective manner to achieve project objectives. Nevertheless, Goldman funding for the Mercury Policy Project is for international mercury work. Typically, due to the number of grants Goldman manages, and the time it takes to manage each grant, Goldman prefers a grant pass-through arrangement from large NGOs to smaller NGOs when feasible.

Goldman belongs to the Environmental Grantmakers Association but not HEFN.

### **Rockefeller Brothers Fund**

While there was no direct contact with the Rockefeller Brothers Fund during this assessment, several interviewees mentioned Shenyu Belsky, employed by the RBF, who has been based in China for a number of years working on issues of environmental toxics and health. She could be an excellent contact for Garfield Foundation, NRDC or others dealing with these issues in China.

## **Sigrid Rausing Trust**

The Sigrid Rausing Trust (SRT) came to mercury via its interest in environmental justice, after becoming aware of concerns that following the EU's new mercury strategy huge quantities of mercury from country-members might be dumped on Southern countries as it was the case with harmful pesticides banned in the North. The SRT trustees then determined that it would be most effective to support a program (Zero Mercury Campaign) put together by a number of organizations and hosted by EEB (which was uniformly recommended as the most effective European NGO network). The program ran two tracks, one at the EU level campaigning on the EU strategy on mercury and one at UNEP level promoting an international treaty on mercury. Specifically, the EEB was to address the following mercury issues:

- EU and international efforts to phase out the use of mercury in chlor-alkali production;
- EU and international efforts to phase out the use of mercury in products such as measuring devices, dental amalgams, batteries, paints, etc.;
- EU efforts to support the mercury export ban and promote the safe storage of surplus mercury.

One of the most significant achievements of the Zero Mercury Campaign was the way in which it persuaded NGOs in other countries to be actively involved, both within the EU and in other strategically important countries like South Africa, Brazil, India, China and the Philippines. During the last five years the Sigrid Rausing Trust has made pass-through (EEB) grants or direct grants supporting MSR initiatives to Ecologistas en Acción, Friends of the Earth or groundWork, Toxics Link, Legambiente, France Nature Environnement, Deutsche Naturschutzring (German Nature Protection League), Arnika, CNIID, ACPO, Global Village Beijing, and Ban Toxics!

With its continued interest in international toxics work, SRT continues to fund Pesticide Action Network, a sub-granting scheme on toxics with the New World Foundation, the Basel Action Network, the NGO Platform on Shipbreaking, groundWork, as well as significant support for NGOs engaged in mitigating the impacts of mining – both large-scale and small.

## **Sills Family Foundation**

The most recent grant provided by Sills to the MPP was not intended for international work. The grant focus from Sills was focused on reducing mercury exposure in the U.S. Sills was not interviewed for this assessment, and it is therefore not known whether Sills would consider supporting international initiatives in the future.

## **Tides Foundation**

The Tides Foundation has a wealth of experience with environment and health issues in general, consolidates and manages funds from a number of other foundations as well, and grants an estimated \$8-10 million annually for international activities, including support to a number of the NGOs most active in the Zero Mercury Working Group.

## **APPENDIX B**

### **Main bilateral assistance agencies funding MSR projects**

The main countries providing bilateral funding for mercury initiatives have been the North American and the Nordic countries.

#### **United States**

The importance of Hg as an environmental concern increased in the U.S. in the 1990s as the U.S. became aware of transboundary air pollution, and started thinking about how to deal with Hg deposition on the U.S. from outside the U.S. Simultaneously, U.S. EPA had rather strict water quality standards, and many States couldn't meet the standards due to so many diverse sources of Hg to wastewater. So the U.S. decided to look for a way to move forward internationally.

Therefore, in the late 1990s the U.S. encouraged (and funded) UNEP to address Hg through the Global Mercury Assessment (to which this author also contributed), and afterward the U.S. became the main funder of the UNEP Mercury Programme. In parallel, the North American Commission for Economic Cooperation was given a strong environmental mandate, and mercury issues have figured prominently in their work. Overall, Hg remains a high priority internationally, and much of that is due to early U.S. initiatives.

