www.cambridge.org/plc

Research Article

Cite this article: O'Hare P and Nøklebye E (2024). "The human face of the UN plastics treaty"? The role of waste pickers in intergovernmental negotiations to end plastic pollution and ensure a just transition. Cambridge Prisms: Plastics, 2, e12, 1–12 https://doi.org/10.1017/plc.2024.12

Received: 07 February 2024 Revised: 05 April 2024 Accepted: 24 April 2024

Keywords:

plastics treaty; waste pickers; just transition; performance; scale

Corresponding authors: Patrick O'Hare and Emmy Nøklebye;

Emails: po35@st-andrews.ac.uk; Emmy.Noklebye@niva.no "The human face of the UN plastics treaty"? The role of waste pickers in intergovernmental negotiations to end plastic pollution and ensure a just transition

Patrick O'Hare¹ o and Emmy Nøklebye²

¹Social Anthropology, School of Philosophical Anthropological and Film Studies, University of St Andrews, St Andrews, Fife, UK and ²International Environment and Development, Norwegian Institute for Water Research, Økernveien 94, Oslo 0579, Norway

Abstract

Waste pickers are recognised as a key stakeholder in the ongoing negotiations towards an international legally binding instrument to end plastic pollution. Up to 34 million waste pickers contribute to recovering close to 60% of recycled post-consumer plastic waste globally. The International Alliance of Waste Pickers (IAWP) has actively engaged in the negotiations to safeguard a just transition for these important but vulnerable and frequently overlooked workers. This article explores how the IAWP has gained prominence in the plastics treaty negotiations through three iterative processes. First, the reiterative naming of "waste pickers" has constituted a symbolic practice and discursive influence that heightened recognition of waste pickers' role as knowledge and rights holders in a just transition to end plastic pollution. Second, the performative dimension of waste picker advocacy has influenced official and informal events. Third, by engaging in "scale work", waste pickers have influenced and leveraged their alliances to work towards a just transition across national, regional and international levels. By examining the role and influence of waste pickers in the plastics treaty through the frames of naming, performance and scale, the article contributes to advance the scholarly literature on just transition and grassroots movements in global environmental governance (GEG).

Impact statement

Global plastic pollution has been shown to have nefarious effects on biodiversity, the environment and human health. Waste pickers play a key role in mitigating global plastic pollution by recovering, classifying and processing an array of plastics that would otherwise end up in the environment. Simultaneously, they suffer from the adverse effects of plastic pollution in their working lives and communities and are potentially vulnerable to the control measures being discussed as part of negotiations to develop an international legally binding instrument to end plastic pollution. This article documents and analyses the ways that waste pickers have succeeded in becoming a "human face" of the global plastics treaty and the strategies they have employed to influence and gain prominence in treaty proceedings, events and draft text. The authors expect that the analysis will be helpful to environmental and social justice groups seeking to influence global environmental governance (GEG), such as waste pickers and their organisations. It is among the first pieces of research exploring the role of waste pickers in the global policy arena, complementing research on waste picker advocacy at national and regional scales and that on Indigenous Peoples' role in GEG.

© The Author(s), 2024. Published by Cambridge University Press. This is an Open Access article, distributed under the terms of the Creative Commons Attribution licence (http://creativecommons.org/licenses/by/4.0), which permits unrestricted re-use, distribution and reproduction, provided the original article is properly cited.





Introduction

Global waste generation has doubled over the past two decades, reaching an estimated 353 million tonnes (Mt) in 2019 (OECD, 2022). Seventy percent of this waste ends up in landfills and uncontrolled dumpsites, while 117 Mt has leaked into aquatic, marine and riverine environments (ibid). The transboundary and unequally distributed impacts of plastic pollution (Lau et al., 2020; Bennett et al., 2022) have been shown to adversely affect socio-economically disadvantaged and/or politically marginalised individuals and communities (Orellana, 2021; Owens and Conlon, 2021; Karasik et al., 2023). Environmental injustices occur from upstream to downstream in the lifecycle of plastics. Communities and individuals face displacement and/or exposure from extractive petrochemical industries (UNEP, 2021; Terrell and St Julien, 2022), mismanaged plastic waste and pollution affect coastal communities dependent on aquatic

resources (English et al., 2019; Fuller et al., 2022) and mismanaged waste impacts waste workers and communities living in and/or working in near proximity to areas where waste is dumped and/or processed (Human Rights Watch, 2022; Cook et al., 2024). The systemic changes required to address the root causes of plastic pollution across scales are likely to impact some communities, industries and livelihoods more than others (Mekaoui et al., 2021; Nagarajan, 2022; Nøklebye et al., 2023). Enabling a just transition towards ending plastic pollution is thus key to protecting the rights of individuals, workers and communities who continue to bear the inequitably distributed impacts of plastic pollution and corresponding control measures (Stoett, 2022; ILO, 2023).

The just transition concept emerged from labour and environmental justice movements in the late 1960s. Since then, it has emerged to encompass impacts on individuals, communities, ecosystems and the climate, including for future generations, uniting the multiple dimensions of justice (distributional, procedural and restorative) (McCauley and Heffron, 2019). It has been linked to green transitions away from coal and other environmentally damaging fossil fuel energy sources (Morena et al., 2019; Stevis and Felli, 2020) and was placed on the global environmental governance (GEG) agenda through the Copenhagen Summit (COP15) and the Paris Agreement (COP21) (Schroeder, 2020), thus effectively straddling policy and scholarship on climate, energy and environmental justice. More recently, the concept has been brought into discussions around safeguarding affected communities and workers in the ongoing negotiations towards an international legally binding instrument to end plastic pollution, including the marine environment (henceforth, plastics treaty) (Dauvergne, 2023). In the negotiations, just transition has gone from being understood primarily as a workers' rights issue (loss of jobs), towards recognising the broader implications for people and communities of the transition towards ending plastic pollution (including direct and indirect impacts of pollution and control measures) (Annex 1), even if the multiple dimensions of justice are arguably not currently reflected in the negotiations in the room and in the draft treaty texts. Here, a just transition has been understood as "ensuring that measures taken to end plastic pollution are fair, equitable and inclusive for all stakeholders across the plastic lifespan by safeguarding livelihoods and communities impacted by plastic pollution and corresponding control measures" (O'Hare et al., 2023). Such definitions are admittedly broad, and the popularity of the concept within plastic pollution governance is also partly based on its ambiguity. Different meanings can be grasped by different actors, ranging from a just transition away from plastic production altogether, to a transition away from single-use applications. One aspect of a nascent procedural justice that can already be identified, however, is the inclusion and recognition given to waste pickers as a key stakeholder that is both vulnerable to and helps to combat plastic pollution (GRID-Arendal, 2022; UN-Habitat and NIVA, 2022; Gutberlet, 2023).

Recent scholarship has placed waste pickers at the centre of achieving social and environmental outcomes within a circular plastics economy (Gutberlet and Carenzo, 2020; Barford and Ahmad, 2021; Hartmann et al., 2022; Velis et al., 2022). It is estimated that waste pickers collect 58% of all post-consumer plastic waste recovered for recycling worldwide (Lau et al., 2020). Commonly, it is estimated that waste pickers constitute a significant workforce of 15–20 million people globally (see, e.g., ILO, 2018; Morais et al., 2022). However, by scaling up uncertain estimates to account for development patterns, it is plausible that 34 million people around the world could be involved in this type of work

(UNCTAD, 2022; see Cook et al. (2023, 2024) for a recent discussion of different estimates). Waste pickers play an indispensable role as service providers, contributing to urban sustainability and economies (Dias, 2016), saving municipalities' significant waste management costs (Kaza et al., 2018) and reducing climate emissions (WIEGO, 2021). Despite being the "backbone of collection and recycling systems in the world" (Chweya, in Laville, 2023), waste pickers are particularly vulnerable to the adverse impacts of plastic pollution and associated chemicals; they often work in direct contact with contaminated waste materials under hazardous and sometimes exploitative working conditions, with limited access to social protection (WIEGO, 2018; Ferronato and Torretta, 2019; Harriss-White, 2020). Although the formalisation of waste work can improve waste picker conditions and income as part of a just transition (Pereira, 2010; Serrona et al., 2014), it can also threaten their jobs, diminish income and increase precarity (O'Hare, 2020), particularly if waste pickers are not included in the design and implementation of the policies that affect them (Samson, 2020; Parra and Vanek, 2023).

