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'Accept Half of Something, or Nothing at All?' Brazil's National Solid Waste Policy
and the Coalition Politics of a Blue-Brown Alliance

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of the requirements for the degree Master of Urban and
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by

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ABSTRACT OF THE THESIS

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Brazil’s 2010 *Política Nacional de Resíduos Sólidos* (National Solid Waste Management Policy, PNRS) was a landmark legislative victory for a social movement of waste pickers (workers who collect and re-sell discarded materials), who have organized to overcome conditions of exclusion and marginality. The PNRS addressed both social and environmental aspects of waste management: it formally recognized waste pickers and assigned greater financial responsibility to the private sector for environmentally sound stewardship of the waste it produces. The policy was an important win for waste pickers and urban environmentalists, who I argue formed a *blue-brown* coalition that together supported the policy. However, by most accounts the PNRS seems like an unlikely success story. Stalled in the National Congress for the two decades prior, the bill faced strong resistance from private sector interest groups.

Drawing from social movement theory concepts and using qualitative research methods collected through interviews and document analysis, this thesis interrogates what factors led to

the unlikely passage of the PNRS, and whether the law’s supporters were able to achieve in practice the policy changes that they worked to pass on paper. I argue that a co-occurrence of three phenomena—agitations from civil society actors, a change in political tides under President Luiz Inácio “Lula” da Silva, and a shifting political strategy by the private sector— together enabled the law’s passage. However, because of the influence of corporate actors on the legislative process and a shifting political landscape under Lula’s successor President Dilma Rousseff, the PNRS was not implemented in a manner consistent with the goals of the blue-brown coalition. This outcome created divisions between waste pickers and urban environmentalists over whether to accept the policy despite its shortcomings, or reject it entirely.

This thesis uses the case of the PNRS to illustrate the complicated prospect of achieving shared wins for labor and environmental interests. I analyze challenges to forming coalitions in the face of unfavorable political climates, the prospect of building labor-environment alliances, and obstacles to meaningful civil society participation in policy-making spaces. In sum, the thesis generates insights about the opportunities and challenges that face labor-environment coalitions, and how such coalitions may work to achieve shared policy goals that ensure a just and sustainable future.

The thesis of Suzanne Claire Caflisch is approved.

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LIST OF ACRONYMS

ABES	Associação Brasileira de Engenharia Sanitária e Ambiental (Brazilian Association of Sanitary and Environmental Engineers)
ABRELPE	Associação Brasileira de Empresas de Limpeza Pública e Resíduos Especiais (Brazilian Association of Urban Cleaning Companies)
ARZB	Aliança Resíduo Zero Brasil (Brazil Zero Waste Alliance)
ASSEMAE	Associação Nacional dos Serviços Municipais de Saneamento (National Association of Municipal Sanitation Services)
BNDES	Banco Nacional do Desenvolvimento (Brazilian Development Bank)
CBO	Classificação Brasileira de Ocupações (Brazilian Classification of Occupations)
CEMPRE	Compromisso Empresarial para Reciclagem (Business Commitment for Recycling)
CETESB	Companhia Ambiental do Estado de São Paulo (São Paulo State Environmental Company)
CIISC	Comitê Interministerial de Inclusão Social de Catadores (Inter-ministerial Committee for Social Inclusion of Catadores)
CIISCL	Comitê Interministerial de Inclusão Social de Catadores de Lixo (Inter-ministerial Committee for Social Inclusion of Catadores of Trash)
CNI	Confederação Nacional da Indústria (National Confederation of Industry)
CNMA	Congresso Nacional de Meio Ambiente (National Environmental Conference)
CONAMA	Conselho Nacional do Meio Ambiente (National Environmental Council)
CONSEMA	Conselho Estadual do Meio Ambiente (State Council for the Environment)
CSO	Civil society organization
CSR	Corporate social responsibility
CUT	Central Única dos Trabalhadores (Unified Workers' Central)
EPR	Extended producer responsibility
FAT	Fundo de Amparo ao Trabalhador (Worker Support Fund)
FHC	Fernando Henrique Cardoso

FIESP	Federação das Indústrias do Estado de São Paulo (Federation of Industries of the State of São Paulo)
FNRU	Fórum Nacional de Reforma Urbana (National Forum on Urban Reform)
FUNASA	Fundação Nacional de Saúde (National Health Foundation)
GAIA	Global Alliance for Incinerator Alternatives
GDP	Gross domestic product
GTT	Grupo de Trabalho Técnico (Technical Working Group)
IPEA	Instituto de Pesquisa Económica Aplicada (Institute of Applied Economic Research)
MBO	Member-based organization
MDS	Ministério do Desenvolvimento Social (Ministry of Social Development)
MMA	Ministério do Meio Ambiente (Ministry of the Environment)
MNCR	Movimento Nacional dos Catadores e Catadoras de Materiais Recicláveis (National Movement of Collectors of Recyclable Material)
MNRU	Movimento Nacional de Reforma Urbana (National Urban Reform Movement)
MST	Movimento dos Trabalhadores Rurais Sem Terra (Landless Workers' Movement)
MSW	Municipal solid waste
NGO	Non-governmental organization
OECD	Organization for Economic Co-operation and Development
OPEC	Organization of the Petroleum Exporting Countries
PCB	Polychlorinated biphenyl
PNRS	Política Nacional de Resíduos Sólidos (National Solid Waste Policy)
PMDB	Partido do Movimento Democrático do Brasil (Party of the Brazilian Democratic Movement)
PPP	Polluter pays principle
PSDB	Partido da Social Democracia Brasileira (Brazilian Social Democracy Party)
PT	Partido dos Trabalhadores (Workers' Party)
SENAES	Secretaria Nacional de Economia Solidária (Secretariat of Solidarity Economy)

SINIR	Sistema Nacional de Informações Sobre a Gestão dos Resíduos Sólidos (National Information System for Waste Management)
SNIS	Sistema Nacional de Informações sobre Saneamento (National Sanitation Information System)
UNICEF	United Nations Children's Fund
W&C Forum	Waste and Citizenship Forum
WIEGO	Women in Informal Employment: Globalizing and Organizing
WTE	Waste-to-energy
WWF	World Wildlife Fund

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1. WASTE: AN URBAN SOCIO-ENVIRONMENTAL STRUGGLE

Introduction

Alliances between workers and environmentalists are a growing area of focus for activists and scholars interested in a more sustainable future that prioritizes equity and social justice. Since many environmental issues can be traced back to the activities of industry, it is no surprise that workers and environmentalists frequently find themselves on opposite sides of policy debates. The instances where these actors find a common cause to work together, then, pose significant promise for making environmental policy that prioritizes the livelihoods of workers.

One such emblematic case of an alliance between environmentalists and a labor sector is that of waste pickers and environmentalists in Brazil, who formed a coalition to advocate for complementary policy goals. Waste pickers, also known as *catadores*, constitute one of the most indispensable and exploited workforces in the country. By collecting, sorting, and re-selling discarded materials, *catadores* provide ecological and sanitary services that improve the quality of urban life, ease the burden on landfills, and conserve raw resources, while self-creating employment for almost 1 million people. Their work finds a natural synergy with urban environmentalists concerned with urban sanitation and public health.

As part of their livelihoods, *catadores* endure social stigma, dangerous working conditions, and criminalization. In response to this marginalization, these workers have organized themselves into a national social movement, the *Movimento Nacional de Catadores de Materiais Recicláveis* (National Movement of Collectors of Recyclable Material, MNCR). From its inception, the MNCR depended on support and partnerships with Catholic clergy, academics, and politicians to advance the rights of waste pickers and achieve integration in waste systems managed by municipalities, the constitutionally mandated entities responsible for setting up waste management systems in the country. Collectively, organized *catadores* and

these allies built momentum for policies that would foster social inclusion and recognition from public officials. Despite opposition from some policymakers and private sector entities, these actors won several important policy victories in the 1990's and 2000's.

One such landmark victory of the movement was Brazil's 2010 *Política Nacional de Resíduos Sólidos* (National Solid Waste Policy, PNRS). By many accounts, this policy stands as a model for other countries with large populations of informal waste pickers. With the PNRS, Brazil made waste management a matter of national policy, where it had previously been an issue under local oversight. The PNRS contains a number of provisions recognizing and supporting waste picker cooperatives, and provisions for environmentally-sound management of waste. This includes mandating selective collection, which entails collecting waste in a manner that segregates recyclables and non-recyclables. More significant still, in its original design the law intended to hold corporate entities fiscally responsible for stewardship of their own waste. Known as *extended producer responsibility* (EPR), this policy framework is consistent with the notion of "polluter pays", or making actors responsible for bearing the costs of managing their own pollution, to prevent environmental and human health harms.

As waste pickers and urban environmentalists worked together to pass the law, I argue that they formed a *blue-brown coalition*, with blue connoting the MNCR and brown connoting environmentalists concerned with *urban sanitation efforts*. This label extends the well-established concept of *blue-green* coalitions between workers and environmentalists interested in *non-urban ecologies*. The two-pronged environmental and social agenda of the blue-brown coalition built on Brazil's long tradition of *socio-environmentalism*, or an approach to environmental policy that prioritizes the needs and livelihoods of vulnerable communities or workers. Waste pickers and urban environmentalists found a window of political opportunity to achieve their policy goals during the presidential administration of Luiz Inácio "Lula" da Silva, who adopted an explicit commitment to principles of social justice and participatory governance

that privileged social movements. The PNRS was signed into law in 2010, with the endorsement of private sector producers who held significant power in the legislature.

By all accounts, this policy seemed like an unlikely victory in the face of a powerful private sector that had obstructed the advance of the legislation for decades. More surprising still is the fact that only five years following the passage of the PNRS, the coalition of environmentalists and waste pickers found itself disagreeing over whether to endorse the policy at all. How did these actors manage to achieve the passage of a law that faced intense opposition from industry? And how did a powerful coalition that once wielded enough political influence to pass a contentious policy end up fractured today, after the law's successful passage?

These two phenomena—the unlikely passage of the PNRS and the fractures in a seemingly synergistic blue-brown coalition—are the focus of this thesis. Together, these puzzles provoke two research questions:

1. What factors led to the unlikely passage of the PNRS?
2. Were the proponents of the law able to achieve in practice the policy changes that they worked to pass on paper?

In order to answer the first research question, I trace the progress of the policy as it evolved in Brazil's federal Chamber of Deputies. I will argue that the PNRS eventually passed due to a co-occurrence of three factors. First, bottom-up agitations from the waste picker movement and its civil society allies put pressure on policy-makers to move a national waste policy forward. Second, a change of political tides at the federal executive level with the election of President Lula opened a window of political opportunity to advancing a socio-environmental agenda. Third, the private sector shifted its political strategy from one of obstructionism to corporate social responsibility (CSR), and endeavored to pass the law on favorable terms instead of resisting its advance altogether. Hence, while the PNRS was in many ways a historic victory for the cause of waste pickers, it was also a political calculation on the part of industry, which found itself facing pressure from international environmental movements and in an less-than-

favorable political moment under President Lula. Given these constraints, the private sector made a deliberate choice to support the advance of this policy, throwing its weight strategically behind the agenda of waste picker inclusion while avoiding responsibility for financing municipal waste collections, which would have posed a significant monetary burden.

To answer the second research question, the thesis shifts forward in time to analyze the circumstances that unfolded after the PNRS passed, specifically, the law's implementation process that used sectoral agreements to establish industry responsibility for post-consumption stewardship of its waste products. Even though the PNRS passed, private sector interests played a significant role in shaping the law's language, and also implemented the policy in a way that privileged their interests. I will show that the law's language was structured in a vague and at times contradictory manner that creates confusion over which actor is to be held financially responsible for various aspects of the waste management chain. This includes the provision of "shared responsibility" for managing waste throughout its life cycle. Under the logic of shared responsibility, the business sector successfully excused itself from financing municipalities' waste collection activities. Without these financial commitments, cities found themselves without resources to implement better waste collection services, a disappointing outcome for urban environmentalists who had hoped the PNRS would obligate private producers to pay for these costs. I conclude that in light of these outcomes, the blue-brown coalition was not able to achieve the shared win that it sought.

After answering the second research question, I will then analyze the effects on the blue-brown coalition that supported the law. The waste picker movement, while aware of the limitations of the PNRS, chose its position towards the PNRS by considering the wider political landscape of the moment. Under Lula, the waste picker movement had enjoyed a closer relationship with the federal government. But by the mid-2010's, under President Dilma Rousseff, social movements like the MNCR found themselves lacking the same bastion of allies in high places. As a result, the waste picker movement made a political calculation to support

the PNRS, which at minimum brought recognition and a modicum of investment in waste picker cooperatives. These decisions had negative effects on the blue-brown coalition, which had formerly taken a unified stance towards the PNRS. While many environmentalists reject the agreement for falling short of EPR, waste picker cooperatives accept the limited corporate assistance provided through the agreement and have formed partnerships with these private sector actors. By some accounts, this has strained a coalition that once stood united in its demands from government and industry. One interviewee aptly characterizes the division with the question “is it better to have nothing or to have half of something?” (W. Ribeiro 2021). Thus, the case of the PNRS appears to shed light on the complicated prospect of achieving more sustainable and inclusive systems of waste management in Brazil.

This thesis uses the case of Brazil’s PNRS to generate insights about the nature of coalitions between labor and environmental movements. Drawing from social movement theory concepts and using qualitative data collected from key informant interviews and document analysis, I interrogate the confluence of factors that led to the PNRS’s passage, and whether the labor-environment coalition that pushed the law forward was able to achieve the shared wins that it strove for. In doing so, I will assess a wide range of inter-connected dynamics related to socio-environmental policy-making, including the challenge of forming coalitions in unfavorable political climates, the prospect of building labor-environment alliances, and civil society participation in policy-making.

Thesis organization

The thesis traces the development of the PNRS chronologically, through its formation and its implementation. The rest of the introduction presents my data collection strategy and methodology for the project, provides a brief historical context that forms a foundation for the case study, and presents concepts from scholarly literature that are relevant to my analysis. In Chapter Two, I begin my empirical analysis of the formulation of a national waste policy, noting

the confluence of agitations from civil society actors, changing political opportunities under President Lula's administration, and shifting strategies in the private sector. In Chapter Three I elaborate the principles and instruments of the PNRS, noting the vague and contradictory elements of this policy that set up future conflict. In Chapter Four I describe the PNRS's implementation, with particular focus on sectoral agreements following the law's passage that determined the private sector's responsibilities for managing waste and for supporting waste picker cooperatives. Here, I chronicle a wedge between the waste picker agenda and environmentalist agenda, as each faced its own separate struggle for resources. I note the state of the blue-brown coalition today, which paradoxically has taken on a more solidified form while also facing new internal divisions. I conclude the chapter by opening up a broader discussion of other factors that may have eventually presented challenges to the longevity of the coalition. Finally, in Chapter Five I discuss Brazil's current situation under Bolsonaro, which has reinforced some of the underlying political circumstances that weakened the coalition. I conclude by offering three reflections related to socio-environmental policy-making: the nature of coalition-building in the face of unfavorable political circumstances, the possibility of forming labor-environment alliances, and civil society participation in public policy making.

Data collection and methodology

Methodology

My thesis relies on qualitative methods in order to answer its questions. Quantitative methods are difficult to apply to a question on Brazil's informal economy, particularly waste picker organizations, because it is difficult to collect rigorous data on a population of largely informal workers. Qualitative methods are also appropriate for this project because they allow an iterative process that makes possible more efficient hypothesis development and testing, as described by Becker in the article "How to Find Out How to Do Qualitative Research". By letting

what is learned at T1 inform the data collection conducted at T2 and interpreting data as they gather it, qualitative researchers can “investigate new leads, apply useful theoretical ideas to the (sometimes unexpected) evidence they gather; and, in other ways, conduct a systematic and rigorous scientific investigation” (Becker 2009, 548). This is true for my thesis, in which I use inductive reasoning to form and answer my research questions. With this methodology, researchers make specific observations that lead to broader theories about observed phenomena, consistent with a case study approach. For this project, I observe the development and implementation of a federal policy governing waste management, and then used this information to build generalizations and claims about the factors that led to this law’s passage and the conflicts that arose around its implementation. I then further generalize this information to draw insights on the nature of labor-environment coalitions, such as the one that supported this law.

Drawing from the work of John Gerring, this research uses a single case study approach to analyze the nature of coalitions between labor and environmental groups. A case study is an “intensive study of a single unit for the purpose of understanding a larger class of (similar) units” (Gerring 2004, 342). In this case, the single unit is the National Solid Waste Policy. By studying the factors that allowed for the PNRS to pass, as well as the impact of the policy after its implementation, I draw generalizable conclusions about the nature of coalitions between labor and environmental interests, and the challenges they face in achieving shared socio-environmental wins for a more inclusive and environmentally sustainable future.

Primary data for this thesis comes from two sources. The first is in-depth qualitative interviews with key informants: that is, experts or professionals with specific knowledge of subject matter relevant to my research questions. Second, I draw data from document analysis. I will elaborate further on the data collection process below.

Data collection

I began this research project in the midst of the COVID-19 pandemic. Unsurprisingly, the pandemic obstructed strategies for data collection, and therefore complicated my choice of research questions. I had originally hoped to travel to Brazil and collect data via in-person interviews, archival research at one of the various non-governmental organizations (NGOs) I contacted, and attending hearings and other in-person gatherings. Instead, I found myself quarantining in California, thousands of miles removed from the people and events I was studying. When initially planning my thesis project, I was interested in studying the factors that influence waste pickers' decisions to join workers cooperatives, versus remaining informally employed and unaffiliated with a member-based organization (MBO). Answering this question would have required contact with members of cooperatives and catadores working independently, a prospect that was out of reach during the shelter-in-place.

In light of limited options for fieldwork, I designed my project to be answerable via the methods I had available. I redefined my research questions to focus on a different set of actors: instead of studying individual waste pickers, I posed a question about a federal policy that affected the waste picker movement as a whole (as well as its environmentalist allies). Thus my research subjects became organizations and movements like the MNCR, urban environmental organizations, and industry associations. The data collection approach similarly benefitted from this shift: my sample population became the heads of organizations, attorneys, and government employees, who I judged would have a higher chance of responding to my cold emails, would have access to Wi-Fi and Zoom software, and could make time in their workdays to explain the complex ins and outs of the PNRS to a foreigner. Additionally, I used these connections to accumulate written materials that documented the proceedings I was interested in: for example, news articles that chronicled the development of the National Policy, PowerPoint presentations on waste prepared by environmentalist organizations, and minutes from meetings held in the federal Chamber of Deputies that captured the speeches given by industry association

representatives. While I may have missed the chance to observe certain dynamics that would have been apparent from an in-person data collection approach, this fieldwork was sufficient to triangulate my findings and come to robust conclusions about the state of the labor-environment alliance I studied. I will further describe my two sources of data below.

Key Informant Interviews

My interview subjects all fell under the category of *key informants*, meaning people who “know what is going on in the community” (UCLA, n.d.). This designation may include community leaders, professionals, or others who possess firsthand knowledge about a particular subject of study. I used a snowball sampling interview technique, meaning at the end of each interviewee I asked the respondent to recommend others to speak to. I chose this method because I anticipated it would be difficult to receive a high response rate from cold-calling or emailing organizational staff and municipal employees in Brazil, given my lack of direct proximity. This allowed me to talk to people from a wide range of backgrounds, and provided diverse perspectives on my research questions.

I conducted a total of 31 interviews for this project (see Appendix 1 for a list of interview subjects). Interview length averaged 71 minutes, and followed a semi-structured format where subjects responded to a standardized questionnaire, with additional questions tailored to their areas of expertise, and follow-up questions posed depending on what was discussed during the call. Generally, many interviewees were affiliated with or worked for one of the following types of organizations:

- A waste picker-led organization
- An organization focused on urban environmental issues
- An organization representing municipalities
- A state or federal government agency
- The producer sector
- An academic institution

Two interviewees requested total anonymity (although one of these two allowed me to reveal their organizational affiliation). I also anonymized sensitive information in cases where I deemed it necessary or when an interviewee specifically requested that a quote not be attributed to them.

All interviews were conducted over Zoom or other video conferencing software. I conducted 22 interviews in Portuguese, and 9 in English. I took hand-written notes during the interviews, and audio-recorded each interview with the subject's consent. Interview audio files were transcribed and translated by two Brazilian translators who speak native Portuguese, and I then analyzed the Portuguese and English transcripts. This involved reading and coding the transcripts using the qualitative analysis software ATLAS.ti, employing a series of 70 codes grouped under a series of themes (see Appendix 2 for a list of themes and codes). I designed this code list iteratively, starting with an initial set of basic codes and refining and adding new codes to the list as the process moved forward.

Document Analysis

Documents served as the second component of primary data. I analyzed approximately 16 documents, most of which were provided or referenced by interviewees during our conversations. The types of documents I analyzed generally fell under the following broad categories:

- Legal documents (bills, laws, etc.)
- Journalism and news articles
- Transcriptions of government hearings and public audiences in Congress
- PowerPoint presentations given in academic or organizational settings

Most documents were written in Portuguese. I translated the documents manually, using dictionaries and translation software when necessary. I read and coded the documents using the same methodology as the interview case studies. I primarily used these documents to

supplement and triangulate information gathered from interviews, and augment my analysis of legal proceedings as the PNRS was discussed in the Chamber of Deputies and implemented.

Project limitations

The data collection techniques above have several limitations. First, my snowball sampling technique did not allow me to speak with representatives from solid waste management companies, who are significant actors in the landscape of municipal waste management and whose perspective differs from packaging producers and manufacturers. Furthermore, my interviews skew towards *leaders* of organizations, due to the comparative ease of reaching these individuals by email and arranging video conversations over Zoom. With regard to the MNCR, I did not have the opportunity to speak to many individuals who are actually engaged in the profession of waste picking. I acknowledge that catadores working in particular cooperatives, as opposed to leaders of the movement as a whole, might have provided different accounts of the effect of the PNRS and the Sectoral Agreement on their livelihoods. To address this limitation, I have tried to analyze the activities and status of the *movement as a whole*, rather than the livelihoods of individual waste pickers or specific cooperatives (although I acknowledge that the welfare of the movement is inextricably linked to that of its members).

Much like the limitations of the snowball interview sample, I was not able to gather documents in a systematized manner, such as by looking at an archive of transcripts of government hearings. Instead, I relied on documents sent to me by interview respondents, and procured documents that I could find on the internet by searching government websites. Because of the methods employed, I have likely missed important milestones in the development of the PNRS. I have tried to mitigate this possibility by triangulating information collected from one source with other sources whenever possible.

Finally, my data collection efforts may have been limited by the sensitive nature of the subject matter at hand. My research questions probe around important relationships and

political dynamics with vast financial stakes. The complexities surrounding municipal waste management often remain out of the public eye, yet for catadores waste is a means of livelihood and for waste management companies, waste elicits lucrative contracts with public authorities. The same delicacy applies to studying an active coalition that works on achieving shared policy goals: these are complex relationships with livelihoods at stake. I was conscious of these controversies when I spoke with interview subjects, and recognize the possibility that interview subjects may have decided not to share certain sensitive information with me. Thus the data I gathered might not represent the entire picture of the PNRS, or may inaccurately represent certain details.

Tracing histories of the PT, catadores, and environmentalism

In this section I will discuss three historical trajectories relevant to the issue of inclusive waste policy in Brazil: the history of the left-wing political party *Partido dos Trabalhadores* (Workers' Party, PT), catador organizing at the federal and state levels, and the trajectory of environmental policy in Brazil leading up to the PNRS.

The rise of the Partido dos Trabalhadores (PT)

Initially founded as a labor movement, the PT grew from a large group of unions led by Luiz Inácio Lula da Silva, a middle-aged metal worker and trade union leader born into poverty in the rural northeast of Brazil (French and Fortes 2005, 13–14). These unions formed a coalition with activists from other social movements, which included Marxist-Leninist intellectuals, Catholics linked to traditions of liberation theology, and other social reformers. Mutual opposition to the military dictatorship that governed Brazil from 1964 to 1985, combined with shared strategies of grassroots mobilization, produced a socialist party that challenged the nation's legacy of inequality and labor exploitation.

More than any existing party, the PT fashioned its identity on “radical devotion to a bottom-up style of participatory politics that rejected limited... notions of democracy” (French and Fortes 2005, 14). Starting at the municipal and state levels, the party won elections across Brazil on a platform of sustainable economic growth, social justice, and inclusive democracy. Koonings et al. describe the PT’s approach as one focused on achieving “socially just democracy by working within the bounds of an electoral democracy” (Koonings, de Castro, and Wiesebron 2014, 3–4). At the sub-national level, the PT channeled this platform into providing public goods to socially excluded sectors of society, forming alliances with pre-existing social movements, and supporting “innovative experiments” in governance strategies such as participatory budgeting systems.

Lula was the “iconic co-founder and undisputed leader” of the Workers’ Party (Koonings, de Castro, and Wiesebron 2014, 3). John French describes how Lula and the radical social movement that he built achieved “a transformative electoral politics of consistency and achievement” (French 2020, 3). Paul Singer coins the word *Lulismo* to refer to “a social contract built on upward mobility for the poor” (Power 2014, 24). Lula symbolized a critique of authoritarianism, a bid for bottom-up participation in governance, a reconstituted imagination of citizenship, and an organized civil society (French 2020). However, *Lulismo* contains certain contradictions: for one, as president, Lula made notable concessions to a neoliberal agenda that the Workers’ Party had long-eschewed. Shedding the radicalism of the PT’s earlier years, the Lula administration embraced economic orthodoxy (Anderson 2019, 70), governing in coalition through broad inter-party alliances with the center-right wing PMDB party. Paul Singer notes that there has never been a true PT government in Brazil, but rather a series of coalition governments with the PT holding the presidency (A. Singer 2012). The consequence was to create distance from the left-wing social movements that had served as the party’s historic base, such as workers’ unions and other sects of civil society (Power 2014, 26). One example was the waste picker movement, which gained much of its strength at the state and municipal levels as a

result of the PT's rise to power. I will next address the beginnings of the waste picking profession and the subsequent growth of a waste picker movement, highlighting its linkages to the Workers' Party.

The trajectory of catador organizing

The second half of the 20th century saw vast changes in the global political economy, with shifts towards free trade and market-oriented reforms. These neoliberal trends had significant influence on the growth of Brazil's catador labor force. In many parts of the Global South, impoverished migrants who had moved to cities for industry jobs in the 1970's found themselves on a rapid backslide, thanks to cheaper imported goods that stifled domestic manufacturing.¹ Meanwhile, as the state slashed domestic spending, waste collection services were among the public utilities that suffered. In cities with insufficient waste collection infrastructure, individuals stepped in to informally collect, sort, and sell reclaimed materials back into the chain of production. Today, waste constitutes a livelihood and means of income for Brazil's estimated one million catadores (S. Dias 2016, 375). However, catadores have historically faced many forms of disenfranchisement: this includes social stigma, low pay, hazardous working conditions, a lack of rights and recognition by the state, and outright criminalization for their activities (Gutberlet 2012, 24). Catadores' contributions to municipal waste management and sustainability have long been ignored, or else viewed as unhygienic and backwards livelihoods (Arfvidsson et al. 2017, 110). Governments considered waste pickers a "source of shame" for "modern" cities, and frequently eliminated waste pickers from city centers by force (Baudouin et al. 2010, 30–31).

¹ During the prior period of import substitution industrialization in the 1950's-1960's, 43 million rural Brazilians moved to urban areas for employment in emerging industries (Wagner and Ward 1980, 255; Logan 2015). In 1940, agriculture employed 67% of the labor force and industry employed 13%. By 1970, agriculture employed only 44% of the labor force, while industry employed 18% (Wagner 1980).

What was eventually to become a national movement of waste pickers started from humble origins, with small cooperatives of workers in various localities across the country. From its very inception, Brazil's waste picker movement relied on coalitions with a broad base of partners to build capacity and advance its goals. The first catador organizations appeared in the late 1980's and early 1990's in the cities of Porto Alegre, São Paulo, and Belo Horizonte, with assistance from the Catholic Church, non-governmental organizations (NGOs), and universities (S. Dias 2009, 86). In the 1990's these cooperatives found affinity with the growing PT party, whose transformative governance project allowed municipalities more autonomy to support social agendas. In her dissertation on multi-stakeholder forums and the waste picker movement, scholar and activist Sonia Dias traces the history of the evolution of the waste picker movement and its struggle for recognition from public authorities. With the assistance of civil society partners, cooperatives organized to demand the right to work in the city recovering recyclable materials (S. Dias 2009, 144).

