

# The politics of anti-plastics activism in Indonesia and Malaysia

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## Review

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## Abstract

Research on anti-plastics activism in Indonesia and Malaysia, although increasing somewhat in recent years, is sparse and patchy. Interviews with local activists and a review of the existing literature, however, does suggest this activism is intensifying. Activists are educating people of the health and ecological risks of plastics, and operating nonprofit organizations to recycle and repurpose plastics. They are organizing cleanups and advocating for marginalized waste workers. And they are lobbying governments for stricter regulations, exposing illegal operations, and building transnational advocacy networks. Collectively, these strands of activism appear to have the potential to aggregate eco-actions and decrease plastic pollution. In the coming years, however, given the power of the global plastics industry and the nature of politics within Indonesia and Malaysia, pro-plastics corporations and industry allies are likely going to increasingly contest anti-plastics narratives and strive to undermine efforts to address the root causes of plastic pollution, including rising sales of single-use plastics by transnational corporations, the dumping and burning of unrecyclable plastics from high-income countries, and inadequate waste infrastructure and regulatory enforcement. Further research on how this politics is affecting the power and effectiveness of anti-plastics activism, the article concludes, is going to be essential for improving plastics governance.

## Impact statement

This article's literature review and interviews with local activists reveal the growing intensity of anti-plastics advocacy within Indonesia and Malaysia. This activism is energizing community action, pushing governments to reform policies, shutting down high-polluting operations, and empowering transnational movements. Sustainable governance of plastics, however, is still a long way off in both countries. Reining in plastic pollution is going to require overcoming the entrenched power of oil and gas, petrochemical, plastics, and retail corporations within the politics of Indonesia and Malaysia. Besides advancing research on Indonesia and Malaysia, the article lays the groundwork for investigating the influence of anti-plastics activism in other developing countries, as well as more broadly the impact of this activism on global plastics governance. The conclusion summarizes research gaps and identifies key questions to assist future researchers.

## Introduction

Developing countries have been at the forefront of worldwide activism to reduce plastic pollution since the 1990s (Clapp and Swanston, 2009; Knoblauch et al., 2018; Bezerra et al., 2021). There is considerable variation across the politics of these countries, with some jurisdictions taking little action (Xanthos and Walker, 2017; Behuria, 2021). Yet, although implementation and enforcement have often been weak and inconsistent (Njeru, 2006; Nøklebye et al., 2023), governments in developing and emerging economies have passed some of the strictest laws (e.g., to ban plastic waste imports) and imposed some of the heaviest fines and penalties (e.g., to reduce the production and consumption of shopping bags). These governments are also taking a leading role in negotiating a binding treaty to govern the life cycle of plastics, as evident during the first negotiating session of the intergovernmental committee in Uruguay in 2022. Over the past few decades, too, increasing numbers of grassroots movements, nongovernmental organizations (NGOs), and nonprofit action groups across the developing world have been disseminating norms of what constitutes inappropriate attitudes, actions, and behaviors when producing, using, and discarding plastics (i.e., anti-plastic norms). This anti-plastics activism has been instrumental for advancing a wide range of governance reforms, from local bans on single-use plastics to national moratoriums on new incinerators to a global commitment to negotiate a plastics treaty by the end of 2024.

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Research on the political, social, and environmental consequences of anti-plastics activism in developing countries is growing (Hanson, 2017; Cristi et al., 2020; Shipton and Dauvergne, 2022; Pathak, 2023). This knowledge is feeding into a broader, rapidly emerging body of research on the global environmental politics of plastics (Dauvergne, 2018a, 2018b; Mendenhall, 2018; Vince and Hardesty, 2018; O'Neill, 2019; Stoett and Vince, 2019; Nielsen et al., 2020; Cowan and Tiller, 2021; Farrelly et al., 2021; Mah, 2021, 2022; Bailey, 2022; Johnson et al., 2022; Stoett, 2022; Tiller et al., 2022; Chertkovskaya et al., 2023). To advance this research, this article reviews the existing literature, nongovernmental websites, and media publications on anti-plastics activism in Indonesia and Malaysia, building on interviews in 2022 and 2023 with activists and nonprofit leaders in these countries.

