

The EU's Dirty Plastic Secret

EU-Mercosur Deal Set to Boost Trade in Single-Use Plastics

Three-year-old Jaguar playing with a plastic bottle. Pantanal, Brazil, 2019.

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1. Summary

Our planet is flooded with plastics. While nature, the climate, biodiversity, and human health suffer from the ever-increasing volumes of plastic waste, the fossil fuel industry continues to produce it and to profit from it.

This new analysis^a reveals that the planned trade agreement between the EU and Mercosur (made up of Brazil, Argentina, Paraguay, and Uruguay) will eliminate tariffs for plastics exports from the EU to South America – including tariffs for plastic items whose trade and use are banned in the EU in order to protect the environment and human health, such as single-use plastic cutlery. This stands in stark contrast to ongoing negotiations over a Global Plastics Treaty to significantly reduce plastic production and phase out plastic pollution, as well as to EU legislation aimed at reducing plastic use and avoiding plastic waste. This planned trade agreement is a textbook case of double standards.

It is clear that we need to significantly reduce plastic production and end plastic pollution. However, with this trade deal, the EU will create new incentives for the plastics and petrochemical industry in Europe to expand production, and dump plastic and plastic waste in South America, where it has long-lasting negative effects on people's health and nature.

By cutting tariffs on EU plastic exports, the EU-Mercosur trade agreement provides a lifeline for corporations with an unsustainable fossil fuel business model, starkly contradicting the EU's recognition that reducing plastic use is essential to addressing the biodiversity and climate crises.

Decision-makers must oppose any trade deals that encourage continued and increased production of plastic raw materials and plastic products in Europe for export to South America. These perpetuate a form of waste colonialism, rather than promoting a general reduction in plastic use. Instead, we urgently need ambitious, legally binding global targets to reduce plastic production and use.

^a The analysis that this report refers to was commissioned by Greenpeace Germany.

2. Introduction

We are living in a world ravaged by disposable plastics. Global production and consumption of plastics have surged exponentially in the past 50 years, from 15 million tonnes in 1964 to more than 300 million tonnes today,¹ with a projected tripling by 2050 if we do not act now.²

99% of plastics are derived from oil and gas – and fossil fuel companies are investing billions to massively expand plastic production.³ Plastic generates climate, nature, and people-harming emissions at every stage of its lifecycle, starting from the moment its raw material, oil or gas, is extracted from the ground, and continuing through its incineration or degradation in landfills

and oceans. An estimated 170 trillion plastic particles are currently drifting in the world's oceans.⁴ Microplastics have been found in the air we breathe, the food we eat, and even in our organs and blood.⁵

Scientists have estimated that of all the plastic waste ever produced only 9% has been recycled^{6,7} and with production projected to increase in the years to come, it is clear that we will never be able to solve this crisis solely through waste management and cleanups.⁸ Reduction and a fundamental change from a disposable single-use plastic industry towards reuse as standard are essential. Without dramatically reducing plastic production, it will be impossible to end plastic pollution.



Horses scavenging for food in a landfill in Catu. Catu bahia, Brazil, 2019.

Recognising the urgent need for action to combat plastic pollution, governments around the world are now negotiating a Global Plastics Treaty.⁹ Based on a UN Environment Assembly resolution, an intergovernmental negotiating committee was established in 2022 to develop an international legally binding instrument on addressing the full life cycle of plastic pollution.¹⁰ This treaty offers a historic opportunity to help solve the planetary crisis caused by unchecked plastic production by limiting and gradually phasing out plastic production and usage.

The EU has also passed legislation on plastics. In 2019, it banned several particularly harmful single-use plastic products, such as plastic cutlery, plates, and expanded polystyrene food containers, from being placed on its own market.¹¹ Additionally, the EU is currently revising legislation to reduce packaging waste and promote reuse and refill.¹² However, while policymakers are finally taking steps to reduce plastic production, use and waste, and eliminate single-use plastics within the European Union, the EU still allows the manufacturing and export of such plastics to non-EU countries, thereby

outsourcing the environmental and health damage of European production to the Global South.

