

## Strategic goals and measurable objectives for chemicals and waste governance beyond 2020

*The Strategic Approach to International Chemicals Management (SAICM) entails 46 objectives in five categories. Implementation is assessed through 20 indicators, yet these are incapable of tracking progress and in urgent need of renewal. The intersessional process on SAICM and the sound management of chemicals and waste (SMCW) beyond 2020 provides an opportunity to enhance this approach. Experiences from other governance areas like biodiversity can be used to learn from: SAICM stakeholders should build a new set of strategic goals and measurable objectives, embedded in a strengthened overall framework. The second meeting of the intersessional process in March 2018 should establish a working group open to all stakeholders to develop about 15-20 objectives integrating environmental, health, labour, agricultural and other aspects of SMCW. These objectives should be embedded into a renewed strategic framework containing an engaging vision, an implementation mechanism including national action plans, and a peer review and follow-up procedure.*

### **The need for new goals and objectives on chemicals and waste beyond 2020**

The Strategic Approach to International Chemicals Management (SAICM) was established in 2006, and its mandate is linked to the goal that, “by 2020, chemicals are used and produced in ways that lead to the minimization of significant adverse effects on human health and the environment.” As 2020 is drawing closer, SAICM is in need of a renewed mandate, which opens a window of opportunity to rethink the governance architecture for the sound management of chemicals and waste (SMCW).

At the fourth International Conference on Chemicals Management in 2015 (ICCM4), a multi-stakeholder process was launched to develop a model for the future governance framework on chemicals and waste. Resolution IV/4 entails the mandate “to initiate an intersessional process to prepare recommendations regarding the Strategic Approach and the sound management of chemicals and waste

beyond 2020”. These recommendations are supposed to be agreed upon by delegates at ICCM5 in autumn 2020. Since the onset of this process, there is considerable appetite among many stakeholders to build upon and enhance the current system (Simon 2017).

One of the elements in urgent need of renewal is SAICM’s system for measuring progress. In resolution IV/4, delegates provided the intersessional process with the mandate to “consider the need for and develop recommendations regarding measurable objectives in support of the 2030 Agenda for Sustainable Development”. Discussions about an enhanced system began during the first meeting of the intersessional process (IP1), which took place in Brasilia in February 2017. The co-chairs from Brazil and Canada were elected and subsequently provided a Co-Chairs’ Summary (SAICM 2017a). It reports the need for carving out a system based on measurable

objectives and milestones. The second meeting (IP2) takes place in March 2018 in Stockholm, and in preparation the Co-Chairs published an Overview Paper which states: “Regardless of the form of the future approach, measurable objectives will be needed.” (SAICM 2017b)

Some proposals for new objectives on SMCW beyond 2020 have already been issued or are under preparation (IPEN/PAN 2017). In preparation for the IP2 meeting, two informal workshops took place in January 2018 dealing with objectives and milestones. The first was organised by UNITAR and took place in Berlin (UNITAR 2018), the second was funded by the Nordic Council and was held in Stockholm (Government Offices of Sweden et al. 2018). Both workshops highlighted the utility of a focused set of measurable objectives, and participants developed some first ideas on how it might look.

This paper assesses why the current framework of objectives and indicators under SAICM needs renewal, what lessons can be learned from other issue areas, and what kind of process would best support deliberations for a robust and effective outcome.

### **The current SAICM system: The 2020 goal, objectives, and indicators**

The 2020 goal was first agreed upon by heads of state and government at the World Summit on Sustainable Development (WSSD) in 2002, where it was part of the Johannesburg Plan of Implementation (JPol). It was then reiterated as the main objective of SAICM in the Overarching Policy Strategy (OPS) from 2006. The OPS lists 46 objectives for achieving the 2020 goal, sorted into the five areas of risk reduction (including 10 objectives); knowledge and information (10); governance (14); capacity-building and technical cooperation (9); and illegal international traffic (3). However, the OPS neither sets priorities among these objectives, nor does it call on stakeholders to reach certain goals or targets by a defined deadline.