The scholarly attention paid to waste pickers' role in the plastics treaty (Dauvergne, 2023; Velis et al., 2022 and Gutberlet, 2023) has been complemented by suggested measures aiming for a just transition (GRID-Arendal, 2022; UN-Habitat and NIVA, 2022; IAWP, 2023). Yet to date, there has been limited attention paid to the dynamics influencing the ways waste pickers have engaged and become visible in the plastics treaty process. As with biodiversity and conservation (Brosius and Campbell, 2010: 247), ethnographic research has been conducted with waste pickers as they work in situ (e.g. Millar, 2018; O'Hare, 2022; Butt, 2023) but much less as they intercede in spaces of negotiation. This article offers a preliminary analysis of how and why waste pickers have managed to achieve such prominence in plastics treaty negotiations. In setting out the tripartite schema of naming, performance and scale, we adapt Campbell et al. (2014)'s attention to translation, performance and scale as a key analytic for understanding GEG, recognising that the influence of civil society organisations (CSOs) can be evidenced in the written and oral statements made during the negotiation process and in draft as well as final text (Betsill and Corell, 2001: 76). By participating in the Intergovernmental Negotiating Committee (INC) and engaging with a broad range of stakeholders involved in the process, we contextualise how waste pickers are named and framed across official, informal and draft documents and statements; analyse the performative aspects of waste picker advocacy; and point to the "scale work" they engage in to leverage influence across national, regional and international levels.

Methodology

This article draws on a range of social science methods, including participant observation, collaborative event ethnography (CEE) and discourse analysis (Table 1). By analysing official documents and meeting reports alongside collaborative note sets of Member State (MS) and observer interventions from INC1 to INC3 (Cowan and Tiller, forthcoming), we gain a greater understanding of the

¹The World Bank's (2008) estimate that 15 million people globally work as waste pickers has been widely quoted (e.g. World Bank (2021); UN Environment (2019)) and is based on 1% of the urban population in developing countries engaging in waste picking as a primary livelihood. We have scaled this up to provide an updated insight into the amount of people in the urban population in developing economies (3,401 million (UNCTAD, 2022)) that may engage in waste picking as their primary livelihood.

Table 1. Methodologies and data sets

Methods		Meeting	OEWG	INC1	INC2	INC3	
		Authors attending INCs	1	2	2	2	
Collaborative event ethnography	Participant observation	Types of events attended	Plenaries, con meetings.	tact groups (CGs), officia	al side events and inforr	mal side events and	
	Discourse analysis	Official documents and meeting reports	2 UNEP, 2022a, 2022b	1 UNEP, 2022c	2 UNEP, 2023a, 2023b	1 UNEP, 2023c	
		Size of data set containing collaborative notes	n/a ^a	573 interventions	1,423 interventions	796 pages/213425 words	
		Number of interventions mentioning WPs	n/a ^a	15	39	112	
	Searc	th terms across data sets		"pick", "informal", "WP", "worker", "recycler"			

an/a, not enough data.

prevailing narratives and terminologies throughout the plastics treaty process. While interventions from plenary sessions are streamed online, interventions in contact groups (CGs) are restricted to in-person attendees and specific content from these cannot be publicly shared. Thus, below, we refer to MS interventions in plenary followed by session, date and/or meeting, while from CGs, we do not specifically quote MSs. CEE was carried out following the tradition of researchers like Campbell et al. (2014), Brosius and Campbell (2010), Mendenhall et al. (2023) and Cowan et al. (2024) who have employed such methods at GEG meetings.

Although the plastics treaty INCs are slightly smaller than some UN Conference of the Parties (COPs), they are of significant size, with thousands of attendees engaging in hundreds of meetings. As a small team with multiple responsibilities, we were under no illusion that we could attend or capture every interaction, even those restricted to waste pickers. Further, for some bilateral meetings between waste pickers and MSs or the INC Secretariat, the presence of additional researchers would have been burdensome. Our presence at different waste picker interactions was measured and methodological, involving attendance at open fora and selective participant observation in more closed spaces. The active, participatory nature of involvement should also be stressed – rather than detached observation, we often advised waste pickers and even provided informal translation services. This was part of a reciprocal relationship where we sought to make ourselves useful, and our research beneficial, to our research participants. To a certain extent, we also let ourselves be led by waste pickers: meetings and activities that were important to them also became important for us, and conversely, we did not have much to do with actors whom waste pickers did not seek to influence or create alliances with. Close engagement with waste pickers before and during the INC process may have influenced our analysis, although we were able to conserve a critical distance as independent researchers. Our status as researchers from the United Kingdom and Norway² may also have influenced the framing of the research and the information shared with the authors.

By focusing on one specific stakeholder, cross-checking each other's notes and triangulating these with CSOs' notes and official meeting proceedings, we hope to offer a thorough, if not exhaustive, account of waste picker engagement in the plastics treaty process up

to and including INC3. In spreading our focus over consecutive INCs, we "reveal critical relationships and individual agency within a meeting" and "illuminate...changes in governance over time and space" (Corson et al., 2014:31). In the spirit of O'Neill et al. (2013), we use CEE to track the processes by which waste pickers have gained prominence as an important stakeholder in plastics treaty discussions.

Recognising the importance of community peer review (Liboiron, 2022: 138), we invited technical staff from the International Alliance of Waste Pickers (IAWP) to review this article.

Waste pickers' engagement in the plastics treaty process

Waste pickers' involvement in the plastics treaty negotiations began at the United Nations Environment Assembly (UNEA) 5.2 in Nairobi in February/March 2022, building on waste pickers' participation in climate change negotiations from 2009 (COP15) onwards. The UNEA 5.2 resolution 5/14 does not specifically mention waste pickers or just transition but recognises "the significant contribution made by workers in informal and cooperative settings to the collecting, sorting and recycling of plastics in many countries" and recommends that the INC "consider lessons learned and best practices, including those from informal and cooperative settings" (UNEP, 2022a) (Annex 1). This was partly a result of the IAWP lobbying at UNEA 5.2, where nine waste pickers and their associated technical team put forward a series of demands and suggestions surrounding waste picker involvement in the plastics treaty.

The IAWP is a relatively new organisation that nevertheless builds on decades of transnational waste picker organising. The First International (and Third Latin American) Conference of Waste Pickers was held in Bogotá in 2008. During subsequent years, meetings of an Interim Steering Committee for a nascent international waste pickers' organisation were held in Durban (2009), Belo Horizonte (2010) and Bangkok (2011). In 2009, waste pickers sent an observer delegation to the COP15 Climate Change Conference in Copenhagen under the banner of the "Global Alliance of Waste Pickers", as the IAWP was initially known. This was the first organised involvement of waste pickers at a GEG forum and set a precedent for attendance at subsequent climate change COPs and other international environmental events.

The IAWP's 460,000-strong membership is spread across Africa (65,625), Asia Pacific (292,094), Europe (5,200), Latin America

²The authors attended the INCs as observers on behalf of their respective institutions, both accredited to UNEP.

(94,208) and North America (623). It launched its constitution in October 2022 and hosted its first elective congress in May 2024. According to its constitution, the IAWP is a "representative structure and mouthpiece for waste pickers" that "will defend their work and its recognition, in pursuit of public policies that improve the working and living conditions of the recyclers of the world". It is effectively a "trade union of waste pickers" whose "scope covers the waste pickers represented in the organisations that act in the defence of subsets of waste pickers...throughout the world". Its member organisations can be of local, national or regional scope and must meet a set of criteria, including that they principally represent informal waste pickers, be democratic and accountable and be membership-based organisations (cooperatives, trade unions and associations). The Congress is the Alliance's highest decision-making body with affiliates apportioned voting delegates based on the size of their memberships. At least 50% of the Congress delegates should be women, non-binary or trans workers. The Congress elects an Executive Council (President, Vice President and Treasurer), which is geographically balanced and hires and oversees a General Secretary and Secretariat.

The IAWP has sent sizeable and geographically representative observer delegations to the INCs in Uruguay, France and Kenya, including two democratically selected representatives per region. Some of these waste pickers have been financed by United Nations Environment Programme (UNEP), and others have formed part of national delegations (Argentina, South Africa and Brazil). The increasing visibility and importance of waste pickers at the plastics treaty negotiations have been remarked upon; in the words of one MS in their intervention during the INC3, "waste pickers give the plastics treaty a human face" (MS, CG1, INC3). In the following sections, we examine the influence of naming, performance and scale as waste pickers have gained increasing prominence as the human face of the plastics treaty.

