State of Global Environmental Governance 2024

International Institute for Sustainable Development

Earth Negotiations Bulletin

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Edited by Jen Allan, PhD

Contributing authors:
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Earth Negotiations Bulletin

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March 2025

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Foreword

Hindou Oumarou Ibrahim, Chairperson, UN Permanent Forum on Indigenous Issues at the 2024 UN Biodiversity Conference. (IISD/ENB | Angeles Estrada)

Last year was heavy—particularly for me and for Indigenous Peoples who moved to action at all three Rio Convention Conferences of the Parties (COPs). I recall the late nights running between Parties, speaking with ministers, and navigating dynamics with COP Presidencies and the Secretariats to move the decisions forward.

It was very complicated, but at the end of the day, we got some good outcomes. We achieved the permanent subsidiary body on Article 8(j) in the Convention on Biological Diversity. We helped creating the first Indigenous Peoples' Caucus and the Sacred Land Declaration at United Nations Convention to Combat Desertification COP 16. On climate, we worked to see a new workplan for the Local Communities and Indigenous Peoples Platform adopted, and to have the Indigenous Peoples' right to the free, prior and informed consent recognized as a condition for any project in the carbon market. I'm so grateful we reached these outcomes.

But how we are carrying on cannot continue. I left home in September for the UN General Assembly (UNGA). I travelled in October, November, and December for negotiations. Is that healthy for me? No. Is that sustainable for the planet? No. Is that helping to get better outcomes? I'm not sure.

I met many people like me who were in the three COPs and at the UNGA. For most countries, the same minister of environment is in charge of climate, biodiversity, and land. So why must we travel to three separate conferences? Not to mention the fact that we need to focus on implementing the decisions.

I think the governance of the three Conventions needs to be revised, in a way that allows COP meetings to be organized differently, in a more efficient and holistic way. I'm standing with Indigenous Peoples, advocating that ecosystems are interconnected. Our crises are linked, and our actions must be linked, and yet we talk in these separate forums.

Humanity is under threat. Maybe developing countries are the most impacted now; maybe Indigenous Peoples are the most impacted now—but everyone is at risk. We cannot do our work separately. We are competing for the same funding from the same countries and from the same businesses but in separate negotiation areas. They give us peanuts here and there—and we celebrate these peanuts when we need billions and trillions. Perhaps if we coordinate all the actions of the Rio Conventions, we can have one push for the money that we want and the outcomes we need.

Progress for Indigenous Peoples in these talks is mixed. In addition to Parties, many non-party stakeholders now talk about Indigenous Peoples as the solution. They understand we have important contributions to bring to the table, and they want our voices there. On the other hand, when you look at Indigenous Peoples' access to finance, we get less than 1% of the climate funding. There is some hypocrisy going around.

For 2025, I have two themes on top of my agenda. First: ensure we get direct access finance for Indigenous Peoples. We need money we can build our lives with—not siloed money for forests, water, and so on. The needs of Indigenous communities are interconnected, so we need flexible money that can adapt to our lives.

Second: critical minerals in the just transition. Often these critical minerals are in Indigenous Peoples' lands, in developing countries with high biodiversity but low legal oversight. I want the world to think about making a global treaty to do no harm to the land. We are moving from oil to critical minerals without knowing how to restore the land, without limits to harm that Indigenous Peoples know.

Most people think it is just anecdotal or folkloric when we talk about Indigenous Peoples' knowledge. When I say my grandmother can observe the clouds to predict the weather, they say: "Oh wow, this is amaaa-zing." But it is true. I want people to better understand this about Indigenous Peoples' knowledge. It is the real life we are living.

Usually when I'm on a panel as a black African Indigenous woman, people want me to talk about negative things. "How are you impacted by climate change? How are you impacted by whatever?" OK, but I want to talk about the actions I will take—the solutions we have as Indigenous Peoples and the support we need to implement them. Time runs out, and the panel is done—and I do not get the chance to talk about the positive.

We are in very difficult times now. Many countries have different views, especially about climate and biodiversity. My advice? Stay positive. Stay focused. It is important to pull the light out of the geopolitical darkness. Politicians come and go, but our life is continuous, so let's join all our efforts together.

Indigenous Peoples have been very good at showing no matter what administration, no matter what we face—even genocide—the solutions are there. Just listen to us.

Hindou Oumarou Ibrahim

Chair, UN Permanent Forum on Indigenous Issues

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REWARD:
CLIMATE JUSTICE

← Civil society call for ambition as delegates enter the Baku Climate Change Conference COP 29. (IISD/ENB | Mike Muzurakis)

Letter from the Editor

In 2024, the polycrisis settled in. Every continent felt the impacts: wars grew in scope and intensity, climate-fueled disasters devastated communities, famines raged, and financial crises deepened. Naming the crises was for 2023. Now, the post-pandemic "new normal" is marred by instability and uncertainty. Governance is more complex, while effective decision making is desperately needed.

After a year of elections, a new set of leaders and governments will face the polycrisis. 2024 was a particularly bad year for incumbents. Without elections, coalition governments crumbled in Germany and France. The political pendulum in many countries swung to the right, with leaders, many with populist agendas, emerging victorious. This turn of events caused fresh worries about a rollback of environmental legislation.

At times, the environment seemed lost among competing priorities. Our 2023 report was sadly prescient. Geopolitical tensions are undermining environmental cooperation. Negotiators from the US and the EU cannot speak to their Russian counterparts. Trust among countries is low, and tensions are high. None of this bodes well for realizing global outcomes to save the planet. And, as our Year at a Glance section highlights, cooperation proved elusive this year. All the while, warfare is a new pressure on ecosystems on which livelihoods depend. The polycrisis tightens its grip as these crises reinforce one another.

We heard more in 2024 about the crises we know all too well. It feels like a grim routine, starkly contrasting the urgency we should feel when we see the damage (even from space). Since 1970, there has been a 73% decline in wildlife populations. The first-ever overview of migratory species reported that 20% are at risk of extinction. Air pollution continues to worsen in South Asia, affecting health throughout the region. A global study of "forever chemical" pollution found our drinking water regularly exceeds regulatory thresholds, and the true extent of this pollution is underestimated. We heard about the "aridity crisis"—our blue planet is turning brown. Drylands now make up 40% of all land (except Antarctica). Much of this aridity is permanent due to climate change and already costs USD 307 billion per year globally.

2024 became the (new) warmest year on record and the first to reach 1.5°C, the Paris Agreement's lower boundary for temperature rise. And emissions continue to rise, albeit more slowly. Shrinking emissions in advanced economies, especially the EU, provide a glimpse of hope that strong economies can also be green.