Over the last four decades, waste pickers across Brazil have organized into a cohesive social movement, the National Movement of Waste Pickers (MNCR), that demands recognition from public authorities and integration into municipal waste management systems. Bolstered by Brazil's "pink tide" of social democratic reforms under the left-wing PT, catadores in Brazil have forged the "strongest movement of waste pickers in the world" over the past thirty years (Samson 2009, 63; Medina 2007, 82; Evans and Sewell Jr 2013). Waste picker associations engage in forums, seminars, public debates, local demonstrations, and distribute informational pamphlets. Under the PT administrations, waste pickers won substantial policy victories: this includes official recognition of waste picking as a legitimate profession in 2002, when the Ministry of Labor and Employment added catadores to the official classification of occupations (CBOs). In 2007, the federal government passed the National Sanitation Law 11.445/2007, which allows municipalities to hire waste picker cooperatives for services with no need to engage in typical bidding processes (MNCR 2017). This law simplified the process for municipalities to

hire waste pickers, and ensured that waste pickers did not have to compete with private service providers (Manetti 2021; MNCR 2010). All of these policies represented significant advances for the waste picker movement, bolstered by its allies in government and civil society.

Brazil's evolving environmental policy

After the end of World War II, Brazil saw several decades of developmentalist policies, with successive presidents spurring industrial growth and economic autonomy. As Brazil joined the world economy, an “optimistic developmentalist narrative of technological progress” took hold, with expansion of the steel and petrochemical industries (Hochstetler and Keck 2007, 190–91). The city of Cubatão, just outside the São Paulo metropolis, was the epicenter of this development, and by 1980 the city had become the headquarters of twenty-three major industries (Hochstetler and Keck 2007, 191). However, it earned the nickname “Valley of Death” in the 1960’s, as pollutant emissions reached 250 tons per day and mercury levels in the city’s neighboring Santos estuary hit twenty-five times the recommended maximum level. Residents engaged in mass mobilizations to bring attention to the dangerous living conditions, lack of social investment, and health risks present in the community, attracting attention from international news media, and more importantly, elite environmental associations that formed alliances with community associations to bring attention to the environmental crisis (Hochstetler and Keck 2007, 194). Political leaders soon joined the cause, and the São Paulo state pollution agency the *Companhia de Tecnologia de Saneamento Ambiental de Brasil* (Environmental Agency of State of São Paulo, CETESB) opened new programs that brought communities together with public authorities to address pollution issues. Keck and Hochstetler write about the multi-pronged legacy of Cubatão for Brazil’s environmental movement. First, the disaster prompted new state-society linkages on matters of environmental policy, with civil society organizations participating in environmental activism. The crisis precipitated the emergence of national and state-level councils dedicated to regulating environmentally harmful

emissions (Hochstetler and Keck 2007, 200–202). This includes the *Conselho Nacional do Meio Ambiente* (the National Council on the Environment, CONAMA), which was one of the primary national forums that debated a national solid waste policy starting in the 1990's.² It also includes state agencies like São Paulo's *Conselho Estadual do Meio Ambiente* (State Council for the Environment, CONSEMA), which was created in 1983 and continues to lead anti-pollution efforts in the state. Perhaps most importantly, the disaster at Cubatão challenged Brazil's developmentalist project, demonstrating the environmental and social consequences of industrial progress, at a pivotal moment in Brazil's democratization.

The 1980's and 1990's saw an ideological shift in attitudes towards the state of the environment. Article 225 of Brazil's Constitution of 1988 declares that "everyone has the right to an ecologically balanced environment," and identifies the environment as "a public good for the people's use" (Rosenn 2017). Under the Constitution all three levels of local, state, and federal government as well as society have a responsibility to preserve the environment for future generations. Furthermore, international environmental organizations and foundations like Greenpeace International became more visible in Brazil after 1992. These actors put significant funding into Amazon conservation, urban pollution activities, and community-centered environmental protection campaigns (Hochstetler and Keck 2007, 129).

In the 1990's Brazil showed "bold signs of commitment to sustainable development" with the end of the authoritarian period (de Castro 2014, 232–33). The nation hosted the 1992 United Nations Conference on Environment and Development (also known as the Earth Summit) in Rio de Janeiro, which brought actors from various social movements into a "web of interactions" with one another (Hochstetler and Keck 2007, 139). The Earth Summit bolstered closer connections between domestic environmentalism and international environmental

² The National Environmental Council. Housed within the Ministry of the Environment, CONAMA is composed of civil society and appointed officials, and allows citizen participation in its discussions. CONAMA can pass binding resolutions that carry the same weight of law (V. Ribeiro 2021).

networks, and catalyzed a “third wave” in Brazil’s environmental politics. As Chapter Two will show, this new environmental wave also sparked important action from the private sector, which responded to increased environmentalist scrutiny by promoting a discourse of corporate social responsibility (CSR).

During the 1990’s, Brazil also created a Ministry of the Environment (MMA), and introducing new environmental legislation like the Environmental Crimes Law of 1998 under President Fernando Henrique Cardoso (FHC). Nevertheless, Fábio de Castro characterizes the neoliberal position of FHC’s administration, which committed to deregulating markets and privatizing industries, and whose environmental policy only took shape in response to demands of social movements and the international environmental community (de Castro 2014, 234; Anderson 2019, 33). Subsequently, the Lula administration made stronger commitments to socio-environmental movements, integrating an explicit social justice agenda into its platform and providing more state support for marginalized groups like the Amazonian *seringueiro* workforce (to be discussed in the literature review). However, tensions lingered between the agendas of economic growth and environmental protection: Lula’s MMA incurred resistance from powerful agricultural business interests, who challenged its regulations and won concessions from Lula. The MMA grew more isolated from government over the terms of both Lula and Dilma, the latter of whom pushed for environmentally questionable infrastructure projects like hydroelectric power plants (de Castro 2014, 235). Fábio de Castro characterizes this contradiction as a tension between rhetoric and practices of both presidents’ sustainability policies. These contradictions would play out on various fronts of environmental policy issues, including the question of waste management.

Literature review

In this section I will outline several bodies of literature that have bearing on the subject matter explored in this thesis, and serve as frameworks for understanding the case study I will

analyze. The first of these literatures is social movement theory, which encompasses relevant concepts like political opportunity structures and repertoires of contention. After reviewing scholarship on each of these areas, I will discuss literature on coalition building, including labor-environment alliances, which the case study of this thesis exemplifies. I will then discuss notions of the green economy and green development, paying particular attention to the linkage between the green economy and informal work like waste picking. Finally, I will examine the idea of socio-environmentalism, an inclusive vision of environmentalism that prioritizes the livelihoods of working people.

Social movement theory

Social movement theory offers several useful concepts for my analysis of the catadores' social movement. First, I will offer a definition of social movements. The political scientist Sidney Tarrow defines social movements as “collective challenges by people with common purposes and solidarity in sustained interaction with elites, opponents and authorities” (Tarrow 2011, 3–4). Tarrow breaks down this definition by its four properties: collective challenge, which describes disruptive action against authorities; common purpose, which means common claims against opponents; solidarity, which describes participants' recognition of shared interests; and sustained collective action, which distinguishes a movement from a riot or rebellion.

Social movements draw on external resources like opportunities, conventions, shared understandings, and social networks to organize collective action (Tarrow 2011, 17). Political opportunity represents the most important of these external resources. Tarrow defines political opportunity structure as “consistent—but not necessarily formal or permanent—dimensions of the political environment that provide incentives for people to undertake collective action by affecting their expectations for success or failure” (Tarrow 2011, 85). Changes in political opportunity structures are, Tarrow argues, far more important determinants of mobilization than the depth of a group's grievances (Tarrow 2011, 17). For example, collective violence in

France since 1830 has been found to be more closely correlated with electoral opportunities and regime change than economic hardships or other kinds of suffering (Snyder and Tilly 1972). Tarrow identifies four changes in opportunity structures that provide opportunities for movements to mobilize, three of which are relevant to Brazil's waste picker movement. First is access to spaces of participation, which occurs when individuals gain greater opportunities to engage in actions of contention, which could include petitions, raising issues in public hearings, commentary via media and social media, or graffiti. Second is shifts in governing alignments, which can include the ascension of opposition parties. These shifts in political power can cause a challenger to embrace a particular movement agenda as a way to secure political support (Valelly 1993; Tarrow 2011, 87). For example, Peruvian peasants mobilized through land occupations during moments of the state's political instability (Hobsbawm 1974). Finally, influential allies can encourage a movement to take collective action by providing greater capacity to challenge their opponents (Kriesi et al. 1992). When present, such alliances have been found to correlate with greater chances of success for the movement (Gamson 1975; Steedly and Foley 1979). All three of these dimensions of political opportunity showed up in the years leading up to the passage of the PNRS. Waste pickers gained greater access to participatory spaces when President Lula assumed office in 2003. From the moderate conservatism of the previous Cardoso administration, the PT shifted the executive branch further left, creating greater openings for the demands asserted by waste pickers than its predecessors. Finally, as will be discussed in Chapter Three, waste pickers constructed strong alliances with civil society partners which was a key factor in building power.

Tarrow emphasizes that movements both "seize and make" political opportunities, taking advantage of those that arise as well as creating opportunities for themselves (Tarrow 2011, 81). By the very act of mobilizing, a movement can catalyze changes in its opportunity structure that break down additional barriers (Tarrow 2011, 96–97). McAdam echoes Tarrow's claim, noting that challengers can engage in collective action and then innovate or escalate their

activities, “creating new opportunities and reaching new publics” (McAdam 1983). For example, movements may build coalitions with other social actors, or may expand their *repertoires of contention* (Tarrow 2011, 96). For the rest of this section I will expand on the concept of repertoires of contention, and in the following section I will address the function of coalition-building for social movement actors.

Charles Tilly coined the term *repertoires of contention* to refer to “the whole set of means [a group] has for making claims of different kinds on different individuals or groups” (Tilly 1992, 2). Tilly describes the repertoire as both a cultural and structural concept, meaning the term both describes all of the actions a group knows how to do when engaged in conflict with others, and also what outsiders think they will do. Contentious repertoires are “the familiar forms of action that are known by both potential challengers and their opponents”, and so include but are not limited to petitions, strikes, demonstrations, barricades, and urban insurrection (Tarrow 2011, 19).

As the term “repertoires of contention” suggests, Tilly and other collective action scholars have framed social movement repertoires as largely centered on protest and conflict, and have focused their attention on cases from Western Europe and North America to demonstrate the concept (Giugni and Passy 1998; Hanagan 1998; Goldstone 2003). However, the Brazilian context challenges this conflict-centered theory, as civil society actors have collaborated with and even worked within the state to build their movements (Abers and Bülow 2011, 78). In their book chapter “Changing Repertoires of State-Society Interaction”, Abers et al. examine the repertoires that social movements may use to achieve their goals. They coin the term *repertoires of state-society interaction* to describe a broader range of relationships that may exist between the state and civil society (particularly movements), not all of which may be conflictual (Abers, Serafim, and Tatagiba 2014, 38). Brazil, they emphasize, is a country with many participatory governance institutions, and by thinking about the different relationships between governments and civil society actors, it becomes possible to “open up the black box of

the state” and identify new repertoires (Abers, Serafim, and Tatagiba 2014, 38). Social movements, Abers et al. argue, have “transform[ed] the state itself into a space for political activism” through several avenues: first, through protests and direct action (consistent with Tilly’s original repertoires of contention concept), but also by taking advantage of institutionalized channels of participation like public meetings, and through a *politics of proximity*. This concept describes personal relationships between the government and civil society, which allows activists and social movement leaders to circumvent official channels and acquire privileged access to decision-makers. This can look like lobbying, or at times even patron-client relationships (Abers, Serafim, and Tatagiba 2014, 43). A final example of repertoires of interaction is when social movement affiliates join the bureaucracy in order to advance movement goals. Abers et al. note the feedback effects present when social movement leaders join a bureaucracy: for example, this event would enable greater politics of proximity between activist government employees and their social movement colleagues (Abers, Serafim, and Tatagiba 2014, 44). My analysis of waste pickers will engage with these repertoires of interaction when it analyzes the social movement formed by waste pickers and their coalition allies in the years preceding the PNRS.

Coalitions and coalition-building

Throughout my thesis, I will rely on literature describing the nature of movement coalitions, since this provides useful insight on the collective action strategies used by the waste picker movement. In her discussion of coalition building in labor movements, Carola Frege defines coalitions as “discrete, intermittent, or continuous joint activity in pursuit of shared or common goals” (Frege, Heery, and Turner 2018, 123). Nella Van Dyke and Bryan Amos offer another definition that emphasizes resource-sharing: coalitions to them are “organizational collaborations wherein distinct organizations pool resources to pursue shared goals” (Van Dyke and Amos 2017, 1).

Coalitions form because of a variety of causal factors. Frege et al. characterize two types of pressure that move unions toward coalitions: they can either “push” for coalitions, or be “pulled” towards coalition (Frege, Heery, and Turner 2018, 126–29). Labor organizations may push for coalitions as they broaden their platforms to encompass multiple issue areas, like antifascism and environmental protection (Borland 2008; B. K. Obach 2004a; Van Dyke 2003). On the other end, unions may be pulled into coalitions when there is a high availability of potential coalition partners from other sectors of civil society. Additionally, labor organizations may form coalitions when political opportunity structures encourage them to do so, particularly if there are “multiple points of access to policy” that various stakeholders might take advantage of (Diaz-Veizades and Chang 1996; Lee 2011; Maney 2000). Political threats, such as the presence of antagonistic actors, may also inspire coalitions, as organizations form alliances to oppose these challenges (Bandy and Smith 2005; Grossman 2001; Kadivar 2013).

Other factors may increase the likelihood that a union will form a coalition. This includes pre-existing social ties across different organizations, particularly the presence of “bridge builders”, or individuals with long histories of interaction who can act as coalition brokers (Beamish and Luebbbers 2009; Guenther 2010). Also, clear division of labor and professional leaders may make it possible for organizations to reach out to potential partners (conversely, movements with a non-hierarchical structure may face organizational challenges when attempting to make these connections) (Borland 2008; Shaffer 2000). Shared ideology and culture plays a significant role in influencing coalitions to form (McCammon and Van Dyke 2010; Van Dyke and Amos 2017).

Scholars broadly agree that coalitions are vital to strengthen labor organizations, as they offer access to various resources and different kinds of power. Frege et al. classify five types of resources that coalitions offer a labor organization: financial resources, enhanced communication with workers, specialist expertise, a higher degree of legitimacy for the union’s activities, and enhanced capacity for mobilization. These different resources fit within the types

of power that Amanda Tattersall lays out in her article on union-community coalitions. She argues that coalitions provide three types of power to labor organizations: instrumental power (which encompasses Frege's financial and physical resources as well as supporters), legitimizing power (giving the activities of the organization a sense of justice), and revitalizing power (whereby unions themselves may become stronger) (Tattersall 2005, 98).

Coalitions can be compared across several different axes, and for the purposes of my analysis I will examine three such attributes: heterogeneity of partners, degree of explicit articulation of coalition, and the depth of coalitions. In analyzing the power of social movement coalitions, Tarrow reviews historical thought on the importance of heterogeneity in a social movement. He references Karl Marx, who takes a class-based view of social movements and argues that the working class will use its strong homogenous ties to bring about a socialist revolution (Tucker 1978, 481). However, Tarrow points out that broad-reaching social movements of the 18th, 19th and 20th centuries conversely drew their strength from heterogeneous interclass coalitions (Tarrow 2011, 59–60). For example, the patriot movement in the colonial United States expanded its identity to include different religious associations and representatives from various ethnic groups (Wood 1991, 245). Tarrow turns instead to Granovetter's work on *weak ties*, arguing that strong movements are those that build "networks of ties among different and interdependent social groups and localities" (Tarrow 2011, 59–60). Coalitions built on weak ties will produce a broader network of support than coalitions built on strong ties, which are more likely to create factionalism within a movement (Granovetter 1973). These heterogeneous coalitions, Tarrow argues, are able to challenge authorities from a variety of angles, and thus more effectively achieve their goals.

Coalition scholars present various typologies of coalitions, which can be distinguished based on their life span, their goals, methods, and degree of success (Frege, Heery, and Turner 2018, 124). I will present two classification systems that each provide distinct analytical frameworks by which to classify coalitions. First, Frege et al. identify three types of coalitions

that differ based on the type of interaction between the partners: vanguard coalitions, common-cause coalitions, and integrative coalitions. Vanguard coalitions are those in which the labor organization's partner occupies a subordinate role and provides solidarity with labor. Common-cause coalitions are when each partner identifies complementary interests that create a platform for joint collective action. Integrative coalitions invert the relationship present in vanguard coalitions, and describe coalitions where the labor organization supports the goals of its nonlabor partners. Second, Tattersall presents a typology that differentiates coalitions based on the depth of their relationships (Tattersall 2005, 99–107). The first classification, ad hoc coalitions, are temporary alliances that often emerge during a crisis, where an organization sees a political opportunity to ask for support from a like-minded organization. They are simple and distant “coalitions of convenience” that do not create lasting or powerful relationships. Second, a support coalition is a structured coalition that endures for a longer period of time, where both partners make decisions together, but tend to limit their engagement to short-term goals and often favor one partner over the other (harking back to Frege et al.'s vanguard and integrative coalitions). Mutual-support coalitions are deeper than ad hoc or support coalitions and involve two actors pursuing complementary self-interests under one broad issue framing, for example a teacher's union and a parent's association uniting in favor of better quality of childcare. The final classification of coalitions Tattersall identifies is deep coalitions, which are defined by their breadth of common interest, and the number of spaces for member participation. Deep coalitions encourage connections at the membership level, sparking deep engagement amongst members from partner organizations and building the coalition's capacity for mobilization. Drawing from these two typologies, I argue that the civil society coalitions that supported the PNRS were *deep, common-cause* coalitions—they framed their cause in broad visionary terms that appealed to both urban environmentalists and waste pickers, and they encouraged

participation at the member level, through spaces like the Waste and Citizenship (W&C) Forums.³

Finally, the degree to which a coalition is explicitly articulated presents another metric for classification. Tarrow notes that alliances can be explicitly constructed by social movements, or implicitly born from links between different civil society actors (Tarrow 2011, 88). In practice, coalitions with a high degree of formalization might be based on “strong bonds with frequent interaction”, while those with a lower degree of formalization might involve “only a few concrete exchanges among groups” (Di Gregorio 2012; McCammon and Moon 2015, 2). Next, I will discuss the endurance of coalitions, noting the challenges they face and the factors that enable them to withstand obstacles.

Social movement coalitions can face a wide array of obstacles that challenge their strength. I will present a non-exhaustive list of challenges that are particularly relevant to the case of the blue-brown coalition I am studying. Multiple scholars discuss how inequality of resources presents a challenge to coalitions, because resource-rich partners may co-opt the agenda of their resource-poor partners (Bandy and Smith 2005; Van Dyke and Amos 2017; Bandy 2004; Khagram 2018; Mix and Cable 2006). Similarly, ideological divergences and cultural barriers may create a challenge for coalitions to remain united (Staggenborg 2010; B. Obach 1999). Negative political opportunity structures are yet another obstacle to coalitions: when a social movement loses a particular battle, members may gravitate away from building coalitions and refocus upon other activities, such as building internal community (Staggenborg 1998). Finally, declining resource availability can impede a coalition’s endurance, if each partner must compete for the same funding and resources (Frege, Heery, and Turner 2018; B. Obach

³ The W&C Forums are multi-stakeholder convenings held at the municipal, state, and national level in Brazil that bring public, private, and civil society representatives together in a participatory approach to waste management. The first W&C Forum occurred in 1998, with support from the United Nations Children’s Fund (UNICEF), for the purposes of ending child labor in open dumps, promoting partnerships between waste pickers and municipal governments, and closing open dumps (S. Dias 2020). For a complete list of all organizations present at the 1998 National W&C Forum, see Appendix 3.

1999). All of these challenges surfaced for the blue-brown coalition during the years following the PNRS's passage. Waste pickers and their professionalized environmentalist allies came from very different socioeconomic backgrounds, and had vastly different resources at their disposal. While the PNRS did pass, it was on terms that closed a political opportunity for the coalition, leading each side to withdraw from a shared agenda. Furthermore, based on the terms under which the PNRS passed, the two interest parties behind the coalition were made to compete for the same financial resources from the private sector.

Scholars also point out factors that allow social movement coalitions to endure. This includes trust and commitment among partners, and support from outside actors (Bandy and Smith 2005; Van Dyke and Amos 2017). Returning to Tattersall's typologies of coalitions, an enduring coalition is one with a decentralized structure that fosters connections between members at the ground level (Tattersall 2005, 108). Strong social ties among members and high levels of trust allows members of coalitions to overcome conflict and achieve a deep alliance (Arnold 2011).

Labor-environment alliances

Alliances formed between labor organizations and environmentalists are a powerful and frequently studied type of coalition. Brazil's waste picker movement displays many contextual overlaps with other examples of such "green-blue" alliances (where green connotes environmentalists and blue connotes workers), with notable exceptions that will be explored in Chapter Three.

Political ecologists have described labor as the fundamental intersection between society and nature (Barca 2015, 74). Scholars have described labor as one of three actors (alongside capital and the state) in an economic growth coalition that drives a "treadmill of production" under capitalism (B. K. Obach 2004b, 337). Capitalist economies must constantly expand production in a cycle of "growth dependency", which in turn demands increasing extraction of

resources and energy from the environment leading to pollution and ecological destruction (Schnaiberg 1980). Moreover, this damage is also reflected in the bodies of workers who are forced to endure unsustainable and unhealthy working conditions, in what eco-Marxists refer to as the “second contradiction of capitalism” (Barca 2015, 74).

Environment and labor advocates have historically found themselves pitted against each other in disputes frequently framed as “jobs versus environment” conflicts (B. K. Obach 2004a; Brecher, Blackwell, and Uehlein 2014; Khale 2014). Brian Obach writes that these kinds of conflicts “fracture progressive forces preventing the implementation of policies that are sensitive to both the environment and the needs of workers” (B. K. Obach 2004a, 5, 8). The roots of the struggle between labor and environment, Obach notes, originate in the capitalist economic system, which creates divergent motives between private material gain and collective protection from negative externalities. Thus, workers are forced to seek livelihoods through employment in environmentally harmful industries. These contradictions crystallize into conflict when industry draws its workers into public disputes in an effort to evade environmental regulation. Workers frequently form the “public face of environmental opposition” due to the public sympathy they generate (B. K. Obach 2004a, 11). Under the pretext that environmental regulation threatens layoffs or industry shut-down, workers mobilize to protect their interest, which benefits private industry. Workers’ concerns are legitimate under the contemporary political economy of neoliberal austerity: many climate protection programs stand to “gouge workers, increase insecurity, aggravate inequality, and enrich speculators, while leaving our climate-destroying fossil fuel economy largely intact” (Brecher, Blackwell, and Uehlein 2014).

However, scholars have pointed out the common ground shared by labor and environmental interests: they have equal stakes in a just and sustainable economy, and clear incentive to form coalitions as each alone faces a disadvantage against corporate interests (B. K. Obach 2004a, 12). Stefania Barca writes that workers must build an “emancipatory ecological class consciousness” that builds social struggles that are also environmental struggles, joining a

large body of scholarship devoted to shattering the false dichotomy of jobs versus environment (Barca 2014; 2016; Khale 2014; Brecher, Blackwell, and Uehlein 2014; B. K. Obach 2004a).

The just transition and green economy models

The concept of a “just transition” has been proposed as a framework for steering society towards a carbon neutral future while prioritizing equity and justice. Founded on the principle that the global working class should not bear the burden of a transition to a low-carbon economy, the just transition grew out of ideas of “sustainable development” and the “green economy” from labor environmentalism in the 1990’s (Barca 2016). While these concepts had existed in the decade prior, they gained renewed prominence in 2008, in the wake of global financial crisis and burgeoning climate crisis, as a means of “liberating nations from global food, energy and financial crises whilst heeding ecological limits” (Smit 2015, 11; Death 2015). Despite accolades from the World Bank, the Organization for Economic Cooperation and Development (OECD), and various national governments, there remains a lack of consensus on the definition of the green economy or the universal principles that encapsulate this development model (Cassidy 2020).

Scholars and non-government organizations have offered various definitions of the green economy. The United Nations Environment Program defines the term “as one that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities” (Smit 2015, 13). However, disagreements occur over the dimensions of the green economy model. Carl Death describes the controversy over defining the green economy as similar to previous debates over the concept of “sustainable development”, a discourse which argues it is possible to achieve triple wins for social responsibility, environmental sustainability, and economic growth, which is criticized as “polite meaningless words’ masking continued capitalist exploitation” (Death 2015). Much like the notion of ‘sustainable development’, the term ‘green economy’ “reinvigorates existing debates over the

visions, actors, and policies best suited to secure a more sustainable future for all” (Ehresman and Okereke 2015, 24).

Green thought is a spectrum of ideas, and literature characterizes two poles of reformist and radical visions of the just transition. The first perspective, referred to as “green economy” approach, “social dialogue” approach, or “environmental-lite” approach, rests on business-as-usual mindset (Williams 2007, 264). This framework imagines a “conflict free win-win” that unites government, business, and labor around a plan for sustainable capitalism and green growth. Williams writes that this perspective contains an “implicit optimism” that humanity will overcome environmental crises by tinkering at the margins of the economy to factor environmental costs into the budget. It argues there is no need to rethink current development paradigms, and espouses general belief that economic growth and resource exploitation can continue, provided there is better accommodation of environmental issues. Governments pass economic stimulus measures, corporations engage in social responsibility programs, political leaders advance an agenda of “ecological modernization”, and international organizations support via reports and recommendations. Essentially, a social dialogue approach entails a “greening of the capitalist economy”, which Williams labels a greenwashing of capitalism (Barca 2016).

The idea of “green growth” gained prominence in the 2012 Rio +20 Conference on Sustainable Development, and continues to be promoted by multinational institutions like the OECD, the United Nations Environment Program, and the World Bank. Green growth theory reflects a belief in the possibility of “absolute decoupling” of gross domestic product (GDP) from resource use and environmental impact (UNEP 2011). In their article “Is Green Growth Possible?”, Hickel and Kallis test green growth theory against empirical evidence of resource use, finding that absolute decoupling is infeasible on a global scale and would be impossible to maintain over a long time frame. This opens up the question of de-growth of current production and consumption patterns, which would entail a host of policy changes like legislative limits,

green taxes, shifted public investments, working hour reductions, and new social security institutions (Hickel and Kallis 2020). The authors acknowledge the political infeasibility of such an agenda under capitalism, since it questions basic logics of economic growth. Nevertheless, they join a growing body of scholarship that views green growth as a “misguided objective” and urge greater investment in energy efficiency and “loosening the grip on modern life exercised by competitive consumption, which undergirds the incessant demand for expansion” (Cassidy 2020; Hickel and Kallis 2020; Victor 2018; Alier 2009; Jackson 2009).

Still another alternative to green growth and the green economy is ecosocialism, which emphasizes “deep, transformative change meaning dramatically different forms of production and consumption” (Cock 2014). Sociologist Jacqueline Cock argues that this change entails a rejection of market mechanisms to solve climate change, unemployment, and inequality. In contrast to the reformism of the green economy approach, which demobilizes organized labor movements by upholding capitalism, ecosocialism views the earth as finite, and demands a fundamental re-thinking of attitudes toward the environment as a resource, and contemporary notions of economic development (Tawab 2017). The framework forges a “more consciously radical and hopeful space” linked to deeper socioeconomic transformation (Sweeney and Treat 2018). Michael Löwy argues that “social movements with an ecological dimension” are increasingly prominent in the Global South, in reaction to “deliberate policy of ‘pollution export’ by imperialist countries” (Löwy 2006, 22–23; Martínez-Alier 2003). These movements of “ecology of the poor” include mobilizations in response to localized environmental destruction. While not explicitly self-defined as environmental, the framework nevertheless possesses “a crucial ecological dimension” that rejects capitalist expansion (Williams 2007).

Informal Work and the Green Economy

Much of the above literature on the green economy comes from the Global North. Other scholars have attempted to bridge these themes to apply to contexts in the Global South,

particularly in the context of economic activities. The result is a focus on the informal economy, which makes up an estimated 50 to 90 percent of the workforce in the Global South, and has its own particular relationship to green development (Tawab 2017).