The U.S. government provides funding to global mercury initiatives primarily via the State Department and via the U.S. EPA, as seen in the examples in Table 4 below, which draws information from different documents. One would expect that State Department funding would be granted for quasi-political reasons (e.g. diplomatic alliances), and U.S. EPA funding for more technical reasons (e.g. supporting research networks or global treaties). However, the evidence does not support such a clear delineation.

Furthermore, it has been suggested that U.S. funding of Partnerships – the focus of about half of the \$4.5 million from U.S. EPA and \$1.7 million from the State Department provided to the UNEP Mercury Programme through mid-2009 – may have been intended, at least partly, to outweigh and/or distract attention from other countries' calls for a legally binding instrument. To be fair, however, during this period the U.S. did fund projects in critical areas and, after some cajoling by Garfield Foundation grantees, agreed to set objectives and structure these projects in such a way that concrete results have been achieved already in a number of areas.



**Table 4 U.S. support of international mercury initiatives via UNEP (incomplete)**

Years	Activities	Funding
2003-2008	<p>\$130,000 – information and analysis to help countries reduce and ultimately eliminate releases of mercury. Reports increased the knowledge of countries of the hazards associated with mercury, encouraged countries to undertake further activities to reduce mercury releases, and supported countries in their participation in discussions relating to the control of mercury.</p> <p>\$235,000 – partnership meetings, esp. chlor-alkali (\$39,000), inventory work in Burkina Faso (\$41,000), artisanal mining Suriname (\$22,000), support of Kyrgyzstan mine project (\$15,000).</p> <p>\$115,000 –support work by Health Care Without Harm (\$85,000), including workshop in South Africa, work with hospitals in the Philippines, workshops in other developing countries to phase out mercury containing devices in hospitals, and further support of Kyrgyzstan mine project (\$15,000).</p> <p>\$87,000 – workshop on mercury in products in the Asian region.</p> <p>\$113,000 – regional meeting on SAICM held in Panama City, Panama, provided an opportunity for SAICM focal points to consult, facilitated input on Strategic Approach activities, preparation for future meetings of the Conference and exchange of regional expertise and information.</p>	U.S. EPA Cooperative agreement 2003-2008 total \$1.2 million to UNEP.
2006	<p>Country projects (including inventory projects)</p> <p>Work on partnerships, in particular products partnerships in the health-care sector</p> <p>Operational support for the program, including staff costs, travel, conference services and administrative costs, which allowed the work on policy and program development to go ahead</p> <p>Support for the work to develop the assessments of lead and cadmium</p> <p>Production of documentation to assist countries in addressing the mercury issue.</p>	\$850,380 from U.S. State Department. Project-specific grants from U.S. EPA for \$115,000
2007-2008	<p>Country projects (including inventory projects, some of which have been completed)</p> <p>Work on partnerships, esp. 1) developing an overarching framework for the partnership program; 2) further developing business plans; 3) consider new partnerships such as mercury supply, long term mercury storage, vinyl chloride monomer production, non-ferrous metals mining, cement production, and waste combustion; 4) enhancing the artisanal and small scale gold mining partnership together with UNIDO.</p> <p>Assist the UNEP, UNITAR, Swiss project investigating options to Hg mining in Kyrgyzstan.</p> <p>Operational support for the program, including staff costs, travel, conference services and administrative costs, which allowed the work on policy and program development to go ahead</p> <p>Production of documentation to assist countries in addressing the mercury issue.</p>	\$1,000,380 from U.S. State Department (received by UNEP June 2007). Project-specific grants from U.S. EPA for \$260,000
2008-2012 plan	Disseminate information on partnership successes, including the work on gold processing in the Amazon, on retort training and use in West Africa, on chlor-alkali best practices (including financing and surplus management), on successful approaches developed in other sectors, such as vinyl chloride, non-ferrous metals, and cement production; and best practices in the production of consumer goods such as jewelry where hg is routinely emitted.	~\$150,000 from U.S. EPA
2008-2012 plan	Reducing the supply of mercury on the global market, esp. reduce primary mercury mining, with a near-term focus on mining in Kyrgyzstan; also possible technical analysis of primary mining in China; and monitor world mercury trade trends for signs of new mining.	~\$60,000 from U.S. EPA
2008-2012 plan	Extending work on inventories in Eastern Europe, North Asia, the Caribbean and Central America, as well as continuing the development of inventories in Africa, Asia and Latin America. Mercury emission inventories are valuable for developing effective strategies to address the global mercury problem, especially in higher-emission countries.	~\$80,000 from U.S. EPA
2008-2012 plan	Further efforts to reduce the mercury emissions from the products sector, focusing on such sectors as fluorescent lighting, dental amalgam and mercury in batteries. Such efforts, especially in the SE Asia and Latin American Region, may include development of consumer/-educational products, coordinating recycling centers and technologies, facilitating national agreements for potential collection points, proper waste management, and developing inventories of mercury-free products.	~\$120,000 from U.S. EPA
2008-2012 plan	The Basel Convention Secretariat signed an agreement with the U.S. EPA for a maximum of \$2 million funding over a four-year period for mercury-related projects managed by UNEP. The first tranche, with supplementary funding to UNEP from Norway, is to help initiate mercury waste management plans in the health sector in three countries.	up to \$2 million from U.S. EPA