A lot of negativity loomed in 2024. Many in the scientific community started speaking publicly about their private worries for our

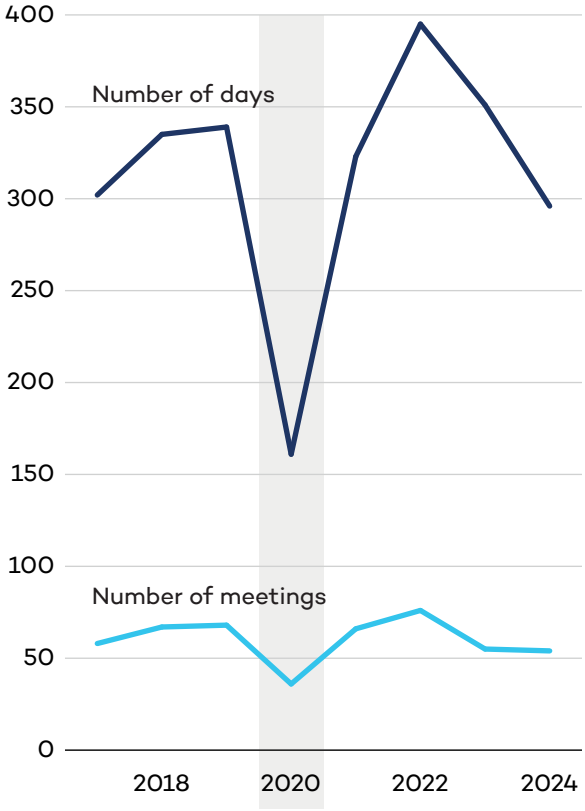
world. Most climate scientists believe global temperature will surpass 2°C by mid-century. Top climate scientists and social scientists feel "desperate" and "terrified." Being emotionally vulnerable is hard for many "objective" climate scientists, but some are still hopeful. Attribution science has changed the game in terms of public communication. It allows us to understand how much climate change intensifies storms, droughts, floods, and other disasters. In 2024, the World Weather Attribution Group marked 10 years. Reflecting on the last decade, the group's work demonstrates the real danger to people's lives and the work that remains to understand how industrial activity reshapes the environment.

This past year was not all bleak. The World Bank reported extreme poverty has lessened, returning to pre-pandemic levels. Girls completed their educations at the same rate as, and even better, than boys. 2024 brought much optimism in the world of global health protection. Malaria vaccines are showing early success. Polio cases decreased by 99%, prompting hopes that it could soon be eradicated globally. Resilience to more extreme natural disasters seems to be improving, perhaps largely due to early warning systems. Indeed, early warning systems are only one of many areas where collaborative scientific innovations are building resilience to the "new normal" climate. More rigorous approaches and investments are needed, including in climate adaptation. But too often, efforts to aggregate the world's experiences into averages and global goals risk overlooking progress.

We saw new links drawn among aspects of the polycrisis. At the Baku Climate Change Conference, activists repeatedly connected conflict and climate change. They argued climate finance—the main issue for the meeting—was a matter of priorities. The money is there, they stressed, but it is spent on wars. Other connections became evident. The emissions from the Gaza conflict, in its first 120 days, are comparable to burning 31,000 kilotonnes of coal, enough to power about 15.8 coal-fired power plants for a year. Russia's war on Ukraine is similarly fuelling the climate crisis, releasing 39.6 tonnes of carbon dioxide equivalent. These are two of the 120 conflicts currently burning worldwide. Nature is as much a victim as the millions of people facing threats to their lives and livelihoods.

There was an upsurge in "greenlash" movements in 2024, largely as various crises collided. Efforts to protect nature or reduce emissions ran against the cost-of-living crisis fuelled by global wars, among other challenges. Backlashes against environmental policies may have affected some European election outcomes. Farmers worldwide, from the EU to India, rose up against climate and biodiversity policies. Like the anti-tourism

Figure 1. Total ENB meeting days, 2017-2024



Source: Author's calculations.

protests, the farmers' demonstrations were prompted by policies they felt failed to balance environmental and economic imperatives.

In 2024, we saw added urgency to calls to bring together the nature and climate agendas. Scientists used satellites to show 350 elephants died due to climate-induced poisoning as algae reached toxic levels in watering holes. The Cali Biodiversity Conference adopted a decision on biodiversity and climate change. It carefully respects treaties' autonomy but calls for greater national and international coordination. As our "Weak Connections" section notes, such synergies can be challenging to achieve despite their incredible potential. Instead, we are seeing international organizations working in silos.

Opportunities to capitalize on positive synergies in the polycrisis exist. The renewables surge continues. China alone is responsible for one third of clean energy investments. The goal of tripling renewable energy by 2030 seems on track. Absolute emissions in some hard-to-abate sectors reduced slightly for the first time since the World Economic Forum started keeping track. The World Trade Organization's Ministerial Conference addressed trade and sustainability, including fossil fuel subsidy reform and plastics, for the first time in 2024. This important step shines a new light on the need to address how trade, subsidies, and plastic pollution intersect. As the *Global Waste Management Outlook 2024* stresses, health, waste, climate change, and economic well-being are deeply connected.

However, economic benefits are unevenly distributed. While wind and solar generation overtook fossil fuels in the EU in 2024, African start-ups tried to fill the vastly under-realized renewable potential of the continent. Despite having the best conditions for these energy sources to thrive, Africa receives just 2% of global investment in renewables. Reorienting finance flows is a key part of the solution—an action the Baku Climate Change Conference and other negotiation processes struggled to take.

Such global patterns require implementing global solutions. In 2024, there were certainly opportunities (Figure 1). The three

Inger Andersen, UNEP Executive Director, at the dais at the close of plastic pollution INC-5. (IISD/ENB | Kiara Worth)

Rio Conventions (climate, biodiversity, and desertification) met almost immediately after one another. As we outline in the Year at a Glance, negotiating new rules proved challenging while established bodies took steps forward. Enacting rules was a key theme of 2024. We provide an overview of the politics of implementation in 2024 amid questions of whether global governance is fit for purpose on a range of issues, from climate change to whaling.

As these complex global bodies try to navigate difficult geopolitical realities and bring countries together to advance environmental protection, some have taken a different approach. Efforts to use the courts to make countries act on their environmental commitments went global. Vanuatu led a group of states to push for an advisory opinion on climate change from the International Court of Justice. In a new addition to our Year at a Glance, we give just a glimpse of the many environmental cases underway.

2024 also showed restoration is possible. The hole in the ozone layer continues to shrink, showing our planet's ability to heal. Thanks to the world's largest land restoration project, the Sahel is turning green. The Great Barrier Reef Foundation reported positive signs of rebirth from its "coral IVF" project. The Iberian Lynx stepped back from the brink of extinction.

Animals became social media sensations. Moo Deng and another pygmy hippo, Haggis, seemed to channel our every mood through memes. Kids found new love for the axolotl online and in stores. Perhaps it is enough to save them from extinction. Some speculate that the depressing year led us to seek comfort in animals online. So, thank you Moo Deng, Nibi, Hua Hua, Pesto, and more.

2024 was the year that Notre Dame shone again. We flew near the sun, saw the dark side of the moon, and peered beyond our galaxy. Human ingenuity can be a blessing—and a curse. Let's hope 2025 sees our curiosity and innovative natures finding our way through the polycrisis.