In an attempt to assess progress towards the 2020 goal, ICCM2 in 2009 established a set of 20 indicators. They gather the number of countries (or organizations), for example:

- “with mechanisms to address key categories of chemicals” (No. 2)
- “with hazardous waste management arrangements” (No. 3)
- “with research programmes” (No. 8)

- “that have committed themselves to implementation of the Strategic Approach” (No. 10)
- “engaged in regional cooperation on issues relating to the sound management of chemicals” (No. 15)
- “having mechanisms to prevent illegal traffic in hazardous waste” (No. 20)

The most important shortcoming of this approach is that it refers to very vaguely defined policies or programmes. For example, having “a research programme” does not contain information about its content, scale, ambition, or results. The system does not capture significant policy evolutions within countries, be it REACH in the EU or China’s repeatedly strengthened chemicals and waste regulations.

By merely counting the number of countries, the system lacks indicators on chemical pollution of air, land, or water, as well as on health effects and the economic costs of unsound chemicals management. This is especially concerning as the Lancet Commission on Pollution revealed serious damages due to high pollution levels, including chemical pollution (Landrigan et al. 2017).

An indicator system that misses key regulatory changes and does not capture relevant impacts is unfit for the task of measuring progress on global chemicals and waste management. Previous opportunities to enhance the current framework were not utilised. For example, the Overall Orientation and Guidance (OOG) document was endorsed by ICCM4 in 2015. It lists six core activity areas and entails 11 basic elements for attaining SMCW, but does not remedy the shortcomings mentioned above.

Another problem is the low rate of reporting by governments. For the second SAICM progress report covering the years 2011-2013, only 43% of governments provided reports, with significant regional variation: Many countries from the Western Europe and Others Group (WEOG) submitted reports, yet only 10 out of 54 countries in the African region did so (SAICM 2015). The situation appears even worse for the 2014-2016 progress report. Thus far, only 31 surveys have been completed, and governmental responses from some regions are particularly scarce: Thus far, there is one from Africa, two from Asia-Pacific, and four from Latin America and the Caribbean (SAICM 2018a).

The legally binding Basel and Stockholm Convention have a typical response rate of about 50%. While this does show that the MEAs have considerable room

for improvement, SAICM is particularly struggling to encourage reporting by stakeholders. It might be worthwhile to consider a joint effort and make more use of the potential synergies between the four binding conventions and SAICM. For making reporting useful and relevant, it appears to be particularly important for secretariats to support countries in their reporting efforts, and to actively use submitted reports, e.g. by using them as a basis for global assessment reports (cf. Ivanova 2017).

The value of the existing framework was questioned before. Persson et al. (2015) found that the indicators used by SAICM do not cover all of its objectives or the basic elements, and they concluded that the existing information does not allow for a robust assessment of whether the world is making progress or not. Likewise, the study commissioned by the Nordic Council of Ministers on chemicals and waste governance beyond 2020 found that “the current indicator framework under SAICM is in need of revision.” (Honkonen/Khan 2017: 58)

#### **Vision, goals, objectives, milestones, indicators: The need for clear definitions**

To establish a set of objectives, it is necessary to first outline a vision for the beyond 2020 framework. Based on a vision, stakeholders can define which steps have to be taken for achieving it. The Co-Chairs’ Overview Paper reads:

**“The vision should be aspirational and long-term and it should also be easily linked to measurable objectives and practical targeted actions, including qualitative and quantitative elements and milestones.”  
(SAICM 2017b)**

The intersessional process should quickly settle on a common terminology, so that “vision”, “goals”, “objectives”, “targets”, “indicators” and “milestones” are not used interchangeably.

The “vision” or “overall goal” could refer to the core purpose of SAICM and SMCW beyond 2020. Ideally, it would be accompanied by a slogan or catchphrase which is short and easy to communicate. “Strategic goals” could be used for a set of maybe four to six priority areas for enhancing SMCW; “(measurable) objectives” refers to about 15-20 targets that must be implemented in order to achieve the vision; “indicators” refers to precisely identified measurements or values through which to assess progress on achieving objectives; and “milestones” refers to quantified, intermediary steps on the way to achieving the objectives.