Scholarship provides two linkages between a green economy and the informal employment sector. Ecosocialist thought from the second half of the 20th century recognizes the potential of the informal economy to move towards a “saner, more humane ecological future” and away from a hyper-expansionist future (Robertson 1981). These scholars view informal work as synonymous with self-reliance, and an embodiment of the “think global act local” paradigm (Hines 2013; Mander 2014), compared to the formal economy’s emphasis on globalized economic development (Henderson 1999; Goldsmith and Mander 2001; Warburton 2013). By strengthening local production, the informal economy will render localities “less dependent upon the foibles of the global economic system for their future well-being” (Williams 2007, 269).

A second body of scholarship coming out of the Global South praises the informal economy for its community-oriented logics on the matter of distributing surplus and organizing capital. Dawa et al. recognize the unique “sociocultural dynamic” in the informal economy, which produces “livelihoods, cultural identity, and employment” (Dawa and Kinyanjui 2012). Suzanne Smit describes the complex social networks that arise from the informal economy, which are more representative “of the complexity of the human-environment system” because they link people more closely to their communities, “providing valuable networks for resource management, energy requirements and climate change” (Smit 2015; Chambwera 2012). Recycling of plastics and metal products, activities that protect biodiversity, low use of non-renewable resources like energy and water, and circumventing waste all demonstrate its contributions to environmental sustainability (Dawa and Kinyanjui 2012; Smit 2015, 64). While acknowledging the environmental benefits of these activities, these same scholars also recognize the vulnerability of the people in this sector, whose livelihoods are “closely tied to the state of the

environment” and the availability of natural resources (Lewis 2016, 10). While informal activities can be damaging to the environment in cases like mining, over-fishing, and charcoal production, it is also the workers in this sector who suffer from the effects of climate change, oil pollution, coastal erosion and reef destruction (Lewis 2016). Yet, in spite of the critical linkage between environment and informal work, the International Institute for Environment and Development finds that only 25% of countries’ green growth plans include mention of informal economic activities in their plans of action (Lewis 2016). One notable exception is the discourse of socio-environmentalism in Brazil, which recognizes the connection of people of low income and the environment.

Socio-environmentalism in Brazil

In this section I will explore the concept of socio-environmentalism, a particular form of environmentalism rooted in equity and the preservation of traditional livelihoods. Marina Silva, former head of Brazil’s Ministry of the Environment (MMA), calls socio-environmentalism “Brazil’s particular contribution to sustainable development” (Abers 2021). This literature provides significant insight on the case study of this thesis, which concerns a policy that earned support from both a workers’ movement and environmentalists due to its appeal to both agendas.

In their book *Greening Brazil*, Kathryn Hochstetler and Margaret Keck present an overview of environmental policy in Brazil, noting its distinct characteristics of being “more politicized and further to the left than one sees elsewhere” (Hochstetler and Keck 2007, 10). Brazil’s environmental policy, they argue, was under construction at the same time as the country was transitioning to democracy, and redefining ideas of citizenship as well as opening its decision-making channels to a wider audience of societal organizations. Environmental activists took part in redefining the state’s relationship with society, and as consequence environmental policy took on dimensions of social equity and participation. The result was

socio-environmentalism, “an attempt to make compatible the struggles for environmental sustainability and for sustainable livelihoods” (Hochstetler and Keck 2007, 13). This environmental ideology prioritizes the needs of poor people in its approach to environmental problems, and can be thought of as “sustainable development for poor people” (Hochstetler and Keck 2007, 13; Viana, Silva, and Diniz 2001).

A landmark case that shows the dimensions of socio-environmentalism is the *seringueiros* (rubber tappers) of the state of Acre, in the country’s interior Amazon region. In the 1980’s, *seringueiros*, who earn their living by extracting rubber from trees, found their traditional activities under threat by large lumber companies and ranchers who wanted to convert the rainforests that *seringueiros* depended on into pasture land. They organized with each other to defend both their right to work, as well as manage the forest in a sustainable manner. Their efforts successfully forged a link between environmental and labor struggles, according to Keck in her article “Social Equity and Environmental Politics in Brazil”. Keck writes that the conflict between *seringueiros* and ranchers began as a poor people’s movement for social justice, and only later acquired the framing as a global environmental struggle thanks to alliances with international environmental institutions in Washington D.C. (Keck 1995, 410). In her analysis of this socio-environmental movement, Keck claims that the case of the *seringueiros*:

“...announced the possibility of an environmentalism that was not an amenity but rather was part and parcel of a struggle around basic rights to subsistence. It inverted cause and solution: no longer was it necessarily the poor who (however unwittingly degraded the environment and the better-off who wanted to save the poor from themselves. In this story, it was the opposite: the poor became the protagonists in seeking a solution rather than the objects of solutions imagined elsewhere” (Keck 1995, 417).

In the wake of an international outcry after the assassination of the *seringueiro* organizer Chico Mendes, the Brazilian government established “extractive reserves” that recognized *seringueiros* and other local people as the owners of the forest (Barca 2014). The

seringueiros' struggle defined a new understanding of sustainable development that focuses on the struggles of poor people and a working class vision of ecology.

It is worth noting that socio-environmental movements have historically been “very connected to the Amazon and to the non-urban environment” (Brandão 2021). While the PNRS is recognized for its social and environmental dimensions (C. Santos 2021; Orlow 2021; Brandão 2021), the issue of waste and waste pickers is not generally highlighted as a prominent case of socio-environmentalism in literature on the topic (Brandão 2021). This may be because urban pollution issues received much less attention from the international community compared to issues of Amazon preservation (Hochstetler and Keck 2007, 22). This thesis makes note of the conceptual linkage between Brazil's socio-environmentalism and waste, where waste pickers serve as environmental agents whose work is “inherently good for the environment” (Abers 2021).

Applying the literature to the case of the PNRS

The literature review presented above has highlighted relevant bodies of scholarship that speak in various ways to the concepts explored in this thesis. I employ social movement theory to analyze the inception and growth of the waste picker movement, and literature on coalitions to emphasize the powerful partnerships the waste picker movement formed with elite allies like government employees and civil society organizations. The alliance that advocated for the PNRS contained both environmentalists concerned with urban sanitation issues, as well as waste pickers seeking inclusion and formal recognition for their services. Thus, the alliance can be best understood through the framework of labor-environment coalitions, which often form to seek just and equitable environmental policy that centers the needs of communities and workers. At the heart of this concept lies a tension over how to include workers in a green future, and moreover what kind of “green” ideology should structure environmental policy approaches. Finally, since the PNRS addresses both social and environmental dimensions of waste

management, the law indexes a long and rich legacy of socio-environmentalism in Brazilian environmental policymaking. All of these literatures are important for understanding the actors involved in shaping the PNRS, and the law's social and environmental significance.

2. AGITATIONS, POLITICAL OPPORTUNITIES, AND CORPORATE RESPONSIBILITY: THE FORMULATION OF THE PNRS

Introduction

In June 2001, three thousand catadores and their supporters marched to the National Congress building in the capitol of Brasília (Freesz 2010). These waste pickers had just held the first National Congress of Waste Pickers, an event attended by catadores from around Brazil and organized by the incipient MNCR, which united cooperatives across the country in joint struggle for class solidarity and self-management (Amorim 2021; F. Oliveira 2015). Their public action was catalyzed by Draft Bill 203, a national bill that had just been released for public consultation, and was the first of its kind to lay out a national policy governing waste management. Despite setting forth terms for environmentally responsible treatment and disposal of waste, the bill did not recognize waste pickers as participants in the waste management chain (MNCR 2010). Social movements often emerge in response to external threats (Berejikian 1992; Goldstone and Tilly 2001; Jenkins, Jacobs, and Agnone 2003; Van Dyke and Amos 2017, 6), and here the exclusion of waste pickers from the first national policy governing waste functioned as a catalyst for greater organizing of catadores and their allies. In the years to come, catadores sought dialogue with the federal deputies to ensure their inclusion in this law, often relying on public actions and protests to achieve their demands.

It is tempting to understand the passage of the PNRS as a product of social movements like that represented by the MNCR. While social movement contention certainly contributed significantly to this outcome, a closer look reveals complex political dynamics involving actors from the private and public sectors as well as various parts of civil society. Many of the events that led to the passage of the law unfolded in more subtle ways than public protest, involving the

work of dedicated civil servants aligned with the waste pickers' cause, as well as strategic pivots on the part of the private sector, who stopped obstructing the bill and instead began shaping it to favor their economic interests. This chapter will attempt to answer my first research question about the factors that led to the unlikely passage of the PNRS. I will describe the formulation of the PNRS between 1991 and 2010, the period that encompasses the first introduction of a national policy governing waste until the passage of the PNRS (Silvério da Costa 2021). I break my analysis into three distinct periods: 1991–2002, 2003–2007, and 2007–2010. For each time period, I will track the activities of three different entities: the federal government, the private sector, and civil society. I will argue that the PNRS passed after a multi-decade stagnation in Brazil's National Congress due to a tripartite convergence of these actors, who each asserted a particular influence on the policy.

This chapter attempts to make sense of the relationship between social movements and political opportunities. In his book *Power in Movement*, Tarrow argues that political opportunities can arise for social movements from independent causal factors, or social movements may attempt to remake the very political systems that gave rise to them, thereby creating their own political opportunities (Tarrow 2011). I will show that a co-occurrence of bottom-up agitations from a deep coalition of catadores and urban “brown” environmentalists, top-down policy changes from a newly elected PT administration under Lula, and a shifting political strategy from private sector, together allowed for the passage of an unprecedented and controversial law that rendered the issue of waste management a matter of federal oversight, where it had previously been governed solely by states and municipalities. In this chapter I will analyze each of the three entities whose efforts paved the way for the passage of the PNRS, as well as their interactions with each other. I will show that over these years, political opportunities arose both for the waste picker movement and for the private sector, each of which took advantage of new openings created by the PT government to advance their own interests. Finally, I will show that that while the formulation of the PNRS saw unprecedented

interactions and convergences amongst this troika of actors, their divergent political and economic interests never found alignment. Instead, these ideological cracks were embedded within the language of the PNRS itself, particularly within the law’s provisions for “shared responsibility” of the waste product life-cycle, and the law’s mandate for inclusion of waste pickers in municipal selective collection schemes. While not at first apparent in the jubilation following the law’s passage, these cracks would later widen into tensions between actors who had formerly found alignment. Later chapters will show that these fissures strained the very same coalitions that were necessary to bring the PNRS, by all accounts an unlikely victory, into law.

1991—2002: Turmoil in Congress, organizing in industry and civil society

Roadblocks in Congress

Brazil’s first national solid waste policy proposal had an inauspicious start. The public policy project that was later to become the PNRS was first seen in 1991 with Senate Bill of Law 203, proposed by Senator Francisco Rollemberg (Silvério da Costa 2021; Valverde 2021). Compared to the law that would result nineteen years later, the draft bill was modest in scope: it set forth guidelines on the “packaging, collection, treatment, transport and final disposal” of waste from healthcare services (“PL 203/1991 Projeto de Lei” n.d.). However, this bill incurred resistance from industry, since it posed additional costs for the private sector. According to Vital Ribeiro, coordinator at *Projeto Hospitais Saudáveis* (Healthy Hospitals Project), industry associations like the *Confederação Nacional da Indústria* (National Confederation of Industry, CNI) were concerned about the possibility of a policy that would differentially tax waste depending on its environmental impact. Such a tax would have penalized less recyclable or more polluting products, a type of differentiation that industry viewed as detrimental to business.

These interests were able to block the law from advancing via congressional lobbies and other connections with government representatives (V. Ribeiro 2021).

In May 2001, the federal Chamber of Deputies created a Special Commission to debate and institute a national policy on governing waste, led by then-deputy Emerson Kapaz (F. Oliveira 2015; Grimberg 2007). At the time of the Special Commission's convening, a staggering number of additional bills had been proposed in conjunction with Bill 203: different sources give estimates ranging from 70 to 200 (Juras and Araújo 2003; Silvério da Costa 2021). Emerson Kapaz, a federal deputy appointed as reporter for the Special Commission, introduced a substitute proposal drawn from waste policies in Europe, which clearly defined post-consumer responsibilities for waste products. Under Kapaz's proposal various industry sectors, including those producing batteries, tires, packaging, electric appliances, automotive vehicles, light bulbs, and polychlorinated biphenyls (PCB), would become responsible for the management costs of the waste they generated (Juras and Araújo 2003). The proposal drew on Germany's Green Dot system, also known as the Dual System, which holds producers responsible for the economic and environmental costs of packaging waste, consistent with the principles of extended producer responsibility (EPR). This proposal elicited substantial criticism from other deputies in Congress, who one anonymous interviewee alleged had political connections to representatives from the producer sector. According to this interview subject, Emerson Kapaz was "boycotted" for his proposal, "[losing] all support from the other parties, from other colleagues in Congress, and [abandoning] politics" (Anonymous interviewee). One year later, in the final text presented by the Special Commission in May 2002, the producer responsibility provisions had been significantly altered from the form they first appeared in Kapaz's preliminary text. Instead of assigning responsibility for waste to producers, the draft bill "diluted [these responsibilities] among the productive sector, the government and civil society as a whole" (Juras and Araújo 2003). The Special Commission was disbanded soon afterwards, and for the time being the project lost momentum in Congress (F. Oliveira 2015).

Waste picker organizing and the making of a blue-brown coalition

As Congress deliberated in Brasília, waste pickers were building a historic movement at the grassroots that eventually reached these government spaces. Starting from initiatives at the state and municipal levels and gradually climbing to national prominence, catador organizations began to form a “defense network” that regularly convened to exchange ideas and build solidarity (F. Rossi 2021). In 1998 with the support from the United Nations Children's Fund (UNICEF), the first National Waste and Citizenship (W&C) Forum met, bringing 19 different entities, including catador associations, social and technical NGOs, government agencies, and entities from the Catholic Church into discussion around three objectives: eliminating child labor, greater partnerships between municipalities and catadores to build waste picker capacity, and eradicating open dumps (for a complete list of all organizations present at the 1998 National W&C Forum, see Appendix 3) (S. Dias 2020; 2009, 154). In her dissertation on the W&C Forum, Sonia Dias characterizes the event as an intervention that “sought to incorporate a social dimension into the technological aspects of solid waste management” by emphasizing participatory and inclusive waste policies (S. Dias 2009, 146). By 2002, the number of participating organizations had grown to 43 as the forum diffused itself into regional and municipal levels. This decentralization process allowed for enhanced participation and greater contextual specificity across different local waste management landscapes, while the national W&C Forum continued to promote catador unity across the country (S. Dias 2009, 158–59).

Participatory spaces greatly advanced the formation and visibility of the MNCR (formed in 2001), giving it a public status (S. Dias 2006). In June 2001, waste pickers organized the first National Congress of Waste Pickers, involving thousands of catadores from various associations across the country. This meeting resulted in a formalization of the national movement, whose founding manifesto called for a national selective collection policy that “prioritizes the integrated management model of urban solid waste, placing [waste] under the management of recyclable material collectors' ventures” (MNCR 2010). On this occasion representatives from

the MNCR met with public authorities in the *Palácio do Planalto* (the president's workplace) and various public ministries as well as Congress to demand inclusion, and organized the first National March of the Street Population described at the beginning of the chapter (Amorim 2021). One year later, the National W&C Forum sent a substitute project to Emerson Kapaz's Special Commission, seeking amendments to Bill 203 to ensure the social inclusion of waste pickers.

The W&C Forums as well as other participatory events built catador capacity by bringing a range of actors from various civil society organizations and private sector entities into dialogue with the emerging waste picker movement—a dynamic that would only intensify in years to come under President Lula. The coalitions these actors built were an essential mechanism for enhancing the power of waste pickers at the national level. The benefits of coalition-building are manifold: scholars of social movement unionism argue that coalition-building provides labor organizations with financial and physical resources like funding and premises (Frege, Heery, and Turner 2004; Tattersall 2005), lends legitimacy to their demands by portraying them as those of a wider community (Flanders 1970; Tattersall 2005; Frege, Heery, and Turner 2018), provides specialist expertise (Frege, Heery, and Turner 2018, 124), and enhances the organization's capacity for mobilization (Frege, Heery, and Turner 2018, 124–25).

Social movement scholars have examined the factors that may influence a labor movement's choice to engage in coalitions with non-labor partners. Relevant to this thesis's case are the factors of exclusion, political identity, availability of partners and political opportunity structure. First, due to their economic and social exclusion, waste pickers have “low organizational power”, and therefore less capacity to sustain organizing and collective action on their own (Turner and Hurd 2001). Partnerships with outside actors became a critical step to attain the movement's goals. Second, waste pickers formed an organizational identity informed by class politics. Today the MNCR seeks to build popular power and class solidarity, goals informed by a leftist ideology that complements organizations and individuals who are

interested in environmental protection and against privatization of waste (MNCR n.d.; Frege, Heery, and Turner 2018, 128). Third, during the 1990's the initial associations of waste pickers found readily available partners in various sectors of society: this included academics, environmentalists, sanitary engineers, government employees, and individuals from the *sanitarista* movement.⁴ This high supply of potential allies made for many opportunities to build coalitions (Crouch 1999; Frege, Heery, and Turner 2018, 128–29). Finally, coalitions formed because of greater political opportunities for greater access to policy. When states are structured to provide “multiple points of access to policy”, coalitions often form to influence these spaces of dialogue (Frege, Heery, and Turner 2018, 129). This opening of access points occurred under the Lula administration in 2003, which instituted various participatory spaces for civil society organizations, thereby further bolstering waste pickers' coalition-building efforts. These participatory spaces will be discussed in greater detail in the next section of the chapter, 2003–2007.

The coalition that waste pickers built is not easily summed up into one category. Due to the broadly appealing political identity of their organizations, waste picker associations found affinity with a variety of civil society sectors (see previous paragraph). Despite these supporters' wide breadth of backgrounds in public health, engineering, social work, and environmental management, this thesis will characterize the coalition as a labor-environment alliance. In its typical usage, the term *environmentalist* indexes one concerned with ecological sustainability: this could include issues like global climate change, resource depletion, and forest conservation. However, when I name the coalition as one between labor and environmentalists, I employ the term *environmentalist* in a manner consistent with the *brown environmental agenda*, defined by the scholar Suely Araújo as issues “relating to pollution control, sanitation, and urban

⁴ *Sanitaristas* are a social movement of public health professionals and poor people's movements who arose in the 1970's, who linked poor health outcomes to social inequality. These activists entered public offices at the municipal and state levels, bringing with them values of social democracy, participatory policy-making, and health as a human right (Rich 2020).

environmental management”, of which urban waste is a substantial factor (Araújo 2013, ix). The brown environmental agenda is familiar to urbanists who are concerned about environmental health impacts, particularly on low-income groups in city centers (McGranahan and Satterthwaite 2013, 73–74). Thus despite their heterogeneity, the MNCR’s partners shared a common goal of reducing the negative environmental and public health impacts of improperly managed waste (Gutberlet 2021; Amorim 2021; J. Rutkowski 2021). Adapting from the concept of *blue-green* alliances discussed in the literature review section of Chapter One, I propose a new concept, *blue-brown coalition*, to describe the alliance in which waste pickers took part, where *blue* connotes the catadores in the MNCR and *brown* connotes a wide variety of NGOs, public health professionals inside and outside the government (*sanitaristas*), and sanitary engineers all focused on urban environmental health. In its first few years this coalition was not formally articulated (i.e. it existed in the form of informal associations and social ties between members of different environmental and waste picker organizations). In 2014, many of these actors formed an explicit alliance called the *Aliança Resíduo Zero Brasil* (Brazil Zero Waste Alliance, ARZB), which will be examined in Chapter Four.

The collective work of blue and brown actors to recognize the social and environmental dimensions of waste is reminiscent of Brazil’s long-standing tradition of socio-environmentalism (see literature review in Chapter One). However, the blue-brown coalition thought in new ways about this familiar concept, and extended the popular framework to the arena of waste management, where it had previously been applied to the Amazon and rural areas.

Even though the private sector contributed to participatory forums alongside aforementioned blue and brown actors, I refrain from labelling business interests as coalition partners. This is because of fundamental divergences of interests and a lower degree of alignment than the blue and brown actors had with each other. In fact, building from the literature on labor-environment alliances, I argue that an additional reason waste pickers and

urban environmentalists found affinity was a mutual recognition of disadvantage next to corporate interests, particularly when it came to formulating a national waste policy (B. K. Obach 2004a). Alex Cardoso, a waste picker involved in the leadership of the MNCR, characterizes the schism between business and a socio-environmental agenda in terms of capital accumulation:

“Private initiative doesn’t foresee the provision of work as an objective, it doesn’t foresee environmental protection as an objective, it doesn’t foresee the inclusion of people. It foresees profit, accumulation. If it’s going to accumulate, if it’s going to profit, if there’s going to be money, it says ‘amen’. If there won’t be, the private sector won’t be there.” (Cardoso 2021)

These divergent logics thus disqualify private interests from being full allies in this blue-brown coalition.

Another important assessment is the depth of the blue-brown coalition. My literature review describes factors that influence the endurance of coalitions, and various typologies to describe different degrees of coalition longevity and success. I combine the two frameworks proposed by Amanda Tattersall and Carola Frege to argue that the coalition developed by these blue and brown actors was a deep, common-cause coalition. Characterized by decentralized decision-making structures and connections between members, deep coalitions frame their causes in broad, visionary terms that appeal to both parties composing the coalition (Tattersall 2005, 108). Although Tattersall’s frameworks apply to coalitions formed by unions and communities, the discussion applies to this case of a social movement and a loosely-composed network of brown environmentalists. I point to two pieces of evidence to demonstrate qualities of deep coalition: first, beginning in 1998, the Waste & Citizenship (W&C) Forums served as participatory spaces in which civil society actors and waste pickers forged a new platform for dialogue with the state. The initial National W&C Forum sparked the creation of sub-national and municipal W&C Forums across the country, catalyzing greater engagement between members of individual waste picker cooperatives and local civil society organizations. This deep

engagement extended beyond the W&C Forums into other interactions between these coalition partners. For example, one anonymous professional affiliated with an environmental organization describes helping a group of waste pickers during a difficult meeting with city officials:

“[The city hall] called the catadores, and fifty waste pickers went to a morning meeting, and I went with them because we thought they would be more easily deceived alone. When we arrived, a public official told them: ‘Ah, now the person will not be able to see you, he will be able to see you in the afternoon.’ There were a lot of people who came on foot, and barely had the money to commute. I went to the supermarket next door, I bought drinks and sandwiches, I took them and opened them on the street, like that, and we ate and drank out there. It is a lack of respect of these people from governments to not understand the condition of these people. [You cannot say] ‘today it is not possible, this morning it is not possible, let's do it in the afternoon.’ How would these people cope?” (Anonymous interviewee)

This story suggests a linkage that transcends high-level organizational partnerships, and instead emphasizes connections amongst catadores and environmentalists on an individual level. Such engagement fulfills the definition of a deep coalition.

Second, Frege’s “common-cause coalitions” are characterized by “separate but associated interests behind which a coalition can form” (Frege, Heery, and Turner 2018). Common-cause coalitions see two actors form alliances and partake in joint actions to advance “distinctive interests” that are often complementary. However, common-cause coalitions are less united than integrative coalitions, which occur when each partner accepts the objectives of the other as their own. While the goals of the blue and brown actors were at times complementary, each side had distinctive bottom lines that allowed them to work together, but also created tensions when these interests became less mutually compatible in the wake of the PNRS’s passage (to be discussed in Chapter Four).

The producers and haulers organize: Private sector opposition to a national waste policy

The blue-brown coalition was not the only case of collective action present during the formulation of the PNRS. During this time, private sector actors were also forming collective action networks that would allow them to see their interests included in the law. Scholars like Trigilia and Hardin note that firms build “contracts by convention” with one another by way of social networks, conventions, and shared understandings, (Hardin 1982; Trigilia 1986). Using formalized networks like producer associations, they “coordinate and sustain collective action” to achieve their goals, ranging from reduced transaction costs to political power (Tarrow 2011, 17). The rest of this section will discuss the activities of two industry associations that each presented an influential nucleus of collective action during the early years of debate on the PNRS.

The private sector is not a monolithic block, and two different subsets of the private sector exerted significant and at times opposing influences on the formulation of the PNRS: these were solid waste management companies who contract with municipalities to collect waste, and producers whose products create wastes like packaging. Within each sector, certain industry associations represent individual businesses and their actions may indicate the positions of each sector as a whole. The *Associação Brasileira de Empresas de Limpeza Pública e Resíduos Especiais* (Brazilian Association of Urban Cleaning Companies, ABRELPE) brings together companies responsible for private waste management (“hauling”) and sanitation services. Producers were represented by an array of industry associations including the *Federação das Indústrias do Estado de São Paulo* (Federation of Industries of the State of São Paulo, FIESP) and CNI. The two private sectors held significant sway over the direction of the PNRS, and used their influence to block the advance of the law as previously discussed.

Multiple interviewees describe the strong influence exerted by lobby groups affiliated with productive sectors in Brazil (Rizpah Besen 2021; V. Ribeiro 2021; J. Rutkowski 2021; F.

Rossi 2021). These include industry associations like FIESP and CNI, as well as representatives from packaging manufacturers (F. Rossi 2021; V. Ribeiro 2021). These business interests did not want to pay the cost associated with waste management that would be prescribed under a framework of EPR. During the late 1990's and early 2000's, producers were organizing themselves in response to mounting regulatory pressure from the federal government by organizing disparate industry sectors to defend collective producer interests. From 1993 to 2000, CONAMA created a series of resolutions that each regulated the final disposal of a specific environmentally hazardous product—lubricating oils, automotive batteries, tires, and pesticide packaging (Juras and Araújo 2003; V. Ribeiro 2021; F. Ribeiro 2021). CONAMA's regulations on particular categories of waste represented the first national policies governing post-consumption management of waste. All four of these laws invoked some form of the polluter pays principle,⁵ by assigning responsibility to manufacturers, importers, and dealers to reuse, recycle, or destroy discarded products in an environmentally appropriate manner. These early policies incited a shift in the private sector's engagement strategy towards the federal government's regulatory impulse. Vital Ribeiro remembers learning about the producer sector's pivot towards a collective response to CONAMA's regulations when CONAMA attempted to pass a resolution on post-consumer responsibility for the lamp industry:

“Every time a [productive sector] met at CONAMA, for example, we are going to discuss car tire waste, the tire industry came to negotiate conditions. And when it came time to discuss the lamp industry, we realized that the lamp industry was not coming, we started to see the entire confederation of the industry. [The producers] noticed that the industry was giving in and was having consecutive defeats, because it always acted in parts. So what did they do, they organized a lobby and they all got together, because they realized that they were losing all the battles and decided to organize themselves in a strategy to win the war.” (V. Ribeiro 2021)

⁵ The polluter pays principle is “the commonly accepted practice that those who produce pollution should bear the costs of managing it to prevent damage to human health or the environment”. The principle was originally articulated by the 1992 Rio Declaration, which set up a set of principles for sustainable development (LSE 2018).

Vital takes a broad view of the producer sector's motivations at this juncture to impede the advancement of EPR in South America: acknowledging Brazil's primacy in regional geopolitics, he states that "large groups were organizing themselves to prevent significant advances in Brazil on some issues, because they knew that this would also expand to countries like Argentina, Chile, Colombia" (V. Ribeiro 2021).

During the decade that this section covers, waste management companies also hindered the advancement of the PNRS, presenting an "extremely organized" blockade against the advancement of any progressive waste policy (V. Ribeiro 2021). The industry association ABRELPE was an important locus of these efforts. ABRELPE's motivations lay in preserving contracts with municipalities for collecting municipal solid waste. Thus, this organization opposed a policy that would amplify the power of its competitors, waste pickers. Alex Cardoso gives evidence of this when he states that "there's a connection between [the political entity and the private entity] which leaves the waste pickers detached, leaves the pickers out. Including the waste pickers means that it's going to exclude business people" (Cardoso 2021). Thus, although opposed to a national waste policy on different grounds than the producer sector (resistance to waste picker inclusion rather than the polluter pays principle), waste management companies still exerted significant political force in obstructing the legislation. Many interviewees emphasized the "umbilical" relationship between this industry and public authorities, and some identified corrupt practices between this sector and municipal as well as federal authorities (Cardoso 2021; Amorim 2021). An anonymous observer of environmental policy in Brazil testifies that the activity of urban waste collection "has always been linked to the underworld of illicit relations with municipal public authorities and such", and Nina Orlow (who works on urban environmental issues and catador inclusion) states that it is common to find in the press that some companies use substantial financial resources to dominate the political agenda and elect deputies who will defend their causes in various areas of activity (Anonymous interviewee, Orlow 2021).