## Canada

It is important to note that there is a high impact of mercury on the Inuit population in terms of their food and traditional lifestyle. This also provides NGOs with an opportunity to pressure the Canadian government to act/fund mercury initiatives. Inuit and aboriginal affairs are high on the agenda of any Canadian government, given the historical sensitivity. The negotiation of the Stockholm Convention on POPs is one of the few success stories that Canada can demonstrate for its northern peoples, and the government cites it regularly.

Up to now the Inuit have not advocated especially hard on mercury. This could be due to funding realities, personalities and priorities (i.e., climate change). They support the NGO efforts, but there appears to be a huge sphere of influence that could be engaged more actively. Once the POPs process was already moving in Canada, Environment Canada funded the Inuit to participate in the process (in the time frame of 2003-2005), but earlier funding was largely through other channels. There could be a similar opportunity for NGOs to leverage assistance from the Canadian government in the case of mercury, but without outside pressure the Canadian government is unlikely to engage. For example, they support the UNEP Partnership process in principle, but have not really contributed.

Overall one could assume that if the Inuit were to step up at the national and international level on the issue of mercury, the Canadian government would have to become more visible. The main difference between mercury and POPs is the impact of mercury issues on the mining industry, which the Canadian government has to protect, so it will be difficult for the Canadian government to be as active as they were on POPs. For example, mid-way through the POPs negotiations, the Canadian government created the Canada POPs Fund (\$20 million over 5 years was channeled through CIDA, the World Bank and UNEP) to facilitate actions during the negotiations. It is difficult to foresee such a large contribution for mercury, but a more modest effort is not at all difficult to imagine.

## The Nordic countries

The Nordic countries (Denmark, Iceland, Norway, Sweden) have long shown particular interest in the human health risks of chemicals, and especially Hg in fish, which has always been an important part of the diet. Among these countries, Sweden first observed that many of its lakes had elevated levels of mercury due to transboundary movements of atmospheric mercury, and later it was also demonstrated the tendency of atmospheric mercury to move northward under certain climatic conditions.