As this review reveals, relatively little academic research has been done on anti-plastics activism in these countries. Deepening the understanding of this activism is especially important given Indonesia and Malaysia are commonly portrayed as two of the world's biggest "land-based sources" of "plastic marine debris" (with large numbers of studies citing Jambeck et al., 2015, p. 769, which ranked Indonesia second and Malaysia eighth for the year 2010). Government mismanagement, weak and inconsistent policy implementation, and inadequate waste infrastructure partly explain why plastic pollution is so severe in these countries. An often overlooked root cause, however, is decades of sharply rising sales of single-use plastics by global brand retailers, backed by major banks, international financiers, and the petrochemical, plastics, and oil and gas industries. Making matters worse, since China banned plastic waste imports in 2018, millions of tonnes of unrecyclable plastics from Western Europe, North America, Japan, and Australia have been flowing into Indonesia and Malaysia through illegal and legal channels (Petrlík et al., 2019; INTERPOL, 2020; Sarpong, 2020; Chen et al., 2021; Basel Action Network, 2023). Surging quantities of plastic waste have overwhelmed government collection, sorting, and disposal infrastructures, private waste services, and the hundreds of thousands of people who work informally as "waste pickers" – a crisis exacerbated by the onset of the COVID-19 pandemic (Lestari and Trihadiningrum, 2019; Bahagijo, 2020; Bedi and Tang, 2021; Omeyer et al., 2022; Kamaruddin et al., 2022; Kristanto et al., 2022; multiple interviews with activists in Indonesia and Malaysia, 2022 and 2023).

In the face of this escalating crisis, as this review article uncovers, anti-plastics activism is intensifying in both countries. Growing numbers of NGOs, citizen action groups, and grassroots movements are raising public awareness of the environmental costs and health risks of plastic pollution. They are developing innovative, community-oriented facilities to increase the recycling, reusing, and repurposing of plastic waste. They are expelling illegal plastics operators from their communities. They are organizing mass gatherings of volunteers to clean up plastic litter. They are lobbying politicians and public officials to restrict and ban plastic shopping bags, straws, and Styrofoam cups. They are advocating for just transitions for workers in the informal waste economy. And they are participating in global campaigns calling for much stronger international laws to govern the production, usage, and disposal of plastics.

The amalgamation of these intersecting and reinforcing forms of activism would appear to have the potential to improve plastics governance in Indonesia and Malaysia. Yet, as our literature review and interviews underscore, several notes of caution are necessary here. Improving plastics governance in any country is a complex, difficult task, with formidable geopolitical barriers to

reform and powerful international forces driving overproduction and overconsumption of plastics. Educating citizens about the health and environmental harms of plastics, and then urging them to consume less and act more responsibly, comprises much of the anti-plastics activism in Indonesia and Malaysia. As the broader literature in global environmental politics reveals, however, getting policymakers on board, reforming laws, limiting corporate offerings, and scaling up small-scale initiatives are necessary to move beyond modest, incremental gains when tackling "problems of consumption" (Maniates, 2001; Princen et al., 2002; Dauvergne, 2010; DeSombre, 2018; Pathak and Nichter, 2021). At the same time, confronting vested interests and pushing hard for deep reforms can bring great risks and dangers for activists (Matejova et al., 2018), with Global Witness (2022, p. 17), for instance, documenting the killings of 14 environmentalists and land defenders in Indonesia between 2012 and 2021.

Patron-client relations, moreover, define politics in both Indonesia and Malaysia. Corruption is widespread, with levels "high" in Indonesia and "moderate" in Malaysia (Najih and Wiryani, 2020). Bureaucracies are understaffed and underfinanced. Regulatory enforcement is weak and uneven. Oil and petrochemical companies wield great influence nationally and locally. This review article is not aiming to provide a detailed, systematic assessment of the efficacy of rising anti-plastics activism in Indonesia and Malaysia. Our analysis does suggest, however, the importance when making any assessment of accounting for the global political economy driving harmful plastics production, the consequences of illegal and legal trade, and the power of corporations to circumvent policies, create legal loopholes, and conceal business as usual with the rhetoric of corporate social responsibility (CSR).

To develop this analysis, we begin by explaining our methodology for uncovering and assessing research on plastic pollution, mismanagement, and activism in Indonesia and Malaysia. Drawing on this research, we then provide a snapshot of the root causes and extent of plastic pollution in Malaysia and Indonesia. This sets the stage for our analysis of the civil society organizations, strategies, and tactics characterizing anti-plastics activism in these countries, including examples of particular campaigns in Jenjarom, Malaysia, and Bali, Indonesia. Then, to contextualize our evaluation of the potential of this activism to improve plastics governance in Indonesia and Malaysia, we reflect on how patrimonial politics and transnational corporate power in these countries could undermine the goals of activists in the coming years. We conclude the article by highlighting the value of further research on the politics of anti-plastics activism for understanding the successes and failures of plastics governance around the world.

### Research on anti-plastics activism in Indonesia and Malaysia

To help uncover research on anti-plastics activism in Indonesia and Malaysia, in 2022 we conducted confidential recorded interviews with set questions, correspondence interviews with set questions, and off-the-record unstructured conversations with 13 Indonesian and Malaysian activists, nonprofit leaders, and nongovernmental staff (plus three follow-up interviews in 2023). To find potential interviewees, we searched websites, social media, and online reports to identify Indonesian and Malaysian NGOs, community groups, and grassroots movements with prominent campaigns or projects aiming to improve plastics governance. Interviewees who agreed to have their organizations named included those from the Consumers' Association of Penang, Greenpeace Malaysia, Nexus3

Foundation (Indonesia), and Sahabat Alam Malaysia (a member of Friends of the Earth International). Attesting to the difficulty of researching this topic, we contacted (and recontacted) more than 90 individuals and organizations to request interviews, but the response rate was low, despite assurances of confidentiality and the backing of a university ethics board.

