

Support for an Independent United Nations Intergovernmental Science-Policy Platform for Chemicals & Waste Management (IPCWM)

The United Nations Strategic Approach to International Chemicals Management (UN SAICM)¹ was established in 2006 as a policy framework to promote chemical safety around the world. The overall goal to minimise the adverse impacts of the most hazardous global chemical pollutants by 2020 has not been achieved. Over the next two decades, global chemicals production is set to double², increasing waste, safety concerns and potential impacts on the environment and human health. It is recognised by the United Nations Environment Programme (UNEP) in the Global Chemicals Outlook II report², that if the next phase of global efforts such as UN SAICM Beyond 2020 are to succeed, and the UN Sustainable Development Goals (SDGs) are to be achieved, there needs to be greater involvement and engagement of both the global scientific academic community and the world's major chemicals industries. We consider here the future involvement of the academic and scientific community.

Summary of Key Points

- The Royal Society of Chemistry endorses Option A proposed by UNEP, in that the best way to strengthen the global science-policy interface is to establish an Intergovernmental Science-Policy Platform for Chemicals and Waste Management (IPCWM).
- This new platform should be established on a par with the Intergovernmental Panel on Climate Change (IPCC) and Intergovernmental Science-Policy Platform on Biodiversity and Ecosystems Services (IPBES) and as such be independent of political processes and not report to any one specific institution or convention .
- It should have the status, authority and credibility to attract the world's best scientific talent from the academic community.
- As chemicals are a major factor in both climate change and biodiversity, as well as pollution control, an IPCWM should be established to enable maximum collaboration with both the (IPCC) and (IPBES).

The UN Call to Action and Options for a new Science-Policy Interface for Chemicals & Waste

The United Nations Environment Assembly (UNEA) have called for a strengthening of the science-policy interface (SPI) and UNEP have produced an options paper for how that might be achieved beyond 2020.

United Nations Environment Assembly (UNEA) Resolution 4/8 on the sound management of chemicals and waste beyond 2020

There is an “urgent need to strengthen the science-policy interface at all levels to support and promote science-based local, national, regional and global action on sound management of chemicals and waste beyond 2020; use of science in monitoring progress; priority setting and policy making throughout the life cycle of chemicals and waste, taking into account the gaps and scientific information in developing countries.”

A document has been prepared by the United Nations Environment Programme (UNEP) titled 'Assessment of options for strengthening the science-policy interface at the international level for the sound management of chemicals and waste' (SAICM/IP.4/4)³. This UNEP document will be presented to the United Nations Environment Assembly (UNEA) in February 2021. The Options for a SPI are presented below.

Option A An independent intergovernmental platform - This option is similar to the IPCC and IPBES and it would be independent of any conventions of political processes and high profile.

Option B Institutionalising the Global Chemicals Outlook (GCO) and Global Waste Management Outlook (GWMO) processes – actions would not be contingent on UNEA resolutions but a UN institution would be established to define a work programme.

Option C Thematic subsidiary panels with specialised task forces – subsidiary to a body such as UNEA with convened experts as needed on a time-limited basis.

In July 2020, the Royal Society of Chemistry convened a group of international expert academics working in relevant areas of the chemical sciences, to discuss the SPI options presented by UNEP. The potential opportunities and challenges for senior level experienced academics when participating in such a platform, to perform key functions and deliver credible outputs, were also discussed.

What are the expected functions and outputs of an SPI

It is expected by the academic chemical sciences community, that an SPI would create a stronger platform for convening expert groups of scientists together with decision-makers who could conduct assessments, prepare guidelines and assess particular risks and impacts of particular actions eg. to human health and the environment. A SPI can be used to inform policy design and decision-making through the provision of authoritative advice and assessments. Research can also be designed better with particular positive impacts in mind. It would not be a decision-making body; it provides the evidence that enables political leaders to take well-informed decisions on chemicals policy, to protect our health and environment. An SPI can perform horizon-scanning, look for emerging issues, monitor trends in pollution or adverse impacts to human health and environmental damage, consider how to build scientific capacity in nations, and act to exchange knowledge, best practice and scientific expertise.

The outputs of an SPI would be expected to be high profile and communicated to governments and citizens through the mass media, social media and scientific publications in a transparent and influential way. The outputs could inform national agencies and influence government action-planning. Assessments and guidelines can be used as evidence to inform multilateral agreements on environmental concerns. The UN and UNEA can build programmes together with the private sector, civil society and national governments with good evidence that actions will have impactful outcomes as based on scientific evidence and indicators.

Reasons why Option A is considered the best of the three options to deliver these outputs

There was strong support from the academics that attended our round table, for the IPCC/IPBES-based option for an independent intergovernmental chemicals and waste SPI with scientists and decision makers co-designing assessments (Option A), with some further consideration needed of realistic work-programme scale, ambitions and funding. It was recognised that it may be feasible to start with something smaller, and then allow it to evolve and grow over time. It is more important to establish what is trying to be accomplished first, rather than what can be afforded. The following points were highlighted as reasons to support Option A.