← Sandrina Thondoo, Director of the Treaties, Multilaterals and Oceans Division, Cook Islands, gives an oral argument at the International Court of Justice hearings on the obligations of States with regard to climate change. (ICJ | Frank van Beek)

The Year at a Glance

"Beauty is in the eye of the beholder." So is progress in global environmental governance. An environmental activist will likely say 2024 disappointed. A laissez-faire economist might offer a more favourable view. For ENBers, the situation is, well, nuanced. We love context and good procedural wrangling. For every success, there are caveats, and not all "misses" are a cause for despair.

One thing that emerged loud and clear is that win–win solutions are needed to tackle the polycrisis. Actions to protect the planet from overheating and safeguard its biodiversity cannot come at the expense of livelihoods. If 2024 had a mantra, it was perhaps the repeated calls for "a just, equitable, and sustainable future for all that leaves no one behind."

Finance and Social Equity

Traditionally, global environmental governance focuses on the environment. Finance is necessary to help all countries meet their obligations under various treaties. The background for finance discussions was difficult. High costs of capital, economic slowdowns, and more meant demand for "high quality" finance grew, and supply was slow to emerge.

In 2024, finance and social equity issues came together in unique ways. Unsurprisingly, perhaps, outcomes differed widely across processes—even on how to refer to Indigenous Peoples or discuss gender equality.

Some finance "wins" passed by without the fanfare of new global decisions. The Global Framework on Chemicals (GFC), established in 2023, launched a new fund to support chemical and waste management in developing economies. Open to both governments and civil society networks, the fund will provide up to USD 800,000 to support projects aiming to make transformative changes and protect both the environment and human health from the impacts of pollution.

In 2024, we saw some new, hard-won finance decisions. The Baku Climate Change Conference set a new collective quantified goal (NCQG) on climate finance. The new goal represents a tripling of the previous annual goal (unadjusted for inflation), from USD 100 billion by 2020 to USD 300 billion per year by 2035. Financing "from all public and private sources" is hoped to turn "billions into trillions over the next decade," reaching "at least" USD 1.3 trillion per year by 2035. But, after two years of work toward the goal, many left disappointed.

The "quantum" of USD 300 billion per year by 2035 did not live up to developing countries' expectations. The Group of 77 and China (G-77/China) called for more than four times as much. The NCQG has no minimum allocation floors for climate-

vulnerable countries like least developed countries and small island developing States (SIDS). As we outline in our analysis of the meeting, they left Baku without guarantees their climate ambitions would be possible. Climate finance is unequally distributed. Channelling public and private climate finance to larger, faster-growing economies neglects the most climate-vulnerable. The "Baku to Belem Roadmap to 1.3T" means another year of negotiations to complete this piece of the Paris Agreement.

Desertification fared somewhat better on the finance front. Although it comprised voluntary pledges, USD 12 billion will be available in the new Riyadh Global Drought Resilience Partnership established at the Conference of the Parties (COP) on desertification. And while the UN Convention to Combat Desertification (UNCCD) meeting did not deliver an agreement to launch negotiations on a protocol on drought—something many had hoped for going in—parties agreed to continue discussions on options to address drought with a view to adopting a decision at the next COP.

Biodiversity made mixed progress on the finance front. Countries at the UN Biodiversity Conference could not agree on guidance to the Global Environment Facility (GEF) or the Global Biodiversity Framework Fund. However, they adopted the landmark "Cali Fund." It will try to ensure fair and equitable benefit-sharing from the use of digital sequence information on genetic resources. Our analysis explains the Cali Fund demonstrates how multilateralism can facilitate justice. It is innovative in its approach to Indigenous Peoples and local communities. Corporations that use genetic data from animals, plants, or microorganisms in nature, such as pharmaceutical companies, will provide a portion (half) of their profits—directly or indirectly—to Indigenous Peoples and local communities.

Overall, the year sent mixed messages on states' collective commitment to upholding the rights of Indigenous Peoples. Biodiversity and desertification enshrined rights and participation in new institutions, while climate change talks saw efforts to roll back agreed language.

There were landmark achievements in improving Indigenous Peoples' participation in global decision making. The UN Biodiversity Conference established a permanent subsidiary body to strengthen the engagement of Indigenous Peoples and local communities in biodiversity work. This is an important step forward in ensuring that the "rights, contributions, and traditional knowledge" of these groups are "embedded in the global agenda."

The desertification COP established two new caucuses: one for Indigenous Peoples and another for local communities. These two

caucuses will enact the UNCCD's calls for local community participation in decision making related to desertification. This work will help future discussions remain informed by the experiences and expertise of people on the ground.

At the same time, in the climate talks, a small group of countries fought to equate Indigenous Peoples with local communities—disregarding their distinct rights under the UN Declaration on the Rights of Indigenous Peoples. This lack of alignment in approaches across multilateral environmental agreements (MEAs) is yet another sign that these big global processes need to find a way to work together.

Building a shared agenda to unite social, economic, and environmental goals was the focus of the Summit of the Future. It confirmed that the 2030 Agenda is still the blueprint for achieving sustainable development. At a time when confidence in multilateralism and global leaders is running low, this recommitment to shared objectives is critical. The Pact for the Future articulates shared priorities that could be advanced across MEAs.

Missed Opportunities

So, where could the world have done more? Last year, we proclaimed 2024 to be a big year for chemicals and waste governance. Sadly, countries failed to realize any of those expected landmarks.

Negotiations on the science-policy panel (SPP) on chemicals, waste, and pollution prevention concluded the final scheduled session without an agreement. At the third (and supposedly final) negotiating session, delegates did not agree on the "foundational document" that would outline the basic structure of the SPP. The negotiators struggled to tailor the panel to the realities of chemicals and waste problems—and their governance. Many left with more questions than answers, including when the next meeting would take place.

Those involved in the Intergovernmental Negotiating Committee (INC) to develop an international legally binding instrument on plastic pollution, including in the marine environment, were less surprised that a new treaty was not adopted. The process was on a tight timeline. The UN Environment Assembly had allocated just two years to develop a new treaty on this complex topic. Beyond technical complexities, like the many different types of plastics, the future treaty could have significant economic implications for businesses along the value chains for a huge variety of products. The stakes are particularly high for fossil fuel companies providing plastic feedstocks and communities inundated with plastic waste.

Table 1. The year in review

Issue area	Process	Delivered?
Sustainable development	Summit of the Future	✓ Pact for the Future
Climate change	United Nations Framework Convention on Climate Change (UNFCCC)	− NCQG, further work in 2025
		✓ Article 6 markets
		✓ Loss and Damage Fund
		− Attempts to weaken Indigenous Peoples' and gender equality
Biodiversity	Bern III	✓ Cross-mapping Global Biodiversity Framework (GBF) targets and MEAs
	Convention on Biological Diversity (CBD)	✓ Cali Fund
		✓ Ecologically or Biologically Significant Marine Areas (ESBA) modalities
		✓ Indigenous Peoples and local communities (IPLC) permanent subsidiary body
	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem (IPBES)	✓ Transformative Change Report and Nexus Assessments
Desertification	UNCCD	✓ USD 12 billion for the Riyadh Global Drought Resilience Partnership
		✓ New caucuses for Indigenous Peoples and for local communities
		− No agreement on how drought will be addressed; talks to continue in 2026
Chemicals and waste	Negotiations toward an SPP	✗ To continue in 2025
	Negotiations toward a plastic treaty	✗ To continue in 2025

Source: Authors' observations, ENB Reports.