Naming

This section documents the changing ways that waste pickers have been referred to in official documents and interventions in the plastics treaty negotiations up to and including INC3. As we shall see, the terminology used to describe waste pickers has evolved in a non-linear fashion. There has been slippage between explicit mentioning of waste pickers as "stakeholders" who are key to achieving a just transition and the subsumption of waste pickers into broader groupings of "waste workers" and "workers in informal and cooperative settings". Waste pickers have also been mentioned with reference to ensuring a just transition across the plastics lifecycle, for workers, communities, Indigenous Peoples, women, children and people in vulnerable situations. However, what is clear is the way that waste pickers themselves have increasingly focused their efforts on the inclusion of the word "waste picker", even to the exclusion of other language alternatives and translations, the most common of which being the Spanish reciclador. This is partly due to the confusion generated by the latter term, which translators unversed in the nuances of waste politics often translate simply as "recyclers", a misleadingly broad term that can include a wide range of actors, from waste pickers to multinational companies.

"Waste pickers" are defined by the IAWP as individuals involved in the collection, segregation, sorting, transportation and sale of recyclables in an informal or semiformal capacity as own account workers, within the informal or semi-formal sector for sorting, recovery and recycling, and any of the above who have been

integrated in municipal waste management or occupy new roles in recycling organisations (IAWP, 2022a, 2022b). Various terms exist across geographies and languages to describe individuals engaged in extracting materials from waste streams for personal use or sale. Some terms specify the type of material collected, while others are preferred for how they frame the activity. Context-dependent examples include "rag picker", "reclaimer", "recycler", "salvager", "canner", "waste collector" and "waste picker" in English; "cartonero", "clasificador", "trapero", "minador" and "reciclador" in Spanish; and "catador de materiais recicláveis" in Portuguese. Other terms, such as "scavenger" and "rummager" (hurgador), have been considered pejorative and rejected by some involved in this activity (Samson, 2009). In cities and countries worldwide, there have been discussions among individuals performing this vital labour about what to call themselves. The term "waste picker" was officially adopted by waste pickers from over 30 countries at the First World Conference of Waste Pickers in Bogotá in 2008 to strengthen regional and global networks under a unified umbrella terminology (WIEGO, 2023).

Prior to INC1, an open-ended working group (OEWG) preparatory meeting was hosted in Senegal, during which the need for a future instrument to specifically and adequately reflect the role of waste pickers and informal workers in the fight against plastic pollution was underlined (UNEP, 2022b). Subsequently, INC1 in Uruguay showed widespread support for recognising and including all relevant stakeholders in the negotiations, with a specific emphasis on "informal waste pickers", Indigenous Peoples and other disadvantaged groups (UNEP, 2022c). The significance of waste picker inclusion and participation to ensuring a just transition was emphasised in MS interventions with relation to opening statements (8),3 scope and objective (3), stakeholder engagement (2) and sequencing and recommended further work (2). Importantly, it was recognised that waste pickers are one of the stakeholder groups most vulnerable to policy changes stemming from the plastics treaty (Kenya, Plenary, 01.12.22). Several MSs called for specific measures to foster the inclusion of waste pickers across plenary sessions, including finance and capacity building (Chile and Columbia, 28.11.22; Uruguay 30.11.22), ensuring decent working conditions (Burkina Faso, 02.12.22), participating in the negotiations (Kenya, 01.12.22) and establishing a "fund to manage legacy plastics (...) available to all waste pickers" (Ghana, Plenary, 01.12.22).

An Options Paper released ahead of INC2 presented a range of options related to "facilitating a just transition, including an inclusive transition of the informal waste sector" under possible core obligation 11 (UNEP, 2023a) (Annex 1). It reflected an inconsistency in terminology used by the MS, ranging from broadly enabling a fair and equitable transition for industries and affected workers to specifically improving working conditions for waste pickers, integrating the informal waste sector and funding infrastructure and skills for informal waste pickers through the operationalisation of extended producer responsibility (EPR) schemes. On the second day of INC2, the IAWP outlined what a just transition meant for them: "You must integrate (...) and work with us to design and add value to recyclables. We need fair prices, environmental fees (...), access to materials and infrastructure, and social welfare and security, both in the treaty and nationally", ending their intervention

³Numbers refer to the number of MS mentions during INC1.

with the slogan "Without waste pickers, a treaty is rubbish" (IAWP, 31.05.23, Plenary). In CG1, discussion about waste pickers revolved around protecting human and workers' rights, with several MSs from the African Group, Group of Latin American and Caribbean Countries (GRULAC) and Western Europe calling for integration guidelines, fair remuneration and ensuring that waste pickers are included in new systems, such as EPR.

The Zero Draft text released in advance of INC3 outlined options for improving working conditions for workers in waste management under provision 12 on "just transition" (UNEP, 2023c). Surprisingly, however, despite being mentioned by many MSs at INC2 (including interventions from 14 individual MSs and on behalf of three regional groups), there was no explicit reference made to waste pickers, marking an apparent weakening of language when compared with the Options Paper; in the just transition section, those singled out for special consideration were "women and vulnerable groups, including children and youth". In the body of the provision, meanwhile, reference was made to "workers in the waste management sector", "workers across the value chain" and "workers in informal and cooperative settings", a return to the language used in UNEA Resolution 5/14. In response to the removal of specific references to waste pickers, the IAWP went into INC3 with three requests: the incorporation of the term "waste picker" into the treaty text; cross-referencing of just transition across other relevant provisions (e.g. EPR and waste management); and the inclusion of definitions of "waste pickers", "just transition" and "workers in informal and cooperative settings".

The importance that the IAWP placed on the inclusion of the term "waste picker" became clear in a pre-INC3 meeting of GRULAC, in which CSOs were invited to make interventions at the end. A waste picker leader lifted her hand to make an intervention:

"We have heard waste pickers mentioned many times in different speeches, plenaries, and other INC processes but today we are very worried that in the Zero Draft there is no mention of waste pickers, just informal, formal, and cooperativized workers, and we aren't always included in these terms since we aren't even recognised at the ILO" (IAWP, GRULAC Regional Meeting, 12.11.23, translation by author).

It is interesting to note here that although the intervention was made in Spanish, the English term "waste picker" was used, highlighting the linguistic hegemony that the English language term had come to assume for the IAWP, with equivalents in Spanish and other UN languages a secondary concern. In advocating for the use of an occupational term (waste picker) and arguing for the inclusion of the IAWP definition of such a term, waste pickers at the plastics treaty engage in "boundary work", defined by Langley et al. (2019) as "a purposeful individual and collective effort to influence the social, symbolic, material, or temporal boundaries, demarcations and distinctions affecting groups, occupations, and organisations". The IAWP's call for explicitly mentioning waste pickers across the treaty text was echoed by several MSs of the African Group and GRULAC in CG discussions related to provisions on just transition, waste management, EPR, chemicals and polymers of concern and problematic and avoidable plastic products. In the revised Zero Draft text that was released following INC3, we can see that the emphasis placed by the IAWP on specifically naming waste pickers bore fruit, with the group being mentioned in bracketed text seven times in the just transition provision as well as in the Preamble, Provision 7 (EPR), Provision 9 (Waste Management), Part III.1 (Financing), Part IV 1. (National Action Plans), Part IV 3. (Reporting on Progress), Part IV 6. (Information Exchange) and Part IV 8. (Stakeholder Engagement) (UNEP, 2023d).

Performance

The IAWP has co-organised several official and informal side events at the INCs in collaboration with other CSOs and MSs. In an informal side event at INC1, the IAWP launched the Group of Friends of Waste Pickers (inspired by the Groups of Friends of Indigenous Peoples established at the UN Food and Agriculture Organisation in 2019), while at INC2, the IAWP co-hosted an informal side event with Brazil, Kenya and South Africa focused on the broader aims of the Just Transition Initiative, launched by the latter two MSs. At INC3, the IAWP hosted an informal side event at the Brazilian Embassy in Nairobi, entitled "Uniting for a Just Transition". Marking the one-year anniversary of the IAWP constitution (adopted 17 October 2022), the side event was an invitation both to celebrate and to hear the IAWP present its position paper on a Just Transition for Waste Pickers under the Plastics Treaty (IAWP, 2023). A theatrical performance entitled "Who knows it feels it: A waste picker's perspective for a just transition" was also organised on three separate occasions prior to INC3 by researchers from the University of Portsmouth, a theatre for development specialist, Grid-Arendal, the Nairobi-based Social Justice Centre Travelling Theatre and the Kenyan National Waste Pickers Association. In the following sections, we draw on event ethnography conducted at the latter two events during INC3, on 13 and 19 November 2023, to explore the importance of performance for waste pickers as they advance their demands and strengthen their position in the plastics treaty process.