Scientific research on plastic pollution in Indonesia and Malaysia, multiple interviewees noted, has been steadily increasing over the past decade. A search of the Scopus database on April 25, 2023, confirms this trend. Searching titles, keywords, and abstracts for “Indonesia, plastic\*, and pollution” yielded 203 publications (with 87% since 2019), while searching for “Malaysia, plastic\*, and pollution” yielded 105 publications (with 70% since 2019). The vast majority of these articles are scientific investigations of pollution. Adding the word “politic\*” to these search terms, for instance, yielded only 1 article: a broad analysis of the way local action can “catalyze” governance reforms across South and Southeast Asia (Mathis et al., 2022). Replacing the search term “politic\*” with “activism,” “advocacy,” “civil society,” “nongovernmental,” or “nonprofit” confirms the relative lack of research on anti-plastics activism in the Scopus database, with these searches yielding only 1 result for “nonprofit” in Indonesia (Hermawan et al., 2021).

Many factors explain why so little research on anti-plastics activism in Indonesia and Malaysia appears in the Scopus database. In part, this is because the topic is relatively new. And in part, this reflects a lack of funding and support for social movement research within Indonesia and Malaysia as well as systemic barriers for Indonesian and Malaysian scholars trying to publish in highly cited, peer-reviewed, English-language journals. But this lack of research would also appear to be partly a result of the difficulty and dangers of documenting the politics of Indonesia’s and Malaysia’s corporate-state alliances profiting from the production and consumption of plastics.

Significantly, however, searching Google Scholar using combinations of the terms “Indonesia, Malaysia, plastic\*, pollution, politic\*, govern\*, activism, advocacy, and nongovernmental” does find some specific research on anti-plastics activism in Indonesia and Malaysia (e.g., Zen et al., 2013; Richards and Zen, 2016; Sarpong, 2020; Shahrudin et al., 2020; Adestika, 2021; Andika, 2021; Merdhi and Imanjaya, 2022; Spranz and Schlüter, 2023). A general Google search using these terms yields additional research and activist output, including newspaper articles, documentary films, and websites of advocacy groups within Indonesia and Malaysia. A few examples of Indonesian advocacy groups conducting or publicizing research on plastics include the Bali Waste Platform, Bye Bye Plastic Bags, ECOTON (Ecological Observation and Wetlands Conservation), Gerakan Indonesia Diet Kantong Plastik (Indonesia Plastic Bag Diet Movement), Indonesian Waste Platform, Nexus3 Foundation, One Island One Voice, Pulau Plastik, WALHI (Indonesian Forum for Environment), and YPBB (Kualitas Hidup yang Tinggi dan Berkelanjutan). A few examples in Malaysia include Greenpeace Malaysia, the Malaysian Nature Society, Sahabat Alam Malaysia/Friends of the Earth Malaysia, WWF-Malaysia, and Zero Waste Malaysia.

### Scale, scope, and root causes of plastic pollution in Malaysia and Indonesia

Plastic pollution, as this review confirms, is widespread in Indonesia and Malaysia (Phelan et al., 2020; Sodik, 2020; Chen et al., 2021; Kamaruddin et al., 2022; Omeyer et al., 2022). Estimates of the

amount of plastic pollution are highly approximate given data gaps, annual variability, and the complexity and variety of sources (Edelson et al., 2021, p. 2). Of the roughly 10 million tonnes of plastics flowing from land into the oceans each year (Boucher and Billard, 2019), various studies estimate that between 270,000 and 1,290,000 tonnes are coming from Indonesia and between 140,000 and 370,000 tonnes are coming from Malaysia (Jambeck et al., 2015, p. 769; Chen et al., 2021, p. 5; Kamaruddin et al., 2022, p. 2). Open dumps and landfills are leaking plastics into terrestrial and aquatic ecosystems (Chen et al., 2021; Neo et al., 2021). Especially in Indonesia, large amounts of plastic waste are visible in drainage ditches, rivers, beaches, and coastal waters (Lestari and Trihadiningrum, 2019; van Calcar and van Emmerik, 2019, p. 4; Benchehib, 2020; Vriend et al., 2021; Sari et al., 2022). As researchers are finding across the world (Braun et al., 2021; Zhang et al., 2021; Allen et al., 2022), microplastics are also now prevalent in waterways, seafood, outdoor air, and drinking water (Ma et al., 2020; Choong et al., 2021; Wicaksono et al., 2021; Purwiyanto et al., 2022). The COVID-19 pandemic beginning in 2020 appears to have further increased the volumes of plastic litter and microplastics flowing into rivers, wetlands, and the ocean, largely because of disruptions in waste collection, rising volumes of takeaway food containers and e-commerce packaging, and the littering of large numbers of facemasks and gloves (Bahagijo, 2020; Bedi and Tang, 2021; Greenpeace Malaysia, 2021; multiple interviewees in Malaysia and Indonesia, 2022).