While CONAMA's regulations applied to post-consumption management of discrete waste products, separate discussions continued within Congress about the possibility of a national waste management policy that would standardize an approach to the management of all forms of waste. Between 2002 and 2006, two new legislative commissions formed with the goal of advancing Bill 203 into law. José Valverde, former technical advisor to federal deputy Arnaldo Jardim who coordinated the passage of the PNRS, describes that these commissions were unsuccessful in advancing the legislation because both attempted to introduce principles of extended producer responsibility to the law. The law's reliance on the polluter pays principle "alienated the business sector", who had a "very intense relationship with the federal Chamber of Deputies", which held "significant weight" on the progress of the legislation (Valverde 2021; F. Rossi 2021). As with the proposal put forth by Emerson Kapaz, producers rejected the polluter pays principle and refused liability for the management of waste. Until 2003 these discussions were limited in scope, particularly under the administration of President Fernando Henrique Cardoso, who remained distant from issues related to waste policy. This was all about to change, however, with the arrival of President Lula to executive office.

2003—2007: Lula and a 'window of opportunity' for the blue-brown coalition

President Lula took office on January 1, 2003, and over the course of his two terms his administration provided new openings to advance a socio-environmental agenda. In *Brazil Apart*, Perry Anderson calls Lula "the most successful politician of his time" for the politically radical turn he achieved in Brazil's national government trajectory (Anderson 2019, 53). Despite a rocky start to his first term punctuated by the *mensalão* scandal,⁶ Lula salvaged his popularity

⁶ The *mensalão* ('big monthly payments') was a corruption scandal in President Lula's first term that involved leaders of the PT making illegal payments to other Congressional parties in exchange for votes and political support. Pereira, Power, and Raile argue that this clientelistic practice allowed the PT to bridge ideological distance with more centrist parties, since it held only 29% of the seats in Congress (Pereira, Power, and Raile 2011).

with a lower class base amidst vilification by conservative media by capitalizing on two phenomena—an economic upturn coinciding with his presidency due to external market conditions, and the social support program *Bolsa Familia*, a massive cash-transfer program that lifted millions out of poverty in the country under Lula’s tenure (Anderson 2019, 60–62). This program was responsible for a major reduction in poverty and inequality in Brazil between 2003 and 2009.⁷

Lula offered “unimpeachably democratic commitments” and advanced state-society interaction by expanding avenues for social movements to participate in public policy-making (Anderson 2019, 71; Abers, Serafim, and Tatagiba 2014, 36). To organized catadores, Lula represented a “window of opportunity” to advance a national waste policy that would incorporate waste pickers as actors in the process (Rizpah Besen 2021). In effect, the administrative actions of the Lula administration created a mutually reinforcing feedback loop with the organizing and alliance-building of the waste picker movement, which continued to gain political traction at municipal, state, and federal levels over this time period.

The new participatory spaces affected the blue-brown coalition in two ways: first, they allowed the coalition to influence the direction of the still-evolving national waste policy. Returning to the concept of political opportunity, participatory governance institutions reflect a second dimension of political opportunity structures described by McAdams et al, that of *the openness of the institutionalized political system* (McAdam 1996, 27, 29). Second, greater access to policy-making spaces also strengthened the blue-brown coalition itself, creating a feedback loop. Frege notes that “coalitions of influence” arise when labor organizations find opportunities to join dialogue alongside other social actors (Frege, Heery, and Turner 2018,

⁷ Brazil’s Gini index moved from 0.58 at the beginning of Lula’s term (2003) to 0.538 by end of his term (2011). Similarly, the number of poor people in Brazil dropped from 50 million to 30 million between 2003 and 2009 (“Primeiras Análises: Distribuição de Renda Entre 1995 e 2009” 2010, 4; *The Economist* 2010).

129). Much of the rest of this section will focus on the actions of the federal government, which fueled this feedback loop.

Lula's strong influence over the fate of waste picker inclusion and the PNRS was in part due to the power of Brazil's executive office, which affords its holder fewer checks and balances than other democratic systems (Anderson 2019, 42). Early in his first term, Lula's administration began acting in a "very present way" to advance catadores' demands for social and economic inclusion through a variety of policy initiatives, of which a national solid waste policy was one (Brandão 2021). Dione Manetti, the former Director of Development in Brazil's National Secretariat for Solidarity Economy, acknowledges the significance of Lula's commitment to waste pickers:

"...regardless of our political and ideological views, we have to recognize, if the waste pickers are within this law, it is the work of a citizen named Luiz Inácio Lula da Silva. He, as the President of the Republic, acted and said 'no, nothing will be approved if the waste pickers do not have their rights guaranteed by law to participate in waste management.'" (Manetti 2021)

In the eyes of catadores themselves, Lula was fundamental to the law's passage and discussion of waste pickers (Amorim 2021; Satgar 2021; C. Santos 2021; Rizpah Besen 2021). One anonymous catador attests that the Lula administration allowed catadores "the right to have a voice and speak for ourselves" (Anonymous interviewee). It was far from typical for the executive branch to take such a role in a legislative process: indeed, Davi Amorim, communications coordinator for the MNCR, notes that the executive branch usually "does not have the function of creating legislation... the deputies do this and society encourages it, right, but sometimes the government agrees with the deputies, with the legislative bodies, and encourages these projects to be put up front and discussed with more priority" (Amorim 2021). The Lula administration's influence on the progress of the PNRS was multi-pronged. Lula filled his administration with an array of PT-affiliated health and sanitation professionals from municipal governments across the country, who were able to advance the policy from their

institutional positions, a phenomenon that Igor Brandão, a researcher who studied the PNRS, calls the “ping-pong effect” (Brandão 2021; 2018). This resulted in a fragmented yet coordinated effort across four Ministries of State—the National Secretariat of the Solidarity Economy (housed within the Ministry of Labor), the Ministry of Social Development (MDS), the Ministry of Cities, and the Ministry of the Environment (MMA)—to advance various parts of the policy. Finally, Lula established participatory spaces for social movements to make demands of government. I will explain each of these in greater detail below.

Entering the state apparatus

Under Lula’s administration, the waste picker movement benefitted from new relationships and interactions between state and non-state actors, which strengthened their participation in policy-making processes. Social movement theory looks at how different forms of interaction between the state and movement actors can affect whether a social movement reaches its goals. As discussed in the literature review, a social movement’s *repertoires of contention* include all the means that it may use to contest a policy or decision, such as protesting (Tilly 1992, 7).⁸ Furthermore, noting that Brazilian social movements engage in more than just contentious politics to achieve their goals, Abers et al. propose the concept of a *repertoire of interaction* between the state and civil society. Such *repertoires of interaction* include protest, but also institutionalized participation, the politics of proximity, and occupying positions in government bureaucracy (Abers, Serafim, and Tatagiba 2014, 41–44). The final two mechanisms on this list, politics of proximity and positions in the bureaucracy are especially worth note, as they function in a feedback loop wherein activists within state institutions conserve their direct ties with their movement colleagues, amplifying a politics of proximity

⁸ Social movement scholars typically employ the concept *repertoires of contention* referring to protest and contentious politics, but less so in regard to political alliances. Hence, Abers et al. present a useful contribution to a concept in social movement scholarship.

(Abers, Serafim, and Tatagiba 2014, 43–44). Abers and Bülow note the presence of this phenomenon in Brazilian politics since the 1990’s, whereby activists “sometimes seek to reach their goals by working within the state apparatus” to advance their goals into policy (Abers and Bülow 2011, 78). One way activists do this is by creating additional participatory spaces for their movement colleagues, which will be discussed in the following sections.

During Lula’s terms, a multitude of health and sanitation professionals, as well as social workers, moved into Lula’s federal government and joined various ministries, at times collaborating and moving between different departments, which resulted in the evolution of the PNRS (Brandão 2021). Many of these professionals were urban environmentalists and *sanitaristas* who I argue fit under the “brown” category of the blue-brown coalition. These professionals were well-positioned to join the government, since they generally had greater access to resources than their catador allies. Furthermore, many had already been embedded within municipal government institutions such as Porto Alegre, São Paulo, and Belo Horizonte, cities known for instituting progressive policies for catador inclusion in municipal waste management. When these brown environmentalists moved into the federal government, they brought these political commitments with them to their new positions (Brandão 2021; Abers 2021; F. Rossi 2021). Returning to Tarrow’s dimensions of political opportunity at the national level described in the literature review, the entry of bureaucrats into the federal government qualifies as *presence of elite allies*, one of the dimensions of political opportunity (McAdam 1996, 27). From their new elevated positions, these brown allies promoted a politics of proximity that opened the door for greater interaction between the waste picker movement and the federal government.⁹ This phenomenon underscores the important role that high level personnel have

⁹ For a parallel example of the importance of politics of proximity in Brazilian policy-making, see Brazil’s National Movement for Urban Reform, which in the 1990’s began to interact with progressive municipalities to achieve its goals. Members took government appointments, promoted the creation of participatory budgeting and councils, and thereby made way for others from the movement to join these participatory institutions (De Castro, Koonings, and Wiesebron 2014, 45–46).

historically played in facilitating the progress of Brazilian public policy and “transforming the state into a space for political activism” (Abers, Serafim, and Tatagiba 2014, 41).

‘Ping-ponging’ to policy goals

Augmenting these new avenues of engagement between the state and social movements, over the span of Lula’s administration, government bureaucrats with ties to the waste picker movement shifted between different federal ministries, often collaborating with each other in order to advance their shared goals. In his dissertation on waste picker inclusion in Brazil, Igor Brandão coins the concept of the *ping-pong effect*, which describes how the development of the PNRS came from people “ping-ponging from different arenas, as they over time pushed for the policy” (Brandão 2021; 2018). Several individuals exemplify the influence of key government bureaucrats described in the prior section. The first is Heliana Kátia Campos, who spent years working with catadores in Belo Horizonte and created the National W&C Forum, as well a campaign supported by UNICEF to end child labor in dumps (Silvério da Costa 2021; “Heliana Kátia Tavares Campos” 2020). Under Lula she assumed leadership of the MDS, where she worked with other key individuals like Silvano Silvério da Costa, Director of the Urban Environment Department at the MMA. Due to personal connections developed while in the federal government, Campos later invited Costa to join the SLU and preside over closing an open dump operating in Brasília. Furthermore, during this time Campos’s husband Marcos Montenegro served as Director of Development of the Secretariat of Sanitation in the Ministry of Cities. Campos held a number of government positions, including coordinating the inter-ministerial committee on catador inclusion and later the Urban Cleaning Service of Brasília (F. Rossi 2021). In *Greening Brazil*, Hochstetler and Keck discuss the function of individuals and informal social relationships in political processes. They write that:

“...complex, often informal, and other multilevel relationships require social and political networks—made up of individuals as well as organizations. Networks play a central role

in promoting activist agendas in Brazil. Networks connecting activists in civil society and committed individuals in state agencies facilitate issue advocacy and institutional change... even in the absence of what political process scholars might identify as a ‘political opportunity’, actors are sometimes able to identify and make use of more serendipitous ‘agitational niches’ to push their goals forward. The resources of networks can... facilitate from a variety of angles and locations the adoption or implementation of policies that they support.” (Hochstetler and Keck 2007, 19)

While *ping-ponging* between multiple government agencies, individuals like Campos, Costa, and Montenegro developed informal social networks that allowed them to jointly push for the advancement of the status of waste pickers (Brandão 2021). Another example of an individual taking advantage of an “agitational niche” is demonstrated by Gilberto Carvalho, an aid and advisor to Lula, who held connections to social movements like that of the catadores. Closely tied to the school of liberation theology,¹⁰ Carvalho is credited with bringing the agenda of catador inclusion to Lula’s attention (F. Rossi 2021; Silvério da Costa 2021; Rizpah Besen and Jacobi 2017, 73). As later chapters will show, the importance of individuals is a running theme throughout the development and implementation of the PNRS.

Paving the way to progress: Actions of four executive ministries

Lula’s commitment to waste picker inclusion is demonstrated by the actions taken by ministries under his presidency. Under Lula’s presidency and by some accounts at Lula’s request, four different Ministries of State became heavily involved in ensuring catador inclusion, which by extension entailed the advancement of the PNRS (Amorim 2021; Brandão 2021). These were the Ministry of Labor, the Ministry of Social Development (MDS), the Ministry of the Environment (MMA), and the Ministry of Cities. Various agendas contained within the PNRS, including the closure of open dumps, producer responsibility, and inclusion of catadores became the focus of these respective ministries, through a “division of labor” of the different

¹⁰ Liberation theology is an approach to Christianity that emphasizes liberation of the poor and oppressed. This school of thought “encouraged a break from an elitist notion of the Church and the return of control to the people”, and spread throughout Latin America in the mid-20th century (O. Singer 2013).

parts of the policy (Brandão 2021; Silvério da Costa 2021). The MDS and the Ministry of Labor each dealt with aspects of inclusion of waste pickers. The MMA advanced policies related to producers' responsibilities to finance sustainable waste management. The Ministry of Cities supported municipalities to implement solid waste management systems. Each ministry's contributions to the policy that would become the PNRS will be discussed below.

The Ministry of Labor and the National Secretariat of Solidarity Economy (SENAES)

The National Secretariat of Solidarity Economy (SENAES) proved to be a key locus for advancing the status and visibility of catadores. Gutberlet et al. characterize the solidarity economy as “an alternative economy generating work and income, as response to the demand for social and labor inclusion” (Gutberlet, Besen, and Morais 2020, 169). Rejecting logics of profit in favor of meeting people's basic needs and overcoming poverty and unemployment, Brazil's solidarity economy model was built around the concept of the worker cooperative (P. Singer 2002, 83). Indeed, the cooperative was seen as the “institutional form that embodies the principles and values of the solidarity economy” (Satgar 2021).

The solidarity economy was instrumental in advancing waste pickers' demands for inclusion through national policy. In 2003, Lula appointed Paul Singer, São Paulo's Secretary of Planning, as head of the newly created National Secretariat of Solidarity Economy (SENAES), housed within the Ministry of Labor. Singer used his office to bolster catador cooperatives, which he viewed as “expression[s] of democratic socialism” connected to a project of social transformation in Brazil (Taniguti 2016). SENAES took on much of the work of ensuring catador inclusion both within the PNRS and through other separate policy initiatives (Brandão 2021). Funding from FAT (the Fund for Support for Workers) was allocated for capacity-building and training of waste pickers, allowing their organizations to accumulate skills, technology, and equipment (Gutberlet, Besen, and Morais 2020; Silvério da Costa 2021). The researcher Jutta Gutberlet argues that the long time horizon of the solidarity economy model was central to this

capacity-building: “the funding from the Social Solidarity Economy was consistent over many many years, and it allowed waste pickers to... get much more skilled in, for example, doing all the bureaucracy, and in writing a funding application” (Gutberlet 2021). The secretariat helped form cooperative networks through the Cataforte program, dovetailing with the federal government’s official recognition of the catador profession in 2002 and the creation of an inter-ministerial committee for catador inclusion (Gutberlet, Besen, and Morais 2020, 173,175). SENAES set up regional forums on the solidarity economy and developed local representation across the country for waste pickers and other sectors of the informal economy (F. Oliveira 2015). Additionally, the Secretariat mapped the solidarity economy in Brazil, the first mapping project of its kind. This solidarity approach to catador inclusion makes Brazil’s national policies unique. Brandão et al. argue that Brazil is one of few countries to design waste management policies that “bring the social aspect of waste management to the center of the discussion” by promoting the advancement of catadores (Brandão and Gutiérrez 2018, 249).

The Ministry of Social Development (MDS)

Along with the SENAES, the Ministry of Social Development (MDS) bore the brunt of responsibility for including waste pickers in waste management in the years preceding the PNRS. This ministry was responsible for coordinating programs like *Bolsa Família*. MDS was actively involved in coordinating Presidential Decree Number 5940 in October 2006, which required federal government buildings in Brasília’s Federal District to institute selective collection in partnership with waste picker cooperatives (Silvério da Costa 2021; Gutberlet, Besen, and Morais 2020, 175). This program, known as the Solidarity Selective Collection Program, was a predecessor to integrating waste pickers via the PNRS, and mandated each building develop a selective collection program in partnership with catadores, allowing them to collect recyclables and have more opportunity to sell this recovered material.

Interestingly, Igor Brandão characterizes a “dispute” between MDS and SENAES, which each took on programs addressing catadores. While MDS criticized the viability of the solidarity economy model, SENAES criticized the MDS model for being assistentialist and treating waste pickers like welfare subjects rather than autonomous actors. Brandão describes it in the following terms:

“There has always been a lot of collaboration, but also a certain distrust on both sides while the solidarity economy looked at social development thinking ‘Ah, they only think about transferring income and not teaching workers to work collectively, so it is assistentialist’, while the social development looked at the solidarity economy saying ‘Ah, solidarity economy does not work, we have already tested it in various areas and it never goes ahead, that is, people are not in solidarity as the solidarity economy would like them to be’. Well, I’m exaggerating, but within the government these two places looked after the catadores.” (Brandão 2021)

Despite conflict between different approaches to models of catador inclusion, these disagreements demonstrate the federal government’s high level of involvement with catadores. The final two ministries, the MMA and the Ministry of Cities, are discussed below.

The Ministry of the Environment (MMA)

The Ministry of the Environment (MMA) played an enduring role in advancing policies related to ecologically responsible waste management, including the National Solid Waste Policy. Before Lula’s presidency, the MMA had been criticized with historically only focusing on issues related to the green environmental agenda. Describing the state of the ministry when Lula took office in 2003, former director of the MMA’s Urban Environment Department Silvano Silvério da Costa remarked that “the Ministry of the Environment took care of the issues of the Amazon, rivers, forests, but they did not interfere in the issues of the urban environment” (Silvério da Costa 2021). The ministry was in for a dramatic shift under Lula’s presidency, however. In 2007, the Lula administration restructured the ministry to incorporate the urban environment (Silvério da Costa 2021). The president recognized that “urban environment has a

great influence on the environment, whether with the pollution of rivers, the question of sanitation, sewage that ends up polluting rivers and this issue is an urban issue” (Silvério da Costa 2021). In the eyes of many interviewees, water pollution served as the critical linkage that catalyzed a renewed focus on the brown agenda, including untreated sewage contamination and other pollution in rivers (Valverde 2021; J. Rutkowski 2021; Orlow 2021; Silvério da Costa 2021). Because the Ministry of Cities was already tasked with handling sewage, the MMA instead began to focus on the environmental hazards posed by municipal solid waste, historically a topic under its jurisdiction. The MMA changed the Secretariat of Water Resources to the Secretariat of Water Resources and Urban Environment, and created an Urban Environment Department, with Silvano Silvério da Costa as its first director (Silvério da Costa 2021). Furthermore, President Lula appointed Marina Silva as head of the MMA. Silva was an environmental activist from a community of Amazonian *seringueiros*, who was associated with Brazil’s trade union movement, indigenous rights movements, and sustainable development (“Marina Silva” 2015; “Marina Silva” 2018). Silva, who stayed in her appointed position until 2008, was in charge of putting in place Agenda 21, which included Article 21, environmentally sound management of solid wastes and sewage (Orlow 2021). Over her tenure Silva oversaw the bulk of the formulation of the PNRS.¹¹

By creating participatory spaces to discuss issues under its oversight, the MMA and CONAMA were important conduits for the participation of civil society in environmental policy-making. In 2003, Lula created the Inter-Ministerial Working Group on Environmental Sanitation within the MMA promote the federal government’s involvement in matters of environmental sanitation. The working group restructured the sanitation sector and created an Urban Solid Waste Program within the MMA, which aimed to coordinate the efforts of different

¹¹ Critically, however, Silva was not around to oversee the passage of the law nor its implementation. This was handled by Izabella Teixeira, who was less connected to socio-environmental movements than her predecessor (Abers 2021).

federal agencies focused on solid waste, as well as organize waste pickers to achieve their “economic emancipation”, expand urban waste management services in a socially inclusive manner, reduce waste, and eradicate open dumps (Schneider, Ribeiro, and Salomoni 2013, 7:15; F. Oliveira 2015). The following year, CONAMA held a seminar entitled “Contributions to the National Solid Waste Policy”, which sought to update the existing draft PNRS bill (Schneider, Ribeiro, and Salomoni 2013, 7:15; F. Ribeiro and Pereira 2021). This led to a working group within the MMA that in 2005 began consolidating and systematizing CONAMA’s recommendations and the existing draft laws in Congress put forth by Emerson Kapaz, with the participation of actors involved in waste management (Schneider, Ribeiro, and Salomoni 2013, 7:15). In their article on participatory engagement on environmental regulations, the researchers Flávio Ribeiro and Alexandre Pereira write that spaces like these involved broad participation from actors ranging from government, civil society, the private sector, academics, and catadores (F. Ribeiro and Pereira 2021). Thus, under Lula the MMA became a key site for expanding catador participation and amplifying issues related to the urban environment.

The Ministry of Cities

On the first day of his presidency, Lula created the Ministry of Cities as a new entity responsible for urban development policy, housing, sanitation, and urban transportation (“Brazil” n.d.). He installed Olivio Dutra as the first minister, who had close connections with the National Movement for Urban Reform (MNRU), which later became the National Forum for Urban Reform (FNRU).¹² While the Ministry of Cities focused primarily on housing, water supply, and sanitation issues and thus had less connections with waste pickers, it still played an

¹² As with the “ping pong effect” seen amongst waste pickers’ allies, members of the FNRU entered federal urban policy spaces in the early years of Lula’s administration, using their positions to strengthen institutional commitments to the FNRU’s goals (Abers, Serafim, and Tatagiba 2014, 44–45). This movement’s primary focus was legalizing land occupations by poor populations, improving access to housing, and guaranteeing access to essential services like water and sewerage, and it achieved these objectives by creating new institutionalized arenas of participation (Abers 2021; Avritzer 2010, 154; Abers, Serafim, and Tatagiba 2014, 45).

important role in several causes related to the PNRS. For example, this ministry implemented urban infrastructure used by waste picker cooperatives, including sorting sheds (Silvério da Costa 2021). Furthermore, the Ministry of Cities worked on consolidating municipalities' approaches to handling waste and other issues within its purview. Marcela de Oliveira Santos, a lawyer who represented municipal institutions during the years following the passage of the PNRS, describes the role of the Ministry of Cities in the following terms:

“...there was a movement within the Ministry of Cities, during the Lula government mainly, which facilitated the integration of municipalities in the sense of a more coordinated action by each municipality according to the National Policy. So the Ministry of Cities had support programs, for example, the elaboration of the waste plan itself and in that sense the Ministry of the Environment also promoted many discussions with all municipalities.” (M. de O. Santos 2021)

This closer association between municipalities proved critical in the formulation of the PNRS, since cities were a significant actor in several of the law's provisions for increased selective collection as well as prioritizing catadores.

Participatory spaces and access to leadership

Finally, by way of executive actions and symbolic gestures as head of state, President Lula opened greater participatory spaces to catadores, which allowed the movement to build capacity and assert a voice in policy-making processes. Notably, each year on Christmas day Lula organized a breakfast with catadores that was followed by a meeting with MNCR leadership to discuss the movement's goals (Gutberlet 2021; Amorim 2021; Silvério da Costa 2021). He created intergovernmental agencies dedicated to catador inclusion, with the Inter-Ministerial Committee of Social and Economic Inclusion of Catadores (CIISC) chief among them. Originally the Inter-Ministerial Committee of Social Inclusion of Catadores of Trash (CIISCL) before being restructured in 2010, CIISC was composed of representatives from the MNCR as well as 24 federal administrative entities, including all aforementioned ministries in addition to the

Secretary-General of the Republic and public and private donors such as the *Fundação Nacional de Saúde* (National Health Foundation, FUNASA), the *Instituto de Pesquisa Económica Aplicada* (Institute of Applied Economic Research, IPEA), the *Banco Nacional do Desenvolvimento* (Brazilian Development bank, BNDES), *Caixa Econômica Federal* (Federal Savings Bank), *Banco do Brasil* (Bank of Brazil), Petrobras, and Eletrobras (Matos, Metello, and Nascimento 2010). Lula created this committee through presidential decree in 2003, and its eight executive groups addressed such goals as including waste pickers in discussions of landfill closures, creating financial tools for catador associations, supporting spaces for dialogue amongst catadores and public authorities, and later supporting waste pickers in the MMA's discussions of the Sectoral Agreement (CIISC 2012). By bringing various entities together, this space was also important for synchronizing policies amongst various organs of the federal government (Amorim 2021). Presidential Decree 7.405/2010, issued in December of 2010, created the *Programa Pró-Catador* (Pro-Catador Program), overseen by CIISC, which had the objective of integrating and supporting waste picker cooperatives as well as improving working conditions and amplifying catadores' economic inclusion in municipal selective collection schemes (Matos, Metello, and Nascimento 2010; Ministério Público do Paraná n.d.). The private donors involved in CIISC supplied large amounts of funding to support these initiatives. One source attests that over his 8 year tenure, Lula made 1 billion reais (approximately USD \$570 million, adjusted for 2010 inflation levels) available for investment in waste picker cooperatives, channeled through CIISC and other federal entities. Indeed, with the help of these organizing initiatives, the percent of waste pickers who were part of associations or cooperatives grew from 1% before Lula's presidency to 5% during his presidency (Anonymous interviewee).

Besides CIISC, Lula's administration opened other spaces for waste pickers to become more visible and build capacity through cooperatives and other member-based associations. The government created participatory councils for waste pickers and other civil society groups to engage in policy discussions. Other important examples include the first National

Environmental Conference (CNMA) held in 2003 (the first year of Lula’s presidency) and the second CNMA held in 2005 (Schneider, Ribeiro, and Salomoni 2013, 7:15–16; F. Oliveira 2015; F. Ribeiro and Pereira 2021). Schneider et al. write that the first CNMA marked “a new stage” in the construction of environmental policy in Brazil, as diverse civil society representatives convened to discuss public management decisions with the federal government. The second CNMA built on this progress by “[consolidating] the participation of Brazilian society in the process of formulating environmental policies”. This conference also saw waste emerge as a dominant theme in discussion of environmental issues (Schneider, Ribeiro, and Salomoni 2013, 7:15–16).

Taken together, these newfound participatory spaces resulted from co-occurring phenomena: the first was the organizing and agitation emanating from deep common-cause coalitions of waste pickers and their allies discussed at the beginning of this chapter. The second phenomenon was the political valence of the PT, a party that was early on defined by its commitment to popular participation in policy-making processes at the municipal and state levels (Koonings, de Castro, and Wiesebron 2014, 4). By creating these participatory spaces at the federal level, the PT government under Lula (and later Dilma) was thus an essential aspect of catador participation in policy-making, and the advancement of the PNRS. These top-down and bottom-up processes were mutually reinforcing phenomena, as each generated more momentum for the social and economic inclusion of waste pickers through policy intervention. Simultaneously, these participatory spaces also allowed other interests a seat at the table. The next section will discuss how by governing through coalitions, Lula’s administration opened the doors to actors whose interests competed with those of the catador-environmentalist coalition.

Lula’s administration: Governing by compromise?

Describing the arc of Lula’s political career, Perry Anderson calls Brazil “the land of *transformismo*: the capacity of the established order to embrace and invert forces of change,

until they become indistinguishable from what they set out to oppose” (Anderson 2019, 49). The collective sum of the Lula administration’s activities described above is one important reason for why the PNRS re-entered the national conversation and eventually passed. However, contradictions within Lula’s governing ideology made their way into the law’s terms. Indeed, in its ascent to the federal executive office, the PT under Lula embraced a coalition governance model that, while ensuring successful PT bids for the presidency in 2002, 2006, and 2010, also created an ideologically disconnected governing alliance that forced the administration to compromise on the progressive principles its party was founded on. The effect was most apparent in the federal government’s relationships with the civil society organizations (CSOs) and social movements with whom it had closely aligned until 2002. By governing in coalition with center-right parties like the *Partido do Movimento Democrático do Brasil* (Party of the Brazilian Democratic Movement, PMDB), the PT under Lula “tried to grasp the best of both worlds, pursuing newly pragmatic policies while attempting to cultivate older left-leaning allies within civil society” (Power 2014, 26–27). Indeed, the Lula administration embraced economic orthodoxy to promote growth, symbolized by a regressive tax structure, high interest rates whose returns accrued to a “modern bourgeoisie”,¹³ cutting public investment, expanding jobs to boost domestic consumption, and lowering inflation rates (Nunes 2018; Anderson 2019, 74–75). Social movements like the *Movimento dos Trabalhadores Rurais Sem Terra* (Landless Workers’ Movement, MST) balked at the Lula administration’s warm relationships with agribusiness, which culminated in the clearing of vast swaths of rural land for consolidated corporate agriculture (Welch 2011; Power 2014, 26; Anderson 2019, 75). These dynamics led progressive CSOs to take a stance that Kathryn Hochstetler terms *apoio crítico* (critical support): voicing criticisms to PT governance while simultaneously defending Lula’s

¹³ A comparison between social transfers and interest rate payments demonstrates this trend. During Lula’s administration the federal government’s outlays for *Bolsa Família* were 0.5% of GDP, while expenditures on the public debt were 6-7% of GDP (Anderson 2019, 75).

government against opposition from other parties (Power 2014, 26–27). The administration’s environmental policies caused Lula’s environmental minister Marina Silva to leave the MMA in 2008 after unsuccessfully opposing several infrastructure projects in the Amazon region that she criticized for promoting deforestation (Butler 2008). Hochstetler writes that political parties “virtually always end up facing contradictions between their role in expressing societal values and their role in winning electoral campaigns and governing” (Hochstetler 2008, 35). This was especially true for the PT, a party borne out of alliance between social movements, unions, progressive thought leaders, and opponents of the dictatorship.