Litigation

Mounting frustration with the climate negotiations—and with other multilateral environmental processes—that have been slow to address the world's pressing challenges have led to the growing prominence of courts. Climate-related litigation has been on the rise in an increasing number of jurisdictions for many years. In 2024, 143 climate cases were filed in the US alone.

What set 2024 apart is that it saw major climate cases play out at the regional and global levels (see Box 2). The International Tribunal for the Law of the Sea confirmed that States have to prevent, reduce, and control "marine pollution from greenhouse gas emissions" and protect and preserve the marine environment from climate change impacts and ocean acidification.

Oral hearings in the ICJ advisory proceedings provided an opportunity to clarify the legal obligations of states with respect to climate change, as well as the legal consequences of their breach. There were two rounds of written statements in the run-up to the hearings. The court received 91 written

Table 2. Notable litigation in 2024

Case	Jurisdiction	Status	Significance
Climate Change			
Request from the UN General Assembly for an advisory opinion on the obligations of states with respect to climate change	International Court of Justice (ICJ)	Pending, written submissions filed and oral arguments presented in 2024	Will provide a legal benchmark and inform climate negotiations with respect to mitigation and adaptation targets, loss, and damage
Request for an Advisory Opinion submitted by the Commission of Small Island States on Climate Change and International Law	International Tribunal for the Law of the Sea	Decided	Confirmed States' obligations to prevent, reduce, and control marine pollution from emissions and protect and preserve the marine environment from climate change impacts and ocean acidification

Case	Jurisdiction	Status	Significance
Request for an advisory opinion on the scope of State obligations for responding to the climate emergency	Inter-American Court of Human Rights	Pending	Will clarify whether States have specific obligations to confront climate emergencies within the context of the Inter-American System of Human Rights
Verein Klimaseniorinnen Schweiz and Others v. Switzerland	European Court of Human Rights	Decided	Ruled that by failing to tackle climate change, the Swiss government had violated the human rights of a group of older Swiss women; in a vote, the Swiss Parliament decided not to comply with the ruling
Milieudefensie et al. v. Royal Dutch Shell plc.	Netherlands	Decided	While the Hague Court of Appeal agreed that the company had an obligation to citizens to limit emissions, it could not establish that Shell had a "social standard of care" to reduce its emissions by 45%—or any other amount
Chemicals			
Swedish per- and poly-fluoroalkyl substances (PFAS) case	Sweden	Decided	Sweden's Supreme Court ruled that residents affected by PFAS-contaminated drinking water in the Swedish towns of Kallinge and Ronneby are entitled to compensation; potential to unlock other cases in Sweden and beyond
US PFAS Case	South Carolina	Decided	Plaintiffs working on behalf of public water systems awarded USD 956 million in legal fees

Source: Authors' observations.

statements and 62 written comments from States and accredited organizations. Ninety-six States and 11 international organizations presented oral statements. These record numbers are a testament to the importance countries attach to this process.

The ICJ's advisory opinion, to be delivered in 2025, is expected to provide a clear legal benchmark and help inform the climate negotiations with respect to mitigation, adaptation, and loss and damage. For many, the advisory proceedings were a platform to raise issues that may stand little chance of making it onto the UN negotiation agenda. These include climate reparations, continuity of maritime zones under sea-level rise, climate-related displacement, and criminalizing ecocide. While ICJ advisory opinions are not legally binding, they carry significant legal weight, and many hope for a robust one.

It was not all progressive in the courts. 2024 saw pushback against rulings previously considered major victories for environmentalists. In Switzerland, the parliament decided not to comply with the decision by the European Court of Human Rights, according to which Switzerland had breached its human rights obligations by failing to take sufficient action against climate change. In the Netherlands, the Hague Court of Appeal decided it could not order a private company—Shell—to reduce its emissions by a specific amount. Agreeing that the company had an obligation to citizens to limit emissions, the court was unable to establish Shell had a "social standard of care."

Some of 2024's developments hold promise for litigation in another complex area—chemical pollution. The Swedish Supreme Court ruled in favour of residents affected by PFAS-contaminated drinking water in one Swedish municipality. They are now entitled to compensation. Commentators suggest this ruling might enable more PFAS-related lawsuits in future. According to recent estimates, PFAS-related environmental liability losses across Germany, France, and Belgium could total between EUR 10 billion and EUR 24 billion. Lawsuits targeting PFAS manufacturers are on the rise in North America. Action is complicated by the sheer breadth and diversity of this family of thousands of chemicals. Amid growing calls for regulatory action that would tackle PFAS as a class, litigation may increasingly be used to hold polluters accountable for cleaning up existing pollution and paying for damages to human health.


VEOLIA
COP16

← Artist Benjamin Von Wong's "Biodiversity Jenga" at the 2024 UN Biodiversity Conference illustrated the delicate balance among interconnected ecosystems. (IISD/ENB | Mike Muzurakis)

Implementation in Practice

Media and policy attention often goes to what's new—anticipated treaties or high-level announcements. While important, new agreements or commitments are not the whole story. At best, focusing on the "new" provides political momentum and public pressure to conclude negotiations or secure funding. But it can also distract from the work and funding needed to implement existing rules. While everyone looks forward to new announcements, on-the-ground policies and projects can lag. There are more rules and discussions, and yet we still see environmental degradation.

The lack of results raises questions about how global environmental governance is enacted. Leaders wrote an open letter calling for reforming climate COPs; others published detailed studies on what COP reform could look like. There was even a call to dismantle "zombie" organizations that, according to some, have fulfilled their purpose. Swift rebuttals from policy-makers and non-governmental organizations emphasized the importance of ongoing implementation of these agreements, from providing scientific advice to coordinating actions across borders.