The Uniting for a Just Transition event at the Brazilian Embassy sheds light on the politics of performance and provided an opportunity to put waste pickers back at the centre stage of ensuring a just transition in the plastics treaty. Although representatives from the scientific, business, environmental and Indigenous Peoples' communities were invited to the event, two groups were afforded priority in terms of spoken interventions and seating: waste pickers and MS delegates. It was symbolically important that waste pickers took centre stage at the embassy event. Indeed, one of the Kenyan waste picker leaders told us that normally a waste picker wandering around the UN district of Nairobi would likely be harassed by police and security, never mind being invited inside an embassy. It was particularly symbolic that the host of the event was a Brazilian waste picker who also formed part of the Brazilian MS delegation, and he made sure that the invitation to the event was extended not only to Kenyan waste picker observers at the INC3 but to "rank and file" waste pickers from the Kibera slum: thirty of them, clad in their trademark olive green uniforms, descended from a bus and found their names on the guest list. MS delegates were, meanwhile, given priority because they were those that the waste pickers needed to influence to get their messages across in the treaty negotiations and as a way of thanking those that had already voiced their support.

In the event, waste pickers from the United States, Italy, Bangladesh, Brazil and Senegal delivered key points from the IAWP position paper with which they particularly identified, each intervention involving a slightly different combination of rehearsed and improvised speech. This meant that each speaker could play to their strengths: some were comfortable giving long, rousing political speeches, while other presentations were more technical or got to the point, and indeed to the heartstrings, in just a few words. Full copies and executive summaries of the official IAWP position paper on just transition were then distributed to delegates. This format facilitated two important aspects of waste picker claims to be legitimate (local) knowledge holders: they could speak from the heart about their lived experiences and provide a fleshed-out,

technical, fully referenced paper on just transition that could inform MS positions. The role of waste pickers as important knowledge holders was highlighted as O'Hare shared the authors' policy brief on just transition but emphasised that most of what he had learned from working with waste pickers had indeed come from waste pickers, as co-participants in the creation of research and, in some cases, now university researchers themselves.

The purpose of the theatrical performance, entitled "Who knows it feels it: A waste picker's perspective for a just transition", was to "amplify the voices of waste pickers to the policy- and decision-makers who have the power to bring about systemic change". The theatre troupe and researchers spent a week at Nairobi's Dandora landfill developing a series of skits with the waste pickers, inspired by, and recreating, the types of situations that they find themselves in during their everyday lives. These included instances at the landfill where waste pickers were injured because of a lack of personal protective equipment, an attempt to negotiate a sale of plastic with a recycling intermediary, a confrontation with a homeowner who renegades on payment for their door-to-door collection and a frustrating attempt to obtain a meeting with a municipal official.

The theatre piece invited the audience to participate by intervening as waste pickers in scenes if they thought that they could induce a different ending. In this, the performance partly followed the script of "legislative theatre", a concept coined by Brazilian dramaturg Augusto Boal, composed of four parts: watching an original play based on community members' lived experiences and problems, acting on stage to intervene in the play, testing ways to address the problems and then proposing and voting on policy changes. To a certain extent, the play bridged theatrical performance and what sociologist Jeff Alexander has called "cultural performance", defined as "the social process by which actors, individually or in concert, display for others the meaning of their social situation" (2006:32). An effective performance, Alexander argues, should be a plausible one, thus depending "on the ability to convince others that one's performance is true, with all the ambiguities that the notion of aesthetic truth implies" (ibid).

Alexander's analogical model relies on a separation between theatrical and cultural performance in what he calls "complex societies". In "Who knows it, feels it", both types of performance are merged, and the authenticity, success and truth of the performance rely not only on waste pickers' ability as actors but also on their ability to faithfully reproduce their own life experiences. Alexander's framework can also be useful for understanding the efficacy of the performance, particularly the aspect of psychological identification, whereby the audience identified with and acted out the role of waste pickers when taking the stage. One of the authors experienced this himself, when he trialled an alternative method of gaining a meeting with the municipal official: staging a peaceful protest involving the singing of the Kenyan waste picker anthem to attract attention. This was then met with an improvised response from the waste pickers, some of whom turned into convincing security forces who arrived to violently break up the demonstration, thus giving the audience an insight into the challenges of using protest as a method of advancing demands in Kenya.

Alexander's framework of cultural performance points to some of the performative aspects of waste picker interventions in the treaty process more broadly. We agree with Jeff Juris in his work on the Occupy movement that social movement practices might be

thought of as operating along a continuum from more to less performative, with cultural performance a means through which "alternative meanings, values, and identities are produced, embodied and publicly communicated" (2015, 82). Campbell et al. (2014), meanwhile, have drawn attention to the dramaturgical aspects of GEG, through their event ethnography of COP10 of the Convention on Biological Diversity. As they conceive it, "a dramaturgical perspective directs us to analyse how meeting sites are managed and roles performed, in ways that are not only constitutive of the subject identity of participants, but shape the legitimation of knowledge" (Campbell et al., 2014, 7). Understanding the "politics of performance" involves examining which actors can speak in what setting, how events are staged and when aspects of the spectacular are present (ibid) and it is not only in strictly theatrical performances, that "different actors perform their policy preferences in front of an audience" (ibid).

Multi-scalar alliances

We have earlier noted how waste pickers engage in "boundary work" to influence occupational categorisations and definitions. In this final section, we discuss the importance of "scale work" as waste pickers seek to influence the plastics treaty through multiscalar alliances. With this term, we denote, first, the way that the IAWP has effectively "scaled up" organising tactics that they have already finessed at national and regional levels, such as strategic alliances with CSOs, MSs and industry actors. Second, waste pickers also "scale down", which involves both taking the matters discussed at the plastics treaty negotiations back to their grassroots for input and consultation and attempting to leverage progress in the treaty negotiations into tangible gains at a national level. We will thus address the way that waste pickers engage these different scales simultaneously to their advantage.

As part of the plastics treaty process, waste pickers engage in a range of strategic alliances with other CSOs. Joint interventions have, for example, been made with trade union representatives, stating the importance of a just transition for all plastics workers (Figure 1). Multinational companies involved in the Business Coalition for a Global Plastics Treaty have meanwhile launched the Fair Circularity Initiative. The initiative is rooted in the IAWP's EPR position and articulates a commitment to improving the human rights for workers like waste pickers that are indirectly involved in their supply chains through the recovery of recyclable packaging and its reincorporation into new products. The IAWP's engagement in the plastics treaty process builds on the consultative work leading up to their EPR position (Cass Talbott et al., 2022).

The IAWP often treads a fine line in manoeuvring between actors with different interests in the treaty process but builds on decades of experience working with different actors and potential allies. For instance, the Latin American and Caribbean Waste Pickers Network (Red LACRE) was a founding member of the Regional Recycling Initiative (now Latitude R), joining companies and organisations like the World Bank, Coca-Cola and PepsiCo to promote examples of "inclusive recycling". Since these actors can, in other circumstances, be locked in more agonistic relationships with waste pickers, Zapata Campos et al. (2021) see such alliances as an example of what Gibson-Graham et al. (2016) have called "multispecies communities", in which "organisations with antagonistic interests converge temporarily" (2020: 593). As Zapata Campos et al. write, Red Lacre has been able to channel the work carried out in the Latitude R partnership, such as reports and best inclusive recycling practices supported by big business, into more inclusive recycling policies in a host of countries (ibid). Waste

⁴https://plasticspolicy.port.ac.uk/who-knows-it-feels-it-legislative-theatre-at-inc-3/.

