

POLICY BRIEF: Common But Differentiated Responsibility in the Global Plastics Treaty

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SUMMARY

Common But Differentiated Responsibility (CBDR) is an important equity principle in international law that obligates wealthier countries to shoulder a proportionately greater burden in solving global environmental problems. The application to finance is clear: “developed” countries should pay for the costs incurred by “developing” countries. These financial transfers have been crucial to the success of some treaties, notably the Montreal Protocol. The climate change convention goes further in applying differentiation to control measures as well, asking “developed” countries to take earlier and stronger action to curb emissions than “developing” countries. The “developed” countries’ failure to meet their obligations has been a major contributor to the treaty’s failure to meet its goals. Moreover, the rationale for differentiated control measures does not apply to the plastic context: reductions in plastic production and use will be beneficial, not an economic burden. The implications for the plastics treaty are clear: CBDR should apply to finance but control measures should be applied uniformly.

BACKGROUND

Common But Differentiated Responsibility (CBDR) is a legal principle first articulated in the Rio Declaration on Environment and Development and the United Nations Framework Convention on Climate Change (UNFCCC), both products of the 1992 Rio Conference. The principle, while not defined in either text, clearly indicates that “developed” countries bear disproportionate responsibility for both environmental problems and for solving them through supporting global sustainable development. Specifically, the history of unsustainable development in the “developed” countries has enhanced their technical and financial capabilities; and they are now obliged to deploy those resources to support the “developing” countries’ sustainable development journey. The principle has been further developed through the UNFCCC, where it has generally been understood to mean that all countries share an obligation to take positive action toward solving the problem (climate change) but the “developed” countries are obligated to take earlier and stronger action than the “developing” countries.

The rationale for this distinction lies in the tight historical coupling between greenhouse gas emissions, fossil fuel use, energy supply, and economic growth. In 1992, fossil fuels were by far

the least expensive and most readily available forms of energy. Developing countries feared that emissions reductions would restrict access to energy and thereby choke their economic growth. Meanwhile, a relative handful of wealthy, highly-industrialized countries were responsible for the overwhelming majority of greenhouse gas emissions, both historical and current. Thanks to their own fossil fuel-driven development, they had the economic means to invest in sustainable energy. Because developing countries' emissions were relatively low at the time, the focus was on reducing industrialized countries' emissions.

In the 30 years since the Rio Conference, much has changed. Solar and wind are now cheaper sources of new energy than any fossil fuel, breaking the link between emissions and economic development.¹ The wealthy countries have failed to significantly reduce their emissions, and the emissions of some developing countries have skyrocketed. Politically, CBDR has become a major stumbling block in the climate negotiations. The US, in particular, has fought hard against the binary division of countries, pointing out that China is now by far the largest GHG emitter. Meanwhile, developing countries point to industrialized countries' failure to decarbonize as a rationale to avoid taking on decarbonization obligations of their own.

When multilateral environmental agreements include CBDR, this principle is usually mentioned in the preamble alongside references to "regional and national circumstances" or "national capabilities" and equity.

DIFFERENTIATION IN FINANCIAL SUPPORT

CBDR has been used in several treaties to indicate that the "developed" countries are responsible for much of the problems that needs to be solved (climate change, ozone depletion, etc.) and, by virtue of their own unsustainable development, they now command significant economic and technological resources which must be applied to solving the global problem. At the same time, developing countries are generally acknowledged as being more vulnerable and more impacted by these same problems. Since developing countries require financial support to implement these treaties, it is only logical that this support comes from the developed countries. In this regard, the plastic treaty will be no different from other treaties that also call upon developed countries to provide new and additional financial resources.

There is no universal list of "developed" versus "developing" countries, and multiple definitions exist.² Under the UNFCCC, the "developed" countries, known formally as Annex 1 countries, include members of the OECD and several Central and Eastern European countries, while the rest of the world is considered "developing" countries.³ This binary grouping, which was relatively uncontroversial in 1992, has been criticized as outdated by the U.S. Indeed, some "developing" countries now have higher per capita incomes than some "developed" countries, casting doubt on their need for compensatory financial support.⁴

¹ Bilicic and Scroggins, "Lazard's Levelized Cost of Energy Analysis - Version 16.0."

² UNCTAD, "Classifications – UNCTAD Handbook of Statistics"; United Nations, "Human Development Index."

³ UNFCCC, "Parties & Observers | UNFCCC."

⁴ Hamadeh et al., "New World Bank Country Classifications by Income Level."