The Lula government approached the issue of waste and waste pickers with much the same pragmatism as in these other policy areas. This moderated approach tempered its commitment to urban environmentalists’ demands to hold the business sector fully accountable for its generation of waste. The government’s position was most clearly embodied in the central role that it afforded to private sector entities during discussions and negotiation of the PNRS. Recalling the law’s formulation, Alex Cardoso states that representatives from the business sector “were practically the main actors” in the discussion process. He says:

“The government always acted according to the rationale of a coalition government. Why that rationale? Because nothing can be created if the elite do not let it move forward. A leftist government itself, as a leftist government, would either take place in an almost armed manner, like in Venezuela. And that’s where we can perceive those differences, right? ... There’s always a pacification process. The PNRS is born from that process. The process of gathering the various parties and being able to reach an agreement between the collective in order to create a policy.” (Cardoso 2021)

This conclusion was reinforced by the researcher Alexandre Pereira, who affirmed that the MMA “worked with the business sector” in setting the policy, and “was not against business” (Neves Pereira 2021). Indeed, various interviewees attested that representatives from industry associations including the *Compromisso Empresarial para Reciclagem* (Business Commitment for Recycling, CEMPRE), CNI, and ABRELPE were also key contributors during this process (Silvério da Costa 2021; Amorim 2021).

As prior sections of this chapter have shown, the policy-making process behind the PNRS was a participatory affair, with waste picker leaders and civil society representatives from social and technical NGOs present during hearings held by the MMA. However, the blue-brown coalition was not alone in taking advantage of these newly accessible institutional structures. Private sector actors were “very close to power”, and came to the process with their own economic agendas (Neves Pereira 2021). By maintaining partnerships with industry and permitting these interest groups to participate in the law’s development, the Lula administration allowed the business sector an outsized influence over the direction of the PNRS. This brings up an interesting tension over the importance of participation in policy-making. Without addressing the power inequalities between CSOs and the private sector, the federal government effectively ceded primacy to the business sector in setting the terms of the PNRS. The ensuing policy result was one that businesses approved of, and was at once both a miraculous policy victory in the face of historic opposition, and simultaneously a time bomb for later conflict. The next section will discuss the private sector’s shift towards an agenda of corporate social responsibility (CSR), which signified a turning point in its approach to the evolving PNRS. Chapters Four and Five will describe the conflicts and tensions that this law has created amongst the blue and brown actors that supported it.

Changing to stay the same: The private sector’s new strategy

By one interviewee’s telling, “[producer sector lobbies] worked with a scenario in which issues could be discussed, as long as nothing changes. [They] had to change to stay where they are and keep things the same” (Anonymous interviewee). Even though momentum toward the PNRS was building thanks to a feedback loop between Lula’s progressive administration and the continued organizing of the blue-brown coalition, these forces on their own would not have been enough to pass a national solid waste policy. The advance of the PNRS was only possible due to the business sector’s pivot towards a policy of corporate social responsibility (CSR), which

supplanted strict opposition as the dominant stance towards a national waste policy. Producers were the first to embrace CSR, followed by solid waste management companies. The private sector's pivot towards CSR can be explained by a variety of causal factors. It was due to pressure on corporate actors from a growing international environmental community. It was also a response to the ongoing feedback loop between a political climate that favored civil society actors with socio-environmental causes. The rest of this section will review literature on CSR, explore the profit motivations behind the producer sector's new approach, and describe the position of the waste management sector towards CSR.

CSR initiatives arose at the end of the 20th century as the general public became aware of corporate entities' culpability in a range of environmental accidents and human rights violations (Fox 2018, 27–28; Idowu and Leal Filho 2009). Finding themselves under enhanced public scrutiny, corporations embraced CSR to improve perceptions among shareholders as well as society at large. Research has shown that CSR holds the potential to positively influence firms' profits, insofar as they avoid engaging in social responsibility activities that involve significant costs, such as switching from cheap raw materials to expensive recycled materials for industrial processes (Orlitzky, Schmidt, and Rynes 2003; Profita and Burns 2017). Fox concludes that “the lack of certainty regarding when exactly CSR might prove lucrative creates an incentive for businesses to advertise a false CSR agenda” (Fox 2018, 29). In other words, corporations seek the financial benefits associated with a socially and environmentally responsible image, without actually taking tangible action towards these end goals. Researchers and environmentalists criticize this as “greenwashing”, pointing out that corporations may even voluntarily engage in CSR actions in advance of public mandates, going so far as to help formulate the environmental and social regulations that will apply to them. In the case of the PNRS, producers pivoted from obstructionism towards a CSR platform that brought them to the negotiating table and allowed them a substantial say in the law's formulation. The success of their strategy demonstrates how

CSR “allocates power and opportunity for corporations to leverage loopholes in the very systems meant to regulate them” (Fox 2018, 30; Cole 2012; Aluchna 2017).

At the fore of this new strategy was CEMPRE (the Business Commitment for Recycling), a member-based non-profit association whose members have historically included multinational companies like Coca Cola, Unilever, Danone, Nestle, Pepsi-Cola, SC Johnson, and large Brazilian companies (Fox 2018, 43). The circumstances under which CEMPRE was founded foreshadowed its involvement in shaping the National Solid Waste Policy, and exemplify the international pressures that catalyzed a change in producers’ strategy. CEMPRE was created in 1992, on the eve of the Earth Summit Conference in Rio de Janeiro. Foreseeing the risk of more stringent regulations brought on by increasing international attention on Brazil’s environmental policies, CEMPRE and its constituents sought to establish an image of social and environmental responsibility by advocating increased selective collection and inclusion of waste pickers in product take-back processes (Vilhena 2006).

Despite its existence since the 1990’s, CEMPRE and the CSR agenda were overshadowed until the early 2000’s by FIESP and CNI’s efforts to obstruct the passage of the law. Interviewees and other primary sources did not provide a clear perspective on exactly when CSR became a dominant discourse in the business sector. However, I infer that a likely catalyst for this shift was the incoming Lula administration (whose progressive platform may have signaled the inevitability of a national waste policy) as well as organizing by social movements of waste pickers and their allies who were backed by the new president. I conjecture that multi-national companies whose products are responsible for a majority of municipal solid waste (MSW) responded to these socio-political shifts by changing strategies: where they had previously blocked the progress of a national waste policy, they then began to participate in policy discussions and lend support to the law’s principle of social inclusion of waste pickers. Yet even amidst their new rhetoric of social and environmental responsibility, these member organizations strategized to avoid taking financial responsibility for paying the costs of

collecting and sorting services for recyclable materials, which would have been consistent with the principles of EPR as practiced in Europe (Grimberg 2021). In other words, CSR was a deliberate strategy on the part of producers to ensure that the PNRS would pass under terms that producers approved of. By participating in setting a policy agenda, the private sector took advantage of a political opening under the Lula administration. Vital Ribeiro states that “we would like to think, to believe that the National Waste Policy was an achievement of the collectors of social movements, but it was only approved because the Confederation of Industry realized that it was more in their interest to move this law forward in the Congress where they had control” (V. Ribeiro 2021). By supporting the advance of the law, the producer sector guaranteed itself a seat at the discussion table—both in institutional forums as well as in informal convenings. Indeed, various interviewees placed emphasis on the private sector’s influence over the scope of the PNRS as it evolved in the National Congress, describing the law as being written “behind the scenes”, either in the restaurants of Brasilia or in the course of “hallway discussions” involving public officials and lobbyists (Cardoso 2021; V. Ribeiro 2021).

Even in officially sanctioned discussions, the business sector vocalized its CSR commitments by supporting catadores’ agenda of social inclusion. In March 2006, CEMPRE’s director André Vilhena spoke at a meeting in the Chamber of Deputies to discuss consolidating a national waste policy from Bill 203. Among the attendees were Heliana Kátia Campos from the MDS and Luiz Fernando da Silva, a leader of the MNCR. In this forum, André Vilhena voiced CEMPRE’s support for a national waste policy in the following terms:

“Fortunately, the proactive business sector has realized that the most appropriate way to adjust to our reality and to contribute to the issue of shared responsibility in post-consumption is by supporting the growth of waste pickers’ cooperatives.... In the National Solid Waste Policy, we would like to see cooperatives included. From what we have seen so far... the collectors’ cooperatives will be inserted and will become the main actors of this solid waste management policy in post-consumption. The business sector must increasingly move towards supporting these initiatives and making waste pickers able to grow and become entrepreneurs, and that Brazil, with this, advances, for those who may one day become a leader in the worldwide recycling of urban waste. Why not?” (Vilhena 2006)

Note that Vilhena frames the responsibility of producers in terms of social assistance to catadores, as opposed to using a frame of environmental responsibility. In the rest of his speech, André outlines CEMPRE's commitments to donating equipment to cooperatives, offering technical training to waste pickers, upgrading machines, and providing lines of financing for building cooperatives (Vilhena 2006). However, he does not mention remunerating waste pickers for their services, nor a commitment to take financial responsibility for environmentally responsible management of producers' waste (which would have been consistent with the polluter-pays principle).

While waste management companies resisted the advance of the PNRS longer than the producer sector, they too eventually realized a profit motive in the law's passage. One anonymous interviewee recalls a split between the producer sector and sanitation sector during the Lula administration in which CEMPRE was supporting the PNRS and ABRELPE was opposing it. According to this source, Lula ended up supporting the agenda articulated by CEMPRE over that of ABRELPE (Anonymous interviewee). I conjecture that this was in part due to the fact that CEMPRE strategically engaged with waste pickers, who had the sympathy of the PT-led federal government in their demands for formal inclusion in municipal waste management systems (J. Rutkowski 2021). Despite the political setback, ABRELPE later ended up supporting the PNRS due to its mandate for the closure of open dumps and raising rates of selective collection (entailing greater separation of recyclable materials). Solid waste management companies saw lucrative opportunities in both of these provisions: many such companies have opened private sanitary landfills into which materials are diverted. Furthermore, to meet selective collection targets municipalities required more waste collection services, a demand which solid waste management companies could meet. As Alexandre Pereira articulated, "even if [solid waste management companies] complained against Lula and about participation of catadores, they took advantage of all these things" (Neves Pereira 2021).

2007–2010: The debate resumes

The year 2007 represented a “resumption” of debate in the legislature around the PNRS (Valverde 2021). It was this year that President Lula and ministry officials began working closely with the legislative branch, in particular the Chamber of Deputies, to advance the PNRS. This period also saw producers and representatives from the blue-brown coalition fully participating in discussions surrounding the passage of the law, both taking advantage of newfound participatory spaces opened by the Lula administration. On September 6, 2007, at the start of President Lula’s second term, CONAMA sent the bill to the National Congress for debate (Valverde 2021). Many interviewees indicate that this process moved forward at the behest of the executive branch, which at this point showed unprecedented dedication to passing a policy with strong commitments to inclusion of waste pickers (Manetti 2021; V. Ribeiro 2021; F. Rossi 2021; C. Santos 2021).

With the arrival of the CONAMA-sanctioned bill in Congress, momentum began to grow in the legislature, starting with the Chamber of Deputies. In 2006 a state deputy from São Paulo named Arnaldo Jardim was elected federal deputy and joined the Chamber, eventually becoming rapporteur of the project to institute a solid waste policy. Jardim, who had been involved in the creation of São Paulo state’s solid waste management policy and held strong links to the industry association FIESP, introduced a version of the PNRS to Congress that built on the consolidated bill from CONAMA’s seminar (V. Ribeiro 2021; Schneider, Ribeiro, and Salomoni 2013, 7:15–16). Much of this federal bill’s language was borrowed from the São Paulo law (R. Souza 2021; Valverde 2021).

In 2007 and 2008, three thematic hearings were held to discuss the bill, with input from CNI, the MNCR, and other interested sectors including CEMPRE and ABRELPE (F. Oliveira 2015; Valverde 2021). These hearings focused on the polluter pays principle, the bill’s financial instruments, and catador inclusion. Various interviewees highlight the high degree of participatory involvement in these forums, with “each [actor] wanting to pull the waste policy to

his side” (Neves Pereira 2021; Valverde 2021; Silvério da Costa 2021; Amorim 2021). During this time, waste pickers and their urban environmentalist allies articulated several objectives be incorporated into the law: first, that catadores be prioritized for contracts with cities for waste collection and sorting. Second, they advocated for catadores to receive fair remuneration for their activities.

During these initial hearings, business interests articulated a stance that industry “does not produce waste; industry manufactures the products that serve society” (Valverde 2021; F. Ribeiro and Pereira 2021). While supporting the law’s passage, they exerted pressure on the federal government to back away from a mandate of EPR. José Valverde, a former technical advisor to Arnaldo Jardim, describes the process by which EPR was modified into a different model of “shared responsibility”:

“We started to understand that the polluter pays principle and the Objective Liability or the European Liability, which is the Extended Liability, also would not be a model that would create a convergence. It was starting from there that we granted this so-called Principle of Shared Responsibility for the Product Life Cycle, that is, it is individualized but it also has interlinked responsibility between manufacturers, importers, distributors, traders, public authorities. And then public power is: the waste management companies, the municipalities and also society, the citizens.” (Valverde 2021)

Here, José’s frank admission about the lack of convergence around EPR acknowledges that federal actors saw the need to compromise with industry. The shared responsibility mandate reflected a vision consistent with the center-right PSDB party with regard to the responsibility of producers, and how to involve waste pickers—in short, a “business vision” that limited producers’ financial responsibility for waste management (Anonymous interviewee). While the bill placed waste pickers in a central role, it no longer contained provisions for EPR similar to European laws (V. Ribeiro 2021; Rizpah Besen 2021). Instead, it introduced a system of *reverse logistics* with a call for responsibility for the return of post consumption waste to be

shared amongst municipalities, producers, and society at large (Silvério da Costa 2021).¹⁴ As the rapporteur for the PNRS bill, Jardim had control over the law's progression within Congress, and was responsible for blocking the insertion of EPR mechanisms, according to Vital Ribeiro (V. Ribeiro 2021).

In June of 2009, a draft of the final bill was published for public comment. In March of 2010, the Chamber of Deputies approved the bill, which was then sent to the Senate chamber for debate. Four committees analyzed the bill, and it was approved on July 7. On August 2, President Lula signed the bill into law. One day later, law 12.305/2010 was published in the Official Gazette of the Union, and on December 23 a regulatory decree 7.404/2010 was passed, which regulates Law 12.305/2010 (F. Oliveira 2015).

A wonder of the world? Laying the groundwork for future conflict

Speaking from the point of view of the MNCR, Davi Amorim recalls that “we already knew [the PNRS] was not the greatest wonder in the world, but... it evolved a lot [to] expressly talk about waste pickers” (Amorim 2021). Despite some awareness of the policy's limitations, the movement praised the PNRS at the time of its passage. The PNRS represented a massive step forward in the visibility of the waste picker movement by providing a legal guarantee of support to catadores. It also placed greater responsibility on industry for the impact of its waste products, a sign of hope for urban environmentalists. However, even as the blue-brown coalition celebrated a policy victory, many of the specifics of the policy were yet to be realized. Vague language of “shared responsibility” would create conflicts down the road, as the business sector maneuvered to defend its financial interests. This conflict of interests would be compounded by a shift in the political opportunity structures facing the coalition under a changing presidential

¹⁴ The term “reverse logistics” references the fact that industries use *logistics* to move their products between manufacturers, importers, distributors, to reach consumers. Thus, “reverse logistics” describes using this same production chain to take back products after consumers use and dispose of them (Brandão 2018, 5).

administration. Cumulatively, these dynamics would spawn tensions in the coalition of waste pickers and urban environmentalists.

3. ANALYZING THE CONTENTS OF THE PNRS

Introduction

On December 23, 2010, President Lula signed Decree 7.404 on stage at Expocatadores, an annual convention for waste pickers across Latin America, held in São Paulo. By his side was president-elect Dilma Rousseff, who was due to assume the presidency one week later, on January 1, 2011. All federal laws require an implementation decree, and Decree 7.404 functioned as the regulatory decree for the PNRS, establishing rules for the implementation of the law's provisions. Alex Cardoso attended the convention, and recalls that the day "meant a lot for the catadores, in the end, because it was on our own stage that the signature of the regulatory decree took place" (Cardoso 2021).

The beginning pages of the now-active National Solid Waste Policy contain a list of principles upon which the law is founded, and instruments that the law uses to achieve its objectives. Among the principles are concepts like sustainable development, eco-efficiency, and recognition of waste as an economic good with social value. Among the law's instruments are solid waste plans, environmental education, and a National Solid Waste Information System (SINIR). In this chapter, I will analyze three principles in the PNRS that specifically pertain to the objectives of the blue-brown coalition: the polluter pays principle, protector-receiver principle, and shared responsibility principle. I will then discuss three instruments that the law calls for to achieve these principles: reverse logistics, selective collection, and sectoral agreements. At the end of the chapter, I will demonstrate how the three aforementioned principles, when articulated in combination, created conflicting interpretations about which actor bore responsibility for different aspects of waste management. This analysis sets up a conclusion about my second research question, whether the proponents of the law were able to achieve the policy changes that they worked to pass on paper. I will show contradictions in the aforementioned principles, which in turn stoked controversy over how the instruments of

reverse logistics, selective collection, and sectoral agreements would be structured. As the next chapter will show, all of these conflicts set the stage for conflict between actors with different stakes in solid waste management, including the private sector, municipalities, waste pickers, and environmentalists.

The principles of the PNRS: Who manages waste?

Polluter pays principle

The concept of the *polluter pays principle* (PPP) originated from a set of recommendations issued by the Organization for Economic Cooperation and Development (OECD), and later was integrated as Principle 16 of the 1992 United Nations Declaration on Environment and Development in Rio de Janeiro. The PPP mandated that entities producing pollution should bear the costs of pollution prevention and control measures (OECD 1992). This meant that polluters must bear the cost of activities to protect the environment, which might include reducing pollution at source and managing the environmental impact of products throughout the entire production life cycle.¹⁵ The PPP functions on the assumption that a polluter will reduce their polluting activities “as soon as the costs which he or she has to bear are higher than the benefits anticipated from continuing pollution” (European Commission 2012). The OECD states that the polluter should not receive assistance to control pollution, such as grants, subsidies, tax allowances, or below-cost charges for public services (OECD 1992).

The polluter-pays concept is listed as a foundational principle of the PNRS, where companies implicated in waste generation constitute the “polluters” (“Brazil National Solid Waste Policy” 2010). Article 33 of the PNRS represents the most important manifestation of the PPP. This article mandates that actors from the business sector whose activities generate waste

¹⁵ More recently, the term extended producer responsibility (EPR) has been popularized to describe stewardship of products throughout their life cycle (European Commission 2012, 6). Extended producer responsibility is thus considered one form of the polluter pays principle.

(including manufacturers, importers, distributors, and marketers) are “required to structure and implement reverse logistics systems, upon return of the products after consumer use” (“Brazil National Solid Waste Policy” 2010, 17). Reverse logistics are systems that facilitate the collection and reuse of solid waste in the production cycle, or else the environmentally appropriate final disposal of solid waste (for further discussion of reverse logistics, see later in the chapter). The PNRS mandates that producers undertake a set of activities to fulfill reverse logistics. This includes providing stations where consumers can deliver reusable and recyclable waste, purchasing used packaging or products for future use, and providing environmentally responsible disposal of products and packaging collected or returned by consumers. Many of these functions, particularly the collection and disposal of solid waste, had historically been the responsibility of municipal governments. Harkening back to the OECD’s stipulations for PPP, Article 33 specifies that “if the holder of the public services of urban cleaning and solid waste management... undertakes activities which are the responsibility of manufacturers, importers, distributors and merchants in reverse logistics systems of products and packaging mentioned in this article, the actions of the public authorities should be duly remunerated” (“Brazil National Solid Waste Policy” 2010, 17–18). Under this specification, the private sector is required to compensate municipalities for expenditures related to managing products that are considered the responsibility of the private sector, consistent with extended producer responsibility and the PPP.

Rather than setting out concrete regulatory principles for reverse logistics, the PNRS stipulates that separate agreements be negotiated between public and private entities. Article 33 states that reverse logistics systems shall be determined by various *sectoral agreements* (see below) signed between public authorities and specific industries, including sectors involved in the production of packaging, batteries, tires, lubricating oils, lightbulbs, and electronics. This provision had tremendous consequences on the degree to which the polluter-pays principle was

met. Chapter Four contains a detailed discussion of the content and effects of the sectoral agreements.

Protector-receiver principle

The principle of *protector-receiver* appears as another of the core principles of the PNRS, and is an extension of the polluter pays principle that is unique to Brazilian environmental law. The principle is meant to encourage ecologically sustainable practices, and can include compensation from public or private entities to actors who render environmental services (Machado 1982, 669–70; Milaré 2015, 271). In the words of José Valverde, the protector is one who protects the environment and promotes ecological responsibility (Valverde 2021). The “protectors” include catadores, but also any other entities that promote environmental stewardship (Silvério da Costa 2021). With regard to catadores, the principle of protector-receiver manifests itself in two provisions of the PNRS. First, the PNRS orders partnerships between catador cooperatives and private waste producers (Article 33). When describing the responsibilities of waste producers, the law states that waste producers must act “in partnership with cooperatives or other forms of association of catadores of reusable and recyclable materials” while implementing the reverse logistics system (“Brazil National Solid Waste Policy” 2010, 17). The law does not provide further specifications about how waste producers should integrate catadores into their processes, and instead states that these relationships should be concretized by sectoral agreements between public authorities and the business sector. Second, the law directs municipalities to prioritize catador cooperatives when contracting solid waste management service providers (Article 36). The policy references Brazil’s 1993 Public Bids Law (8.666/1993), which allows municipalities to bypass otherwise mandatory bidding requirements when establishing contracts with waste pickers for waste management services. Here, the wording of the law is key:

“...the holder of public services of urban cleaning and solid waste management *will prioritize* organization and functioning of cooperatives or other forms of associations of catadores of reusable and recyclable materials, formed by low-income individuals, as well as their hiring” (Article 36, italics added)

Critically, this language of prioritization is not a mandate for municipalities to contract with waste pickers. To mandate the obligatory contracting of waste pickers would be illegal, as the Constitution of 1988 (Article 30, Clause V) designates authority to municipalities to individually determine sanitation and waste management services (S. Dias 2010). This provision of the PNRS became controversial in the years following the law’s passage, which saw many municipalities continuing to pursue contracts with private solid waste management companies over waste picker cooperatives (F. Ribeiro 2021; Gutberlet 2021; Amorim 2021). I will explore the effects of this provision further in Chapter Four.

Shared responsibility

The third relevant principle of the PNRS is *shared responsibility* for the product life cycle (Article 6), which is defined as “any set of individualized and chained assignments of manufacturers, importers, distributors and traders, consumer and holders of public services of urban cleaning and solid waste management, to minimize the volume of solid waste and refuse generated, as well as to reduce the impacts to human health and environmental quality arising from the product life-cycle in accordance with this Law” (Article 3) (“Brazil National Solid Waste Policy” 2010, 3–4). Shared responsibility is perhaps the most controversial principle of the policy: supporters claim that it “created an environment of harmony” amongst industry and public authorities (Valverde 2021), while critics label the language “quite general and not helpful” in assigning obligation to the private sector to manage its waste products (F. Ribeiro 2021).

The degree to which different actors approve of the shared responsibility principle varies according to whether they understand it as synonymous with extended producer responsibility.

Representatives from the MNCR and urban environmental allies, scholars, and some government employees claim that shared responsibility is a different concept than extended producer responsibility (EPR), which holds producers responsible for the costs associated with environmentally sound disposal and recycling of their products (Amorim 2021; F. Ribeiro 2021; V. Ribeiro 2021; WIEGO 2020). Vital Ribeiro traces the origin of shared responsibility to the private sector's appeasement of environmentalists attempting to assign them greater financial responsibility:

“...there was the group of environmentalists who could still cause some problems. This group of environmentalists needed not to be bought, but to be deceived. That's what happened; [the business sector] put forth a very well done proposal to replace the previous project. The new project carefully replaced some fundamental points of the law for points that could be understood any way. For example, it takes out the post-consumer responsibility, extended producer responsibility, and puts in shared responsibility. Shared responsibility does not mean anything, because the responsibility of the citizen already existed by law, the responsibility of the public power was also already established. Only the producer's responsibility was not established. And then they put in shared responsibility and made people think that it represented the producer's responsibility, but not really, so even today there's no producer responsibility in this law.” (V. Ribeiro 2021)

Flávia Rossi, a scholar who studies the MNCR, identifies the language of shared responsibility as a “victory” for the business sector, as sharing was a way for the business sector to excuse itself from full responsibility for its products (F. Rossi 2021). Moreover, while the PNRS uses the term “shared responsibility”, it does not delegate specific tasks to different actors involved in reverse logistics. As one anonymous observer of the proceedings points out, when responsibility is shared, “the problem is that when it comes to identifying the culprits for not having achieved the goals, then the culpability is also shared. So you can't act on this actor or that actor because in fact it's everyone's responsibility” (Anonymous interviewee).

Meanwhile, other interviewees defend shared responsibility as an appropriate method for implementing reverse logistics, and characterize shared responsibility as consistent with an EPR approach. Dione Manetti, executive director of the company *Pragma Soluções*

Sustentáveis,¹⁶ which mediates public-private partnerships on waste management, states that “it is not possible to assign responsibility for the collection and destination of waste to a single sector. I think the city halls need to do their part, which is to implement selective collection in the municipalities, [and] I think companies need to do their part by doing the reverse logistics of their products, either independently or in combination with the city halls. I defend and I work for them to always be together” (Manetti 2021).¹⁷ Manetti’s position is more moderate than that of Fabricio Soler, an attorney who provides legal services to various Brazilian industry associations, and who characterizes the shared responsibility concept as synonymous with EPR. In a revealing statement, Fabricio lays out his perspective on the roles of municipalities and the business sector:

“I understand [shared responsibility] as a beautiful concept brought by the [PNRS] because it brings what is the attribution of the business sector and what is the attribution of public power. The attribution of the business sector is to invest in the improvement of the product that is already aligned with EPR.... On the part of the municipalities, [they must] invest in selective collection, in the recycling of the materials that make up solid urban waste; support social organizations such as cooperatives.... So I particularly like [shared responsibility], I think our law is very good, we have some enforcement deficiencies, but in terms of the situation, the design, the framework, I think it is very robust... *I understand that it is not the responsibility of the business sector to pay for selective collection, this is a public service and the municipality charges [citizens] for it.* There is a discussion in Brazil about reimbursing the municipality for an assignment that he already has to do, okay? It's just a highly discussed point here in Brazil, about what is public service and what is the attribution of the business sector for the purposes of reverse logistics. In my opinion, they are different topics and they should communicate with each other. Some defend that you have to pay the city hall, I do not agree.” (Soler 2021) (italics added)

From Fabricio’s perspective, the portion of the responsibility that is held by the business sector does not include remunerating public authorities for collecting and disposing of waste.

¹⁶ *Pragma Soluções Sustentáveis* is a consulting company that acts as a “link that connects workers, corporations, and governments” (Manetti 2021). Dione Manetti serves as a technical advisor to the waste picker movement (Brandão 2018, 113). However, an anonymous source involved in discussions of the PNRS states that Pragma is “supposedly an environmental organization”, but in reality “is at the service of the private sector” (Anonymous interviewee).

¹⁷ The term “selective collection” describes a method of waste collection in which recyclable materials are collected separately from non-recyclable waste. See the below section “Selective collection” for further discussion.