- A structure for an SPI that mirrors the IPCC and IPBES model, will foster the necessary collaboration where chemicals are also a common factor in climate change and biodiversity loss as well as adverse impacts to human health and environment from environmental pollution.
- Independence from any political processes is a critical feature of an SPI as it creates trust in the functions and outputs by a wide range of stakeholders; if possible an SPI should involve academics, industry scientists, NGO and civil society representatives.
- There should also be independent scientific advisory mechanisms, where experts can be convened with no commercial or financial interests to feed in independent science evidence on specific topics as needed into the SPI.
- Global intergovernmental collaboration leads to the sharing of *authoritative* data from government sources, that can be used with confidence to establish the extent of pollution and its impacts. Collaboration helps to form consensus views on interpreting the evidence and developing harmonised regulation.
- Involvement of governments, but not dominance by governmental politics, helps to lead to meaningful and efficient outputs that are of greatest importance and relevance for decision-making.
- Intergovernmental involvement helps to foster harmonised guidelines and approaches to meet common and consistent regulatory requirements at a global level to facilitate trade, e.g. globally harmonised classifications of chemical hazards have been a success in this regard.
- Having a high profile body at international and national government level will attract the best expert talent to be involved thereby assuring credibility of the advice and media profile.
- All governments can see how scientific experts are chosen and have an ability to nominate their experts through a peer-review process, using transparent nomination and selection processes based upon evidence of expertise – being mindful that this should include expertise in developing countries that is indigenous and based on local knowledge and experience.
- An independent intergovernmental platform is more likely to lead to inclusivity and stakeholder diversity, when the nomination process is open to all and transparent. It would represent the best platform for networking and diverse knowledge exchange.

Options B and C could lead to work that is too narrow in scope, especially if the direction of work is set by a specific institution or tied to a convention, rather than being broad-scale enough in the initial stages. Connections across to IPCC and IPBES could also be missed. Option B would provide no mechanism to react to emerging issues and may not be helpful in aligning work with current policy needs. Option C would not have the high impact authority and credibility to make governments listen and act on big global issues that require substantial government commitments over a long period of time.

What would encourage an academic to engage in an SPI?

The senior level academic scientists in our community who participated in our round table expressed an eagerness and desire in principle to engage in global science-policy activities and help to solve global challenges. Academics need to have clear instructions on how they can engage with policymakers via formal mechanisms of invitation but also to feel able to proactively engage when science indicates something new or urgent requires consideration. A formal high profile body with a suitable level of recognition and reward is needed to encourage involvement, so they can justify the work they are doing to their employers in having an impact on policymaking. There are many pressures on academics to perform in their universities by producing excellent research, bringing in funding, teaching and generating high impact factor publications. However, the higher the profile the body, the more likely it is that a senior level experienced academics can engage in international chemicals policy, as it enhances their personal and employer's scientific reputation and credibility to be involved in an SPI.

Concluding Remarks

To succeed with ambitious outcome-based goals on tackling chemicals pollution sustainably, there is a need to encourage and foster dialogue between scientists (both from academia and industry) and policymakers at national and international levels, such that policymakers and decision-makers can be confident that scientists will add value to the decision-making processes - and vice versa, that policymakers can help scientists to gather better evidence. Policymakers need to inform scientists of their needs in terms of evidence and scientists need to proactively make policymakers more aware of the issues they see as important from the evidence and their interpretations and experiences of that evidence through effective two-way dialogue. It is hoped that a new UN independent intergovernmental science-policy platform for chemicals and waste management can provide the formal processes required to build relationships and foster trust between the scientific and policymaking communities. National governments and universities have a role to play in ensuring the voice of the academic community is represented in international chemicals policy forums and that any barriers to the participation of academic scientists in policy work can be overcome. The contributions of academia to the development of both national and international chemicals policy development is important and the roles played must be suitably recognised.

References

1. UN SAICM website <http://www.saicm.org/>
2. UNEP Global Chemicals Outlook II Report – From Legacies to Innovative Solutions: Implementing the 2030 Agenda for Sustainable Development
<https://www.unenvironment.org/resources/report/global-chemicals-outlook-ii-legacies-innovative-solutions>
3. UNEP 'Assessment of options for strengthening the science-policy interface at the international level for the sound management of chemicals and waste' Report SAICM/IP.4/4
http://www.saicm.org/Portals/12/documents/meetings/IP4/Docs/SAICM_IP4_4_SPInteface_Final.pdf

Contact

The Royal Society of Chemistry would be happy to discuss any of the issues raised in our statement in more detail. Any questions should be directed to the RSC Policy & Evidence Team at policy@rsc.org.

About us

With about 50,000 members in over 100 countries and a knowledge business that spans the globe, the Royal Society of Chemistry is the UK's professional body for chemical scientists, supporting and representing our members and bringing together chemical scientists from all over the world. Our members include those working in large multinational companies and small to medium enterprises, researchers and students in universities, teachers and regulators.

The Royal Society of Chemistry developed this policy position statement following a virtual round table in July 2020 involving international academics and Defra International Chemicals Team representatives. We would like to involve more international senior-level academics in our global chemicals policy work and if you would like to input, please contact policy@rsc.org