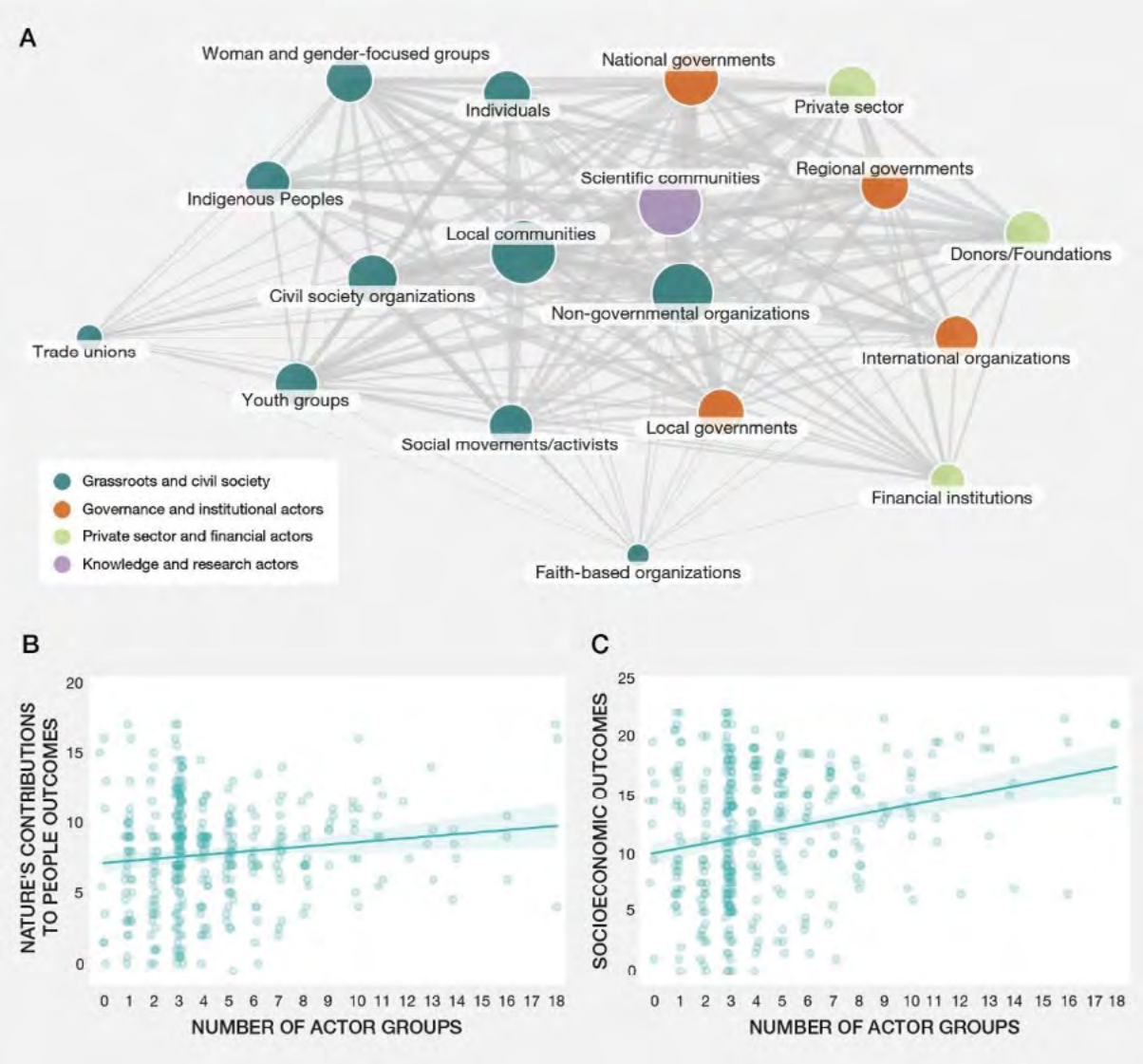
These interventions raise a timely question: How can countries advance implementation? Most treaty bodies are in "implementation mode," although this looks a bit different across issues. The International Whaling Commission and Montreal Protocol have made considerable strides toward their goals. But even these success stories are built on institutional structures, historical precedents, and continued negotiations. As we saw in 2024, implementation in all its forms can still be contentious.

Varieties of Implementation

Governments are ultimately responsible for enacting legislation and catalyzing action to live up to their commitments. At the international level, implementation is a broad term belying an array of activities. Secretariats organize capacity-building workshops and deliver technical assistance. Subsidiary bodies and committees fulfill their mandates by conducting technical reviews, assessing progress, or assisting countries' efforts. Even governing bodies get involved by agreeing to detailed guidelines that supplement the broad rules, reviewing progress and deciding on financial and other forms of support for implementation.

The role of governments and international organizations is important—vital even. But communities, Indigenous Peoples, scientists, and others all play a role. The IPBES *Transformative Change Report* tried to consider the role of all actors for meaningful outcomes. Collaboration seems key: where diverse actors have worked together, nature and people have benefited.

Figure 2. Diversity for better outcomes



Source: IPBES Transformative Change Summary for Policy Makers, Figure SPM10, reprinted with permission.

Stakeholder involvement was contested at the international level in 2024. As we noted in The Year at a Glance, the CBD advanced Indigenous Peoples and local communities' rights, establishing a permanent body for their input. Just weeks later, we saw attempts to water down related language at the Baku Climate Change Conference. A few countries tried to remove references to Indigenous Peoples, leaving only "local communities" recognized by name across several issue areas. This change was criticized as effectively denying their status as rights holders.

Operationalization

The first and perhaps most contentious type of implementation by international organizations involves filling in the details of previous agreements. Getting to "yes"—that is, getting all countries to agree—can mean using vague language or "constructive ambiguity" that can leave rules open to interpretation. This tactic can get agreements across the finish line. Allowing some ambiguity may be essential to achieving a compromise that would otherwise be elusive.

However, resolving ambiguity can prove to be difficult and may hinder subsequent work. Parties may spend extensive time and resources on intractable issues in subsequent years without progress toward clarity. Countries may enact rules in different ways. They could pick and choose which aspects of a rule to follow. While some implementation is arguably better than none, measuring progress becomes difficult if countries are working to different standards. Details matter.

Many of the details filled in during 2024 related to finance. The Baku Climate Change Conference (just) managed to adopt the NCQG called for in the Paris Agreement. It failed to realize a robust goal that ensured benefits for climate-vulnerable countries. In Cali, the biodiversity negotiations also struggled to assess the effectiveness of its financial mechanism and guide future financial decisions by the GEF. However, the separate agreement on the Cali Fund proved a breakthrough, innovative mechanism for channeling funds related to digital sequencing information.

Often, important details can seem simple—describing what should "count" under the existing rules. For example, the CBD adopted modalities for describing ecologically or biologically significant marine areas (EBSAs). These areas of the ocean are particularly important to protect because they provide food sources, habitats, or breeding grounds for species. Identifying what is and is not an ecologically or biologically significant marine area determines what areas are, or are not, included in governance arrangements.

Participants celebrating the establishment of the Subsidiary Body for Article 8(j) at the 2024 UN Biodiversity Conference (CBD COP 16). (IISD/ENB | Mike Muzurakis)

Intersessional Work

Much implementation work happens behind the scenes, or at least between high-profile meetings. Committees have mandates—from conducting expert reviews to providing implementation oversight. They can be as straightforward as implementing the mandate given. The Loss and Damage Fund Board is such an example. It finalized all of its work and now stands ready to start supporting projects once countries turn their financial pledges into contributions.

A key lesson from 2024 is to pay attention to meetings some dismiss as "technical." Here, global action can grow and adapt, new ideas take hold, and implementation is enacted. Independent experts comprise several smaller scientific committees in the chemicals and waste regime. The Persistent Organic Pollutants (POPs) Review Committee (POPRC) and the Chemical Review Committee (CRC) have similar mandates. Both are tasked to recommend new substances for inclusion in the Stockholm Convention and the Rotterdam Convention, respectively. In a way, their work is similar to the Plants and Animals Committees of the Convention on International Trade in Endangered Species.

However, the processes and implications of their decisions differ. POPRC reviews the chemical substances, and the CRC reviews countries' notifications of domestic actions to ban or significantly restrict a chemical. In 2024, the POPRC recommended three

substances for elimination with careful risk management plans. The CRC agreed two pesticides were eligible to be subjected to the Rotterdam Convention's prior informed consent procedure, which would require the provision of more information on these chemicals during international trade.