This responsibility, he argues, belongs solely to municipalities. Critically, this viewpoint represents an alternative interpretation of the reverse logistics system as not covering the collection of packaging waste.

Instruments of implementation

Reverse logistics

The PNRS calls for the private sector to adopt a system of reverse logistics that operates “independently of the public service urban cleaning and solid waste management” (“Brazil National Solid Waste Policy” 2010, 17). Reverse logistics is defined by the policy as “any instrument for economic and social development characterized by a set of actions, procedures and means for facilitating the collection and reuse of solid waste in the business sector, to reuse in its lifecycle or other productive cycles, or other environmentally appropriate final disposal” (“Brazil National Solid Waste Policy” 2010, 3). Reverse logistics describes the process of diverting products from final disposal towards processes of value recovery or proper disposal, and is so named because it describes the backward flow of materials against the production chain.

The PNRS lays out three recommendations that the business sector may carry out in pursuit of reverse logistics (Article 33):

1. purchase products or packaging after consumer use
2. provide waste delivery stations for reusable and recyclable materials
3. act in partnership with cooperatives of catadores

However, the PNRS does not set specific requirements for the business sector’s activities, instead stating that sectoral agreements will determine the details of reverse logistics. Therefore, although a definition of reverse logistics appears and Article 33 assigns responsibility for reverse

logistics to the business sector, the policy remains unclear about exactly how this system will be achieved.

Selective collection

While the business sector holds responsibility for reverse logistics, the PNRS delegates municipalities the responsibility to establish a selective collection system for solid waste (Article 36). The process of selective collection entails “solid waste collection [that is] previously segregated according to composition and characterization”, for example consumers discarding recyclable and non-recyclable materials in separate bins. At the time of the bill’s passage, less than 10% of municipalities had some type of selective collection system in place, and out of these many only served select areas of the city (MNCR 2010).¹⁸ Selective collection holds the potential to increase the sustainability of waste management systems by channeling greater quantities of material into recycling and reuse processes. Simultaneously, implementing selective collection represents a huge financial burden for municipalities. The MNCR estimated that adopting selective collection systems could be four to five times more expensive than conventional collection methods (MNCR 2010). Jacqueline Rutkowski, a researcher at *Instituto SUSTENTAR Interdisciplinar de Estudos e Pesquisas em Sustentabilidade* (SUSTENTAR, Interdisciplinary Institute for Studies and Research on Sustainability) notes that in 2021, municipalities allocate around 5 percent of their total budget to operating waste collection systems (J. Rutkowski 2021). Furthermore, approximately 70% of the recyclable material that cities collect is packaging products (Manetti 2021; Rizpah Besen 2021; Silvério da Costa 2021), a fact that would seem to activate the PNRS’s polluter pays principle (Article 33), which states that municipalities shall be remunerated for performing activities that are the responsibility of the business sector.

¹⁸ A 2008 survey conducted by the Brazilian Institute of Geography and Statistics and the Ministry of Cities found that only 994 of 5,564 Brazilian municipalities have selective collection systems in place as a final destination for recyclable waste. Out of this group, only 377 have systems that cover the entire municipality (IBGE 2017; MNCR 2010).

The mandate for selective collection introduced questions about integrating catadores into municipal waste collection and sorting schemes. Davi Amorim describes the different models of selective collection, either involving catadores collecting garbage through door-to-door collection, or relying on contracts with solid waste management companies (Amorim 2021). As mentioned prior, the PNRS encourages municipalities to make their selective collection systems inclusive to waste pickers by contracting with cooperatives to collect and sort waste, and incentivized this integration with the promise of priority access to federal funding (Rizpah Besen and Jacobi 2017, 77). In the interpretation of former São Paulo state planner Flávio Ribeiro, the prospect of inclusive selective collection was seen as “a nice way to include catadores” while simultaneously ensuring “good quality separation for recyclables” (F. Ribeiro 2021). The MNCR argues that waste pickers provide a more cost-effective service than private companies, while also performing environmental education about separating recyclables during their door to door collection (Amorim 2021). Nevertheless, as Chapter Four will show, after the law’s passage waste pickers continued to face competition from private solid waste management companies, who had historically held contracts with municipalities for collection services.

Sectoral agreements

In its discussion of reverse logistics systems, the PNRS calls for sectoral agreements to be negotiated by the government and with various sectors of industry. Rather than embracing a command-and-control model for reverse logistics (which might have imposed standard regulations on producers), the PNRS uses the approach of sectoral agreements, which assigns producers responsibilities for post-consumption management of waste based on future negotiations between the government and the private sector (Neves Pereira 2021; Valverde 2021; F. Ribeiro 2021). These sectoral agreements are “act[s] of contractual agreement between the public authorities and manufacturers, importers, distributors or traders, with a view to the implementation of shared responsibility for the product life-cycle” (“Brazil National Solid Waste

Policy” 2010, 2). Article 33 elaborates seven industry sectors that are required to establish sectoral agreements to manage reverse logistics for their products: pesticides, batteries, tires, lubricating oils, fluorescent lightbulbs, electrical products, and packaging materials. While many of these categories of waste had already been subject to requirements established by Brazil’s National Environmental Council (CONAMA) (see Chapter Two), packaging materials represented a new category of waste that had not yet been subject to reverse logistics requirements. Moreover, since approximately 70% of the dry recyclable materials collected by municipalities is packaging waste, this regulation held significant implications for various actors involved in waste management, including waste pickers, municipal governments, and the private sector businesses involved in the production of this packaging. Chapter Four contains a more nuanced discussion of the Packaging Sector Agreement and its implications for the coalition of waste pickers and urban environmentalists.

The contradictory logics of the PNRS

In this chapter, I explained the specific principles of the PNRS that held relevance to the coalition of waste pickers and urban “brown” environmentalists who supported the law’s passage. Since these two groups converged around complementary goals of extended producer responsibility and waste picker inclusion, the most relevant PNRS principles for my analysis are threefold: polluter pays, protector-receiver, and shared responsibility. Moreover, out of the law’s various instruments for implementation, three are especially important for actualizing these principles: reverse logistics, selective collection, and sectoral agreements. By elaborating these principles and instruments, I demonstrated that the language of the PNRS is vague and open to interpretation by enforcing authorities. Borrowing a phrase used by multiple interviewees, this meant that “political will” would determine the enforcement of PNRS provisions like producer responsibility and social inclusion of catadores (Gutberlet 2021; F. Ribeiro 2021; MNCR 2010). In the years to come, the law’s ambiguity would set up tension on two fronts: first, around what

activities fell under reverse logistics, and second about the inclusivity of municipal selective collection systems.

Within the principles of the PNRS lies a contradiction between the polluter pays principle and shared responsibility, which each advance different ideas of the responsibility of the business sector. Elements of the polluter pays principle can be found in the PNRS's provision for the business sector to implement a system of reverse logistics, and to remunerate municipalities for activities that fall under the business sector's purview. However, the PNRS does not explicitly define what these activities might be, and whether or not they include selective collection of packaging wastes. Instead, the principle of shared responsibility implicates all actors, including the business sector but also local governments, in processes of product takeback. Therefore, the PNRS "exposes two models of... reverse logistics": one where public authorities are solely responsible for managing urban solid waste collection, and one more consistent with extended producer responsibility (EPR) where the business sector shoulders this financial commitment by directly managing the waste product life-cycle, or by remunerating municipalities for doing so (ARZB 2016b). As Chapter Four will show, the business sector negotiated the Packaging Sector Agreement in a way that avoided taking responsibility for collecting waste. This was especially contentious in light of the PNRS's mandate for selective collection, which placed significant cost burdens on municipalities to develop new infrastructure for recycling. Saddled with greater responsibilities for selective collection of waste, municipalities found themselves without support from the businesses whose products make up about 70% of dry recyclable waste (Manetti 2021; Rizpah Besen 2021; Silvério da Costa 2021). By re-interpreting reverse logistics as separate from municipal waste collection, the private sector successfully de-coupled reverse logistics from the principles of EPR.

Furthermore, the PNRS leaves unresolved the issue of catador inclusion in municipal selective collection. The protector-receiver principle within the PNRS sets up expectations for the recognition and inclusion of catadores, who perform important environmental services by

recovering discarded materials through door-to-door collections. The law's selective collection instrument calls on municipalities to prioritize waste pickers, but does not issue a mandate or create incentives, besides eliminating the municipal bidding process. Thus, waste picker organizations were still vulnerable to competition from private solid waste management companies, and not necessarily included in municipal waste management systems. As the next chapter will show, these embedded contradictions would have harmful reverberations for the coalition of waste pickers and urban environmentalists who had converged to pass the policy.

4. TAKING THE ‘GILDED PILL’: THE PACKAGING SECTOR AGREEMENT

Introduction

The passage of the PNRS saw widespread celebrations amongst catadores, environmentalists, and the private sector. MNCR leader Alex Cardoso calls the PNRS a “policy of liberation”, stating that the law “was going to take us out of the bonds of social exclusion and put us on the path of citizenship, of being recognized as human beings, as workers with rights... It was us, descending like an army of excluded zombies... it was almost like magic; a transformation” (Cardoso 2021). One catador present at Expocatadores (when the regulatory decree was signed) recalls the emotional moments after the bill’s signing:

“I remember perfectly, I remember that I got my cell phone, left the room crying a lot and called my wife and said to her: ‘today was a historic moment in Brazil that will affect the lives of many people , among them us the pickers of recycled materials’. It was a moment not only of hope, but also of a way to improve the life of waste pickers. As I said, the National Solid Waste Policy, it is the major milestone of a waste management policy in Brazil.” (Anonymous interviewee)

However, some interviewees had a more suspicious reaction to the prospect of a shared win for the private sector, labor, and environment. Remembering the private sector’s celebrations following the PNRS’s passage, Vital Ribeiro states “when your adversary celebrates something, you are concerned. Something is up” (V. Ribeiro 2021). Indeed, catadores’ and environmentalists’ celebrations turned to concern in the years following the PNRS’s passage, with the negotiation of the sectoral agreements that the policy mandated to implement reverse logistics.

Building from Chapter Three’s analysis of the contradictory logics of the PNRS, this chapter analyzes the policy’s implementation process, in order to address my second research question about whether the PNRS’s proponents were able to achieve in practice the policy

changes that they worked to pass on paper. I will first describe the sectoral agreements that the PNRS called for to structured reverse logistics systems. I will explain how these sectoral agreements functioned, and will focus on one of the agreements, the *Acordo Setorial de Embalagens* (Packaging Sector Agreement), which established a reverse logistics system for general packaging waste, which makes up about 70% of the recyclable waste collected by municipal sanitation services (Manetti 2021; Rizpah Besen 2021; Silvério da Costa 2021). Similarly to the period that the PNRS bill was debated, political conditions within the federal government played a significant role on the Sectoral Agreement's formulation. This agreement was negotiated under the Dilma administration, which held tenuous control over executive office and made vast concessions to private sector interests. Compared to Lula's presidential term, during which catadores massively advanced in visibility and status, these years represented a closing political opportunity for the waste picker movement and environmental advocates that had fought for producer responsibility and waste picker inclusion. Not for the first time, industry organized itself into a powerful coalition that successfully lobbied to reduce the scope of its reverse logistics responsibilities, embracing a strategy of alliance with catador cooperatives. By purporting to defend catador interests, the business sector "gilded the pill", cloaking its resistance to environmentalists' demands in a "smokescreen" of corporate social responsibility (W. Ribeiro 2021). Indeed, the Packaging Sector Agreement provoked criticisms for its voluntary nature, its tenuous commitments to sustainability targets, and a lack of remuneration for municipalities and waste picker cooperatives. In effect, this meant that the PNRS did not actualize the shared labor-environmental win that its proponents had hoped for. At the end of the chapter, I will describe the impact that these shortcomings had on the coalition of waste pickers and urban environmentalists. I will argue that the law's incomplete implementation exposed tensions between these two actors, as each took different positions towards the Packaging Sector Agreement. This conclusion holds important lessons for labor-environmental alliances, as the following chapter will explore.

‘The start of Dilma’s problems’: President Rousseff’s weakened political position

Dilma Rousseff held office from 2011 until her impeachment in 2016. Hand-picked by Lula and a member of the Workers’ Party, at the beginning of her first term Dilma continued the social democratic legacy of her predecessor (F. Ribeiro 2021). However, during the years of Dilma’s presidency urban environmental issues began to lose steam in national discourse. Public attention increasingly turned towards traditionally green environmental issues like deforestation, climate change, and fires in the Pantanal forest (F. Ribeiro 2021). This shifting momentum left the waste picker movement and their urban environmentalist allies with fewer networks of civil society support on which to draw. Coupled with the fading emphasis on waste issues, external economic circumstances led the Dilma administration to adopt a more circumspect position toward social movements. This represented a significant shift for the waste picker movement, which owed much of its political strength to close ties with the Lula administration (Abers, Serafim, and Tatagiba 2014, 43).

In his book *Brazil Apart*, Perry Anderson captures the shifting political circumstances that led to President Dilma’s fall from the levels of popularity enjoyed by her predecessor Lula. Between 2005 and 2011, Brazil experienced vast economic growth as China and other countries increased their demand for its raw materials. This good fortune allowed Lula to increase social expenditures with the goal of boosting popular purchasing power. The administration achieved this both through conditional cash transfer programs like *Bolsa Familia* and by raising the minimum wage, but also through injections of consumer credit. By the end of Lula’s second term, this debt had grown substantially, both amongst the private sector and in consumer households. By 2014, interest payments on household credit were over one fifth of disposable income (Anderson 2019, 103). Coupled with this growing debt came the collapse of the commodity boom in 2011, when prices of tradeable goods like iron ore, soy, and crude oil dropped to a third of their former zenith. The effect of these external economic conditions was

to stifle domestic consumption, leading to economic stagnation. In response, the newly elected Dilma government first embraced a policy of economic stimulus in 2011, then in 2012 changed course, raising interest rates and reducing public spending. Midway through 2013, southeast urban centers like Rio and São Paulo were swept by a wave of mass protests in response to bus fare hikes, which rapidly morphed into generalized expressions of discontent with the government (Anderson 2019, 101). Amidst this downturn of popular support, Dilma successfully won reelection with a 3 percent margin of victory, propelled by her promise to improve the circumstances of the working poor. No sooner had she assumed office for her second term, however, than she reversed course, championing austerity. This led to a severe recession, in which the PT tried to secure support from manufacturers and industry by offering extensive credit to leading domestic companies. Flávio Ribeiro describes the Dilma administration's entrapment in a political structure that rendered it dependent on the support of allies from across the political spectrum:

“...[T]he Dilma administration, to make governance possible, had to open government to more centrist position alliances. In my opinion, for Dilma to be elected, the PT had to seize and accept influences from other political parties. And this affects everything. In my opinion, this is the start of Dilma's problems.” (F. Ribeiro 2021)

Part of the explanation for the PT's concessions to moderate politics was a lack of other allies on the left to turn to. Unlike in the years of Lula's administration, in which the PT had received the support—albeit *apoio crítico*¹⁹—of numerous social movements, under Dilma the PT found itself at odds with the movements that had borne it to prominence (Power 2014, 26). These social movements ranged from the *Central Única dos Trabalhadores* (Unified Workers' Central, CUT), an important labor federation, the *Movimento dos Trabalhadores Rurais Sem Terra* (Landless Workers' Movement, MST), as well as the MNCR, liberationist Catholics, and

¹⁹ As mentioned in Chapter Two, Kathryn Hochstetler coins the term *apoio crítico* to describe the position of Brazilian social movements during the years of Lula's leadership: voicing criticisms of the administration while also defending Lula against opposition parties (Power 2014, 26–27).

feminist and Afro-Brazilian organizations. As the PT pursued coalitions with moderate allies through pragmatic policies, it kept these social movements “at a distance” (Anderson 2019, 105). To keep its footing, Dilma’s administration was thus left dependent on the support of parties across the political aisle.

Returning to the concept of political opportunity structures articulated by Tarrow, the political and economic turmoil that occurred during Dilma’s administration represented changes to the windows of political opportunity that had opened under Lula’s presidency. Three factors may affect political opportunities: access to participation, shifts in governing alliances, and influential allies. The last two of these dimensions of political opportunity changed significantly under Dilma’s administration. President Lula was a close ally of the waste picker movement, whereas Dilma was less so (Brandão 2021; J. Rutkowski 2021; Abers 2021). From the point of view of social movements, Dilma was “less fond of dialogue and the incorporation of diverse interests” (Brandão 2021). Jacqueline Rutkowski characterizes Dilma’s relationship with social movements in stark terms:

“Lula has much more of a history of understanding the needs of the poor, the most vulnerable, than the Dilma government. Dilma was more of a technocrat who understood government management but did not have much experience with social movements, she didn’t understand this dynamic very much, despite being well intentioned, she was a leftist government but she didn’t have... I don’t know, all that feeling, that feeling about the most pressing needs of how to solve those needs.” (J. Rutkowski 2021)

Dilma also set up a Ministry of the Environment (MMA) that was less open to the demands of socio-environmental interests. Whereas the MMA’s previous minister Marina Silva had been closely associated with socio-environmental movements in the Amazon like the *seringueiros*, Dilma Rousseff’s MMA was led by Izabella Teixeira, a technocrat who did not dialogue as much with the environmentalist community (Brandão 2021; Abers 2021). On top of this, the Dilma administration supported large infrastructure projects, and pressured the MMA to “approve public works instead of protecting the environment” (Brandão 2021; Abers 2021).

The Belo Monte hydroelectric power plant was emblematic amongst various examples of controversial environmental policy in the Dilma era. The dam threatened neighboring indigenous tribes and rainforests in its berth, alienating many environmental activists within the MMA (Faleiros 2011).

The political limitations of Dilma's administration had significant bearing on the events following the passage of the PNRS. For one thing, the National Solid Waste Policy mandated a national waste plan be established to guide state and municipal plans for waste management. According to the researcher Gina Rizpah Besen, the national plan was never approved due to an absence of political will from the Dilma administration. The plan, if approved, would have provided waste pickers with a stronger position to lobby for inclusion in state and municipal plans. Instead, its absence was a "really big loss" for waste pickers (Rizpah Besen 2021). Secondly, Dilma's political vulnerability had significant bearing on negotiations of the Packaging Sector Agreement, which defined the terms of reverse logistics that the private sector was bound to carry out. Izabella Teixeira's receptiveness towards private sector demands weakened the bargaining power of waste pickers, and rendered them dependent on the limited opportunities they could find during negotiations. Sensing the political opportunities available to them, the waste picker movement was forced to consider its own interests before those of its coalition partners. In the next section, I will unpack the events during the three-year period that the MMA considered proposals for a Packaging Sector Agreement.

Proposing the Packaging Sector Agreement

The PNRS calls for reverse logistics systems to be set up for the manufacturers, importers, distributors or traders from various segments of industry.²⁰ The purpose of the

²⁰ The PNRS names six production chains that must institute reverse logistics, in addition to packaging in general: they are (1) pesticides and their packaging, (2) batteries, (3) tires, (4) lubricating oils and their packaging, (5) fluorescent lamps, and (6) household electronic products and their components (Rizpah Besen and Jacobi 2017, 77). Ribeiro and Pereira write that as of 2020, four sectoral agreements have

sectoral agreements was to define “shared responsibility” outlined in the PNRS, and delineate private sector actors’ responsibility for environmentally sound stewardship of waste resulting from their business (Rizpah Besen and Jacobi 2017, 78). Gina Rizpah and Pedro Jacobi write that by setting up this mechanism, the PNRS effectively transferred the responsibility to uphold the polluter pays principle onto the sectoral agreements.

The MMA established the Steering Committee for Implementation of Reverse Logistics, which was responsible for implementing the various sectoral agreements. Five *Grupos de Trabalho Técnico* (Thematic Technical Groups, GTTs) were created to draft and negotiate agreements for different product chains subject to reverse logistics (Rizpah Besen and Jacobi 2017, 77). Representatives from the MNCR and industry were invited to participate in GTT02, which served as the government-sanctioned forum for negotiating the Packaging Sector Agreement (Silvério da Costa 2012). In February 2012, the MMA issued a call for proposals for a packaging sector agreement. The call referenced Decree 7.404/2010, the law regulating the implementation of the PNRS, which contained specifications for the sectoral agreements. Among these provisions was the “possibility of contracting entities, cooperatives or other forms of catador associations to execute [reverse logistics]” (“Decreto N° 7.404” 2010). The call for proposals included additional specifications, including targets for reducing recyclable materials sent to landfills,²¹ penalties for noncompliance, and systematic evaluations of the reverse logistics model. Furthermore, the call for proposals specified that cities hosting World Cup matches should be prioritized for businesses’ reverse logistics efforts. This included Rio de Janeiro, São Paulo, Curitiba, Cuiabá, Belo Horizonte, Porto Alegre, Manaus, Salvador, Recife, Natal, Brasília, and Fortaleza (F. Ribeiro 2021; Fox 2018, 42). Of great significance was the

been signed with the MMA: lubricating oils (signed in 2012), fluorescent lamps (signed in 2014), general packaging (signed in 2015), and electronic waste (signed in 2019). Additionally, two other agreements known as *Termos de Compromisso* (Terms of Commitment, similar to sectoral agreements) were signed for steel packaging (signed in 2018) and batteries (signed in 2019) (F. Ribeiro and Pereira 2021, 4).

²¹ According to the 2012 call put out by the MMA, the targets for diverting recyclable materials sent to landfills are: 22% by 2015, 28% by 2019, 34% by 2023, 40% by 2027, and 45% by 2031 (Fox 2018, 41).

specification that only the federal government or entities whose products create waste that causes environmental pollution could submit a proposal (F. Rossi 2021; Fox 2018, 53).

In spite of this last specification, the MNCR expressed interest in contributing a proposal to the Steering Committee for reverse logistics system for packaging. In a letter to the Steering Committee dated October 11, 2012, representatives from the MNCR argued that “catadores could be considered waste traders, which would make them fit among those who are authorized to submit a proposal for a sectoral agreement” (MNCR 2012). In addition, the letter reminded the Committee that the MNCR represented and promoted empowerment of 800,000 waste pickers, including organized workers but also catadores who remained unorganized and subject to precarious working conditions. Two weeks later, the MMA responded to the MNCR’s request. In a letter addressed to MNCR representatives, Silvano Silvério da Costa, then-director of the Secretariat of Water Resources and Urban Environment within the MMA, denied the MNCR the opportunity to submit a proposal for a sectoral agreement. Justifying this decision, the letter reads:

“[Reverse logistics] is an obligation assigned, in each product chain, to its manufacturers, importers, distributors or traders. This obligation is broad, including the choice of actions, but also the payment of costs arising from them.... In other words: the business sectors that profited from the introduction of waste-generating products into the environment are obliged to collect and give environmentally adequate final destination to this waste. Thus, it is clear that this is a burden to be assumed by entrepreneurs as they have, to a certain extent, ‘caused the pollution of the environment with their waste’ and, therefore, we cannot include collectors in this group ‘associates to environmental pollution’.... The prerogative of presenting these proposals is exclusive to the business sectors that will assume the burden for the cost of the proposed system.” (Silvério da Costa 2012)

The MMA’s statement reasons that, as the producers of waste, business sectors are assigned responsibility for implementing reverse logistics, and the costs that accompany the system. Therefore, since reverse logistics is the private sector’s burden, the private sector should present the proposal for the system. While acknowledging the MNCR as an “important actor in the implementation of reverse logistics”, the letter states that the inclusion of catadores in the

GTT02 meetings, as well as the public consultation process mandated by Decree 7.404, should serve as “an adequate opportunity to make contributions to such [reverse logistics] systems” (Silvério da Costa 2012). However, as Davi Amorim points out, the logic of the business sector bearing responsibility for submitting their own reverse logistics proposal essentially allows the business sector to “regulate itself” (Amorim 2021). With its request denied, the MNCR found itself in a subordinate bargaining position ahead of negotiations that were to come.

In 2014, The MMA accepted a proposal submitted by the *Coalizão Empresarial* (Business Coalition), a group of 20 industry associations that represented 3,786 businesses (Rizpah Besen and Jacobi 2017, 78; Fox 2018, 42; F. Ribeiro and Pereira 2021, 8). This coalition was led by CEMPRE, which represents corporate entities and promotes recycling efforts. When submitting the proposal to the MMA, CEMPRE’s president Vitor Bicca commented that it “shows our commitment to maintaining the [Business Coalition] to create a new model of waste management in the country”, and emphasized that this system would be formulated in partnership with the waste picker movement (T. Oliveira and Verdi 2014). Talia Fox writes that by choosing the Business Coalition’s proposal as the starting point for the negotiation of the Sectoral Agreement, the MMA allowed businesses to “control which sustainability framework informed the resulting reverse logistics system – one that minimized spending and maximized marketability” (Fox 2018, 54).

However, sources show that even at this stage, CEMPRE’s proposal had the support of waste pickers. Roberto Rocha, a leader from the MNCR who represented the movement in negotiations of the Sectoral Agreement, stated in 2014 that “the initial agreement will help us in the organization process. We want to see the agreement in operation and work towards its success” (T. Oliveira and Verdi 2014). I interpret this statement to indicate that the MNCR was aware of the closing window of opportunity to advance their interests under Rousseff’s MMA and were seeking concessions within the limitations of the political moment. The following section will discuss some of the proposal’s controversial provisions in greater detail.

The ‘art of the possible’: Sectoral Agreement controversies

Once the Business Coalition’s proposal was accepted in August 2014, the MMA opened a sixty day public comment period from September 15, 2014 until November 20, 2014 (Rizpah Besen and Jacobi 2017, 69). This was followed by over a year of debate involving the waste picker movement, the Business Coalition, and the federal government.²²

The resulting agreement, signed in November 2015, contained various provisions structuring reverse logistics. The document establishes two phases of implementation. Phase I was to be two years long, and focuses on reverse logistics in the cities that would host World Cup events (Rio de Janeiro, São Paulo, Curitiba, Cuiabá, Belo Horizonte, Porto Alegre, Manaus, Salvador, Recife, Natal, Brasília, and Fortaleza). During Phase I, the signatories agreed to reduce the amount of packaging destined for landfills by 22% by 2018 (Fox 2018, 44).²³ The rest of this section will analyze the Sectoral Agreement’s negotiation.

Speaking about the negotiation of the Packaging Sector Agreement, Flávio Ribeiro muses: “I believe Otto von Bismarck said that ‘politics is the art of the possible’, isn’t it? We dream of an agreement, but when you go to the field, to the negotiation table, it’s really hard” (F. Ribeiro 2021). Indeed, the actors present in the GTT02 encountered numerous points of disagreement while discussing the PNRS. These meetings were ongoing between the years of 2011 to 2015, with the most intense two years of debate in 2014 and 2015 (F. Ribeiro and Pereira 2021, 8). While prior legislation had stipulated that a wide variety of interest groups were to be

²² Even before the MMA accepted the Business Coalition’s proposal, the ministry coordinated multi-stakeholder meetings for waste pickers and enterprise to discuss the terms of the packaging sector agreement. It was not possible to precisely track the MNCR’s evolving bargaining position during these years of meetings, and at the moment the proposal was submitted in August 2014, it is unclear to what extent the MNCR had already aligned itself with the Business Coalition. This lack of clarity stems from limitations in my data gathering.

²³ While the MMA had initially endorsed a system of product tracing, the business sector negotiated for the tracking mechanism to be based on volume of materials. Dione Manetti explains that companies needed to ensure the recovery of a certain volume of material: “[For example], a box of toothpaste is made of cardboard. So if 1,000 boxes of toothpaste represent 10 tons of cardboard and the goal of the companies is to recover 22%, then the companies need to guarantee the recovery of 220 tons of cardboard” (Manetti 2021).

included in the negotiations, the three actors most involved in these discussions were private companies in the Business Coalition (represented by CEMPRE), the MNCR, and officials from the MMA (Fox 2018, 53; F. Ribeiro 2021). Two points of divergence had significant ramifications for the alliance between the waste picker movement and brown environmentalists: the role of municipalities in reverse logistics and remuneration of waste pickers. I will address each of these and the implications for the blue-brown alliance below.

Who finances municipal waste collection?