Figure 1 outlines the general framework envisioned in this paper and illustrates at which levels the overall goal, strategic goals, measurable objectives and indicators are placed.

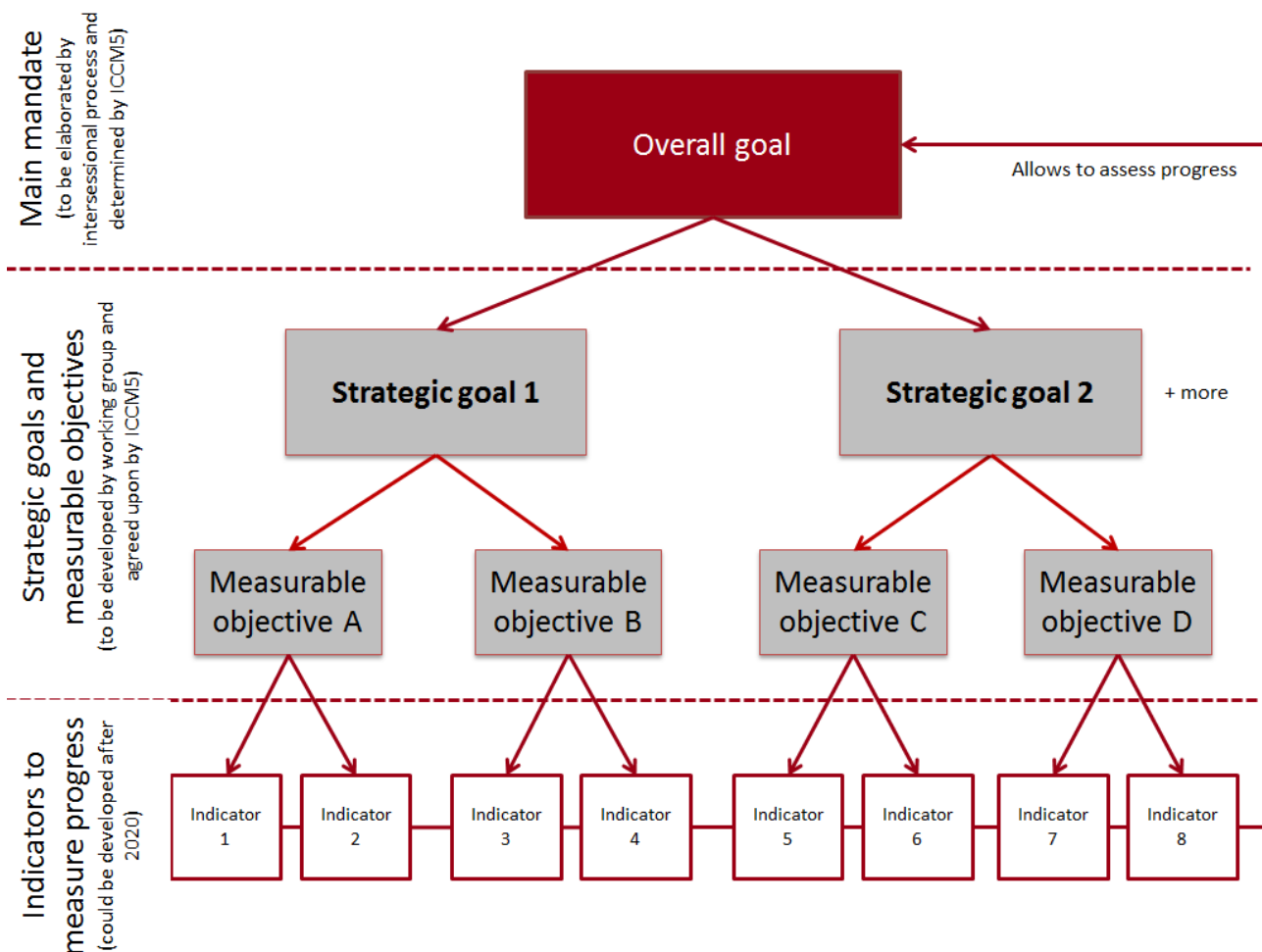
#### **Lessons from the Sustainable Development Goals and Aichi Biodiversity Targets**

In September 2015, heads of states and government agreed on the 2030 Agenda, including 17 Sustainable Development Goals (SDGs) and the according 169 targets. They are representative of an emerging trend in global governance to establish and pursue sets of common goals (Kanie/Biermann 2017). Such goal-based systems can be found in both voluntary and legally-binding settings, making them applicable to chemicals and waste governance.