Similarly, several biodiversity treaties can extend existing rules to safeguard new species. The Convention on Migratory Species added protections for 14 species, subspecies, and populations, either because they were at risk of extinction or required international cooperation for their conservation and management.

Implementation can fine-tune conventions in light of new realities. Innovations create new products and, in turn, new waste. The Basel Convention Open-ended Working Group started work on guidelines for environmentally sound management of lithium-ion batteries—those rechargeable powerhouses in demand for our phones and laptops, and increasingly for electric vehicles and solar power storage. While Convention on International Trade in Endangered Species (CITES) meetings often add trade restrictions for additional species, that was not the case in 2024. This year, the focus was on compliance issues. CITES also stepped into new territory to address issues arising from wildlife trade, from zoonotic disease to youth.

Evolving Governance Mechanisms

Implementation is an all-hands-on-deck endeavor at the global level. It is a yardstick against which countries are held to account. Implementation work includes important technical and scientific reviews taking place. Multilateral agreements create reporting mechanisms to tell us how well countries are progressing toward addressing the world's shared environmental problems.

Implementation is dynamic. It is not a matter of negotiating, implementing policy responses, solving a problem, and disbanding. Environmental challenges evolve, and implementation is iterative. As scientific bodies flag new developments, governments respond. New market, technological, and social developments present new challenges that must be dealt with through multilateral cooperation.


WOMBS UNDER SIEGE
MICROPLASTICS ARE ALREADY AFFECTING OUR BABIES
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OBS

← Civil society observers speak at Plastic Pollution INC-5. (IISD/ENB | Kiara Worth)

Weak Connections

2024 could have been the year to build meaningful bridges across governance areas. The world is complex: climate change undermines ecosystems; plastic production increases oil production; oceans absorb greenhouse gases. Vulnerabilities can multiply in the web of interconnected issues. Small island states face waves of marine litter and rising seas. Arctic communities must deal with intensified exposure to chemicals as permafrost melts due to climate change.

However, global environmental governance is mostly siloed. It is how the system works and is proving nearly impossible to shift. Treaties are legally equal and autonomous. One body cannot tell another what to do, but parties can agree to exchange ideas or find ways to collaborate. In Riyadh, parties to the UNCCD "invited" a range of actors to participate in various aspects of desertification management, including the World Meteorological Organization, Global Water Partnership, and even the GEF, which serves as the administrator of the UNCCD's financial mechanism. The UNCCD parties could not require actions by these other bodies but could invite them to consider future work. Collaboration is a delicate dance around the legal autonomy of organizations and treaties.

There were hopes for synergies to emerge in 2024. The three Rio Conventions (CBD, UNFCCC, and UNCCD) met (nearly) back-to-back-to-back. Government ministers and negotiators moved from Cali to Baku to Riyadh to discuss biodiversity, climate, and desertification. Surely, some hoped, they would acknowledge the connections and start to draw these conventions together.

But progress on synergies was most prominent elsewhere and earlier in the year. In January, the Bern III Conference brought together 16 biodiversity-related MEAs to develop ideas for increased collaboration for the implementation of the Kunming-Montreal GBF. Parties and the secretariats of the three Rio Conventions joined, among others, the Montreal Protocol, Basel, Rotterdam and Stockholm Conventions, Minamata Convention on Mercury, and International Treaty on Plant Genetic Resources for Food and Agriculture (or, the Plant Genetic Treaty). They worked to flesh out a "cross-mapping" of GBF targets and MEAs and identify "champions" and contributors for particular targets. CITES tasked its secretariat to also map their contributions to the GBF.

In February, the UN Environment Assembly (UNEA) convened the first-ever MEA Day, which focused on cooperation among these agreements. Ministers, heads of MEAs, and other stakeholders confirmed the importance of platforms for information exchange and cooperation, such as the UNEA, as well as the need for a systems approach to identify interactions among MEAs. Among the MEAs themselves, the

CBD seems better at coordination. In Cali, the CBD adopted a decision on the links between climate change and biodiversity. It encourages coordination and invites the incoming presidencies of the biodiversity and climate meetings to collaborate. The decision does not create an institutional mechanism. Taking this effort forward has been left to the priorities of the short-term presidencies. CBD also recognized that coordination on marine protected areas (those EBSAs) will be beneficial for the International Seabed Authority (ISA), including when the new Agreement on Marine Biological Diversity of Areas Beyond National Jurisdiction (BBNJ Agreement) enters into force.

As always, the decisions from one meeting ripple into the work of other bodies. This is not new. There has always been a web of bodies with overlapping mandates and rules; for example, our 2020 report outlined the complexities of marine governance. Notably, however, in 2024, we saw some bodies picking up issues that others have ignored or struggled to conclude. We also saw efforts to stop collaboration.