Mismanagement of plastic waste is one reason for this pollution. Landfills are poorly designed and operated (Chen et al., 2021). Waste infrastructures are inadequate to support large-scale, safe recycling of most plastic products (Fauziah et al., 2021; World Bank, 2021; multiple interviewees in Malaysia and Indonesia, 2022). Government bureaucracies responsible for plastic waste management can be frustratingly slow and ineffective (interview, NGO representative in Indonesia, 2022). The sharing of responsibilities, unclear mandates, and insufficient financing for waste management across jurisdictions and levels of government are also undermining effective governance (interview, NGO staff in Malaysia, 2022; Chen et al., 2021). Both countries, too, have struggled to prevent the dumping of plastic waste into marginalized communities, open-air burning of plastics, and illegal operations (GAIA, 2019; Greenpeace Malaysia, 2020; Vilella et al., 2021; multiple interviewees in Indonesia and Malaysia, 2022).

It is misleading, however, to focus exclusively on mismanagement to explain the escalating crisis of plastic pollution in Indonesia and Malaysia (Ocean Conservancy, 2022). Transnational corporations are flooding both countries with single-use plastics (Research and Markets, 2023), without regard for the capacity to recycle or safely dispose of these plastics. This has generated huge quantities of low-quality, low-value, contaminated, and unrecyclable plastics, such as disposable sachets for small quantities of consumer products (e.g., coffee, cooking oil, detergent, and snacks), which in Indonesia comprise 16% of plastic waste (World Economic Forum, 2020, p. 21). Brand retailers bear great responsibility for this pollution. But so do the transnational oil and gas, petrochemical, and plastics corporations, international banks, and asset managers comprising the global plastics industry (Dauvergne, 2018a, 2018b; Mah, 2021, 2022). Audits of the plastic litter in rivers and beaches – documenting the prevalence of waste originating from brands such as Coca-Cola, PepsiCo, Nestlé, Procter & Gamble, Unilever, and Danone – confirm the scale and scope of this pollution (GAIA, 2019, p. 13; Benchehib, 2020; GAIA and Aliansi Zero Waste Indonesia, 2022).

Especially following China's ban on plastic waste imports in 2018, moreover, Indonesia and Malaysia have been serving as dumping grounds for plastic waste from Japan, Australia, North America, and Western Europe. In 2018, these places exported about 770,000 tonnes of plastic waste to Malaysia (up from ~430,000 tonnes in 2017) and around 270,000 tonnes to Indonesia (up from ~90,000 tonnes in 2017). Following public outcries in Indonesia and Malaysia, imports from these places have fallen, with about 460,000 tonnes of plastic waste imported into Malaysia and 150,000 tonnes into Indonesia in 2021. That year, however, Malaysia still ranked first and Indonesia ranked fourth (after Turkey and Vietnam) as destinations for plastic waste from Japan, Australia, North America, and Western Europe (Basel Action Network, 2023, as recorded by UN Comtrade). This waste – often misleadingly described as “recyclables” destined for “environmentally sound management” – frequently ends up in cities and villages in Indonesia and Malaysia without adequate, if any, recycling infrastructure. At the same time, unknown, and possibly even greater, quantities of low-grade, contaminated plastic waste from high-income countries have been flowing illegally into Malaysia and Indonesia (INTERPOL, 2020; Shaharudin et al., 2020; Center to Combat Corruption and Cronyism and Sahabat Alam Malaysia, 2021; Chen et al., 2021, p. 7; Kamaruddin et al., 2022, p. 5). Indicative, of the 1,095 containers of plastic waste “manually inspected” by Indonesian customs officers in 2019, 45% were rejected as “contaminated” (INTERPOL, 2020, p. 28).

As noted earlier, peer-reviewed research on plastic pollution and plastic mismanagement in Malaysia and Indonesia is far more extensive than the peer-reviewed literature on anti-plastics activism in these countries. Still, as the next section discusses, including the broader NGO and advocacy literatures, and drawing on information from interviewees, we can see that anti-plastics activism has been steadily intensifying across Indonesia and Malaysia in recent years.