The SDGs can be seen as a network of interlinked targets (Le Blanc 2015). The gravitational pull that the SDGs exert is at least partly due to this interconnectedness, which encourages or even requires cooperation among different actors from various sectors. This should be mirrored for a set of goals and objectives for SMCW beyond 2020. It should not only refer to essential SMCW-centred goals and targets of the 2030 Agenda, but also entail key objectives embodied e.g. in the Basel, Rotterdam and Stockholm (BRS) Convention as well as the Minamata Convention, in the WHO Chemicals Roadmap (WHO 2017), in relevant International Labour Conventions, and in other related frameworks and agreements.

Biodiversity governance is another example which can be utilised to inform the beyond 2020 process. The Convention on Biological Diversity (CBD) has established a system of goals and targets as part of its strategic planning. In institutional terms, biodiversity governance is somewhat similar to the area of chemicals and waste: Several binding multilateral agreements and a number of other initiatives and commitments, including a wide range of private and hybrid schemes, form a complex institutional landscape (Pattberg et al. 2017). This is comparable to the chemicals and waste cluster established by the Basel, Rotterdam, Stockholm and Minamata Convention, with SAICM as a voluntary strategic planning platform, a range of partnerships and, last but not least, private initiatives such as Responsible Care in the chemical industry or the Zero Discharge of Hazardous Chemicals (ZDHC) program in the textile sector.

Figure 1: Possible schematic of a beyond 2020 framework based on objectives, goals and targets, and indicators.



The CBD’s first attempt to establish a goal-based system was focused on the 2010 Biodiversity Target, which read “to achieve by 2010 a significant reduction of the current rate of biodiversity loss at the global, regional and national level as a contribution to poverty alleviation and to the benefit of all life on Earth.” This target proved too difficult to reach, and the accompanying measures were not sufficient. The biodiversity community was thus forced to develop a new approach, bringing together a diverse range of stakeholders.

In 2010, the tenth Conference of the Parties (COP) to the CBD agreed on a Strategic Plan for Biodiversity 2011-2020, which included the Aichi Biodiversity Targets. They contain a vision and a mission for the CBD and its stakeholders. At their core is a set of five “strategic goals” and 20 “targets” for achieving them. Establishing indicators for measuring progress was quite difficult and technically challenging. This task was supported by the

Biodiversity Indicators Partnerships (BIP<sup>1</sup>), and the final list was adopted at COP13 in 2016.<sup>2</sup>

**Getting the timeline right: Focus on goals and objectives now, develop indicators later**

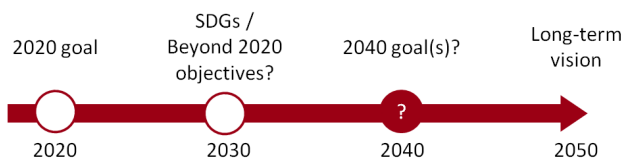
In their attempt to find potential indicators that could be used to identify planetary boundaries for chemical pollution, Diamond et al. (2015) noted that it is technically highly challenging to establish such a list. This lesson and the example of the SDGs and biodiversity governance make it clear that the technically challenging task of developing indicators might best be done after the goals framework has been agreed upon. The set of 232 indicators for measuring progress on achieving the SDGs were finalized in July 2017, two years after the 2030 Agenda was finalized. For SMCW beyond 2020, this means that indicators can be developed later, say by 2022.