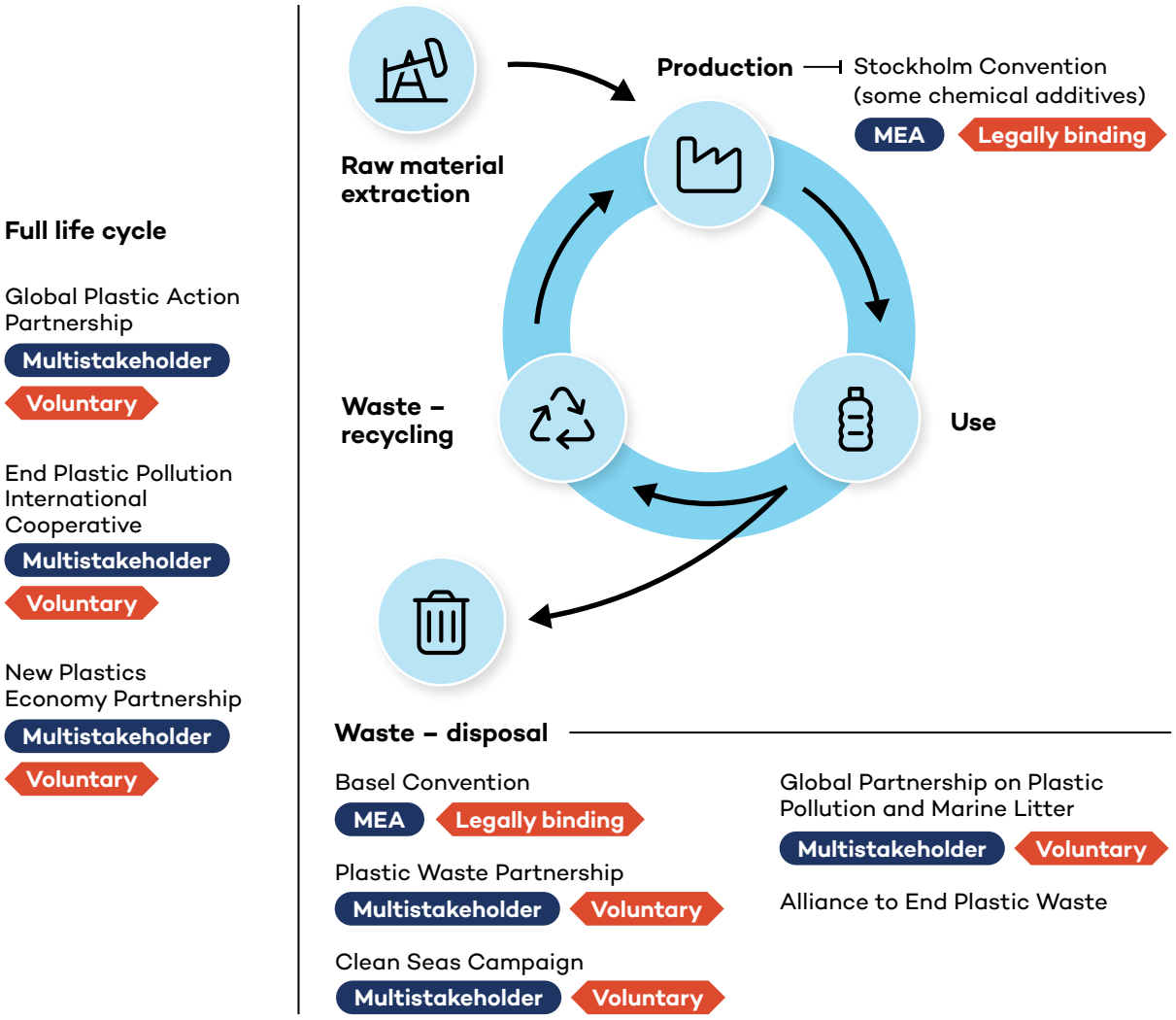
Picking up the Baton

As we discussed above, implementation can mean extending rules to new issues. This can help treaties adapt to evolving challenges—for example, in cases where new technologies or practices undercut efforts to address a problem. As new problems emerge, existing treaties may be positioned to facilitate cooperative action in areas relevant to their mandates.

Each body working on a similar issue offers a unique perspective, depending on a specific MEA's rules and mandate. Carbon capture and storage (CCS) and carbon removal are controversial in discussions crossing multiple bodies. In the climate negotiations, CCS was part of the "energy transition package" in the 2023 Global Stocktake. Removing and storing carbon is also included in the recently completed Article 6 (Paris Agreement Crediting Mechanism). Activities to install new CCS or remove carbon (e.g., through reforestation) can earn credits to be sold on this global market.

However, there is a developing market for storing CO_2 under the ocean's seabed. The London Protocol's prohibition on dumping hazardous substances in the ocean used to include dumping CO_2. However, CCS proponents viewed this as a legal obstacle that effectively blocked potential sites that could store CO_2. Amendments to the protocol in 2006 and 2009 allow for cross-border transport and storage of CO_2 in geological formations beneath the seabed. These amendments are "provisionally applied" to allow this work to go ahead. Work continued in 2024 to regulate this geological storage of CO_2 and marine geoengineering, such as ocean fertilization.

Figure 3. Selected global initiatives on plastics



Source: Authors' calculations.

Other market forces will also affect carbon storage in the seabed. The ISA continued to work on regulations for deep-sea mining. They are leagues apart. Some states want to ban deep-sea mining; others want to extract these commercially valuable resources. Meanwhile, scientists have warned that disturbing the seabed could make climate change worse by releasing newly discovered but poorly understood stores of carbon. It is unclear if these bodies will collaborate to share information about artificial stores of CO_2 allowed under the London Protocol to avoid mining activities in the same area.

While carbon storage regulation is fragmented, it was a race in 2024 to address benefit-sharing digital sequence information (DSI), which comes from genetic resources. It is used to ensure genetic diversity in conservation efforts, create new medicines, and identify traits that make plants more drought resistant. The CBD concluded its negotiations on this issue with the establishment of a benefit-sharing

mechanism and the Cali Fund. The CBD's rapid progress eclipsed the Plant Genetic Treaty. There, delegates previously described DSI as a "deal breaker." With the CBD agreement in place, we are keen to see what happens at the Plant Genetic Treaty talks in 2025.

Overlaps between treaties can create complexity where governance could perhaps be simpler. If the overlaps are synergistic, they can support and reinforce one another. If they clash or subtly diverge, then countries might have to choose which to follow (and which to ignore). The existence of many organizations, initiatives, and MEA decisions can also affect efforts to start anything new.

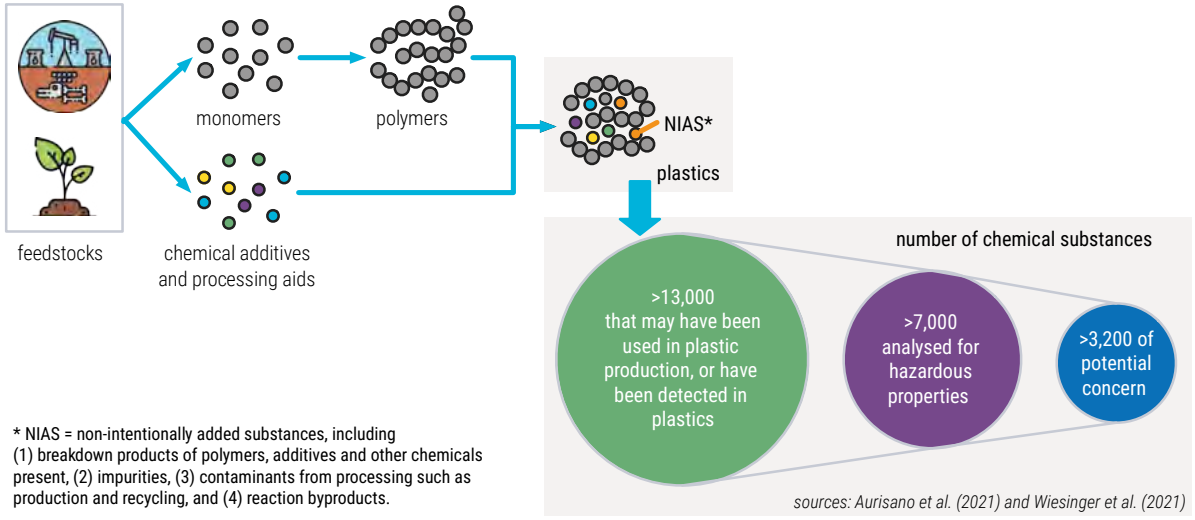
This was (at least partly) the case in 2024's failed plastic negotiations. There is a widespread desire to address plastic pollution, as people around the world face the environmental and health consequences of this growing problem. States have forged coalitions, and companies have launched new initiatives. Other related treaties have used their rules to address plastics. The result is a complex web of efforts, many of which focus on plastic waste (see Figure 2).