### Surging anti-plastics activism in Malaysia and Indonesia

Over the past decade, growing numbers of activists, students, lawyers, scientists, journalists, NGO leaders, filmmakers, and bloggers have successfully raised public awareness of the scale, scope, and causes of plastic pollution in Malaysia and Indonesia (interview, nonprofit representative in Indonesia, 2022). They have founded nonprofits – such as Gerakan Indonesia Diet Kantong Plastik (the Indonesia Plastic Bag Diet Movement) – to advocate for bans and restrictions on single-use plastics (interview, nonprofit representative in Indonesia, 2023). They have publicized scientific research (e.g., Smith et al., 2018; Curren et al., 2021; Gündogdu et al., 2022; Shi et al., 2022) documenting the health risks arising from microplastic and nanoplastic contamination of seafood and drinking water. They have investigated the legal and illegal trade in plastic waste (e.g., Nexus3 Foundation, 2022). They have exposed how plastics are harming marine life, coral reefs, and ocean biodiversity, and detailed the high costs of plastic pollution for coastal tourism and fishing communities. And they have mapped the inequitable consequences of this pollution, revealing how the poorest and most vulnerable populations are absorbing disproportionate economic costs, ecological harms, and health risks.

Activists in these countries have also run educational workshops to support the refilling, reusing, and repurposing of plastic waste (interview, NGO staff in Indonesia, 2022). They have launched websites to promote recycling, such as Zero Waste Malaysia's Trash Encyclopedia (Trashpedia). They have made documentary films

and posted videos on YouTube to raise awareness of the plastics crisis and urge people to reduce, reuse, and recycle plastics (e.g., the 2021 film *Plastic Island* set in Indonesia and the 2021 film *They Keep Quiet So We Make Noise* set in Malaysia). They have urged people to stop throwing plastic garbage into rivers, and cleaned up plastic litter on beaches and along coastlines, as when 20,000 volunteers across Indonesia came together one day in 2018 in a campaign dubbed “Face the Sea” (Miller, 2018). And they have lobbied governments and pressured corporations (multiple interviewees in Malaysia and Indonesia, 2022).

In addition, activists in Malaysia and Indonesia have highlighted the importance of ensuring that plastics policies, initiatives by plastics and petrochemical firms (e.g., redesigning products), and new technologies (e.g., chemical recycling and biodegradable plastics) do not produce unfair, inequitable, and harmful outcomes for waste pickers (GAIA and Aliansi Zero Waste Indonesia, 2022). Activists and activist-oriented waste pickers have joined forces to urge governments and firms to ensure that policies to advance extended producer responsibility (EPR) for plastics do not further impoverish and marginalize waste pickers (as Cass Talbot et al., 2022 demonstrate can occur). They have gone to court to challenge laws seen as discriminating against waste pickers. They have called for supports, compensation, and a just transition for waste pickers as a circular economy for plastics emerges. They have joined, empowered, and been assisted by transnational networks and alliances, such as the International Alliance of Waste Pickers, the Global Alliance for Incinerator Alternatives, and the International Pollutants Elimination Network (GlobalRec, 2022; interview, Malaysian NGO representative, 2023). Waste pickers and community activists from Indonesia and Malaysia have also added their voices to worldwide calls, such as the Just Transition Initiative (Zumbish, 2022), to embed principles of justice, equity, livelihood support, and human rights into the plastics treaty.

At the same time, social entrepreneurs in Indonesia and Malaysia have launched tech startups and smartphone apps to collect, repurpose, upcycle, recycle, and resell plastic products. These entrepreneurs, along with community activists, have also established innovative waste management models, as in Palembang, South Sumatra, where parents in one low-income neighborhood are “paying” kindergarten school fees by “depositing” recyclables in a community “waste bank” (or “Bank Sampah,” which, in exchange for recyclables, offers credit for community goods and services) (Nilan and Wibawanto, 2015).

Activists in Malaysia and Indonesia have also run campaigns to encourage people to take personal responsibility for moving toward the societal goal of “zero waste” by using cloth shopping bags, refillable food containers, and reusable coffee mugs (interview, nonprofit representative in Indonesia, 2022). Ten of thousands of people across Malaysia, for instance, have now pledged to strive for a “zero waste lifestyle” (ZWM, 2023; interviews, NGO representatives in Malaysia). Many groups, too, have encouraged local businesses and customers to return to traditional eco-friendly practices, such as using banana leaves for takeaway food.

Activists in Malaysia and Indonesia have also partnered with faith-based groups, such as Greenpeace Indonesia joining forces with Indonesia's Muslim organizations Nahdlatul Ulama and Muhammadiyah to promote a “plastic-free Ramadan” (Nugraha and Purwaningsih, 2018). They have referred to the value of a “Green Islam” to call for plastic-free mosques and foster more environmentally conscious lifestyle choices (Dewayanti and Saat, 2020). They have lobbied the Association of Southeast Asian Nations (ASEAN) to help rein in plastic pollution (Marks et al.,

2020), contributing, for instance, to the adoption in 2021 of the ASEAN Regional Action Plan for Combating Marine Debris in the ASEAN Member States (2021–2025). They have backed international anti-plastics campaigns, such as the #BreakFreeFromPlastic movement, which, since launching in 2016, has grown to include over 2,800 organizations (with 9 Core and 46 Associate Member Organizations from Indonesia and 9 Core and 15 Associate Member Organizations from Malaysia) (BreakFreeFromPlastic, 2023). And they have managed to shut down plastics industries that were polluting their communities.