The first important area of controversy concerned financial responsibility for waste collection. The Brazilian Constitution of 1988 delegates municipalities the responsibility to manage solid waste (S. Dias 2010). However, Article 33 of the PNRS mandates the business sector to bear the cost of reverse logistics for packaging, and explicitly states that the “actions of the public authorities should be duly remunerated” (“Brazil National Solid Waste Policy” 2010). While the Sectoral Agreement was under discussion, entities representing municipal interests demanded remuneration for their selective collection services, since a significant portion of materials collected was packaging produced by the business sector. Their argument rested on the reasoning that selective collection falls under the umbrella of reverse logistics, which the PNRS makes clear is a responsibility attributed to the business sector. A key actor espousing this viewpoint was the *Associação Nacional dos Serviços Municipais de Saneamento* (National Association of Municipal Sanitation Services, ASSEMAE), a non-profit association of approximately 2,000 municipalities that all provide direct sanitation services, as opposed to contracting with a private sector entity. ASSEMAE defends public management and universal

basic sanitation initiatives, and was involved in the GTT02 meetings relating to the Packaging Sector Agreement (ASSEMAE 2021; Silvério da Costa 2021).²⁴

However, the Business Coalition’s proposal contradicted Article 33 by failing to guarantee compensation for municipal waste collection activities (Alves 2015). Instead, pointing to the PNRS’s principle of “shared responsibility”, the business sector argued that selective collection is separate from reverse logistics, and therefore municipalities should bear responsibility to finance waste collection (Rizpah Besen 2021). They offered various justifications, four of which I will elaborate here. First, the business sector claimed that municipalities receive the money they need from residents. Fabricio Soler, an attorney for industry associations, says that municipalities already charge residents for sanitation services (Soler 2021).²⁵

Second, the business sector argued that arranging municipal remuneration was a logistical impossibility. In the words of Fabricio:

“...in Europe you have a remuneration of municipalities for collection, but it is another system, another organization, another reality. In Brazil, we have 5,570 municipalities... and thousands [of municipalities] with less than 50 thousand inhabitants. Can you imagine a company [like] Coca Cola, negotiating with 5,570 municipalities? Infeasible, you know? So I defend the independence of reverse logistics and public service.” (Soler 2021)

Third, companies claimed that money paid to city halls might be repurposed to other uses: “[companies argued that] remunerations would go to the city’s general funds, and many

²⁴ Exactly to what degree ASSEMAE participated in these meetings is unclear, based on conflicting interview testimony. I will address the controversial aspects of participation in the Packaging Sector Agreement negotiations later in this section.

²⁵ While true, this statement does not give the full financial picture of waste management. According to the researcher Gina Rizpah Besen, over 50% of Brazilian municipalities do not charge citizens for solid waste services. Out of those who do, the charge covers less than half of the total expense for waste management (Rizpah Besen 2021). Since waste management takes up approximately 5-10% of municipal budgets (Cardoso 2021; J. Rutkowski 2021), cities wanted to ensure the private sector bore the costs of this service provision.

municipalities do not have resources to pay employees' payroll, so this resource would be redirected to something else” (Manetti 2021).

Fourth (and most consequential for my analysis of blue-brown coalition fissures), the private sector justified its exemption from paying cities by arguing that waste pickers, not cities, are doing the actual recovery of packaging waste: “if [the business sector] invests in cooperatives and these cooperatives recover the material, this is material that is no longer recovered by the city, so [by investing in cooperatives, the business sector] is paying for the recovery” (Manetti 2021). But Jacqueline Rutkowski’s testimony suggests a strategic angle behind this last reasoning. By offering to assist in waste picker inclusion, a policy which “had strong support in the [federal] government”, the business sector successfully “isolated municipalities” in negotiations (J. Rutkowski 2021). I argue that this was done to avoid responsibility for a much more expansive interpretation of reverse logistics, which would have placed much greater financial burdens on the business sector.

In October 2015, two months before the federal government signed the proposal, ASSEMAE’s executive secretary Aparecido Hojaij expressed dissatisfaction with the terms of the Business Coalition’s proposal, stating that cities “cannot be responsible for a legal attribution of the private sector, which has the obligation to send packaging to an environmentally appropriate destination” (Alves 2015). From the logic of municipalities, “it was the private sector that put that waste in the world, then the private sector that should pay for its return in the production chain. This is what the National Solid Waste Policy provides, when it establishes shared responsibility for the product's life cycle” (M. de O. Santos 2021).

Municipalities’ disputed participation in negotiations

Disputes over participation in negotiations of the Sectoral Agreement crystallizes the conflict between the private sector and municipalities. The federal government had proposed a participatory negotiation process, yet many interviewees claim that municipalities were

excluded from the dialogue. When asked about the participatory nature of the sectoral agreement negotiations, Alexandre Pereira attests from firsthand experience at discussions:

“It was participatory at the beginning. But municipalities were excluded. There were some groups, like ASSEMAE, who were against this process, totally against it... I remember that [ASSEMAE] held a meeting against the Packaging Sector Agreement, because they knew that they were not part of the debate. Because CEMPRES was closer to the industry, and CEMPRES would want to protect its own interests. So [CEMPRES] didn't engage with local governments.” (Neves Pereira 2021)

Others remember that municipalities were included in the discussions, but not heeded. Marcela Santos worked as a lawyer for ASSEMAE during this time period, and says that the MMA “in no instance closed the doors to our participation”. She describes sending notifications, making written statements, and participating in meetings and roundtables held by the Steering Committee related to the Packaging Sector Agreement. Despite these different testimonies, Marcela and many other interview subjects agree that municipal interests were “not taken into account” by the federal government (M. de O. Santos 2021; Neves Pereira 2021; Grimberg 2021; Fox 2018; F. Ribeiro 2021; Rizpah Besen 2021). Dione Manetti, executive director of the company *Pragma Soluções Sustentáveis* and a participant in the negotiations, takes a more pragmatic view of the proceedings. He commends the federal government for remaining “flexible to refuse” the demands of municipalities. In Dione's assessment, the MMA “managed to get around” municipalities' opposition and settle on an agreement in which “everyone agreed to give a little bit”. In his eyes, even the business sector “gave in on some points that they did not initially agree with” (Manetti 2021). Here it is likely that Dione is referencing the business sector's concessions to the waste picker movement, which is the second area of controversy I will discuss below.

How should the private sector support waste picker cooperatives?

A second important area of controversy concerned the private sector's support for waste picker cooperatives. In contrast to municipalities, the waste picker movement was present at the bargaining table for the negotiation of the Packaging Sector Agreement. Two movement leaders, Luis Henrique da Silva and Roberto Rocha, represented the MNCR in the GTT02. However, in the eyes of Gina Rizpah Besen, waste pickers were "hostages" to a proceeding that privileged business sector interests over those of the movement and civil society. Gina attests:

"[Catadores] had no alternative but to participate in the agreement and be dependent on the private sector because they do not have the public sector to provide support as they had in the Lula government and the Dilma government, right? Today there is no national public policy for them." (Rizpah Besen 2021)

Besides backing away from financing municipal selective collection services, the Business Coalition also refused to answer catadores' demands for remuneration proportional to the volume of materials that a cooperative recovered. The PNRS specifies that the business sector must act in partnership with catadores, since catadores are already engaged in recovering and commercializing packaging materials. The Sectoral Agreement emphasizes the importance of building the capacity of waste picker cooperatives to do this resource recovery, but nowhere does the Agreement stipulate a standardized system for how much funding shall be invested, or how this support to cooperatives shall be channeled. Instead, Agreement signatories can independently develop their own reverse logistics programs, and partner with waste picker cooperatives as they see fit. Moreover, the MNCR as an organization does not receive resources from signatories; instead the investment is allocated directly to catador cooperatives and associations without intermediaries (Amorim 2021). This model of reverse logistics, writes Talia Fox, follows a corporate social responsibility (CSR) approach to sustainability rather than the more stringent model of extended producer responsibility (EPR) (Fox 2018).

Under the terms of the Sectoral Agreement, the investment that waste picker cooperatives receive is not tied to the amount of material that the cooperative recovers, nor the cooperative's operational costs. Instead, support is negotiated on a case-by-case basis between signatories and the cooperatives that they agree to assist. Although there is a general report for the Sectoral Agreement as a whole, the result is a piecemeal implementation, in which different businesses account individually for the volume of recyclables recovered by the waste pickers they support. This means that the government, according to Flávio Ribeiro, needs to ask each signatory "one by one" about operational details, such as its material recovery rates:

"There is no one operational model that all of [the businesses in the private sector] follow. Each signatory just does what they want, and they just report together... How can you sum up results for different programs with different strategies in only one report? This is crazy." (F. Ribeiro 2021)

Moreover, signatories dictate the form that this support comes in, usually as technical assistance and investment in resources to improve a cooperative's infrastructure. This can include building retrofits, maintenance costs, new machines and trucks, paying utility bills, and other forms of investment, but does not include payment for services rendered (J. Rutkowski 2021). Many interviewees pointed out that under these circumstances, it becomes easy for signatories to shirk their responsibility to provide substantive assistance to the cooperatives they support:

"...for example, you can have Enterprise A going to cooperatives, making a nice diagnosis with technical standards, statistical measurements, doing a nice job identifying needs and supporting [cooperatives] to overcome those challenges and needs, etc. etc., and you can also have Enterprise B going there and saying 'People, I will help you', and giving some t-shirts and caps, written with the logo of the company, and say 'Oh I am helping them giving them some clothes for work'. You cannot compare those things." (F. Ribeiro 2021)

Diving into interview testimony exposes double-speak on the part of the private sector: recall that the private sector justified not remunerating municipalities because *waste pickers*

perform the actual work of recovering packaging materials. However, faced with the question of remunerating catador cooperatives for their services, the business sector argued that it did not owe waste pickers payments for service, because “they are not collecting only packaging, they are providing a public service, right, and therefore the city halls have to pay [cooperatives]” (Soler 2021).

In the absence of direct remuneration for their work, waste pickers’ only form of cash income continues to come from selling recyclable materials on the commodity market, which is an unstable means of revenue. Speaking on this arrangement, Flávio Ribeiro comments: “this is not real social inclusion... you put the social inclusion [of waste pickers] in exposure to price volatility of the international market of commodities. If OPEC²⁶ people decrease crude oil prices in New York stock markets, for example, [catadores] suffer here. This is not fair” (F. Ribeiro 2021).

As a result, waste pickers have lost valuable autonomy. Jutta Gutberlet describes this lack of direct remuneration as the most critiqued element of the Sectoral Agreement for waste pickers: “[catadores] don’t have complete autonomy over how they want to spend that money. It’s of course good that money comes and they can buy new presses and new equipment, or improve roofs, or whatever is needed. But sometimes they would like to spend the money differently, or would like to remunerate workers better, and they can’t” (Gutberlet 2021).

Moreover, the Agreement contains no provisions to enforce its terms, or penalize businesses that do not comply (F. Ribeiro 2021; Fox 2018, 70). One anonymous interviewee describes the Agreement as more of a “favor” from the business sector than a law:

“...if a company doesn’t want to comply with a sector agreement, you don’t have enough strength within the agreement to say to that company: ‘If you don’t comply with an agreement, you’ll be fined in this many millions’, you know? ... The Sectoral Agreement does not speak of obligation. It is a gentlemen's agreement, and the gentlemen's agreement fulfills whoever has the honor of gentlemen. And that is not how it should be played.” (Anonymous interviewee)

²⁶ Organization of the Petroleum Exporting Countries.

Davi Amorim points out that this struggle all returns to the PNRS's provision of "shared responsibility", which has given the business sector license to support waste pickers as it sees fit. He states that:

"...the [PNRS] explicitly says that the business sector has responsibility... [which] is defined by the entrepreneurs themselves through this mechanism, which is the sectoral agreement. On paper it looked interesting, but in practice it proved to be a cruel mechanism that does not really offer accountability from this business sector, right? ...for now, what prevails today in Brazil is different from what exists elsewhere, in other countries, which is called extended producer responsibility. Here in Brazil the legislation talks about shared responsibility." (Amorim 2021)

While this critique suggests that the waste picker movement was aware of the shortcomings of the agreement, it is unclear to what extent the MNCR voiced these critiques during negotiations. Davi describes that the movement and its allies "were taken kind of naively", and "on paper [the Agreement] looked interesting", comments that suggest the waste picker movement (and, in Davi's understanding, also its civil society allies) were hopeful that private sector signatories would eventually provide more direct support to cooperatives (Amorim 2021). It is also possible that, aware of their limited bargaining position, catadores felt pressure to accept any agreement that provided support. A few interviewees from outside the movement suggest that perhaps at the time of the Sectoral Agreement's finalization, the MNCR hoped that it would be possible to pressure the business sector for more support in "a matter of time" (V. Ribeiro 2021; Anonymous interviewee). Whatever the case, the federal government signed the Packaging Sector Agreement on November 25, 2015 with the MNCR's endorsement. The agreement prompted both an outcry from municipalities and tension amongst the waste pickers and their urban environmentalist allies.

Returning to the blue-brown coalition: An alliance in tension

While waste pickers and urban environmental organizations continued to build partnerships during the years of the Sectoral Agreement's negotiation, these actors also dealt

with significant new areas of tension. In the years leading up to the Sectoral Agreement's passage, the blue-brown coalition took on a more solidified form as the *Aliança Resíduo Zero Brasil* (Brazil Zero Waste Alliance, ARZB), which formed in September 2014. The ARZB is composed of a wide variety of organizations with links to environmental sustainability initiatives. This includes Instituto Pólis, the Zero Waste International Alliance, and the *Sociedade Resíduo Zero* (Zero Waste Society), among others. The MNCR is also a part of the ARZB membership. On its website, the ARZB elaborates its goals, among which are:

1. Advocate policies that promote sustainable production and consumption patterns, particularly non-generation of waste
2. Pressure government to adopt selective collection systems
3. Recognize cooperatives as service providers and ensure their remuneration from the private sector
4. Pressure the private sector to take responsibility for costing reverse logistics (ARZB 2016a)

The ARZB's membership and this list of goals suggest that the ARZB embodies the blue-brown alliance, which until this point had been an informal association between environmental activists and the waste picker movement. Furthermore, the ARZB promotes both an environmental and social inclusion agenda, calling for producer responsibility, increased rates of selective collection, and recognition of waste pickers.

Looking at this list, it is reasonable to assume that waste pickers place high priority on Goal 3, and municipalities place high priority on Goal 4. I contend that the Sectoral Agreement exposed these different orders of goal prioritization, and in turn generated tension between environmentalists and the waste picker movement. In order to understand this conflict, it is necessary to unpack the Sectoral Agreement's significance for municipalities and for waste pickers, as well as the complicated relationship that exists between these two entities. I will elaborate each side's position below.

Municipalities: The ‘secondary actors’ of reverse logistics

With producers exempting themselves from responsibility for financing municipal waste management systems, many cities found themselves lacking the necessary resources to carry out selective collection. This provoked outrage from ASSEMAE and other municipal representatives. Marcela Santos succinctly describes the controversy: “in practice, the municipalities want to be the protagonists of reverse logistics. And today they are secondary actors” (M. de O. Santos 2021).

Within the ARZB, the Sectoral Agreement pitted the struggle for catador inclusion against the struggle for municipal remuneration. Selective collection is critical for both sustainability and urban sanitation: it ensures adequate waste management solutions in urban space, as well as diverting recyclable materials from landfills. ARZB member organizations like Instituto Pólís, which focuses on equitable urban service provisions and the right to the city, thus had a clear incentive to oppose the Sectoral Agreement for denying municipal claims for remuneration from producers (Instituto Pólís 2020). Nina Orlow and Vital Ribeiro, who are both affiliated with the ARZB, describe the ARZB’s internal divisions when the waste picker movement agreed to the Sectoral Agreement. Calling waste pickers “the weakest link in the chain”, Vital states that “[the MNCR] is very vulnerable in negotiations. All they ask for is protection, guarantee, financial support. It works for waste pickers, but does not guarantee an effective recycling policy for Brazil” (V. Ribeiro 2021). Nina’s testimony centers more on the different positions of individual catadores and the ARZB, but nonetheless indicates the divergence of interests between the two groups. Describing the ARZB’s concerns with environmental sustainability and the campaign against single use plastics, Nina Orlow characterizes different “worlds of struggle” between waste pickers and the rest of the ARZB members:

“This struggle is not the fight of individual catadores, because... it is not part of their universe. I think their fight is for subsistence... if the person is on another level, being

seen as a professional, having their profession recognized with dignity, with a health guarantee, a series of things... [catadores in the movement] are super agreeing with [our campaigns], but I think that there is a world of struggles that is a little different.” (Orlow 2021)

These quotes seem to indicate that waste pickers’ vulnerability may have prompted the movement to accept an agreement that fell short of the terms hoped for by urban environmentalists.

Other interviewees expressed frustration that the catadores’ support of the Sectoral Agreement may have even swayed the MMA to accept the terms offered by the business sector, despite the government’s desire to enforce a more stringent version of reverse logistics. One person states with dismay that:

“Companies have somehow managed to convince waste pickers that [the terms within the Sectoral Agreement] were the best way. So when companies get support from waste pickers, what will the Ministry of the Environment do? ...there came a point where the National Movement of Catadores was supporting this negotiation with companies to some extent.” (Anonymous interviewee)

However, other interviewees offer a more plausible diagnosis of the power dynamics present in the agreement negotiations. Jacqueline Rutkowski points out the “imperial inequality” that exists between waste pickers and the business sector:

“[Waste pickers] don’t have support from producers, who use their data to justify recycling targets, nor do they have it from municipalities, because city halls, who could be including them as service providers in waste management, also don’t. But there is clearly an imperial inequality in [the Sectoral Agreement] discussion, and the catadores accepted it because it was better than nothing, right? Had they not accepted it, they would continue without support from both city governments and producers. The producers at least... offer resources that help them to work in a better way, increase income, improve working conditions because they manage to make small reforms in the warehouses, they manage to acquire some equipment that sometimes they never have the resources to acquire, right? So for waste pickers it was a good deal but it was not the best deal they would like to have, they would like to have a cost-based deal.” (J. Rutkowski 2021)

Jacqueline's testimony about waste pickers' relationship with city halls circles back to a point that until now I have not discussed in this chapter: the continued lack of municipal contracts with catador cooperatives to collect and manage waste, despite the PNRS's call for cities to do so. A lack of support from municipal governments may have informed the waste picker movement's decision to accept the limited support offered by the business sector. I will elaborate on these dynamics below.

Municipal waste contracts: The PNRS's unmet call for catador inclusion

While urban environmentalists criticized the Sectoral Agreement's shortcomings on producer responsibility, I contend that the waste picker movement's attention was diverted by the struggle for inclusion in municipal waste management systems. As Chapter Three notes, the PNRS integrated the *protector-receiver* principle by directing municipalities to prioritize catador cooperatives in their waste management contracts. Multiple accounts indicate that in the years following the law's passage, the vast majority of municipalities continued to contract with private waste hauling companies instead of catador cooperatives (Gutberlet 2021; Cardoso 2021; F. Ribeiro 2021; J. Rutkowski 2021; Amorim 2021). Interview respondents offer different justifications for this trend: some catadores state that corruption played a role in swaying public officials to continue their relationships with waste hauling companies. Alex Cardoso of the MNCR paints a thoughtful portrait of the relationship between public and private entities:

“...the [waste hauling] companies have an umbilical process, because they're hired by the city hall. Let's take a very concrete example here, right? If I were to do a job for you, our initial relationship is going to be professional. Later I will know your last name, where you live, I'm going to have dinner with you. I'm going to invite you to be the godmother of my children. There is a logic... this public administration process can't be maintained without a process that is linked to the private spheres.... in Brazil [waste management costs] are 10% of the municipal budget, more or less. It's a big investment in waste. The businesses that are in the market are old companies, which already know the politicians, which have already financed the campaigns... they don't want to lose this market niche.” (Cardoso 2021)

Drawing on her experience working with the municipal association ASSEMAE, Marcela Santos offers an alternative explanation rooted in the relative technical capacities of cooperatives and private solid waste management companies. She states that private companies provide an integrated service that “takes care of collection, urban cleaning, tree pruning, final disposal, [and] will have all the logistics... that a large or small municipality needs to be served”. By comparison, many waste picker cooperatives lack the technical equipment to perform collection on the scale of an entire municipality, and require significant training and infrastructure investments in order to operate effectively (M. de O. Santos 2021; Brandão 2021). Between these two options, municipalities prefer a single integrated contract with one service provider. Igor Brandão confirms this testimony, and adds a political dimension to the dynamic: “it is a complicated discussion because it is mixed with prejudices... municipalities have difficulties, especially those with more right-wing leadership that [lack] social commitment” (Brandão 2021).²⁷

Alex Cardoso brings up yet another possible motivation for municipalities to avoid contracting with waste pickers: their vulnerability and dependence on work to survive. He says:

“Waste pickers do an extremely important job; however, they have always worked for free. Then, why do you pay someone who works for free? And what’s worse, someone that has a vital necessity of having to work or they’ll starve to death? So [for municipalities] the deal with waste pickers is: ‘if I hire them, good, but if I don’t, they’re going to have to work anyways because those who don’t work starve to death; they need the job.’” (Cardoso 2021)

Regardless of actual motivations, it is clear that very few municipalities contract with waste pickers today, even though this goes against the PNRS’s directive. Flávio Ribeiro attests to the relative ease with which a municipality can skirt the PNRS’s call to prioritize waste picker cooperatives in its collection contracts:

²⁷ However, Igor acknowledges that today, both left and right leaning municipalities may hire private companies over cooperatives (Brandão 2021).

“[A municipality] can say ‘we took a look and we tried it, but no cooperative has sufficient labor protection standards, so we declined to use the cooperatives and hired an enterprise’. So it’s easy for a municipality to not prioritize.” (F. Ribeiro 2021)

Waste pickers: Game theory and logics of ‘pé de barro’

In light of the limited support available from municipalities, it stands to reason that the waste picker movement found itself willing to accept aid in whatever form it came, including indirect assistance offered by signatories of the Packaging Sector Agreement. Sources indicate that the MNCR felt pressure on yet another side: competition from *coopergatos* (companies posing as cooperatives) or small waste hauler companies, who would have been willing to carry out reverse logistics in partnership with the business sector if the waste picker movement refused (F. Rossi 2021; Brandão 2018, 148; MNCR 2016). Multiple interviewees reference elements of game theory when analyzing the MNCR’s decision-making process in the Sectoral Agreement negotiations (V. Ribeiro 2021; W. Ribeiro 2021). Speaking in second person, Wladimir Ribeiro (a lawyer who has represented ASSEMAE and is affiliated with the ARZB) breaks down the choice facing the waste picker movement in the following terms:

“It is a difficult decision, either you accept [the terms of the Sectoral Agreement] or you accept nothing.... is it better to have nothing than to have half of something? These decisions are difficult in politics, especially as related to the environment, right? The thing about you being disjunctive, either yes or no, doesn’t always work in environmental struggles and that’s the question that has arisen on the part of the movements: accepting something that is very small compared to what is provided for in the law, or resisting and having nothing....” (W. Ribeiro 2021)

Here, Wladimir primarily considers the economic consequences of accepting versus rejecting the Agreement, but the decision also carried political ramifications for the movement and its allies. Representatives of the MNCR carry no illusions about the pushback their choice received from other members of the ARZB. Davi Amorim underscores that the movement has faced criticism for “supporting, somehow benefiting from the Sectoral Agreement, which is not

very good, which should be better”.²⁸ While allies have pushed the movement to “reject” or “boycott” the agreement, in the eyes of the MNCR, “the little bit that the business sector pays is what is saving cooperatives today from hunger, death... from closing their ventures” (Amorim 2021). Alex Cardoso of the MNCR describes the “different spheres” in which NGOs and the MNCR operate, and emphasizes the “bourgeois” origins of NGOs in the environmental movement: “they will operate within a logic, which is not the *pé de barro* in the village” (Cardoso 2021).²⁹

Alex and Davi’s testimonies expose some of the factors that can challenge coalitions, as documented in social movement scholarship. Recall from the literature review some of the factors that impede the endurance of coalitions: cultural barriers (Staggenborg 1998; Van Dyke and Amos 2017), closing political opportunities (Diaz-Veizades and Chang 1996; Lee 2011; Maney 2000; Staggenborg 1998), and declining resource availability (Frege, Heery, and Turner 2018; B. Obach 1999). All three of these played a role in creating tension amongst the MNCR and other members of the ARZB. Cultural barriers like class status estranged a movement of vulnerable waste pickers and “bourgeois” NGO representatives. The Dilma administration represented the start of a less favorable political climate for waste pickers, who lost proximity to the federal government. Finally, the business sector provided minimal resources to waste pickers, and no resources for municipalities. This led to tensions over whether to accept the limited aid, or take a hardline stance against the Agreement.

²⁸ Here, Davi also points out that the Sectoral Agreement only benefits cooperatives and associations of catadores. The MNCR does not receive resources; instead the budget is invested in equipment and training (Amorim 2021).

²⁹ The Portuguese expression *pé de barro*, or clay foot, refers to a financially poor or humble subject with no purchasing power.

The alliance remains...

Today, members of the ARZB continue to work together on achieving shared goals, and interviewees from both blue and brown backgrounds express sympathy for the other's position. Multiple interviewees blamed the federal government for the Packaging Sector Agreement's shortcomings, since it holds power to redefine the private sector's role in reverse logistics. Speaking about the MNCR's relationships with other members of the ARZB, Davi Amorim attests:

“...there is an alliance; there is a great integration with these [environmental] sectors and the movement of waste pickers, and there are only a few occasional disagreements... there's a position that we defend publicly, and the other entities also have their positions that are not necessarily the same as the MNCR, right? And we respect it, and that's no reason for us not to work together, right? ...these disagreements, they will really be resolved with better legislation, you know, with legislation that effectively ensures that companies can be held accountable. Then the decision is not in the hands of companies and [waste pickers] are not holding the crumbs. Here I am specifically defending legislation that ensures extended producer responsibility.” (Amorim 2021)

Davi's support for EPR underscores the commonalities between the waste picker movement and its environmental allies: each understand the importance of holding the business sector more financially accountable. Nina Orlow and another anonymous interviewee who is involved discussions surrounding the PNRS both echo Davi's sentiments. While calling the private sector's support to catadores “a crumb”, the anonymous source also says: “maybe if I was in their condition, I would do it too...even if the resources [provided by the business sector] do not cover [catadores' operation costs], if I needed resources for me to eat and feed my children, maybe I would also receive [the business sector's support] without question” (Anonymous interviewee). Nina points out the federal government's culpability in approving an agreement that ultimately split the interests of the coalition: she describes feeling disappointment at the role played by the federal government, “because the government should have played the role of mediating collective interests and saying: “no, then there must be more... remuneration, [more] extended producer responsibility” (Orlow 2021). Here, one must recall the shifting landscape of

political opportunity for social movements under the Dilma administration, which assumed a more distant position toward the waste picker movement and made concessions to business interests (Anderson 2019; Brandão 2021; J. Rutkowski 2021; F. Ribeiro 2021).

...But important fissures have opened

Is this coalition of waste pickers and urban environmentalists still a deep, common-cause coalition, defined by distinctive but complementary interests and long term engagement amongst members (Tattersall 2005; Frege, Heery, and Turner 2018)? The ARZB continues to meet and discuss issues related to urban sustainability and catador inclusion. However, several schisms would seem to challenge the depth of this coalition. Factors that spurred these divides will be familiar to coalition scholars: ideological divergences, declines in resource availability, and negative political opportunity structures. Below I will describe several axes of divergence, both between coalition partners and within the MNCR itself. It is unclear how these tensions will affect the alliance in years to come.

Sustainable waste management versus catador inclusion

This most obvious divergence between coalition partners is ideological: stated broadly, a split in prioritizing urban environmental health versus social inclusion. This chapter has analyzed the challenges that the Sectoral Agreement presented to the blue and brown coalition partners, who, by each pursuing their highest priorities, found themselves focused on different problems created by the Agreement. Two agendas that were formerly complementary—sustainable waste management and social inclusion of catadores—are no longer as mutually compatible as they once were. While both sides advocate for a policy that more closely approximates extended producer responsibility (EPR) by making the private sector responsible for financing selective collection, waste pickers have worked with the private sector, forming partnerships with the Business Coalition and accepting (albeit limited) investment from

signatories of the Sectoral Agreement. ARZB members stand divided on how to work with the private sector: whether to accept its terms, or reject them and organize for something better.

Long-term catador movement-building under threat

By accepting the Sectoral Agreement, the waste picker movement may have paradoxically alienated allies who are invested in long-term catador movement-building. Per the Sectoral Agreement, the private sector does not pay waste picker cooperatives for their services, which actually creates a *disincentive* for unorganized waste pickers to join these member-based organizations (MBOs). Gina Rizpah Besen explains that catadores who continue to work informally can be selective in their collections, picking only materials with value like cans and paper, whereas catador cooperatives must collect and sort through non-valuable materials like Styrofoam or other types of polystyrene plastic, which has no resale value. Because nobody is paying cooperatives for their sorting services, these associations spend valuable time and labor handling non-valuable materials without compensation.