This new exploratory analysis brings to light a concerning development: Greenpeace scrutinised the text of a free trade agreement currently being negotiated between the EU and the Mercosur countries (made up of Brazil, Argentina, Paraguay and Uruguay)¹³ and can now reveal that the deal will reduce tariffs for plastics exports from the EU to Mercosur. This reduction in tariffs also applies to plastic items that have been banned for use in the EU in order to protect the environment and human health, such as single-use plastic cutlery. By cutting tariffs on EU plastic exports, the EU-Mercosur trade agreement props up an unsustainable fossil fuel business model, starkly contradicting the EU's recognition that reducing plastic use is essential to addressing the biodiversity and climate crises.

3. The EU-Mercosur Deal Boosts Single-Use Plastics

The EU and Mercosur began negotiating the EU-Mercosur agreement more than two decades ago. A provisional agreement on the trade part of the deal was reached in 2019, but the deal remains unsigned. The political negotiations are far from concluded, with governments, parliaments, and civil society on both sides of the Atlantic voicing serious concerns.¹⁴

The EU-Mercosur deal incentivises environmentally disastrous products such as beef, soy, and combustion-engine cars, prompting widespread criticism. Moreover, the agreement would benefit large

chemical companies based in the European Union by boosting their exports of chemical products, including, as this study reveals, plastics.

Greenpeace commissioned an exploratory [analysis](#) by Dr Arturo Castillo Castillo from Utrecht University, Copernicus Institute of Sustainable Development, to look at the potential risks plastics could have on the environment and human health stemming from the agreement. The analysis reviewed the planned reduction of tariffs for EU plastics exports to Mercosur and identified several red flags.

Summary of key findings:

1. The EU-Mercosur agreement would gradually abolish tariffs for EU exports of plastic kitchenware, tableware, and other plastic household articles.

Currently, Mercosur countries impose import tariffs of up to 18 % on such items.¹⁵ Plastic cutlery, in particular, raises numerous concerns from both human and environmental standpoints, including issues related to toxicity and sustainability. Primarily designed for single use purposes, disposable plastic cutlery is among the most common items found in the environment as plastic pollution.¹⁶ Leaked plastic waste made of the relevant polymers eventually degrades and forms macro- and micro-plastics, which have frequently been found in the stomachs of seabirds.¹⁷ The EU has banned single-use plastic cutlery in its market to protect the environment and human health.¹⁸

2. The EU-Mercosur agreement would gradually eliminate tariffs for EU exports of plastic waste scraps made from Polyethylene terephthalate (PET), Polyvinylchloride (PVC), and other polymers.

At the moment, EU exports of such waste to Mercosur face a 14 % tariff.¹⁹ EU legislation allows the export of plastic waste to non-EU countries under certain conditions.^b Without mature and efficient recycling systems in Mercosur countries, the likelihood is high that this waste stream will lead to environmental pollution. When these fragmented scraps leak into the environment, they can harm the wildlife that ingests them, most typically birds, amphibians, and fish.²⁰ They can have toxic impacts on humans when disposed of through open burning.^c

3. The EU-Mercosur agreement would gradually remove tariffs for EU exports of garments and accessories made of plastic.

Currently, Mercosur countries impose duties of up to 35 % on plastic garment imports.²¹ Increasingly used in short-lived products (i. e. fast fashion), these garments are difficult to recycle due to the amount of pigments and

additives typically present.²² As a result, they often end up in open burning sites,²³ with associated impacts on air quality and pollution of water and soil.²⁴

4. The EU-Mercosur agreement would gradually abolish tariffs for EU exports of expansible polystyrene^d in primary forms.