In the case of plastics, the fact that some “developing” countries such as Saudi Arabia and other oil and gas states have been among the primary financial beneficiaries of the plastics manufacturing boom raises the question of whether they should join the donor countries. The production of both plastic polymers and fossil-based feedstocks (although not plastic products) is highly concentrated in a handful of mostly wealthy countries.⁵ These countries therefore bear the responsibility of having produced (and continuing to produce) the majority of the world’s plastics. If financial responsibility is assigned by contribution to the plastic problem (i.e., plastic polymer production), rather than overall development level, **these countries should primarily finance the transition to a post-plastic future.**

One important element that will require financial support is to ensure a just transition. As companies switch to alternative forms of packaging or service delivery models such as reuse, there will certainly be some displacement of workers, including waste pickers, other waste workers, small retailers, street vendors, small restaurants and food vendors, and workers in industries that manufacture plastic products. At the same time, scaling up reuse will provide new employment and business opportunities. Concrete, well-funded and adaptive just transition plans are required to minimize the financial impact on workers as they find and transition to new roles.

Another critical need will be to address legacy plastic pollution. Many “developing” countries are saddled with immense amounts of plastic pollution that will require cleanup, even if new sources of pollution are effectively halted. Much of the legacy pollution is the result of international waste trade: the practice of sending difficult-to-recycle waste (including plastic and plastic-containing electronic waste) to “developing” countries, where small amounts are recovered and the rest is typically dumped or burned. Another major source of plastic waste is the packaging from consumer goods sold by major multinational firms. These firms, mostly headquartered or owned in “developed” countries, have profited by introducing these plastics, but do not bear the financial burden of waste management or cleanup.

DIFFERENTIATION IN CONTROL MEASURES

“Control measures” refer to the core obligations that Parties adopt to address the problem. Here, the climate convention is an outlier. Two different agreements under the UNFCCC have applied differentiation to greenhouse gas mitigation obligations. Both attempts are notable for their failure to achieve the core treaty objectives.

The Kyoto Protocol (1997) allowed developed countries to meet their emission reduction obligations by purchasing carbon offset credits representing emissions reductions from private entities in developing countries. In this way, developed countries could claim to be “responsible” for emissions reductions without actually reducing emissions on their own territories. The developing countries were to benefit both from the influx of investment (to the private sector, not national treasuries) and from receiving improved, emissions-reducing technology. These carbon trading mechanisms collapsed after a series of scandals, including their inability to verify

⁵ Bauer et al., *Petrochemicals and Climate Change*; Charles, Kimmant, and Saran, “Plastic Waste Makers Index.”

emissions reductions claims.⁶ Greenhouse gas emissions rose steeply during this period, even while the Adaptation Fund, which was to be primarily funded through a 2% levy on the carbon market, remained dramatically under-resourced.

Eighteen years later, the Paris Agreement (2015) was hailed as a diplomatic breakthrough. Rather than dividing countries into developed and developing categories, it allows each country to set its own reduction target and appropriate mitigation measures to reach that target in its National Action Plan. By encouraging countries to make commitments commensurate with their capacities, this “bottom-up” approach became a form of self-differentiation. However, the national targets do not add up to the Paris Agreement’s non-binding goal of net zero emissions by 2050, and in fact, emissions continue to rise.⁷

In retrospect, requiring “developed” countries to act first and fastest under the UNFCCC was a fatal mistake. It demanded leadership of the “developed” countries that they were not prepared to take; this resulted in a failure to progress toward treaty objectives. It also replaced the spirit of cooperation, essential to international negotiations, with an atmosphere of mistrust that continues to undermine the treaty process. **Just as importantly, by insisting that “developed” countries act first, it denied “developing” countries the opportunity to demonstrate leadership – leadership that they have already exercised on plastics both through domestic legislation and in the treaty negotiations.**

In the Montreal Protocol, CBDR is used only to distinguish those developing countries that consume minimal levels of ozone depleting substances, whose obligation to phase them out is delayed by ten years. Under most multilateral environmental agreements, including the Basel, Minamata, Stockholm and CITES Conventions, there is no differentiation in core obligations and control measures. The history of multilateral environmental agreements suggests that, **while differentiation in financial support is essential, differentiation in core obligations undermines treaties’ success.** (See Table 1).

⁶ Harvey, “Global Carbon Trading System Has ‘Essentially Collapsed’”; Reyes, “Beyond Carbon Markets.”

⁷ *Emissions Gap Report*; Ritchie, Rosado, and Roser, “Greenhouse Gas Emissions.”