### **Anti-plastics campaign in Jenjarom, Malaysia**

In Jenjarom in the Selangor state of Malaysia, for instance, Pua Lay Peng (a chemical engineer), Tan Ching Hin (a former village head), and CK Lee (a lawyer), along with some neighbors, began investigating smoky, noxious fumes billowing from the fields of their town. By early 2018, the group had uncovered a large number of unlicensed operations that were recycling plastics imported from Europe, North America, and Australia, but council and state officials did nothing after they reported their discovery. The group uploaded videos of illegal operators to YouTube. And they contacted nonprofit organizations and journalists in Malaysia and around the world. Before long, Greenpeace Malaysia was supporting them.

Despite receiving death threats, the Jenjarom activists persisted, and large numbers of locals began to back the cause. Deploying drones, they documented dozens of additional illegal plastics recycling facilities in Jenjarom. They then petitioned the local government, met with politicians, and generated national and international media coverage. In July 2018, they formed the Persatuan Tindakan Alam Sekitar Kuala Langat (Kuala Langat Environmental Action Association) to raise awareness of the harms of open-air burning of plastics and press for the closure of unlicensed plastics recycling facilities in Jenjarom.

A month later, local officials began raiding facilities and arresting people; before long, most of the illegal operators had closed or left the area (Gaia, 2019; Mosbergen, 2019; Shaharudin et al., 2020; Skrobe, 2021; Vilella et al., 2021). This local campaign also put pressure on the national government to act (Sarpong, 2020), while rousing nationalistic anger at the idea of Malaysia acting as a “garbage dump” for developed countries (Gunia, 2019; Picheta, 2020). Hundreds of illegal recyclers were shut down across the country (interview, NGO representative in Malaysia, 2022). Stricter policies for importing plastic waste were put in place (Muslim, 2021). And scores of shipping containers of contaminated, unsorted, and unrecyclable plastic trash were sent back, including to France, the United Kingdom, the United States, and Canada (Picheta, 2020). As documented earlier, legal imports of plastic waste into Malaysia have declined steadily since peaking in 2018, although in 2021 the country was still the world’s biggest importer. Grassroots groups and NGOs in Malaysia, however, have been continuing to press for much tighter controls on plastic waste imports, with some notable successes in recent years (e.g., in 2022 in the state of Selangor) (Center to Combat Corruption and Cronyism and Sahabat Alam Malaysia, 2021; Sahabat Alam Malaysia, 2022; interview, NGO representative in Malaysia, 2023).

### **Anti-plastics campaigns in Bali, Indonesia**

Grassroots anti-plastics campaigns are also intensifying across Indonesia. One example is the Pulau Plastik (Plastic Island) campaign in Bali. Launched in 2018, it is aiming to reduce the consumption of

single-use plastics and promote better management of plastics. Through social media, videos, community meetings, and a full-length documentary (Pulau Plastik, 2021), the campaign is focusing on raising awareness of the scale of plastic pollution in Bali, the various ways microplastics end up in local seafood, and the role consumers can play in decreasing waste. Each year, as anti-plastics campaigners are telling residents, Bali is generating around 300,000 tonnes of plastic waste – roughly 5% of Indonesia’s total. Of this, 44% goes to landfill, while just 4% is recycled; large amounts end up polluting the environment, with roughly 33,000 tonnes a year making its way into coastal waters (Andika, 2021). Bali’s Pulau Plastik campaigners have also joined a coalition of anti-plastics activists to organize public rallies across Indonesia to raise awareness about the need to reduce single-use plastics and the value of “plastic-free” living. In 2019, for instance, this coalition of 49 groups paraded through the streets of Jakarta (Andika, 2021). Today, this coalition comprises more than 100 groups advocating for plastic-free marketplaces and e-commerce delivery.

Bye Bye Plastic Bags (BBPB) is another example of surging anti-plastics activism in Bali. Launched in 2013 by sisters Melati and Isabel Wijisen (at just 12 and 10 years of age), BBPB envisions a world without single-use plastic bags. Student volunteers distribute educational booklets in elementary schools, initiate petitions to try to influence policymakers, organize beach cleanups, and give public talks to encourage other youth to lead efforts to eliminate plastic bags. They support social enterprises to produce handmade bags made out of cotton, donated items, and recycled materials. They help shopkeepers offer these alternative bags. And they showcase on social media which shops, hotels, and restaurants are no longer offering plastic bags, as well as offer to give them a sticker saying, “One Island One Voice – Plastic Bag Free Zone.”

Melati and Isabel Wijisen have spoken at many high-profile events, including at international ocean conferences and the World Economic Forum in Davos. In 2016, they went even further, going on a hunger strike until getting a meeting with the Governor of Bali. This publicity has helped the influence of their movement expand beyond Bali, with teams of youth now advocating under the BBPB banner in over 50 locations around the world, including in Kuala Lumpur, Malaysia (Bye Bye Plastic Bags, 2023).