Currently subject to import duties of up to 14 % in Mercosur,²⁵ polystyrene is widely used in single-use applications, such as for food packaging and protective packaging for individual delivery of consumer goods. It is one of the most abundant particles found as plastic pollution in the environment.²⁶ Items such as food containers, beverage containers, and cups made of expanded polystyrene have been prohibited for sale in the EU since 2021 to safeguard the environment and human health.²⁷ As the tariff reduction will apply to the chemical in its primary forms, it is not possible to ascertain exactly which products will be manufactured with it. But expanded polystyrene is difficult to recycle and can easily break apart into smaller pieces, leading to significant land and aquatic pollution.²⁸ It poses a widespread hazard to biodiversity,²⁹ and can also produce hazardous substances when incinerated.³⁰

5. The EU-Mercosur agreement would gradually remove tariffs for EU exports of primary forms of Polyvinylchloride (PVC) obtained in emulsion.

Currently, PVC primary forms are subjected to tariffs of up to 14 % in the Mercosur region.³¹ Used in a variety of different products, including for example toys or food packaging, several countries are gradually banning PVC for certain applications, primarily on public health grounds.³² The European Commission is currently considering restricting PVC and its additives in the EU.³³ When goods made from PVC become waste, they have significant potential to cause harm to the environment due to PVC's propensity to leak into its surroundings.³⁴ PVC can pose a hazard to vulnerable groups such as children.³⁵

^b While EU legislation sets out that waste can only be exported outside the EU if it is managed sustainably in the countries of destination, the European Commission acknowledged that the lack of clear provisions and mechanisms to implement this has led to weak enforcement. Therefore, in 2021, the European Commission put forward a proposal for a New Regulation on Waste Shipments, which would add new restrictions on the export of non-hazardous waste to non-OECD countries. While this is still currently under negotiations, the proposal does not foresee a phase out or ban of EU plastic waste exports to non-OECD countries. See: European Commission (2021): Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Our waste, our responsibility: Waste shipments in a clean and more circular economy, COM/2021/708 final. Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52021PC0708&qid=1642757230360>. Accessed 20 August 2023.

^c These polymers can have significant toxicity if they are disposed of by open burning. Particularly polymers of PVC can produce significant amounts of dioxins and furans, which can be carcinogenic. See also: Health and Environment Alliance (2021): Spotlight On PVC: An Especially Problematic Plastic. Available at: <https://www.env-health.org/wp-content/uploads/2021/01/Spotlight-on-pvc.pdf>. Accessed 19 September 2023.

^d Expansible polystyrene is the polystyrene polymer that is able to expand or be expanded, into expanded polystyrene; expanded polystyrene is polystyrene that has already been expanded into a lightweight foam like material.

It is hard to assess the amount of damage the tariff removals would eventually have on the environment and human health, as several dependencies must be considered, such as recycling capacity in the Mercosur region and how the raw plastics are used.^e This is part of the enormous risk that the tariff removals in the trade agreement present, creating fresh incentives for the plastics and petrochemical industry in Europe to continue producing polluting plastics for export to third countries.

Common among all the raw materials and products identified as red flags in the analysis is their derivation from fossil fuels. Greenhouse gas

emissions from the plastic lifecycle threaten the ability of the global community to limit global temperature rise to below 1.5°C. Estimates suggest that if overproduction and consumption of plastic continue unchecked, it could account for 20% of the total global oil consumption by 2050.³⁶

The EU-Mercosur deal provides a lifeline for corporations with an unsustainable fossil fuel business model, even though the EU itself already recognised the imperative need for a reduction in plastic production. As such, the agreement undermines the necessary shift toward a toxics-free materials and reuse-based, zero-waste circular economy.