WORKERS AND TRADE UNIONS MAJOR GROUP'S JOINT POSITION ON INC

Shared priorities for the Intergovernmental Negotiating Committee (INC) to develop an international legally binding instrument on plastic pollution,

including in the marine environment

Foreword

We, the organisations representing and organising the hundreds of millions of workers of the global supply chain in plastic production, manufacturing, use, waste collection, reuse, recycling and disposal - as well as workers in agriculture, fisheries, food processing, packaging, services, catering, hospitality and restaurants - united as Constituents of the Workers and Trade Unions UN Major Group:

- Emphasize the pressing necessity to comprehensively address the environmental degradation and societal crises caused by plastic waste pollution and plastic-related health risks and hazards - including major occupational health and safety (OSH), and the global threat to food safety, food security and human and animal nutrition;
- Urge States and all level of governments to act decisively and address plastic waste pollution and plastic-related adverse impacts on public health and on global ecosystems and the environment, both on land and in the marine environment:
- Support a legally binding international instrument to guide and direct the
 policies, legal and regulatory frameworks and actions of States, business from
 multinational enterprises to SMEs and plastic users.

Figure 1. IAWP aligning with other civil society actors to amplify shared priorities.

picker organisations are both wary that such companies may be engaging in "greenwashing" and think that it is only right that waste pickers should receive funds and support, however limited, from companies for whom they have for decades delivered an environmental cleanup service free of charge. Alliances with environmental groups can also be tense, since not all are favourable to recycling nor demand that the phase-out of plastics be contingent on a just transition for impacted workers. These are the kinds of tensions that the IAWP negotiates as they scale up alliance strategies. We would suggest that waste pickers maintain what Zapata Campos et al. (2021) have described as a policy of establishing open and diverse relationships with a range of different actors as part of a "grassroots governmentality".

Building alliances with CSOs and industry actors can amplify shared priorities in the plastics treaty negotiations. Yet perhaps even more influential in the negotiations are alliances with MSs. Our analysis shows that some of the most supportive MSs often comes from groups of countries where waste pickers have strong organisations, such as within the GRULAC and the African Group. This can be seen as a result of waste pickers' work over decades, where local and national relationship building, as well as participation in developing national waste management and environmental legislations, is scaled up to the global level. Strong sub-national and city-based achievements for waste pickers do not always scale up to favourable national MS positions, however. This is the case for India, for example, where the campaigning of waste picker organisations such as the KKPKP, Hasiru Dala and SWaCH in cities like Pune and Bangalore has resulted in inclusive legislation and the participation of waste picker cooperatives in municipal solid waste management systems (Chikarmane, 2012; Shankar and Sahni, 2018). However, India has yet to emerge as a strong supporter of waste picker inclusion in the plastics treaty negotiations. As indicated by the hosting of an IAWP event in the Brazilian Embassy, Brazil, on the other hand, has been supportive of waste pickers in the treaty process, a fact not unrelated to the inclusive waste

management legislation passed by various Workers' Party (PT)-led governments and the strong personal relationship between President Lula da Silva and Brazil's thousands-strong waste pickers (catador) movement.⁵ Nationally, recent waste picker campaigns have focused on the inclusion of waste pickers in EPR legislation in various countries (e.g. Najib and Patil, 2023), something with relevance for the plastics treaty given the likely inclusion of an article on EPR.

At the same time, as waste pickers scale up existing regional organisation strategies, waste pickers also "scale down", returning to their grassroots for updates and consultations and attempting to transform international advances into local gains. Waste pickers attending the INCs were encouraged to report back findings to their home country organisations and gather input and advice for further negotiations (Figure 2). This was an important step for maintaining a link with the grassroots and strengthening the democratic and representative character of waste picker participation in the plastics treaty process. At monthly online plastics working group meetings with simultaneous translation for the IAWP and their allies, IAWP representatives were asked to report back any conversations that they had with their national membership on plastics treaty developments. Such a modality of virtual work had grown out of the pandemic and enabled more inclusive organising and regular communication between waste pickers dispersed all over the world.

Waste pickers also attempted to lobby at a national level to secure improvements, leveraging their prominence and alliances at the INCs as they had previously tried to scale down regional partnerships like Latitude R. In Uruguay, host to INC1, an obvious

⁵Governments of the Partido dos Trabalhadores (PT) include those of Lula da Silva (2003–2011, 2023-) and Dilma Rouseff (2011–2016). Inclusive waste management legislation passed includes Article 57 of Law # 11.445/07 (2007), which allows for the hiring of waste picker associations and cooperatives directly by municipalities to perform selective waste collection without a process of tendering of bids.



Figure 2. Senegalese waste picker leader Harouna Niass reporting back to Senegalese waste pickers following INC3. Photograph: Amira El Halabi.

disconnect emerged between the position of Uruguay in the plastics treaty negotiations (where it was and continues to be an important supporter) and the direction in which national waste policy was moving: away from inclusive recycling, towards more pro-business schemes. Whereas the current Uruguayan EPR scheme involves waste picker cooperatives but has low levels of recovery, Plan Vale, a new scheme launched by the Uruguayan Producer Organisation, the Chamber of Industry, involves siphoning off the most valuable materials to a semi-automatic Deposit Return Scheme (DRS) run by a multinational company (Matonte-Silva and O'Hare, 2022).

In an official side event at INC1, hosted by the Uruguay Environment Ministry, a Latin American waste picker leader made an intervention from the floor, pointing out how the plan stood to dispossess and negatively impact Uruguayan waste pickers. Several inconsistencies were pointed out in a subsequent meeting between the Uruguayan waste pickers, IAWP colleagues, allies and public and private sector actors involved in Plan Vale; while Uruguay had just agreed to join the Group of Friends of Waste Pickers, waste pickers had not been consulted or involved in the Plan Vale policy process. Moreover, as waste pickers were gaining recognition and influence in the plastics treaty negotiations, several multinational companies that would be making contributions to the Uruguayan EPR scheme had also signed up to the abovementioned Fair Circularity Initiative. While representatives from Plan Vale seemed to take on board the spirit of these comments, Uruguayan waste pickers told the authors that no substantive changes were subsequently made to Plan Vale nor had waste pickers been meaningfully consulted by the time of this article's submission. Meanwhile, in Chile, attempts to scale down international treaty advances fared

somewhat better. The national leadership used contacts established with companies signed up to the Fair Circularity Initiative to press for improvements in a new legal EPR programme to make it more inclusive and responsive to waste picker needs. As a result, the EPR law stipulated that waste pickers would receive a minimum payment per kilo of packaging waste recovered. The contrast between the two cases demonstrates that waste pickers are not always successful in scaling down agreements and precedents established at an international level to national contexts. Strong leadership at the national level and the openness of national governments to including waste pickers in policy design are two important factors that can determine positive or negative outcomes of such "scale work".

Concluding remarks

Past the midway point of the plastics treaty negotiations, this article has offered a preliminary analysis of the ways in which waste pickers have influenced the plastics treaty negotiations. While being active and visible at the INCs does not automatically translate into influence (Betsill and Corell, 2001), we have shown that waste pickers have engaged in boundary and scale work to form strategic alliances with CSOs and MSs to ensure that their interests are placed and remain on the negotiating agenda. Their influence becomes visible as MSs repeatedly and passionately call for the inclusion and explicit mention of waste pickers across the treaty text. The recognition of waste pickers has been non-linear across official INC documents, with a notable weakening of the negotiated language in the Zero Draft text as compared to the Options Paper. Yet it becomes evident that MS interventions have largely gone from portraying waste pickers as "merely" vulnerable workers to having specific rights as human beings, workers and local communities with global reach, whose participation as key knowledge holders is an essential element of developing and implementing a treaty which enables a just transition towards ending plastic pollution.

As argued by Ciplet (2014) in the climate negotiation space, recognition in negotiated text can be leveraged to put pressure on governments and businesses at local and national levels. We observe that waste pickers do this by scaling down the matters discussed at the plastics treaty negotiations to their grassroots communities for consultation and leveraging tangible gains at national levels. However, international commitments to ensuring a just transition for waste pickers do not always reflect national action, as illustrated by the example of Uruguayan waste pickers being excluded from a privately run DRS system. At the same time, multinational companies are agreeing on principles for fair circularity that are strongly influenced by waste picker positions, which could provide a starting point for co-developing guidelines for a just transition for waste pickers in the plastics treaty. Looking ahead, to ensure a just transition in the plastics treaty, waste pickers must be recognised as key stakeholders in the development and implementation of strategies to reduce plastic pollution, prioritising meaningful participation, social protection, decent work and safeguarding measures to avoid negatively affecting waste pickers' livelihoods when moving towards safe and equitable zero waste systems, involving reuse, refill and recycling (O'Hare et al., 2023). It is yet to be seen how a just transition will be addressed in the final treaty text. Its impacts on people and communities involved in waste picking will thus largely depend on whether the treaty and its provisions will be legally binding based on globally agreed goals or based around voluntary and nationally determined targets, as well as MSs and local municipalities' capacities to implement and monitor these.