<sup>1</sup> <https://www.bipindicators.net>

<sup>2</sup> See <https://www.cbd.int/doc/strategic-plan/strategic-plan-indicators-en.pdf>

Another aspect to consider when it comes to the timeline is the end date. Assuming that 2050 would be the endpoint for the long-term vision, two options stand out: In a 10-year cycle, 2030 and 2040 would become key milestones for assessing overall progress, which would provide two opportunities for adapting the framework to address new challenges and enhance activities on unresolved issues. In a 15-year cycle, 2035 would become the only opportunity to instil major changes to the system before 2050.

**Figure 2: Timeline for the possible long-term development of goals and objectives for SAICM and SMCW beyond 2020**



Amending an existing system is a necessity in dynamic and evolving issue areas, but it is also a double-edged sword. As the example of the 2010 biodiversity target shows, a system that isn't working must be improved. Yet it can take countries more than five years to establish national implementation programs or action plans, after which it takes another few years to implement them and achieve impacts. If the system is undergoing a major overhaul after just 10 years, these efforts will be wasted to some extent. It takes careful consideration whether these costs outweigh the benefits to conclude whether an existing system should be carefully amended or completely replaced with something new.

### National action plans, reporting and review

National action plans (NAPs) are a widely-used mechanism for transforming international commitments into domestic implementation efforts. They are employed in many areas, including the UNFCCC and the Paris Agreement, the CBD, or the Stockholm Convention.<sup>3</sup> For the framework beyond 2020, a comparable mechanism should be established so that the goals and objectives on the global level are translated by governments into national actions for implementation and follow-up. These plans would ideally be developed with the participation of other national-level stakeholders.

<sup>3</sup> The UNFCCC knows Nationally Determined Contributions (NDCs) and National Adaptation Plans (NAP); the CBD uses National Biodiversity Strategies and Action Plans (NBSAP); and the Stockholm Convention knows National Implementation Plans (NIP).

While committed to the entire set of objectives, governments would be free to set their own priorities and choose their favoured implementation tools, much like they do to achieve the SDGs. Support can come through IOMC member organisations, e.g. based on the IOMC Toolbox.

The goals, objectives and national action plans should build the foundation for a reporting system based on a peer review procedure. The 2030 Agenda contains a system of voluntary national reviews that can be used as a model (Beisheim 2016). The reviews follow a guideline outlined by the UN Secretary-General, providing a broad framework while allowing each country to conduct the review according to their own priorities and preferences.

An essential feature of any successful reporting mechanism is that reports be used for meaningful follow-up (Ivanova 2017). The Ramsar Convention on Wetlands is a good example with about 90% of parties reporting. This is fostered through two measures: First, the secretariat actively supports parties in establishing their reports; and second, it uses the reports to produce compilation documents for summarizing global progress. National reports are put online, enhancing transparency and visibility.

The reporting system should provide governments and other stakeholders incentives to submit sufficiently detailed information. The CBD model is again illustrative (Urho 2018): National reports are based on the Aichi Targets and used to compile the Global Biodiversity Outlook (GBO). For the beyond 2020 framework, national reports could be used to compile the future Global Chemicals Outlook (GCO). The SAICM secretariat should be equipped with the resources to support countries in their reporting efforts and to compile a summary of progress reports, so that stakeholders realise their efforts are acknowledged.

### Launching an open and inclusive process

At the first intersessional process meeting, delegates had called on the SAICM secretariat to establish a group for drafting a set of goals. According to the meeting report, delegates wanted "a proposal on objectives in support of the 2030 Agenda and related milestones [...] to be developed through an intersessional working group open to all stakeholders". (SAICM 2017c) Due to funding shortages, this working group has never been established. Instead, a first proposal has been published in the form of a paper commissioned by the SAICM secretariat (SAICM 2018b). This could be the starting point for discussions in a future working group. Such a group is essential: As the set of goals

and objectives is supposed to be accepted and implemented by the wider SMCW community, stakeholders must have ownership over the process.