4. EU-Mercosur Deal at Odds with EU Environmental Agenda

This trade deal not only contradicts the EU's climate and environmental objectives but also represents a double standard. While the EU today still allows companies based in its territory to export plastics that are banned for use within it, the agreement cuts tariffs for the exports of some of those plastic products or their raw materials, as well as for plastic waste, thereby further incentivising waste colonialism (see box). The European Commission's trade department, with its pursuit of free trade at all costs, is contradicting and undermining the environmental agenda led by the Commission's Directorate General for Environment.³⁷

Waste colonialism

High-income countries transport millions of tonnes of plastic waste they produce to low- or middle-income countries to be recycled. They lost the "biggest backyard"

for their plastic when China banned waste importation, including many plastic materials, back in January 2018. Many countries had been exporting their plastic waste to China for the previous 25 years due to the country's low processing costs. When the ban was implemented, the countries responsible for the majority of the world's plastic waste sought out new trade routes to dispose of their waste. However, the plastic waste load of developed countries, which has become so high that it is impossible to control or recycle, is now being transported to countries that lack the infrastructure to manage even their own waste, let alone the waste of other countries. See more: Greenpeace Mediterranean (2022): Game of waste – Irreversible impact.³⁸

^e Dr. Castillo Castillo notes that the potential links between the reduction of import tariffs, as envisioned in the trade agreement, and actual risks and harm would be affected through different pathways, and several dependencies must be considered: e.g. combination of chemical additives used, price competitiveness across product groups and world regions, the type of final product made with products imported in primary form, and the recycling capacities of Mercosur countries.



A waste collector selects garbage in the largest landfill in Lujan, Argentina, 2022.

Double standards: Overview of plastics banned in the EU versus what the EU-Mercosur deal incentivises

	Status in the EU	Current tariffs on EU exports to Mercosur	Tariffs as proposed under EU-Mercosur free trade deal
Single-use plastic cutlery	Banned in the EU since 2021	Up to 18 %	Will become tariff-free
Food and beverage containers made of expanded polystyrene	Banned in the EU since 2021	Expansile polystyrene, in primary forms, up to 14 %	Expansile polystyrene, in primary forms, will become tariff-free
PVC	EU Commission currently evaluating a ban	PVC in primary forms up to 14 %	PVC in primary forms obtained in emulsion will become tariff-free

5. Impacts of EU Plastics Trade on South America

Already today without the EU-Mercosur agreement, the EU is a significant exporter of plastics to Mercosur. In 2022 alone, it exported almost €2.4 billion worth of plastics, equivalent to 550,000 tonnes, with Germany, Italy, France, Belgium and Spain being the main exporting countries.³⁹ Most of these exports consist of plastics basic material in primary forms, such as polymers in liquid, powder, or granule form.⁴⁰ These materials are used in Mercosur countries to manufacture final plastic products.

A substantial portion of the plastics produced and imported in the Mercosur region is expected to end up in landfills, open dumpsites, and in the environment. EU exports of plastic to Mercosur are likely to eventually end up as waste: the OECD estimates that Latin America has a recycling rate of 10%.⁴¹ Estimates about the plastic recycling capacity of individual Mercosur countries vary greatly, as there is no official data.^f Overall, much of the plastic packaging used today is not designed to be recycled.^g This means that it is seldom profitable for companies to recycle at all, and many single-use plastics have no destination other than landfill, incinerators, rivers, and oceans.

In 2022, roughly 80% of EU plastic exports to Mercosur went to Brazil.⁴² Estimates suggest that Brazil's plastic industry produces around 6.67 million tonnes of plastic products per year from virgin polymers overall; nearly half of it are reported to be single-use plastics, such as food and drink packaging and disposable products.⁴³

The consequences of increasing trade in plastics between the EU and Mercosur could be nothing short of dramatic. Already today, Brazil is discarding an estimated 325,000 tonnes of plastic waste into the oceans every year.⁴⁴ In order to protect oceans, biodiversity, and people's health, it is crucial that governments do not introduce new incentives for single-use plastic production. Instead, both Mercosur and EU countries must adopt strategies to phase out plastic production by focusing on reduction and reuse, and negotiating a strong Global Plastics Treaty.