This article has engaged with how waste pickers have worked to place their demands for a just transition on the plastics treaty agenda, by focusing on being cross-referenced across the plastics treaty text, positioning themselves front and centre stage in effective performances in parallel to the negotiations and scaling up and down their alliances and strategies simultaneously to work towards a just transition at local, national and international levels. By doing so, we have explored some of the processes through which waste pickers have become the human face of the plastics treaty and reiterated their role as an important stakeholder group whose rights and knowledge must be included and protected. The evidence of waste picker influence that we demonstrate in this article can also be used to justify the resources that the IAWP have sunk into the plastics treaty process, the fruits of which might take years to trickle down into the lives of many individual waste pickers. We hope that the conceptual triad of naming, performance and scale that we have developed can be useful for analysing the actions, strategies and influence of other groups involved in GEG advocacy, including Indigenous Peoples, trade unions and environmental groups. As we move towards the crucial final stages of the plastics treaty negotiations with ambitions to reach an agreement by the end of 2024, other avenues for future research include monitoring waste pickers' role and influence in the plastics treaty process, as well as identifying how proposed control measures and means and mechanisms of implementation may influence the multiple dimensions of just transition for waste pickers and other peoples and communities in the transition towards ending plastic pollution.

Open peer review. To view the open peer review materials for this article, please visit http://doi.org/10.1017/plc.2024.12.

Data availability statement. The data that support the findings of this study are available from the UNEP, but restrictions apply to the availability of some of these data, which were used for the current study and so are not publicly available. Some of the data are, however, available from the corresponding authors upon reasonable request and with the permission of UNEP.

Acknowledgements. The authors would like to thank the International Alliance of Waste Pickers for their collaboration with this article. We would also like to thank María José Zapata Campos, Taylor Cass Talbott, Aase Jeanette Kvanneid and Marianne Mosberg for initial input or critical readings.

Author contribution. P.O. and E.N. conceptualised the article; P.O. and E.N. collected the data and prepared the original draft; P.O. and E.N. contributed to formal analysis; and P.O. and E.N contributed to the writing, reviewing and editing of the article. All authors have read and agreed to the published version of the manuscript.

Financial support. This work was supported by the Norwegian Development Assistance Program Against Marine Litter and Microplastics and the Royal Norwegian Embassy in New Delhi (E.N., grant number IND-22/0007); the Research Council of Norway (E.N., grant number 302575); and a UKRI Future Leaders Fellowship (grant number MR/S03501X/1).

Competing interest. The authors declare no competing interests exist.

Ethics statement. This research has been conducted in line with the Norwegian research ethics guidelines of the National Committee for Research Ethics in Science and Technology (NENT) and the research ethics guidelines of the National Committee for Research Ethics in the Social Sciences and the Humanities (NESH). Research ethics approval for the UKRI Future Leaders Fellowship (grant number MR/S03501X/1) was sought and approved by the School of

Philosophical, Anthropological and Film Studies Ethics Committee, acting on behalf of the University Teaching and Research Ethics Committee of the University of St Andrews, under approval code SA15058.

References

- Barford A and Ahmad SR (2021) A call for a socially restorative circular economy: Waste pickers in the recycled plastics supply chain. Circular Economy and Sustainability 1, 761–782. https://doi.org/10.1007/s43615-021-00056-7
- Bennett NJ, Alava JJ, Ferguson CE, Blythe J, Morgera E, Boyd D and Côte IM (2022) Environmental (in)justice in the Anthropocene Ocean. *Marine Policy* 147, 105383. https://doi.org/10.1016/j.marpol.2022.105383
- Betsill M and Corell E (2001) NGO Influence in International Environmental Negotiations: A Framework for Analysis. *Global Environmental Politics, MIT Press*, 1(4), 65–85. https://doi.org/10.1162/152638001317146372
- Brosius JP and Campbell LM (2010) Collaborative event ethnography: Conservation and development trade-offs at the fourth world conservation congress. Conservation and Society 8(4), 245–255. http://www.jstor.org/stable/26393015.
- Butt W (2023) Life beyond Waste: Work and Infrastructure in Urban Pakistan. Palo Alto: Stanford University Press.
- Campbell LM, Corson C, Gray NJ, MacDonald KI and Brosius JP (2014) Studying global environmental meetings to understand global environmental governance: Collaborative event ethnography at the tenth conference of the parties to the convention on biological diversity. Global Environmental Politics 14(3), 1–20. https://www.muse.jhu.edu/article/552010.
- Cass Talbott T, Chandran P, Allen C, Narayan L and Boampong O (2022) Extended producer responsibility (EPR) and waste pickers. WIEGO Technical Brief No. 15. Manchester, UK: WIEGO.
- Chikarmane P (2012) Integrating Waste Pickers into Municipal Solid Waste Management in Pune, India, WIEGO Policy Brief (Urban Policies) No. 8, July 2012. Available at: https://www.wiego.org/publications/integrating-waste-pickers-municipal-solid-waste-management-pune-india.
- Ciplet D (2014) Contesting climate injustice: Transnational advocacy network struggles for rights in UN climate politics. Global Environmental Politics 14 (4), 75–96. https://doi.org/10.1162/glep_a_00258
- Cook E, Cano NSS and Velis CA (2024) Informal recycling sector contribution to plastic mitigation: A systematic scoping review and analysis of prevalence and productivity. *Research Square*. Available at https://doi.org/10.21203/rs.3. rs-3791652/v1.
- Cook E, Derks M and Velis CA (2023) Plastic waste reprocessing for circular economy: A systematic scoping review of risks to occupational and public health from legacy substances and extrusion. Science of the Total Environment 859(2), 160385. https://doi.org/10.1016/j.scitotenv.2022.160385
- Corson C, Campbell LM and MacDonald KI (2014) Capturing the personal in politics: Ethnographies of global environmental governance. *Global Environmental Politics* 14(3), 21–40. https://www.muse.jhu.edu/article/552011
- Cowan E, Holmberg K, Nøklebye E, Rognerud I and Tiller R (2024) It takes two to tango: The second session of negotiations (INC-2) for a global treaty to end plastic pollution. *Journal of Environmental Studies and Sciences* 14, 428–434. https://doi.org/10.1007/s13412-024-00906-4.
- **Cowan E and Tiller R** (forthcoming) Database of narratives from The Global Plastic Treaty Negotiations (INC1–5). Unpublished.
- Dauvergne P (2023) The necessity of justice for a fair, legitimate, and effective treaty on plastic pollution. *Marine Policy* 155, 105785. https://doi. org/10.1016/j.marpol.2023.105785
- Dias SM (2016) Waste pickers and cities. Environment and Urbanization:
 Urban Livelihoods 28(2), 375–390. https://doi.org/10.1177/0956247
 816657302
- English E, Holmes J and Wagner C (2019) The effects of marine debris on beach recreation and regional economies in four coastal communities: A regional pilot study. July. National Oceanic and Atmospheric Administration, Marine Debris Division. Available at https://marinedebris.noaa.gov/