### **The nature of intensifying anti-plastics activism**

Several broad themes emerge from this survey of anti-plastics activism in Indonesia and Malaysia. So far, the most common forms of anti-plastics advocacy have been largely nonconfrontational and apolitical, focusing on educating the general public, cleaning up plastic litter, running social enterprises, and encouraging consumers to take more responsibility for their purchases and their waste. More confrontational forms of activism, however, do appear to be on the rise, such as grassroots protests against incinerators and open-air burning of plastic waste, community action to evict highly polluting operators, demands for environmental justice for waste pickers, and campaigns against plastic waste imports from high-income countries. Activism to confront and challenge the international and domestic political economies driving the overproduction and overconsumption of plastics, although starting to emerge, is relatively less common, at least as far as we can tell from reviewing scholarly publications, activist websites and social media, and interviewing activists within Indonesia and Malaysia. Most significantly, however, despite gaps and weaknesses, this bottom-up activism in Indonesia and Malaysia

would appear to be amalgamating in creative and powerful ways to strengthen environmental norms and sustainable practices, and pressure village, city, and national governments to improve plastics governance.

### Counterforces to anti-plastics activism

Anti-plastics activism is intensifying in scores of other countries, too, from the wealthiest cities of Europe and North America to the poorest neighborhoods of Africa, Asia, the Caribbean, and Latin America (Eriksen, 2017; Hanson, 2017; Phillips, 2017; Dauvergne, 2018a; Cristi et al., 2020; Behuria, 2021; Pathak and Nichter, 2021; Shipton and Dauvergne, 2022; Willis et al., 2022; Pathak, 2023). Around the world, those profiting from plastics production, consumption, and pollution are now pushing back (Schröder and Chillcott, 2019; Nielsen et al., 2020; Mah, 2021, 2022). Oil and gas producers, petrochemical firms, and plastics manufacturers and retailers are especially powerful within this politics. These corporations are manoeuvring to weaken regulatory controls on plastics production. They are forming multistakeholder alliances to enhance negotiating and discursive powers. They are turning to political allies to gain exemptions on bans on single-use plastics, paying off officials to continue to run illegal operations, and working to sabotage anti-plastics campaigns. They are shifting the costs of complying with plastics regulations onto consumers, waste pickers, and marginalized communities. And they are striving to shift responsibility for overconsumption, recycling, and littering onto consumers (Dauvergne, 2018b; Mah, 2021, 2022; Omeyer et al., 2022).

Although more research is necessary to be sure, a backlash to surging anti-plastics activism could well gain strength in Indonesia and Malaysia, too. If so, this will have far-reaching consequences for the capacity of bottom-up activism to improve the governance of plastics. Patrimonialism and clientelism are defining features of politics in both countries, with government corruption, bribery, vote buying, and influence peddling widespread (Handayani, 2019; Najih and Wiryani, 2020; Purwaningsih and Widodo, 2020; Riyadi et al., 2020; Siddiquee and Zafarullah, 2022). According to a survey by Transparency International (2020), 32% of Indonesians and 13% of Malaysians “paid a bribe for public services” during the previous year. More than 90% of Indonesians and over 70% of Malaysians, this survey found, “think government corruption is a big problem.”

Oil and gas, chemical, and plastics corporations wield great powers within this patrimonial politics (multiple interviewees in Malaysia and Indonesia, 2022). Within some localities, scrap industries and informal scrap cartels are also powerful players (interview, nonprofit representative in Malaysia, 2022). Government accountability and corporate transparency, meanwhile, are low in both countries (interview, nonprofit representative in Malaysia, 2022). Governments in both places, too, struggle with equitable and consistent implementation of environmental rules, with many recent cases, for instance, of regulators failing to enforce bans on single-use plastics, such as bags, straws, and food containers (interviews, NGO staff in Malaysia, 2022, and nonprofit representative in Indonesia, 2022).

To date, no in-depth, fieldwork-based research study has been conducted on how this politics is interacting with anti-plastics activism. Although doing this is beyond the scope of this article, our analysis does suggest the value and importance of investigating this further.

### Conclusions

Anti-plastics activism across Indonesia and Malaysia, as this article has shown, has been intensifying over the past decade. A significant strength of this activism comes from the involvement of a great diversity of civil society groups, including school-age children, religious organizations, social nonprofits, environmental NGOs, community action groups, and grassroots movements. The diversity of strategies and tactics is further strengthening the bottom-up power of advocacy. Activists are conducting research and creating websites, videos, and documentaries to raise local awareness of the escalating crisis of plastic pollution. To spur broader community action, they are educating the public of the health risks. And they are organizing volunteers to clean up beaches, rivers, and neighborhoods.