^f For example, estimates for Brazil vary between 1.28% recycling rate (WWF, 2019) to 23.4% (plastics industry estimate, 2021). In general, absent official figures in all four Mercosur countries, it is unclear how reliable the estimates are. WWF (2019): Brasil é o 4º país do mundo que mais gera lixo plástico. Available at: <https://www.wwf.org.br/?70222/Brasil-e-o-4-pais-do-mundo-que-mais-gera-lixo-plastico>. Accessed 22 September 2023; PICPLAST (2021): Portal CNN – Produção de plásticos reciclados no Brasil bate recorde em 2021, diz associação. Available at: <https://www.picplast.com.br/detalhe-noticia/portal-cnn-producao-de-plasticos-reciclados-no-brasil-bate-recorde-em-2021-diz-associacao>. Accessed 22 September 2023.

^g Recovering 100% of the material is difficult due to quality losses, degradation and contamination. The recovery process is expensive and energy intensive.

6. Demands

The EU is at a (plastic) fork in the road: One way leads to an unsustainable, polluted future that benefits corporations and accelerates the destruction of this planet and its inhabitants. The other puts people, nature, and climate first by rejecting harmful trade agreements. To go down the latter, Greenpeace demands are:

- ▶ Policy-makers in the EU and in Mercosur must firmly reject trade deals that encourage the continued production of plastics in Europe for export to the Global South.
- ▶ EU and Mercosur governments must pursue ambitious, legally binding global targets to cut plastic production by at least 75% by 2040, in the context of the Global Plastics Treaty negotiations,

in order to stay below 1.5°C for our climate and to protect our health, our rights, our communities, and our planet.

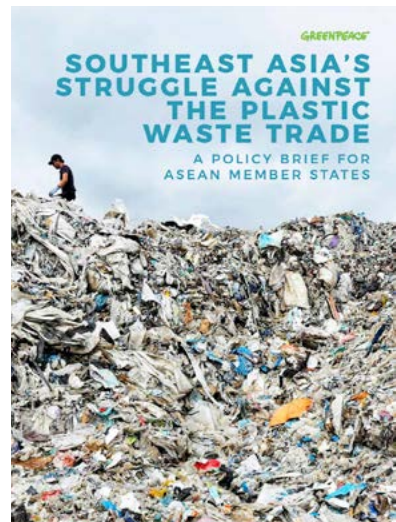
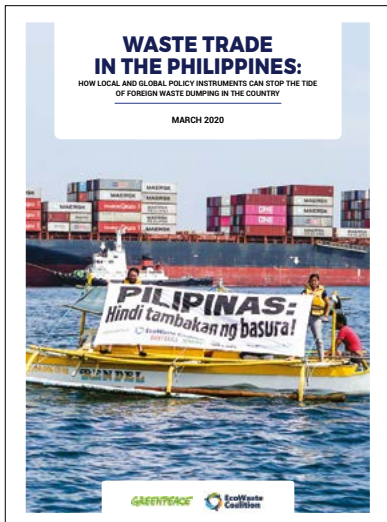
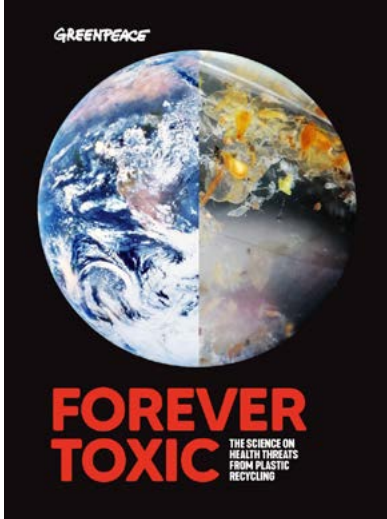
- ▶ The EU must adopt legislation that prevents the export to third countries of goods, such as single-use plastic products or toxic chemicals and pesticides, whose sale and use is not allowed on the EU market. EU decision makers must make sure that the Union's trade and environmental policies are aligned: a product that is unacceptable for the EU market, due to its health and environmental impacts, must also be unacceptable for the markets of the EU's trade partners, and for their people and ecosystems.