- sites/default/files/2019.07.Econ_.Impacts.Marine.Debris.complete.wFN_ 30Aug2019_508.pdf.
- Ferronato N and Torretta V (2019) Waste mismanagement in developing countries: A review of global issues. *International Journal of Environmental Research and Public Health* **16**(6), 1060. https://doi.org/10.3390/ijerph16061060
- Fuller S, Ngata T, Borelle SB and Farrelly T (2022) Plastic pollution as waste colonialism in Te Moananui. *Journal of Political Ecology* 29(1), 534–560. https://doi.org/10.2458/jpe.2401.
- Gibson-Graham JK, Hill A and Law L (2016) Re-embedding Economies in Ecologies: Resilience Building in More than Human Communities. *Building Research & Information* 44(7), 703–736. https://doi.org/10.1080/09613218.2016.1213059
- GRID-Arendal (2022) A Seat at the Table The Role of the Informal Recycling Sector in Plastic Pollution Reduction, and Recommended Policy Changes. GRID-Arendal.
- **Gutberlet J** (2023) *Global Plastic Pollution and Informal Waste Pickers*. Cambridge Prisms: Plastics.
- Gutberlet J and Carenzo S (2020) Waste pickers at the heart of the circular economy: A perspective of inclusive recycling from the global south. *Worldwide Waste: Journal of Interdisciplinary Studies* 3(1), 1–14. https://doi.org/10.5334/wwwj.50
- Harriss-White B (2020) Waste, social order, and physical disorder in small-town India. *Journal of Development Studies* 56(2), 239–258. https://doi.org/10.1080/00220388.2019.1577386
- Hartmann C, Hegel C and Boampong O (2022) The forgotten essential workers in the circular economy? Waste picker precarity and resilience amidst the COVID-19 pandemic. *The International Journal of Justice and Sustainability* 27, 1272–1286. https://doi.org/10.1080/13549839.202 2.2040464
- **Human Rights Watch** (2022) It's as If They are Poisoning Us. The Health Impacts of Plastic Recycling in Turkey. Available at https://www.hrw.org/report/2022/09/21/its-if-theyre-poisoning-us/health-impacts-plastic-recycling-turkey.
- IAWP (International Alliance of Waste Pickers) (2022a) Constitution of the International Alliance of Waste Pickers. Available at https://globalrec.org/ constitution/.
- IAWP (International Alliance of Waste Pickers) (2022b) Group of Friends of Waste Pickers' is inaugurated during the INC-1 in Uruguay. 29th November. Available at https://globalrec.org/2022/11/29/group-of-friends-of-waste-pickers/.
- IAWP (International Alliance of Waste Pickers) (2023) IAWP's Vision for a Just Transition for Waste Pickers under the UN Plastics Treaty. November 2023. Available at https://globalrec.org/wp-content/uploads/2023/11/english_position-paper_IAWP-vision-just-transition_resolution150ppi.pdf.
- ILO (International Labour Organization) (2023) Outcome of the General Discussion Committee on a Just Transition. International Labour Conference 111th Session. 15th June. ILC.111/Record No. 7A. Available at https://www.ilo.org/ilc/ILCSessions/111/committees/just-transition/WCMS_885375/lang_en/index.htm.
- International Labour Organization (ILO) (2018) Women and Men in the Informal Economy: A Statistical Picture, 3rd edn. Geneva: International Labour Organization - ILO. Available at https://www.ilo.org/global/publications/books/WCMS_626831/lang_en/index.htm.
- Karasik R, Lauer NE, Baker A, Lisi NE, Somarelli JA, Eward WC, Fürst K, Dunphy-Daly MM (2023) Inequitable distribution of plastic benefits and burdens on economies and public health. Frontiers in Marine Science, 9. https://doi.org/10.3389/fmars.2022.1017247.
- Kaza S, Yao LC, Bhada-Tata P and Van Woerden F (2018) What a Waste 2.0: A Global Snapshot of Solid Waste Management to 2050. Washington, DC: World Bank. http://hdl.handle.net/10986/30317
- Langley A, Lindberg K, Mork BE, Nicolini D, Raviola E and Walter L (2019) Boundary work among groups, occupations, and organizations: From cartography to process. *Academy of Management Annals* 13(2). https://doi.org/10.5465/annals.2017.0089
- Lau W, Shiran Y, Bailey R, Cook E, Stutchey M, Koskella J, Velis C, Godfrey L, Boucher J, Murphy M, Thompson R, Janokwska E, Castillo A, Pilditch T, Dixon B, Koerselman L, Kosior E, Favoino E, Gutberlet J, Baulch S, Atreya M, Fischer D, He K, Petit M, Sumaila R, Neil E, Berhofen M, Lawrence K

- and Palardy J (2020) Evaluating scenarios toward zero plastic pollution. *Science* 369, 1455–1461. https://doi.org/10.1126/science.aba9475
- Laville S (2023) Leader of Kenyan waste pickers: 'We are the backbone of recycling'. The Guardian. May 12, 2023. Available at https://www.theguar dian.com/environment/2023/may/12/leader-kenya-waste-pickers-we-arebackbone-of-recycling-plastic-pollution (Accessed 18 January 2024).
- **Liboiron M** (2022) *Pollution is Colonialism*. Durham, MA: Duke University Press.
- Matonte-Silva C and O'Hare P (2022) Packaging EPR in Uruguay. The Global Alliance of Waste Pickers and WIEGO. Available at https://epr.globalrec.org/case-study/case-study-packaging-epr-in-uruguay/.
- McCauley D and Heffron R (2019) Just transition: Integrating climate, energy and environmental justice. *Energy Policy* 119, 1–7. https://doi.org/10.1016/j. enpol.2018.04.014
- Mekaoui EA, et al. (2021) Plastic bags ban and social marginalization: Evidence from Morocco. *Polish Journal of Environmental Studies* **30**(5), 4587–4595. https://doi.org/10.15244/pjoes/132981
- Mendenhall E, Tiller R and Nyman E (2023) The ship has reached the shore: The final session of the 'biodiversity beyond National Jurisdiction' negotiations. Marine Policy 155, 105686.
- Millar K (2018) Reclaiming the Discarded: Life and Labor on Rio's Garbage Dump. Durham, MA: Duke University Press.
- Morais J, Corder G, Golev A, Lawson L and Ali S (2022) Global review of human waste-picking and its contribution to poverty alleviation and a circular economy. *Environmental Research Letters* 17, 6. https://doi. org/10.1088/1748-9326/ac6b49
- Morena E, Krause D and Stevis D (eds) (2019) In Just Transitions: Social Justice in the Shift Towards a Low-Carbon World. London: Pluto Press. https://doi. org/10.1177/0022185620957459.
- Nagarajan A (2022) The governance of plastic in India: Towards a just transition for recycling in the unorganized sector. *Local Environment* 27, 1394–1413. https://doi.org/10.1080/13549839.2022.2084721.
- Najib H and Patil N (2023) Waste Pickers: Missing Piece in India's EPR Puzzle:
 Mapping the Challenges Faced by Waste Picker Organisations in India's
 Extended Producer Responsibility (EPR) Landscape. Delhi: Alliance of
 Indian Wastepickers. Available at https://aiw.globalrec.org/2023/10/07/
 waste-pickers-the-missing-piece-in-indian-epr-puzzle/.
- Nøklebye E, et al. (2023) Plastic bans in India Addressing the socio-economic and environmental complexities. *Environmental Science and Policy* 139, 219–227. https://doi.org/10.1016/j.envsci.2022.11.005.
- O'Hare P (2020) 'We looked after people better when we were informal': The 'quasi-formalisation' of Montevideo's waste-pickers. Bulletin of Latin American Research 39(1), 53–68.
- O'Neill KEW, Suiseeya KRM, Bernstein S, Cohn A, Stone MW and Cashore B (2013) Methods and global environmental governance. *Annual Review of Environment and Resources* 38(1), 441–471.
- OECD (2022) Global plastics outlook. *Organisation for Economic Cooperation* and *Development*. February 22. Available at https://doi.org/10.1787/de747aef-en.
- O'Hare P (2022) Rubbish Belongs to the Poor: Hygienic Enclosure and the Waste Commons. London: Pluto.
- O'Hare P, Nøklebye E, Stoett P and Korsten K (2023) Towards a just transition away from plastic pollution. Scientists' Coalition for an Effective Plastics Treaty. Available at https://doi.org/10.5281/zenodo.10021005.
- Orellana M (2021) The Stages of the Plastics Cycle and Their Impacts on Human Rights Report of the Special Rapporteur on the Implications for Human Rights of the Environmentally Sound Management and Disposal of Hazardous Substances and Wastes. Available at https://www.ohchr.org/en/documents/thematic-reports/a76207-stages-plastics-cycle-and-their-impacts-human-rights-report.
- Owens KA and Conlon K (2021) Mopping up or turning off the tap? Environmental injustice and the ethics of plastic pollution. *Frontiers in Marine Science* 8. https://doi.org/10.3389/fmars.2021.713385.
- Parra F and Vanek J (2023) The Collection of Data on Waste Pickers in Colombia, 2012–2022. WIEGO Statistical Brief #35. Available at https://www.wiego.org/sites/ default/files/publications/file/WIEGO Statistical Brief N35 Colombia English.pdf.
- Pereira A (2010) National Solid Waste Management Policy Brazil. English version translated by Pereira. Available at https://www.wiego.org/sites/