Among the issues under discussion is whether the negotiations are to address the full life cycle of plastics, including production, use, and disposal. As we note in our coverage of the fourth and fifth meetings in 2024, discussions of waste were the least controversial. However, countries debated how a new plastics treaty would fit alongside the Basel Convention's guidelines for environmentally sound management of plastic waste. Many other issues slowed the negotiations. Some fossil fuel-producing countries continued to view production caps and chemical additives as outside of the treaty's scope. Other stakeholders stressed the need to "turn off the tap," pointing to the UNEA decision that clearly states the treaty should take a life-cycle approach. This perspective could also mean addressing the raw materials used to make plastics. These feedstocks are largely fossil fuels. Bio-based plastics also use vegetable fats or xylans, which come from cereal grains, meaning there are land-based implications of our demand for plastics.

Chemical additives will pose problems for years to come. The Stockholm Convention has eliminated the production and use of some POPs in plastics. But that is a tiny set of problematic chemicals (see Figure 4). The Stockholm Convention can only act on chemicals that meet the "quadfecta" of four dangerous properties: toxic, long-lasting, moving up food chains, and travelling long distances through air and water.

Many hope the new plastics treaty will be inducted into the web of complicated voluntary initiatives and binding rules in 2025. Cooperation and collaboration across related bodies will be key for

Figure 4. The risks in the life cycle of plastics



Source: Global Resource Outlook, Figure 3.3., reprinted with permission.

implementation. A strong treaty may also be able to signal the level of ambition and expected types of actions to others.

As noted above, collaboration and cooperation are tricky, and even when there are strong reasons to collaborate, countries can block these efforts. We saw this in 2024, including efforts to block or undermine connections across bodies working at the interface of science and policy bodies. A key example is the fact that the Intergovernmental Panel on Climate Change (IPCC) produces assessment reports on a six-(ish) year cycle while the Paris Agreement undergoes the Global Stocktake every five years. The IPCC is a key source of information on how countries are collectively faring in reducing emissions, building adaptation capacity, and providing support to developing countries. The mismatch in these cycles may prevent timely input to the Global Stocktake. In the Baku Climate Change Conference and the IPCC meetings this year, Saudi Arabia and a rotating list of other countries blocked decisions that could help align these cycles. A similarly small group of countries blocked text calling for collaboration between IPBES and IPCC. In the negotiations for the chemicals and waste pollution SPP, this group also objected to calls for the new panel to work with "other international initiatives." These other initiatives could include the IPCC and IPBES or even the GFC.


Cuba

← Delegates at the closing plenary of plastic pollution INC-5 rise when asked to show their support for an ambitious treaty. (IISD/ENB | Kiara Worth)

Looking to 2025

2025 marks the beginning of the five-year sprint to meet the goals in the 2030 Agenda. In the coming year, countries will also need to finish work left undone in 2024 on plastics, a new science-policy platform, and more. The coming year could tell us much about how environmental agendas are likely to fare in the new geopolitical realities.

Trying to wrap up what is left undone will be a major challenge for 2025. The plastics negotiations are still far from realizing a full-fledged treaty. Much of the debate is still on the scope and basic design of the future agreement. Global trends may not help. Oil demand is expected to be "subdued" but bolstered by petrochemical feedstocks. The oil industry's economic imperative for plastic production will remain high.

2025 will be a major test for the Paris Agreement. Countries are due to submit their revised nationally determined contributions (NDCs) early in the year, although most expect parties will wait until closer to the start of COP 30. Much remains uncertain. Will developing countries lack the confidence to raise their ambition, given the Baku finance deal? Will the US withdraw from the UNFCCC altogether? Will the NDCs live up to the Global Stocktake, especially its energy transition package? 2025 will mark the first full turn of the Paris Agreement's ratchet-up cycle, with ample need for it to raise ambition.

Encouragingly, CBD COP 16 has already successfully picked up where it left off. After a lack of quorum ended talks in 2024, a resumed session in Rome has concluded discussions on finance, including guidance to the GEF and Global Biodiversity Framework Fund.

Beyond the plastics treaty and SPP negotiations, 2025 could be a year to advance the implementation of important previous agreements across chemicals, waste, and the ocean.

The cluster of chemical and waste agreements will be busy in 2025. The GFC will hold its inaugural meeting. As we outlined in our 2023 Review, the GFC sets ambitious targets, some of which need further refinement, including who is responsible for achieving them. One of its initial tasks may be reviewing the uptake of the new GFC Fund.

Established, implementation-focused treaties will face new challenges. The Stockholm Convention on POPs eliminates or restricts the production and use of these dangerous chemicals. Some chemicals are pervasive and difficult to remove from supply chains and everyday products. For the first time, there is a request to revisit a decision. Ethiopia has requested an amendment to a previous decision to eliminate most uses of UV-328, a POP used to help plastics, coatings, and adhesives hold up to UV

Stefano Vescovi, Switzerland, congratulates Leticia Reis de Carvalho, Brazil, for her election as the new ISA Secretary-General. (IISD/ENB | Diego Noguera)

exposure. The aviation industry has yet to find an alternative chemical and would like to continue using UV-328 for adhesives and other materials used in civilian and military aircraft.

New rules for electronic and electrical waste (e-waste) will come into effect. All global trade in e-waste will require the prior informed consent of the importers, regardless of whether the waste is classified as "hazardous" under the Basel Convention. It is an effort to protect communities from the toxic substances found in the fastest-growing waste stream in the world. Recent studies show the disproportionate burden that waste pickers bear from our overconsumption and overproduction, including high levels of heavy metals in their bodies. The Partnership for a Lead-Free Future will get fully underway to try to move the discussion toward coordinated action. Hopefully, this will build on successes in eliminating lead in petrol while also tackling dangerous, everyday sources of exposure like spices and paint.

The drive for raw materials critical to the energy transition will be a key theme in 2025. Demand will soon outstrip supply. New sources may be needed, including from the ocean floor. The ISA will aim to finalize rules for mining the seabed for these minerals, used in batteries for electric vehicles and other key components of the clean energy transition. Views are divided

among countries calling for a moratorium and others who want the ISA Council to start issuing licences.

The 2025 UN Ocean Conference will also aim to mobilize actors to protect the ocean. The previous UN Ocean Conference amassed billions in voluntary pledges and commitments to protect the ocean. Many hope it could also be an occasion to celebrate the entry into force of the BBNJ Agreement. Adopted in 2023, the BBNJ Agreement seeks to fill a gap in biodiversity protection spanning much of the ocean.

In 2025, there will be continued efforts to bring social equity in line with environmental protection. Entrenching social dialogue and rights will be the focus of the second World Summit for Social Development. It comes 30 years after the first World Summit for Social Development and aims to renew optimism for socially inclusive green transitions. The UN Permanent Forum on Indigenous Peoples will discuss their rights and countries' obligations in critical mineral extraction in May. Ensuring a just energy transition also means including all rightsholders in energy solutions.

But perhaps just as important is the financing needed to support action across the Sustainable Development Goals. As we saw at the Baku Climate Change Conference, funding is a matter of quantity and quality. The Fourth International Conference on Financing for Development is expected to add to the calls to reform the international financial architecture. The UN is launching negotiations to establish a new agreement on international taxation. The GEF will launch negotiations for its ninth replenishment. Financing synergies across social, economic, and environmental dimensions of sustainable development could help realize practical solutions at a time when geopolitical realities complicate global cooperation.