Table 1. Quick reference guide to differentiated treatment of developed and developing countries in other environmental treaties

Convention	Financial support	Control measures
Basel	Regional Technical Centres supported by voluntary contributions from Parties and others.	No differentiation.
Minamata	All parties invited to contribute finance, according to their capabilities. Recognizes the specific needs and special circumstances of small island developing states and least developed countries.	No differentiation.
Stockholm	Developed parties must provide new and additional resources to enable developing parties and economies in transition to meet the agreed full and incremental costs of compliance.	Effective implementation by developing countries depends on effective provision of financial support by developed countries.
Montreal Protocol to the Vienna Convention	Developed countries and developing countries with more than minimal levels of consumption shall finance the Multilateral Fund.	Developing countries with minimal levels of consumption can delay implementation of control measures by 10 years.
Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)	No financial support.	No differentiation.
Framework Convention on Tobacco Control	A variety of multilateral mechanisms are directed to support developing countries and economies in transition. All Parties are required to use price and tax measures to reduce demand for tobacco.	No differentiation.
Kyoto Protocol to UNFCCC	Finances flowed from firms in developed countries through carbon markets to private sector developers for projects in developing countries. 2% of transactions went to the	Developed countries adopted self-determined emissions targets which could be met through carbon offset markets (CDM and JI). Developing

	Adaptation Fund for distribution in developing countries.	countries took on no emissions reduction obligations.
Paris Agreement to UNFCCC	Developed countries must provide finance to developing countries to meet treaty obligations.	Each country designates its own control measures and reduction targets in its National Action Plan.

IMPLEMENTING CBDR IN THE PLASTICS TREATY

Although plastics are overwhelmingly derived from fossil fuels, and many of the same companies are implicated in producing both, there are important differences between the plastic and climate change contexts. Unlike fossil fuels, plastic has not been integral to any country’s economic development, as plastic use has become widespread only in the last few years. While the oil and gas industry is now looking to pivot to plastic production, historically, polymers have generated a small percentage of the industry’s income.⁸ The global plastic market of USD 627 billion⁹ represents only 0.6% of the world’s economy,¹⁰ and 75% of that is concentrated in just ten countries.¹¹ Reducing plastic use is therefore unlikely to have significant negative macroeconomic impacts. Indeed, reduced production and use of plastic should be economically beneficial. The societal costs of plastic are estimated between USD 2.2 trillion¹² and USD 4.4 trillion¹³ per year – 3.5 to 7 times the economic value of plastic production! These costs are borne by the public in the form of waste and litter management, plastic-related illnesses, loss of ecosystem services, and impacts to other economic sectors, such as tourism. Whereas the ownership and economic benefits of plastic production are highly concentrated in a few countries, the costs are felt globally and particularly in “developing” countries.

In 1992, the transition away from fossil fuels was seen as a necessary but costly endeavor. Renewable energy was expensive, alternative transportation energy sources barely existed, and there was no substitute for jet fueled-aviation. (All that has now changed: renewables are now cheaper than new fossil fuel energy sources,¹⁴ battery electric vehicles are expected to take over the market in the next few years,¹⁵ and even [electric aircraft](#) prototypes now exist¹⁶). While plastics are now ubiquitous, their presence in most markets is relatively recent, and much production is clearly superfluous. Good alternatives exist for the vast majority of plastic uses. Indeed, switching to locally-manufactured and reusable packaging and products should prove to be an economic boon in most countries. The old logic of the climate change convention – that

⁸ CIEL, “Fueling Plastics: Fossils, Plastics, & Petrochemical Feedstocks.”
⁹ “Plastic Market Size, Share, Trends & Growth Report, 2030.”
¹⁰ Koop, “The \$100 Trillion Global Economy in One Chart.”
¹¹ Bauer et al., *Petrochemicals and Climate Change*.
¹² Forrest et al., “Eliminating Plastic Pollution.”
¹³ DeWit et al., “Societal Cost of Plastic Produced Just in 2019 Revealed at US\$3.7 Trillion.”
¹⁴ Bilicic and Scroggins, “Lazard’s Levelized Cost of Energy Analysis - Version 16.0.”
¹⁵ Bibra et al., “Global Electric Vehicle Outlook.”
¹⁶ “List of Electric Aircraft.”

control measures impose economic costs – does not apply to plastics, which are a net drain on the economy. Delaying or weakening the implementation of control measures in “developing” countries will only exacerbate the economic and environmental costs to these countries without bringing commensurate economic benefit.

TAKEAWAYS FOR THE GLOBAL PLASTICS TREATY

The plastics treaty should require countries to reduce overall production of plastic polymers; phase out and ban the most problematic polymers and additives; end the production, use, and trade of certain plastic products; and institute standardized tracking, labeling, and reporting systems, among other reporting and transparency requirements. While these requirements can be expected to disrupt some industries, as mentioned above, they are not expected to impair economic development. There is therefore no reason that developing countries should not adhere to the full Global Plastic Treaty obligations, or delay or weaken their implementation of the treaty’s control measures. However, a differentiated approach to Global Plastics Treaty finance is not only justified, but essential to the treaty’s success: developed countries must contribute the most, and developing countries, particularly lower-income countries among them, must be the first to benefit.