This is only a fraction, moreover, of surging anti-plastics activism in Indonesia and Malaysia. Activists are fighting to shut down illegal plastics recyclers in villages and towns. They are running nonprofit startups to support the reusing, repurposing, and recycling of plastic products. They are lobbying politicians and corporate executives for measures to reduce the production, consumption, and disposal of single-use plastics. They are running campaigns to advocate for plastics policies that respect the need for justice, equity, and human rights for waste pickers and marginalized workers. They are participating in multistakeholder meetings to improve plastics governance across the region of Southeast Asia. They are strengthening transnational movements of waste pickers and activists striving to influence international decisions, agreements, and rules for plastics governance, such as amendments to the Basel Convention, resolutions at the UN Environment Assembly, and negotiations for a plastics treaty (McIntyre, 2022; interview, NGO representative in Malaysia, 2023).

This bottom-up activism would appear to be influencing political discourses and policies in Malaysia and Indonesia. In the Malaysian state of Penang, for instance, educational campaigns in schools, community-based initiatives, waste sorting and collection policies, and fines and penalties for noncompliance have enabled a waste recycling rate of over two times the national average (Sangaralingam and Nagappan, 2019; multiple NGO interviews in Malaysia, 2022 and 2023). More broadly, with public support for stricter plastics regulations rising, in 2021 the Malaysian Ministry of Environment and Water published a vision of how to move toward a circular economy for plastics by 2030, aiming to decrease unnecessary consumption, extend producer responsibility, ensure recyclability and reusability of valuable plastics, eliminate toxic fillers and additives, ban some polymers, and end plastic pollution (Kementerian Alam Sekitar dan Air, 2021a; NGO interviewees in Malaysia, 2022). In 2021, too, the Ministry published a detailed “policy and action plan” to reduce marine litter, most of which is plastics (Kementerian Alam Sekitar dan Air, 2021b).

In Indonesia, meanwhile, the national government is now aiming to be “plastic pollution-free” by 2040 (Pandjaitan, 2020). To move toward this goal, at least two Indonesian provinces and more than 50 cities and districts have now banned the use of some plastics, such as shopping bags, straws, and Styrofoam (Ministry of Environment and Forestry, 2020; Andika, 2021; interview, NGO staff in Indonesia, 2022). In 2020, Jakarta banned most uses of single-use plastic bags in supermarkets, minimarkets, and traditional markets. Other jurisdictions in Indonesia have imposed similar restrictions, including the cities of Bogor in West Java, Balikpapan in East Kalimantan, Banjarmasin in South Kalimantan, and Denpasar in Bali (Atika, 2020). Villages in Bali have also been setting up community-run waste management facilities as well as

regulating plastics consumption through customary law. Some cities in Bali, too, have been decentralizing waste management to try to reduce pollution. Bali's capital city of Denpasar, for instance, passed a regulation in 2019 (Regulation No. 76/2019) that in effect shifts responsibility for waste management to the villages. These provincial and local efforts appear to be working: from 2019 to mid-2020, one study found, the consumption of Styrofoam, plastic straws, and plastic bags in Bali fell by 50% (Andika, 2021).

Journalists and researchers writing in English commonly refer to Indonesia and Malaysia as examples of waste mismanagement and as world-leading sources of marine plastic pollution. The story of surging bottom-up anti-plastics activism in these countries, meanwhile, is under-researched and under-reported. Our hope is this article will spur further research on this topic. Significant gaps in knowledge remain. What, more specifically, are the consequences of patrimonial politics in Malaysia and Indonesia for the overall effectiveness of anti-plastics activism? To what extent are new plastics policies performative exercises to sustain tourism, appease donors, or enhance national images rather than genuine efforts to improve governance? What is the role of nationalistic pride in promoting or weakening governance reforms? How, more precisely, is surging anti-plastics activism in Indonesia and Malaysia influencing negotiations for a plastics treaty? Is the power of activists surging more quickly in one country than in the other? If so, why? Why, inside each country, is the power of anti-plastics activism varying across localities? What are the consequences of oil and gas, petrochemical, and plastics industries pushing back against anti-plastics activism, questioning scientific findings, constructing pro-plastics narratives, financing political parties and local leaders, carving out legislative loopholes, capturing governance spaces, and undermining regulatory enforcement? Answering such questions would not only deepen the understanding of plastics management in Indonesia and Malaysia, but would also offer valuable insights into how, why, and the extent to which anti-plastics activism across the developing world is spurring community action, governmental reforms, greater corporate accountability, and ambitious international agreements.

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**Data availability statement.** Nonconfidential data are available from the corresponding author upon request.

**Author contribution.** P.D. conceptualized the study. P.D. and S.I. honed the research focus and designed the methodology. S.I. conducted the interviews and first stage of research. P.D. wrote the draft and revised it in response to reviews. S.I. conducted post-review interviews and approved the final draft. P.D. acquired funding, obtained ethics approval, and supervised the project.

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