A range of government agencies in the Nordic countries provide assistance to MSR projects, including the:

- Danish Environment Agency
- Danish Ministry of Foreign Affairs
- Norwegian Ministry of Environment
- Norwegian Ministry of Foreign Affairs
- Norwegian Pollution Control Authority

- Swedish Chemicals Agency
- Swedish Environmental Protection Agency
- Swedish International Development Cooperation Agency
- Swedish Ministry of Environment

## **Many other countries**

The Nordic countries are sometimes joined by Environment Canada, Health Canada or others as well when addressing mercury problems in the Arctic. Likewise, there are many other countries, among which Switzerland is one of the leaders, that contribute significantly in various ways to MSR projects.

## **Mechanics of bilateral funding**

Bilateral funding of MSR projects may take one of two main forms – direct assistance from one government to another government; or contributions by individual governments to the UN or other IGO system, such as UNEP, UNITAR, the Global Environment Fund (GEF), the Basel Convention Secretariat, the World Health Organization, etc.

In the first case, a project may be identified jointly between the donor government and a second government, and project funding may provide training for employees of the second government, it may provide consulting services e.g. to assist in carrying out a mercury inventory, it may help authorities of the second government to attend an international meeting, it may support local NGOs (although sometimes problematic, as when the NGO criticizes its own government) responsible for implementing a government program, etc.

In the second case, the purpose of donor funds is typically agreed at the time they are transferred to an IGO, and the IGO is then responsible to manage the agreed project and report back to the donor government. These funds may be used in very similar ways to those described in the first case above.

The obvious question arises: “Why would national government agencies fund projects through UNEP or another IGO rather than directly to another government or NGO?” In response, it may be recalled that direct funding may serve diplomatic alliances, as noted above, as well as supporting very specific government priorities, and recognizing that direct funding of an NGO, for example, may be the quickest, and certainly the most cost-effective way to get progress on the ground.

Government funding of an IGO, on the other hand, might be required to honor certain commitments, but it is also the best way to ensure effective management of large programs, large workshops and meetings. One interviewee noted that there are certain activities already programmed by UNEP that individual countries might find more difficult to fund directly, depending on national priorities, etc.

Table 5 below shows typical contributions (the numbers and identities of specific contributors are not final) to the UNEP Mercury Program during a recent year, indicating how many different governments may be involved, especially in support of important international meetings such as OEWG 1 and 2.

**Table 5 UNEP Mercury Program 2007/2008 – approx. costs and country contributions\***

<b>Contributors</b>	<b>Core costs (staff, premises, staff travel)</b>	<b>OEWG (meetings and studies/interces- sional work)</b>	<b>Partnership process costs (meetings, development of documents and business plans)</b>	<b>Projects (partnerships program and others)</b>
UNEP Environment fund	\$1,100,000			
Norway	15,000	210,000		
Finland		25,000		
Germany		25,000		
Australia		40,000		
Nordic Council		115,000		
Netherlands		60,000		
Sweden		385,000		
Switzerland	40,000	410,000		
U.S. (State Dept. and U.S. EPA)	1,400,000		250,000	830,000
Shortfall	160,000	950,000		
<b>TOTAL</b>	<b>2,715,000</b>	<b>2,220,000</b>	<b>250,000</b>	<b>830,000</b>

\* Not including expenditures on lead, cadmium or other work on heavy metals directly supported by bilateral grants.

In the most recent preparatory documents for GC 25, UNEP reported that in 2007, pledges and contributions to the trust fund were received from the Governments of Australia, Denmark, Finland, Germany, the Netherlands, Norway, Sweden, Switzerland and the United States, together with the European Commission and the Nordic Council, amounting to approximately \$2,487,000.

UNEP also reported that as of 1 September 2008, pledges had been received from the Governments of Canada, Finland, Germany, Norway, Sweden and the United States amounting to approximately \$1,895,750. Separate funding, amounting to \$1.5 million, was made available to the mercury and other metals program from the Government of Norway through a separate contribution agreement with UNEP. Additional funding is also being made available from the Governments of Canada and France, in addition to the European Commission; however, these contributions were not formalized as of 1 September 2008.