REFERENCES

- Bauer, Fredric, Joachim Peter Tilsted, Carolyn Deere Birkbeck, Jakob Skovgaard, Johan Rootzén, Kersti Karltorp, Max Åhman, Guy David Finkill, Luisa Cortat, and Theo Nyberg. *Petrochemicals and Climate Change: Powerful Fossil Fuel Lock-Ins and Interventions for Transformative Change*. Vol. 130. IMES/EESS Report. Lund: Environmental and Energy Systems Studies, Lund university, 2023.
- Bibra, Ekta Meena, Elizabeth Connelly, Shobhan Dhir, Michael Drtil, Pauline Henriot, Inchan Hwang, Jean-Baptiste Le Marois, Sarah McBain, Leonardo Paoli, and Jacob Teter. “Global Electric Vehicle Outlook,” 2022.
- Bilicic, George, and Samuel Scroggins. “Lazard’s Levelized Cost of Energy Analysis - Version 16.0.” Lazard, April 2023. <https://www.lazard.com/media/nltb551p/lazards-lcoeplus-april-2023.pdf>.
- Charles, Dominic, Laurent Kimmant, and Nakun Saran. “Plastic Waste Makers Index.” The Minderoo Foundation Pty, 2021. <https://cdn.minderoo.org/content/uploads/2021/05/18065501/20210518-Plastic-Waste-Makers-Index.pdf>.
- CIEL. “Fueling Plastics: Fossils, Plastics, & Petrochemical Feedstocks.” Center for International Environmental Law. Accessed November 2, 2023. <https://www.ciel.org/wp-content/uploads/2017/09/Fueling-Plastics-Fossils-Plastics-Petrochemical-Feedstocks.pdf>.
- DeWit, Wijnand, Erin Towers Burns, Jean-Charles Guinchard, and Nour Ahmed. “Plastics: The Costs to Society, the Environment, and the Economy.” WWF, 2021. https://wwf.panda.org/wwf_news/?3507866/These-costs-for-plastic-produced-in-2040-will-rise-to-US71-trillion-unless-urgent-action-is-taken.
- Emissions Gap Report*. United Nations Environment Programme, 2022. <http://www.unep.org/resources/emissions-gap-report-2022>.

- Forrest, Andrew, Luca Giacobazzi, Sarah Dunlop, Julia Reisser, David Tickler, Alan Jamieson, and Jessica J. Meeuwig. "Eliminating Plastic Pollution: How a Voluntary Contribution From Industry Will Drive the Circular Plastics Economy." *Frontiers in Marine Science* 6 (2019). <https://www.frontiersin.org/articles/10.3389/fmars.2019.00627>.
- Hamadeh, Nada, Catherine Van Rompaey, Eric Metreau, and Shwetha Grace Eapen. "New World Bank Country Classifications by Income Level: 2022-2023." *World Bank Data Blog* (blog), July 1, 2022. <https://blogs.worldbank.org/opendata/new-world-bank-country-classifications-income-level-2022-2023>.
- Harvey, Fiona. "Global Carbon Trading System Has 'Essentially Collapsed.'" *The Guardian*, September 10, 2012, sec. Environment. <https://www.theguardian.com/environment/2012/sep/10/global-carbon-trading-system>.
- Koop, Avery. "The \$100 Trillion Global Economy in One Chart." *Visual Capitalist* (blog), July 12, 2022. <https://www.visualcapitalist.com/100-trillion-global-economy/>.
- "List of Electric Aircraft." In *Wikipedia*, September 2, 2023. https://en.wikipedia.org/w/index.php?title=List_of_electric_aircraft&oldid=1173469419.
- "Plastic Market Size, Share, Trends & Growth Report, 2030." Grand View Research, 2023. <https://www.grandviewresearch.com/industry-analysis/global-plastics-market>.
- Reyes, Oscar. "Beyond Carbon Markets." *United Nations Chronicle* (blog). United Nations. Accessed November 2, 2023. <https://www.un.org/en/chronicle/article/beyond-carbon-markets>.
- Ritchie, Hannah, Pablo Rosado, and Max Roser. "Greenhouse Gas Emissions." *Our World in Data*, September 28, 2023. <https://ourworldindata.org/greenhouse-gas-emissions>.
- UNCTAD. "Classifications – UNCTAD Handbook of Statistics," 2022. <https://hbs.unctad.org/classifications/>.
- UNFCCC. "Parties & Observers | UNFCCC." Accessed November 2, 2023. <https://unfccc.int/parties-observers>.
- United Nations. "Human Development Index." *Human Development Reports*. United Nations, 2021. <https://hdr.undp.org/data-center/human-development-index>.