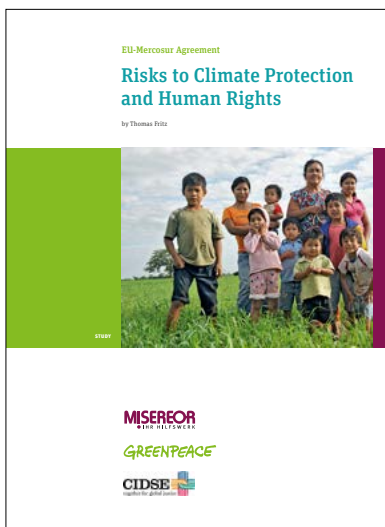
A coati at the Iguazu Waterfalls is seen carrying the remains of a plastic bag. Argentina, 2019.

7. Further Reading

Plastics



EU-Mercosur trade agreement



8. References

- 1 World Economic Forum (2016): The New Plastics Economy – Rethinking the future of plastics. Available at: http://www3.weforum.org/docs/WEF_The_New_Plastics_Economy.pdf. Accessed 30 August 2023.
- 2 nova-Institut (2021): World Plastic Production and Carbon Feedstock – in 2018 and Scenario for 2050 (in million tonnes). Available at: <https://renewable-carbon.eu/publications/product/world-plastic-production-and-carbon-feedstock-in-2018-and-scenario-for-2050-graphic/>. Accessed 30 August 2023.
- 3 Center for International Environmental Law (2017): Fueling Plastics – Fossils, Plastics, & Petrochemical Feedstocks. Available at: <https://www.ciel.org/wp-content/uploads/2017/09/Fueling-Plastics-Fossils-Plastics-Petrochemical-Feedstocks.pdf>. Accessed 30 August 2023
- 4 Eriksen, M., Cowger, W., Erdle, L. M., Coffin, S., Villarrubia-Gómez, P., Moore, C.J., Carpenter, E. J., Day, R. H., Thiel, M. & Wilcox, C. (2023): A growing plastic smog, now estimated to be over 170 trillion plastic particles afloat in the world's oceans – Urgent solutions required. PLoS ONE 18 (3): e0281596, <https://doi.org/10.1371/journal.pone.0281596>. Accessed 30 August 2023.
- 5 Heather, L. A., van Velzen, M. J. M., Brandsma, S. H., Vethaak, A. D., Garcia-Vallejo, J. J. & Lamoree, M. H. (2022): Discovery and quantification of plastic particle pollution in human blood. Environment International 163: 107199. Available at: <https://www.sciencedirect.com/science/article/pii/S0160412022001258>. Accessed 30 August 2023.
- 6 Geyer, R., Jambeck, J. R. & Law, K. L. (2017): Production, use, and fate of all plastics ever made. Science Advances 3, e1700782. Available at: <https://advances.sciencemag.org/content/3/7/e1700782>. Accessed 28 September 2023.
- 7 OECD (2022): Global Plastics Outlook. Available at: https://www.oecd-ilibrary.org/environment/global-plastics-outlook_de747aef-en. Accessed 30 August 2023.
- 8 Roland, G., Jambeck, J. R. & Law, K. L. (2017): Production, use, and fate of all plastics ever made. Science Advances 3. Available at: <https://advances.sciencemag.org/content/3/7/e1700782>. Accessed 30 August 2023.
- 9 UN Environment Programme (n. d.): Intergovernmental Negotiating Committee on Plastic Pollution. Available at: <https://www.unep.org/inc-plastic-pollution>. Accessed 28 September 2023.