The lessons from other policy areas show that the inclusiveness of the deliberation process is a crucial aspect. For SAICM and SMCW beyond 2020, this means that the working group should not only be open to, but actively encourage the participation of stakeholders from all relevant sectors. As SAICM is a voluntary forum, and as it was struggling to fully engage all sectors, the set of goals and objectives should strive to integrate the views of governments, businesses, civil society and academia, working on environmental, health, labour, food and agriculture and other issue areas, and dealing with chemicals both up- and downstream.

Second, stakeholders need sufficient time to discuss any proposals with sets of goals and targets, to weigh in and refine them according to their priorities. The cases of the SDGs and the Aichi Targets show that it can take about two to four years from an initial proposal to a final agreement. If IP2 launches a working group in March 2018, this leaves two and a half years until ICCM5 in autumn 2020 – a challenging yet manageable timeframe.

Third, the discussions should make use of the wide variety of examples from other areas, and they should be informed by existing systems within chemicals and waste governance. For example, the chemical industry has more than three decades of experience in setting goals, gathering data and reporting on progress through Responsible Care, and in fact some of the data that industry associations are collecting at the national level could become useful for the framework beyond 2020, as well. In Germany, the national chemical association VCI, the labour union IG BCE, and the employer association BAVC have established Chemie<sup>3</sup>, which contains a set of 40 sustainability-related indicators from which one could draw.

## Conclusion

The existing system of objectives and indicators in SAICM needs a major overhaul. The intersessional process on SAICM and SMCW beyond 2020 offers an opportunity to develop an enhanced system, building on experiences with the 2030 Agenda and other issue areas including biodiversity governance.

At the second meeting of the intersessional process, an open working group should be established and mandated to develop a proposal for a system of measurable objectives. This proposal should strive to engage and incorporate ideas of stakeholders, especially from non-environment sectors, as well as key goals of the legally binding chemicals and waste agreements.

A preliminary draft should be sent to the Open-Ended Working Group (OEWG3), scheduled for spring 2019. Delegates at OEWG3 could discuss and refer it to IP3 in mid-2019, which could finalise the draft for adoption at ICCM5 in 2020. There, delegates could establish another working group to develop the indicators required for measuring progress.

Implementation of the new framework could be fostered through national action plans, which should be devised through a multi-stakeholder and multi-sectoral process. In these plans, countries could set their own priorities, while still aiming to achieve all the established goals.

To foster reporting and reviewing, the secretariat of the beyond 2020 framework should provide technical assistance and other capacity development measures, in close cooperation with the secretariats of the BRS and Minamata Convention and the IOMC organisations. This system should be combined with a mechanism for a voluntary peer review of progress reports.

After review, the reports should be used to develop a global progress report on the beyond 2020 goals and objectives. These progress reports could be used as a basis for future editions of the GCO for assessing to what extent SMCW is being achieved. Last but not least, means of implementation are an indispensable ingredient for successful governance through goals, and SAICM and SMCW beyond 2020 will be no different.