- default/files/resources/files/Pereira-Brazilian-Waste-Policy.pdf. **Original text available at** http://www.planalto.gov.br/ccivil_03/_ato2007-2010/2010/lei/l12305.htm.
- Samson M (2009) The politics of naming. In Samson M (ed.), Refusing to be Cast Aside: Waste Pickers Organising around the World. Women in Informal Employment: Globalizing and Organizing (WIEGO) Cambridge, MA, USA. Available at https://www.wiego.org/sites/default/files/publications/files/Samson-Refusingto-be-Cast-Aside-Wastepickers-Wiego-publication-English.pdf.
- Samson M (2020) Lessons from waste picker integration initiatives: Development of evidence-based guidelines to integrate waste pickers into south African municipal waste management systems. Technical Report: Integrating Reclaimers into our Understanding of the Recycling Economy. Pretoria, South Africa.
- Schroeder P (2020) Promoting a Just Transition to an Inclusive Circular Economy. Chatham House Research Paper April.
- Serrona KRB, Yu J, Aguinaldo E and Florece LM (2014) Developing a monitoring and evaluation framework to integrate and formalize the informal waste and recycling sector: The case of the Philippine National Framework Plan. Waste Management & Research 32(9), 882–895
- Shankar VK and Sahni R (2018) Waste pickers and the 'right to waste' in an Indian City. *Economic and Political Weekly* 53(48), 54–62.
- Stevis D and Felli R (2020) Planetary just transition? How inclusive and how just? Earth System Governance 6, 100065. https://doi.org/10.1016/j.esg.2020.100065
- Stoett P (2022) Plastic pollution: A global challenge in need of multi-level justice-centered solutions. One Earth, 5, 593–596. https://doi.org/10.1016/j. oneear.2022.05.017.
- **Terrell K and St Julien G** (2022) Discriminatory Outcomes of Industrial Air Permitting in Louisiana, United States. *Environmental Challenges* **10**, 1–13. https://doi.org/10.1016/j.envc.2022.100672.
- UNCTAD (2022) Total and Urban Population. UNCTAD Handbook of Statistics. Available at https://hbs.unctad.org/total-and-urban-population/#: ~:text=Urbanization%20continues&text=The%20share%20of%20urban% 20population,minority%20(35.3%20per%20cent) (accessed 19 January 2024).
- UNEP (2021) Neglected– Environmental Justice Impacts of Marine Litter and Plastic Pollution. United Nations Environment Programme. Available at https://wedocs.unep.org/bitstream/handle/20.500.11822/35417/ EJIPP.pdf.
- UNEP (2022a) UNEA Resolution 5/14 entitled "End plastic pollution: Towards an international legally binding instrument". UNEP/PP/OEWG/1/INF/1, 10th May. United Nations Environment Programme. Available at https://wedocs.unep.org/bitstream/handle/20.500.11822/39812/OEWG_PP_1_INF_1_UNEA %20resolution.pdf.
- UNEP (2022b) Report of the ad hoc open-ended working group to prepare for the work of the intergovernmental negotiating committee to develop an international legally binding instrument on plastic pollution, including in the marine environment. UNEP/PP/INC.1/INF/2, 8th September. United Nations Environment Programme. Available at https://wedocs.unep.org/bitstream/handle/20.500.11822/40675/K2221540%20-%20UNEP-PP-INC.1-INF-2%20-%20AMENDED%20ADVANCE.pdf?sequence=1&isAllowed=y.

- UNEP (2022c) Report of the intergovernmental negotiating committee to develop an international legally binding instrument on plastic pollution, including in the marine environment, on the work of its first session. UNEP/PP/INC.1/14*. 2nd March. United Nations Environment Programme. Available at https://wedocs.unep.org/bitstream/handle/20.500.11822/42282/INC1reportReissuedAdvance.pdf.
- UNEP (2023a) Potential options for elements towards an international legally binding instrument, based on a comprehensive approach that addresses the full life cycle of plastics as called for by United Nations Environment Assembly resolution 5/14. UNEP/PP/INC.2/4. 13th April. United Nations Environment Programme. Available at https://wedocs.unep.org/xmlui/bit stream/handle/20.500.11822/42190/UNEP-PP-INC.2-4%20English.pdf? sequence=13&isAllowed=y.
- UNEP (2023b) Report of the intergovernmental negotiating committee to develop an international legally binding instrument on plastic pollution, including in the marine environment, on the work of its second session. UNEP/PP/INC.2/5, 7th July. United Nations Environment Programme. Available at https://wedocs.unep.org/bitstream/handle/20.500.11822/ 42953/FinalINC2Report.pdf.
- UNEP (2023c) Zero draft text of the international legally binding instrument on plastic pollution, including in the marine environment. UNEP/PP/INC.3/4, 4th September. United Nations Environment Programme. Available at https://wedocs.unep.org/bitstream/handle/20.500.11822/43239/ZERO DRAFT.pdf.
- UNEP (2023d) Revised draft text of the international legally binding instrument on plastic pollution, including in the marine environment. UNEP/PP/ INC.4/3, 28th December. United Nations Environment Programme. Available at https://wedocs.unep.org/bitstream/handle/20.500.11822/44526/RevisedZeroDraftText.pdf.
- UN-Habitat and NIVA (2022) Leaving no one behind How a global agreement to end plastic pollution can enable just transition of the people informally collecting and recovering waste. Available at https://unhabitat.org/sites/default/files/2022/11/un-habitat_niva_report_leaving_no_one_behind_1.pdf.
- Velis C, Hardesty B, Cottom J and Wilcox C. (2022) Enabling the informal recycling sector to prevent plastic pollution and deliver an inclusive circular economy. *Environmental Science and Policy* 138, 20–25. https://doi. org/10.1016/j.envsci.2022.09.008
- WIEGO (2018) Violence and informal work. Briefing Note. May. Women in Informal Employment: Globalising and Organizing.
- WIEGO (2021) New Calculator reveals the Amount of Equivalent CO₂ mitigated by Waste Picker Activity. Available at: https://www.wiego.org/resources/new-calculator-reveals-amount-equivalentco2-mitigated-waste-picker-activity (accessed 16 October 2022).
- WIEGO (2023) Waste Pickers. Terms and Categories. Available at: https://www.wiego.org/waste-pickers (accessed 28 November 2023).
- World Bank (2021) What a Waste 2.0: A Global Snapshot of Solid Waste Management to 2050.
- Zapata Campos MJ, Carenzo S, Kain J-H, Oloko M, Reynosa JP and Zapata P (2021) Inclusive recycling movements: A green deep democracy from below. Environment and Urbanization 33(2), 579–598. https://doi.org/10.1177/ 0956247820967621

Annexes

Annex 1. Terminology related to waste pickers in key INC documents

Key documents	Elements related to just transition and waste pickers
UNEA Resolution 5/14: "End plastic pollution: Towards an international legally binding instrument"	"Recognising also the significant contribution made by workers in informal and cooperative settings to the collecting, sorting and recycling of plastics in many countries" and the need for considering "Lessons learned and best practices, including those from informal and cooperative settings"
UNEP/PP/INC.2/4 Potential options for elements towards an international legally binding instrument, based on a comprehensive approach that addresses the full life cycle of plastics as called for by United Nations Environment Assembly resolution 5/14	Possible core obligation 11 on "facilitating a just transition, including an inclusive transition of the informal waste sector". Options included refer to "the industry and affected workers, informal waste workers and affected communities, particularly in developing countries"; "informal waste picker cooperatives or associations"; "workers, including waste pickers"; informal waste sector; and informal waste pickers"
UNEP/PP/INC.3/4 Zero draft text of the international legally binding instrument on plastic pollution, including in the marine environment	Provision 12 on "Just transition" proposed provisions for promoting a "fair, equitable and inclusive transition for affected populations, with special consideration for women and vulnerable groups, including children and youth". This may include enabling policies and conditions for "improving working conditions for workers in the waste management sector", including for "workers in informal and cooperative settings" through legal recognition, protection, formalisation and integration (12e-f); training and skills development (12b-c); and dedicating EPR funds to improve infrastructure and livelihoods (12 g)

Sources: UNEP (2022) UNEP/PP/OEWG/1/INF/1. pp. 3-4; UNEP (2023) UNEP/PP/INC.2/4. p. 12; UNEP (2023) UNEP/PP/INC.3/4. p. 19.