- 10 UN Environment Programme (2022): UNEA Resolution 5/14 entitled "End plastic pollution: Towards an international legally binding instrument". Available at: https://wedocs.unep.org/bitstream/handle/20.500.11822/39812/OEWG_PP_1_INF_1_UNEA%20resolution.pdf. Accessed 29 September 2023.
- 11 European Parliament & the Council of the European Union (2019): Directive (EU) 2019/904 of the European Parliament and of the Council of 5 June 2019 on the reduction of the impact of certain plastic products on the environment. Available at: <https://eur-lex.europa.eu/eli/dir/2019/904/oj>. Accessed 30 August 2023.
- 12 European Commission (2022): European Green Deal: Putting an end to wasteful packaging, boosting reuse and recycling. Available at: https://ec.europa.eu/commission/presscorner/detail/en/ip_22_7155. Accessed 30 August 2023.
- 13 For more information and analysis about the EU-Mercosur agreement, see: Greenpeace EU (2023): EU-Mercosur: A nightmare for nature. <https://www.greenpeace.org/eu-unit/issues/nature-food/46587/eu-mercosur-a-nightmare-for-nature/>.
- 14 Greenpeace EU (2023): EU-Mercosur: A nightmare for nature. Available at: <https://www.greenpeace.org/eu-unit/issues/nature-food/46587/eu-mercosur-a-nightmare-for-nature/>. Accessed 30 August 2023.
- 15 European Commission (2019): EU-Mercosur: Text of the agreement: Appendix on tariff elimination schedule for Mercosur. Available at: https://policy.trade.ec.europa.eu/eu-trade-relationships-country-and-region/countries-and-regions/mercosur/eu-mercosur-agreement/text-agreement_en. Accessed 30 August 2023.
- 16 European Commission (2018): Commission Staff Working Document: Impact Assessment – Reducing Marine Litter: action on single use plastics and fishing gear. Available at: <https://circabc.europa.eu/ui/group/6e9b7f79-da96-4a53-956f-e8f62c9d7fed/library/3edf8072-cb82-4eef-a353-f84ccc9d8985/details?download=true>. Accessed 19 September 2023.
- 17 Kühn, S., Van Oyen, A., Bravo Rebolledo, E. L., Ask, A. V. & van Franeker, J. A. (2021): Polymer types ingested by northern fulmars (*Fulmarus glacialis*) and southern hemisphere relatives. Environmental Science and Pollution Research 28: 1643-1655. Available at: <https://link.springer.com/article/10.1007/s11356-020-10540-6>. Accessed 30 August 2023.
- 18 European Parliament & the Council of the European Union (2019): op. cit.
- 19 European Commission (2019): op. cit.