## Bibliography

- Beisheim, Marianne (2016): Follow-up and Review: Developing the Institutional Framework for Implementing and Reviewing the Sustainable Development Goals and Partnerships. Working Paper FG 8, 2016/02, Berlin: Stiftung Wissenschaft und Politik.
- Beisheim, Marianne (2016): Follow-up and Review: Developing the Institutional Framework for Implementing and Reviewing the Sustainable Development Goals and Partnerships. Working Paper FG 8, 2016/02, Berlin: Stiftung Wissenschaft und Politik.
- Diamond, Miriam L.; de Wit, Cynthia A.; Molander, Sverker et al. (2015): Exploring the planetary boundary for chemical pollution. *Environment International*, 78, pp. 8-15, DOI:10.1016/j.envint.2015.02.001.
- Government Offices of Sweden; Nordic Council of Ministers; KEMI (2018): Outcome of the informal workshop held in Stockholm on objectives and milestones for the beyond 2020 framework. SAICM/RM/2018/5/rev.1.
- Honkonen, Tuula; Khan, Sabaa A. (2017): Chemicals and Waste Governance Beyond 2020. Exploring Pathways for a Coherent Global Regime. Report commissioned by the Nordic Council of Ministers.
- IPEN; PAN (2017): Beyond 2020: Chemical safety and Agenda 2030. 24 January 2017.
- Ivanova, Maria (2017): Making National Reporting Efficient: Lessons learned from Global Environmental Conventions. Presentation at the Nordic Seminar: Global Chemicals and Waste Governance beyond 2020, Helsinki: 16-17 January 2017.
- Kanie, Norichika; Biermann, Frank (eds.) (2017): *Governing through Goals: Sustainable Development Goals as Governance Innovation*. Cambridge/London: MIT Press.
- Landrigan, Philip J.; Fuller, Richard; Acosta, Nereus J.R. et al. (2017): *The Lancet Commission on Pollution and Health*. The Lancet, DOI:10.1016/S0140-6736(17)32345-0.
- Le Blanc, David (2015): Towards integration at last? The sustainable development goals as a network of targets. DESA Working Paper No. 141, ST/EA/2015/DWP/141.
- Pattberg, Philipp; Kristensen, Kristian; Widerberg, Oscar (2017): Beyond the CBD: Exploring the Institutional Landscape of Governing for Biodiversity. IVM Report (R-17/06). Institute for Environmental Studies, Vrije Universiteit Amsterdam.
- Persson, Åsa; Weitz, Nina; Nilsson, Måns (2016): Follow-up and Review of the Sustainable Development Goals: Alignment vs. Internalization. *Review of European Community & International Environment Law*, 25(1), pp. 59-68, DOI:10.1111/reel.12150.
- Persson, Linn; Lai, Adelene; Persson, Åsa (2015): How Far to the Global 2020 Goal for Chemicals Management? Stockholm Environment Institute Working Paper (Draft).
- SAICM (2018a): Status of input to the 2014-2016 Strategic Approach report on progress, SAICM/RM/2018/1.
- SAICM (2018b): Proposal on objectives in support of the 2030 Agenda and related milestones. SAICM/IP.2/8.
- SAICM (2017a): Co-chairs' summary of the discussions during the first meeting in the intersessional process to consider the Strategic Approach and the sound management of chemicals and waste beyond 2020
- SAICM (2017b): Co-Chairs' Overview Paper to Support Preparations for the Second Intersessional Meeting Considering the Strategic Approach and the Sound Management of Chemicals and Waste Beyond 2020. SAICM/IP.2/5.
- SAICM (2017c): Report of the first meeting in the intersessional process to consider the Strategic Approach and the sound management of chemicals and waste beyond 2020. SAICM/IP.1/7
- SAICM (2015): Summary report on progress in the implementation of the Strategic Approach for the period 2011-2013. SAICM/ICCM.4/3.
- Simon, Nils (2017): Stakeholder views on SAICM beyond 2020 – Results from an interview series. *Chemicals beyond 2020*, Issue 01/2017, Berlin: adelphi.
- UNITAR (2018): Summary Report: The Aichi Biodiversity Targets: Are approaches and lessons from the biodiversity cluster relevant for the management of chemicals and waste beyond 2020? SAICM/IP.2/INF.10.
- Urho, Niko (2018): Options for effective governance of the Beyond-2020 Framework for sound management of chemicals and waste: Lessons learned from other regimes. Center for Governance and Sustainability, University of Massachusetts Boston.
- WHO (2017): Chemicals Road Map. WHO/FWC/PHE/EPE/17.03

## Legal Notice

Suggested citation: Simon, Nils; Schulte, Maro Luisa (2018): Strategic goals and measurable objectives for chemicals and waste governance beyond 2020. Chemicals beyond 2020 Series, Issue 01/2018. Berlin: adelphi.

### Published by:

adelphi  
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**Place and Date of Publication:** Berlin, March 2018

**Photo credit (title):** Egorov Artem -  
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**Disclaimer:** The project underlying this report was contracted by the German Environment Agency and supported with funding from the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety under project number FKZ 3715 65 402 0. The responsibility for the content of this publication lies with the authors.



Federal Ministry for the  
Environment, Nature Conservation,  
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