- 20 Galloway et al (2017): Interactions of microplastic debris throughout the marine ecosystem. *Nature Ecology and Evolution* 1 (5), 1 – 8. Available at: <https://www.nature.com/articles/s41559-017-0116>. Accessed 19 September 2023.
- 21 European Commission (2019): op. cit.
- 22 European Environment Agency's European Topic Centre on Waste and Materials in a Green Economy (2019): Textiles and the environment in a circular economy. Available at: <https://www.eea.europa.eu/publications/textiles-in-europes-circular-economy>. Accessed 19 September 2023.
- 23 See for example Greenpeace Germany (2021): Poisoned Gifts – From donations to the dumpsite: textiles waste disguised as second-hand clothes exported to East Africa. Available at: <https://www.greenpeace.de/publikationen/220421-greenpeace-factsheet-textile-waste-east-africa-english.pdf>. Accessed 19 September 2023.
- 24 Cosier, S. (2022): Burning plastic can affect air quality, public health. *Environmental Factor*. August 2022. National Institute of Environmental Health Sciences.
- 25 European Commission (2019): op. cit.
- 26 Eriksen, M., Prindiville, M. & Thorpe, B. (2017): The Plastics BAN List.
- 27 European Parliament & the Council of the European Union (2019): op. cit.
- 28 Thaysen, C., Stevack, K., Ruffolo, R., Poirier, D., De Frond, H., DeVera, J., Sheng, G. & Rochman, C. M. (2018): Leachate From Expanded Polystyrene Cups Is Toxic to Aquatic Invertebrates (*Ceriodaphnia dubia*). *Frontiers in Marine Science* 5. Available at: https://www.researchgate.net/publication/323451236_Leachate_From_Expanded_Polystyrene_Cups_Is_Toxic_to_Aquatic_Invertebrates_Ceriodaphnia_dubia. Accessed 30 August 2023.
- 29 Eriksen, M., Prindiville, M. & Thorpe, B. (2017): The Plastics BAN List.
- 30 Elomaa, M. & Saharinen, E. (1991): Polycyclic aromatic hydrocarbons (PAHs) in soot produced by combustion of polystyrene, polypropylene, and wood. *Journal of applied polymer science* 42: 2819 – 2824. Available at: <https://onlinelibrary.wiley.com/doi/abs/10.1002/app.1991.070421020>. Accessed 30 August 2023.
- 31 European Commission (2019): op. cit.
- 32 Center for Health, Environment & Justice (n. d.): PVC Policies Across the World – PVC Factsheet. Available at: <https://www.toronto.ca/legdocs/mmis/2012/cc/comm/communicationfile-28414.pdf>. Accessed 19 September 2023.
- 33 European Commission (2022): Commission Staff Working Document – Restrictions Roadmap under the Chemicals Strategy for Sustainability. Available at: <https://ec.europa.eu/docsroom/documents/49734>. Accessed 30 August 2023.
- 34 Net, S., Sempéré, R., Delmont, A., Paluselli, A., and Ouddane, B. (2015): Occurrence, Fate, Behavior and Ecotoxicological State of Phthalates in Different Environmental Matrices. *Environmental Science and Technology* 49, 7, 4019 – 4035. Available at: <https://pubs.acs.org/doi/abs/10.1021/es505233b>. Accessed 22 September 2023.
- 35 IPEN (2020): Plastic's toxic additives and the circular economy. Available at: https://ipen.org/sites/default/files/documents/plastics_and_additives_final-low-o-en.pdf. Accessed 19 September 2023.
- 36 Center for International Environmental Law (2019): Plastic & Climate: The Hidden Costs of a Plastic Planet. Available at: <https://www.ciel.org/wp-content/uploads/2019/05/Plastic-and-Climate-FINAL-2019.pdf>. Accessed 30 August 2023.
- 37 See another example when it comes to pesticides: Greenpeace Germany (2023): A Toxic Cocktail: the EU-Mercosur Deal. Available at: <https://www.greenpeace.org/eu-unit/issues/nature-food/46638/eu-mercotur-banned-pesticides-found-on-brazilian-limes-in-eu/>. Accessed 6 September 2023.
- 38 Available at: https://www.greenpeace.org.uk/wp-content/uploads/2022/02/GAME_OF_WASTE_SHORT_V_ENG_FINAL_rev.pdf. Accessed 6 September 2023.; Greenpeace International (2022): Stop exploiting African and other global majority countries with 'waste colonialism'. Available at: <https://www.greenpeace.org/international/story/52154/africa-waste-colonialism-plastic-treaty/>. Accessed 6 September 2023.
- 39 Eurostat: International Trade: EU trade since 1988 by HS2-4-6 and CN8 (DS-045409) [reporter: EU27; partner: Argentina, Brazil, Paraguay, Uruguay; flow: exports; period: 2017-2022; indicators: quantity and value; product: HS6, chapter 39]. Available at: <https://ec.europa.eu/eurostat/web/international-trade-in-goods/database>. Accessed 19 August 2023.
- 40 Eurostat: op. cit.
- 41 OECD (2022): Global Plastics Outlook. Available at: https://www.oecd-ilibrary.org/environment/global-plastics-outlook_de747aef-en. Accessed 30 August 2023.
- 42 Eurostat: op. cit.
- 43 Iwanicki, L. & Zamboni, A. (2020): Um Oceano Livre De Plásticos – Desafios Para Reduzir A Poluição Marinha No Brasil. Available at: https://brasil.oceana.org/wp-content/uploads/sites/23/umocEANOLivredeplastico_oceana_port_web_18dez2020.pdf. Accessed 30 August 2023.
- 44 Iwanicki, L. & Zamboni, A. (2020): op. cit.

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