Some argue that by accepting the Sectoral Agreement, the MNCR has forsaken its founding principles. Flávia Rossi writes that the MNCR was originally premised on three core ideas: protagonism (leadership), autonomy, and social emancipation (F. C. R. Rossi 2019, 117). Its mission was to “collectively organize the category” of waste pickers across the country, creating inclusion in which “catadores rise to the position of protagonists of all stages of structuring of recyclable solid waste management” (F. C. R. Rossi 2019, 118). One interviewee suggests that the MNCR has abandoned the common struggle of *all* waste pickers, both organized and informal, to prioritize assistance to a small minority of catadores already in cooperatives:

“I worry about those 95% of catadores, who receive nothing, who live in the dumps or on the streets... the catadores who number more than 1.5 million who receive nothing, who live inside dumpsters with pigs, vultures, garbage. The MNCR is [supposed to be] the movement that discusses the improvement of the lives of waste pickers in the eyes of the

facts and not the improvement of *some* cooperatives, the improvement of *all* waste pickers in Brazil. This is the banner.” (Anonymous interviewee, italics added)

This disagreement appears to concern planning on different time horizons: waste pickers in the MNCR see the private sector’s limited support as essential for meeting urgent needs like hunger. By contrast, individuals outside the movement whose immediate needs are met emphasize the importance of long-term capacity building amongst informal waste pickers.

I argue that the MNCR has responded to closing political opportunities by redefining notions of inclusion and “protagonism” of catadores.³⁰ Recall from Chapters One and Two the contradictions embedded within the Lula administration, which embraced a coalition government that compromised on the PT’s progressive platform. In her dissertation, Flávia Rossi argues that by entering the federal public policy arena under the Workers’ Party, the MNCR has followed the same political trajectory as the PT under Lula: “since the pickers went into the [PT] government, they suffered the contradictions of the Lula government in their own movement” (F. Rossi 2021). Wladimir Ribeiro’s question “is it better to have nothing than to have half of something?” again reverberates as one considers the tension between the MNCR’s stated principle of protagonism, and its choice to accept the Sectoral Agreement. I argue that by making the latter choice, the MNCR has effectively deprioritized its agenda of organizing the entire category of Brazil’s 800,000 waste pickers, choosing instead to give primacy to resource investment in those few cooperatives that already exist and operate at high capacity. The strategic pivot makes sense for the movement, but may also cost them allies.

³⁰ Two different pieces of evidence lead to this claim. First, as discussed, the terms of the Sectoral Agreement do not provide incentives for independent, informal waste pickers to join catador associations. Second, evidence indicates that the current terms of the Sectoral Agreement will result in investment flows to cooperatives with pre-established capabilities to process high volumes of waste, and will disadvantage smaller or less equipped cooperatives. This is because private sector signatories rely on data provided by the cooperatives they support to demonstrate their compliance with the Agreement. In her thesis, Talia Fox identifies the “perverse incentives” within the Sectoral Agreement that lead corporate actors to “seek out the most productive cooperatives, which are generally located in the most developed cities”, leaving behind cooperatives that are arguably most in need of investment (Fox 2018, 66).

Cracks within the MNCR itself

Beyond the relationships between the waste picker movement and its allies, the Sectoral Agreement opened a notable internal fissure in the MNCR itself. Wladimir Ribeiro's rhetorical question "is it better to have nothing than to have half of something?" may have generated different answers from within the waste picker movement, which found itself "very fragile" as some leaders disputed the movement's decision to approve the Agreement (F. Rossi 2021). While it is true that the Business Coalition agreed to invest resources in catador cooperatives, some waste pickers critiqued the movement for straying away from a stronger bargaining stance.

For example, nine cooperatives based in São Paulo state left the MNCR around the same time to form a new cooperative association (F. Ribeiro and Pereira 2021, 12). Furthermore, Tião Santos, a catador and former leader of the MNCR, left the movement midway through negotiations and formed a separate organization, *Movimento Eu Sou Catador* (I Am A Catador Movement), to organize catador associations that were unsatisfied with the Agreement (Brandão 2018, 148; T. Santos 2021). Today, the *Movimento Eu Sou Catador* represents nearly 300 cooperatives across Brazil, with a total of approximately 6,000 individual members (T. Santos 2021). While the *Movimento Eu Sou Catador* enters into discussions with the MNCR over shared issues, they do not receive private sector investment through the Sectoral Agreement and rely solely upon sales of recovered materials. It is reasonable to assume that schisms like these indicate wariness about the MNCR's political calculation to support the sectoral agreement, and the implications for the waste picker movement. Moreover this internal conflict is a good reminder that the movement is not a monolith. Different cooperatives may take varied positions towards the current arrangement with the private sector, and this could also be a source of instability, both for the MNCR itself and for the endurance of its partnerships with external civil society actors.

Was a fissure inevitable?

All else equal, would a change in the PNRS's language or a different political opportunity structure have averted the negative outcome for the blue-brown alliance? For example, if the PNRS had emphasized extended producer responsibility instead of “shared responsibility”, and provided stronger incentives for waste picker inclusion in municipal waste management, would a shared win have resulted? Or, if President Dilma Rousseff's administration had acted more affirmatively to meet the environmentalists' and waste pickers' agendas, might these actors be more aligned today? One might interpret this case study as a labor-environment alliance that would have remained stable but for the at times vague and contradictory nature of the PNRS's provisions that Chapter Three describes, or an unfortunate shift of political tides. I contend that even notwithstanding these unfavorable factors, several additional obstacles were putting pressure on the blue-brown coalition that would have presented challenges (and may still do so) in the future. I will describe three such areas of possible future tension below.

Hygienist attitudes in professional circles

Many professionals, including those associated with environmental movements, assert that the waste picking is a “degrading situation” that should be abolished (Abers 2021). This “hygienist attitude” has been particularly expressed by *sanitaristas* (including sanitary engineers), government employees, and others associated with urban public health initiatives (Amorim 2021). Roseane Souza, a sanitary engineer and director of the *Associação Brasileira de Engenharia Sanitária e Ambiental* (Brazil Association of Sanitary and Environmental Engineers, ABES) in São Paulo, describes that even after the passage of the PNRS, which formally recognized the profession, many industry professionals expressed the view that “this category must cease to exist; it's unhealthy” (R. Souza 2021). Instead, these individuals argued that “it should be machines, a more mechanized process” that is “more developed” and

“prioritizes sanitation” (Amorim 2021; Gutberlet 2021; Rizpah Besen 2021). Hygienist attitudes persist up to this day, even within circles of waste picker allies. Advocates “put it in terms of the public good”, and “protecting the catadores themselves” from health and safety problems (Rizpah Besen 2021). Waste pickers and other allies take an opposing stance:

“[Critics of waste picking] don’t propose how to create low-barrier entrance jobs for the people who are now working with diverting resources into the circular economy. They don’t agree with the argument that this work should be made safer and better. Of course you should invest in technology to make work of waste pickers easier. For example, an electric cart so they don’t have to push heavy materials with their body, would humanize the work of these people. I’ve heard so many waste pickers tell me that they are proud to be a waste picker. They are proud to do what they are doing. They see their work as environmental stewardship. They see that they are actually benefitting the environment, and they are feeding their family without having to steal or do any other work. They are proud.” (Gutberlet 2021)

Furthermore, the COVID-19 pandemic and the proliferation of incineration technology together have exacerbated the debate still further. Since the start of the coronavirus pandemic in March 2020 many cooperatives have closed due to health concerns for waste pickers, who may lack personal protective equipment and often work in enclosed facilities, putting them at heightened risk for virus transmission (C. Santos 2021). The effect has been a “retrogression” (C. Santos 2021) in which many cooperatives have closed and waste pickers are relying on government social assistance payments, putting them in a fragile position (Gutberlet 2021; R. Souza 2021; T. Santos 2021; Valverde 2021; W. Ribeiro 2021). Some interviewees have stated that waste-to-energy (WTE)³¹ incineration companies have used this opportunity to “aggressively attack” the waste management market, “building coalitions with politicians and industry to bring forward a proposal for waste-to-energy” in cities throughout Brazil (Gutberlet 2021). Cláudio Santos, a federal public defender, characterizes the arguments for WTE in terms reminiscent of hygienist attitudes: “Oh, it’s more beautiful, this industry here, you won’t see a

³¹ Waste-to-energy (WTE) technology is a waste management process that incinerates waste material and captures energy from the process. It has been criticized for eroding waste pickers’ livelihoods, reducing recycling rates, and generating environmental toxins (Gutberlet 2012).

picker messing around with the cans... [instead] there will be a compartment like this, put it in the truck, the truck goes to power plant and it's over.' Very beautiful, right? [But] waste pickers are still suffering, right?" (C. Santos 2021). It is possible that such a "hygienist attitude" would have created inner divisions amongst blue and brown allies regardless of the outcomes of the PNRS.

Catadores' disputed efficiency as service providers

A second issue that would seem to question the foundations of the blue-brown alliance is the controversy over whether waste pickers provide the most efficient form of waste management services. Only one interviewee from the environmentalists that I interviewed made these arguments, but identified an incompatibility between social policy and environmental policy:

"...social policy should be more to emancipate, to give the opportunity for the picker to grow and earn greater income. And environmental policy should be about solving the problem. As the PNRS mixed the two, it used a social argument to hide the environmental problem.... So we need to be careful when we say that recycling can only be done with waste pickers. If the collectors are not a solution that will solve the problem of garbage in Brazil, we have to think very carefully." (V. Ribeiro 2021)

Vital Ribeiro understands recycling as an "economic activity that needs to grow and do well" in order to increase Brazil's overall recycling rate, which currently sits at 1.6% (SNIS 2020). In his view, "nowhere in the world will you actually solve recycling with an army of miserable pickers pulling a cart by hand or living off the city's charity" (V. Ribeiro 2021). Catador cooperatives have a "natural limitation" of 15-30 people, and usually only process 30 tons of garbage per week. To build technical capacity requires machines and investments that waste pickers lack the capital to procure. "While we are discussing whether or not the collector has the right to an income, recycling does not progress in Brazil" (V. Ribeiro 2021).

Vital's argument touches on an attitude known as *controle*, which was growing in Brazil's federal government during this period. The "controller" sector grew in response to anti-corruption efforts during Lula's term, and opposes favoring particular interest groups in public policy (Abers 2021). Social movements scholar Rebecca Abers explains:

"This whole idea that you'd have a policy specifically oriented to favor the organization of groups, not just neutrally provide a policy, but to give preference to particular interest groups, goes against [the *controle* attitude].... The *controle* viewpoint would see policies empowering [catadores] as favoritism and bias, and also to the extent that those groups may not have had the professional capacity to do things according to the rules, because they're organized by people who are learning how to do it as they go. There's going to be mistakes, there's going to be problems, it's messy..." (Abers 2021)

To explicitly favor the inclusion of waste pickers in national policies would thus be exhibiting "favoritism and bias" that impedes the best technical solution for environmentally efficient waste management in the country. Vital's vision of a competitive "business environment" would obviously be controversial to a waste picker movement that is predicated on ideas of the solidarity economy: that their work is not to maximize profit but to alleviate poverty and unemployment and achieve social inclusion (Gutberlet, Besen, and Morais 2020, 169).

A circular economy, or a future without waste?

Finally, the PNRS evokes an important tension between a "circular economy" vision of sustainability and a non-generation vision, which could generate divisions between environmentalists and waste pickers in the future. Article 9 of the PNRS sets up the following hierarchy for waste management: non-generation, reduction, reuse, recycling, solid waste treatment, and environmentally sound disposal ("Brazil National Solid Waste Policy" 2010). However, interview testimonies suggest that the first list item, non-generation, has been lost in the process of implementing reverse logistics.

Here it is important to describe the ideological gap between a policy of non-generation versus one of diversion, and how it has played out in the PNRS's implementation. Thus far, this thesis has equated EPR with an environmentalist agenda and "shared responsibility" with the agenda of producers.³² However, this characterization obscures many environmentalists' critiques of EPR as not promoting environmental sustainability or health.³³ EPR does not necessarily incentivize a reduction in waste—in fact, according to Jacqueline Rutkowski "it is the opposite" trend in the European Union, where overall waste generation levels have risen by 6% between 2013 and 2015 despite the presence of EPR policies (J. Rutkowski 2021; J. E. Rutkowski 2020). Waste-producing companies may even push for EPR mechanisms as a preferred alternative to plastic bans. A former employee of the World Wildlife Fund explains one such case:

"In Kenya, you had a strong ban on single use plastics, and that pushed industries to say 'well, just do EPR instead. We can pay for it, but let us produce more plastics'. Those are the dynamics that are going on.... Welcome to the world of collaboration between the private sectors and NGOs!" (Anonymous interviewee)

Recycling, the process that EPR theoretically promotes, aligns with a *circular economy* ideology that has gained increasing popularity across the world.³⁴ In popular interpretations by the European Commission, multinational corporations, and NGOs, the circular economy has grown to broadly symbolize a waste *diversion* agenda (i.e. recycling and reuse) rather than waste *prevention* (i.e. non-generation or reduction) (O'Neill 2019, 186).³⁵ Therefore, even if the PNRS

³² Recall that the concept of EPR is an extension of the "polluter pays" principle, which mandates that businesses internalize the costs of their polluting activities (European Commission 2012). Some environmentalists call EPR a "market liberal solution" that often privileges business interests and obfuscates deeper environmental concerns (Anonymous interviewee).

³³ For example, nothing prevents EPR systems from being structured to promote incineration as a final destination for waste, which implies serious environmental hazards in vulnerable communities (Cass Talbott 2021).

³⁴ Environmental scientist Kate O'Neill describes the *circular economy* model as a process by which wastes are cycled back into productive use, as opposed to incinerated or landfilled as they might be in a linear economy model (O'Neill 2019; De Decker 2018).

³⁵ Valenzuela et al. argue that the circular economy discourse embodies a "newly forged link" between sustainability and business, stating that recycling practices amount to a consolidation between

had fulfilled environmentalists' demands for EPR, I argue it still would have been consistent with a circular economy vision of waste management.

In practice, the PNRS has sparked discussions about recycling, but not as much about non-generation. Alex Cardoso attests that:

“In Brazil there is no project, no law, no meeting, no event, no seminar to discuss with businessmen about not generating waste.... these things entered the agreements only to be left behind. Nobody gains from it, so it won't be a priority.” (Cardoso 2021)

An anonymous interviewee echoes Alex's testimony when describing the tension between an agenda of waste reduction versus that of recycling, noting the profit motivations behind the latter:

“...Except the main word is never 'reduce' because if you reduce, you take the revenue from the packaging manufacturers, right? So the main language was 'recycling', consume a lot and we'll recycle. That was the language.” (Anonymous interviewee)

The tension between waste reduction and diversion represents different ideologies of sustainability, and cuts along environmental and private sector lines. In this conflict, the position of labor is less clear. Waste pickers directly depend on recycling markets to generate a livelihood, and waste reduction may rank lower on their list of priorities, or worse yet may be seen as a threat to their existence. An anonymous interviewee associated with an environmental organization identifies a controversy waiting to happen between waste pickers and environmentalists over the waste reduction agenda:

sustainability and economic growth. Hence, the circular economy model does not fundamentally challenge unsustainable capitalist consumption, depoliticizes the consumer's role, and over-prioritizes technologically-mediated forms of mitigation (Valenzuela and Böhm 2017, 23; Hobson and Lynch 2016, 16). Jacqueline Rutkowski echoes this testimony, noting: “The concept of circular economy brings comfort because I am looking for solutions to not change my economic model and try to minimize the negative environmental effects that this economic model brings. For me it is on the same axis as all the discussions so far that have appeared to solve climate change. People do not want to change the economic system, they want to find ways to palliate, keep everything as it is: try to reduce a little bit of carbon there, reduce a little bit of garbage there, but nothing that radically changes the system” (J. Rutkowski 2021).

“[There is] all this focus on recycling, especially in the context of EPR.... [but] how can we support sincere waste prevention, rather than using EPR as a strategy to incentivize recycling? This is a controversial position in the waste picker world, because huge numbers of livelihoods are dependent on plastics.” (Anonymous interviewee)

Other interview testimonies suggest that this is not an immediate tension between these two actors because, in Flávio Ribeiro’s words, “we are too far from non-generation... that I believe that [waste pickers] are much more concerned about increasing collection rates, obtaining payment for services, and continuing to receive support from the sectoral agreement to structure themselves and operate regularly in a formal market” (F. Ribeiro 2021). However, it is possible to imagine that advocates of a zero waste future may at some point experience conflict with waste pickers, who rely on functioning recycling markets. This point of divergence underscores the dynamics at play between environmentalists and labor that may complicate future prospects of shared policy wins.

A question of political will

The Sectoral Agreement generated rifts in the alliance between the waste picker movement and urban environmentalists, which up until this point had been united in shared support of the PNRS and its complementary agendas for waste picker inclusion and producer responsibility. The Sectoral Agreement was a product of the political moment in which it was born: a shifting landscape where the PT was losing grip on electoral politics that had brought Lula and Dilma to the presidency, and a powerful set of private sector interests with increasing influence over public policy at the national level. The voluntarist language of the agreement in essence allowed the business sector to set the terms of its reverse logistics responsibilities, reminiscent of corporate social responsibility much more than extended producer responsibility.

This outcome serves as an unfortunate reminder of what many interviewees vocalized in one form or another: that it “all boils down to political will” (MNCR 2010, 17; F. Ribeiro 2021; Gutberlet 2021; Orlow 2021; W. Ribeiro 2021). For the PNRS to work in the way that waste

pickers and environmentalists hoped for, the federal government had to be willing to enforce extended producer responsibility, municipalities had to hire cooperatives, and the private sector had to take account of waste pickers' demands and remunerate public authorities for their selective collection services.

In the absence of this political will, private sector interests won out over the agenda of social inclusion and EPR. Ultimately, I argue that what won was not just a small group of businesses, but also an entire worldview of sustainability that fits with the “green economy” concept discussed in the literature review (Williams 2007, 264). Under this framework of thought, corporate social responsibility programs and public-private partnerships are the mechanisms that will “green the capitalist economy” without challenging corporate logics (Barca 2016). Radical alternatives certainly challenged this approach: environmentalists rejected these neoliberal visions of ecological responsibility by demanding producer responsibility, and organized catadores advanced a solidarity economy model founded on aspirations of socioeconomic transformation. However, these alternatives were overshadowed by the logics of the private sector, which took advantage of its own political opportunities to advance its economic interests. In the final chapter of this thesis, I will reflect on the trajectory of the blue-brown coalition in Brazil since 1990, and briefly diagnose Brazil's contemporary political moment under President Jair Bolsonaro.

5. A STORY OF MIRRORS AND ‘LEIS QUE NAO PEGAM’: THE LEGACY OF THE PNRS

Introduction

Upon first glance, the fractures that appear today in the blue-brown coalition seem like an unlikely swerve from the coalition’s trajectory. Since the 1980’s, the waste picker movement has benefitted from collaboration and support from environmentalists, embodied by Waste and Citizenship forums and enduring to today’s Brazil Zero Waste Alliance (ARZB). This alliance seems to tap into a natural synergy between waste pickers and environmentalists: waste pickers rightly earn recognition as “environmental awareness raisers” by increasing rates of resource recovery for productive use, reducing the volume of material sent to landfills, lowering municipal costs, and expanding municipalities’ service coverage (Gutiérrez 2020, 114; Aparcana 2017, 595). Moreover at least on paper, these actors have achieved the shared win they struggled to realize for almost two decades: a policy founded on principles of polluter-pays and protector-receiver. How then could it be that the MNCR and the other actors in the ARZB find themselves no longer working as closely as they once did?

Speaking about the interactions between the catador movement and the business sector, Nina Orlow offers a comparison to an earlier foreboding moment of Brazilian history:

“...[waste pickers] had to agree with the little things that were offered, you know... like those little mirrors at the time of the Indians. The Portuguese brought mirrors, distributed them, and everyone was happy because they thought they were friends, right?” (Orlow 2021)

Nina’s testimony illustrates in stark terms the troubling power dynamic between waste pickers and the private sector. Alex Cardoso illustrates the political influence of the private sector by talking about the issue of compliance and *leis que pegam* (laws that stick), an

expression to describe laws that are active and enforced, as opposed to *leis que não pegam*, which are unenforced laws. He says:

“...there is a discussion about the *lei que pega* and the *lei que não pega*. The *lei que pega* is the law that in general doesn't bring benefits to the people. It's going to bring benefits to the government, to the business people. The *lei que pega* is the law of fines, the law of criminalization, the law of persecution, the law of prohibition. The *lei que não pega* is the one that's going to bring popular, social, environmental benefits.” (Cardoso 2021)

Nina and Alex each sit on one side of the blue-brown coalition, and their testimony here and throughout this thesis alludes to a consciousness about the deeper reasons for the divisions between these two sides: namely, a private sector lobby that strongly shaped the PNRS to align with its interests, and a political environment that privileged this actor at their expense. Despite this awareness, the fact remains that while waste pickers and environmentalists may share a vision of environmental health and sustainability and waste picker inclusion, they see different ways to get there.

Over the course of this thesis, I have traced the development of a coalition of organized waste pickers and their allies from the environmental movement. I have shown their involvement in shaping public policies that advanced their goals, as well as taking advantage of opportunities that presented themselves in the underlying political environment—namely, the accession of Lula to the presidency in 2003. By instituting new participatory spaces for movements to influence the policies of state institutions, the Lula administration became part of a feedback loop with the waste picker movement, in which each responded to the other's actions to advance the movement's agenda. Bolstered by these newfound political opportunities within the federal government, and by coalition allies who provided opportunities for politics of proximity and new repertoires of interaction, the catador movement secured the passage of policies promoting the inclusion of waste pickers in the landscape of solid waste management.

The passage of the National Solid Waste Policy (PNRS) was arguably the culmination of these efforts, made possible by the advocacy of the blue-brown coalition and a PT

administration that promoted an explicit mission of catador inclusion. However, this law was also enabled by the private sector, who had previously withheld support from any draft bills that assigned the industry responsibility for environmental stewardship of its waste products. Amidst increasing calls for extended producer responsibility and the polluter pays principle, however, the private sector shifted its weight from strict opposition of a law, towards an agenda of CSR that emphasized social assistance to waste pickers. I argue that this strategy was done with the explicit purpose of avoiding the heavy financial commitment of environmentally sound management of its waste products. Evidence for this is the much-negotiated principle of “shared responsibility” that structures the PNRS, which enshrines a vague and subjective interpretation of what producers must do as part of their reverse logistics responsibilities. Moreover, debates over the remuneration of municipalities for waste collection services animated the contradictory interpretations of reverse logistics, with municipalities and brown environmentalists demanding that producers finance selective collection. In the ensuing Sectoral Agreement that structured reverse logistics for packaging, industry leveraged an alliance with waste pickers to exclude municipalities, both from negotiations as well as from remuneration. Not by coincidence, these developments occurred under the administration of President Dilma Rousseff, which faced waning popular support that prompted it to adopt a conciliatory position towards industry. In the resulting Packaging Sector Agreement, municipalities were denied payments for their selective collection services, and waste pickers found themselves forced to accept a pittance of private sector support in the form of investment in already-existing cooperatives.

This case displays an inherent conflict between environmentalists and business interests over different visions of sustainability and “green” economic policy. In these conflicts, labor interests play an intervening role. Workers have a clear stake in a just, sustainable economy. Waste pickers in particular share common goals with urban environmentalists, as their work directly complements an objective of urban sanitation and sustainability. However, alliances between environmental and labor interests face challenges that make it difficult to remain in

alignment. As this thesis has shown, differential levels of resource access between waste pickers and environmentalists made the former entity more likely to accept an outcome that partially fulfilled their demands, since they faced more dire consequences without any deal whatsoever. Negative political opportunity structures animated these contradictory priorities between environmentalists and workers: the Rousseff administration's more conciliatory position towards the private sector may have informed the MNCR's stance towards the Packaging Sector Agreement. The change of political tides may have obscured the common ground of the blue-brown alliance, complicating the prospect of a shared win for labor and environment to build a more just and sustainable future.

In the rest of this chapter, I consider current political dynamics under the presidential administration of Jair Bolsonaro, and the consequences for the objectives of waste pickers and environmentalists. I include this material with the intention of re-emphasizing the deterministic role that political opportunity structures play for exposing contradictions within labor-environment alliances. Finally, I will conclude with key takeaways about the inherent conflict between environmental and business interests on approaches to environmental policy, and the intervening role that labor plays in these conflicts. I will address the challenges and the prospects of achieving shared wins for a just, sustainable future.

Shutting the window: Emerging challenges under Brazil's rightward shift

Having already been weakened, the blue-brown coalition now finds itself facing even more dire political circumstances under the current administration of President Jair Bolsonaro, who has emerged as the face of a resurgent far-right movement that has antagonized the social democratic principles of the left-wing PT. With the impeachment of Dilma Rousseff in August 2016, social movements like the MNCR found themselves further estranged from the federal government. Recall from Chapter Two that in setting policies on waste management, the Lula

administration chose to prioritize the agenda offered by CEMPRE, which included a commitment to support waste pickers, over the demands of waste hauling companies that make up ABRELPE (Anonymous interviewee). Under Bolsonaro this dynamic reversed itself: the current federal government has forged an “explicit alliance” with companies represented by ABRELPE, meaning that “the companies that provide waste management services, today write all the procedures that the Ministry of the Environment defines for waste management” (J. Rutkowski 2021, Anonymous interviewee).

In this closing window of political opportunity, catadores now find themselves without allies in the federal government. Participatory spaces have closed under the Bolsonaro administration, creating a “total lack of dialogue between catadores and government bodies” (Valverde 2021; Neves Pereira 2021). Alexandre Pereira recalls the “vibrant” and “beautiful” participatory character of previous meetings organized by the Ministry of the Environment (MMA) in the years leading up to the PNRS’s passage. By comparison, under the contemporary Bolsonaro administration “you don’t have the government creating this space”, and participatory spaces “don’t exist anymore” (Neves Pereira 2021). President Bolsonaro dismantled the National Secretariat of the Solidarity Economy (SENAES), which was created under Lula and carried out some of the earliest capacity-building initiatives for waste picker cooperatives. Indeed, since 2015 there has been no public investment in these cooperatives. Instead, nearly 90% of the resources invested in cooperatives come from reverse logistics systems (Manetti 2021).

According to Davi Amorim, today the MNCR is cognizant of the PNRS’s shortcomings (Amorim 2021). However, from their isolated position, catadores are rendered even more dependent on the limited support offered through the Sectoral Agreement. The MNCR continues to engage in partnerships with the Business Coalition, reinforcing Gina Rizpah Besen’s comment that waste pickers are “hostages of industry”, and Flávia Rossi’s comment that the Sectoral Agreement represents “a type of alliance between capital and the precarious work of

waste pickers through public policy” (Rizpah Besen 2021; F. Rossi 2021). Meanwhile, the majority of Brazil’s municipalities still do not contract with waste picker cooperatives to collect recyclable municipal solid waste.³⁶ The MNCR continues to demand that municipalities formally contract with cooperatives for the services they provide. Nina Orlow breaks down the logic of the MNCR’s position toward municipalities and the private sector:

“I think that for the catador this system of extended producer responsibility, it is so far away, so difficult to have relations with various companies and business associations, that it is easier for [catadores] to pressure the city because [they say]: ‘look here, we are working, we need to be remunerated for the work we provide. For various reasons, they have more strength to put pressure on the city. Meanwhile, the city is obligated by Article 33 in the PNRS to assume this role, but it also must require remuneration from companies.” (Orlow 2021)

While environmentalists like Nina agree that waste pickers should receive municipal contracts for their services, they also stress the importance of putting pressure on companies to reimburse the public authorities, in compliance with Article 33 of the PNRS.

Moreover, interview testimonies indicate that the MNCR has redefined its stance towards private waste hauling companies, which have historically been waste pickers’ biggest rivals. An anonymous interviewee observes that the association of private solid waste management companies ABRELPE has grown to “dominate the scene [of solid waste management] under the Bolsonaro administration”. ABRELPE has put forth technological proposals for municipal waste management, including mechanization and incineration (Anonymous interviewee). In this same time period, the waste picker movement has opened an unprecedented channel of dialogue with ABRELPE. Dione Manetti characterizes it in the following terms:

³⁶ As of 2015, waste picker contracts with municipalities occur in less than 10% of Brazilian municipalities, according to an estimate provided by Jacqueline Rutkowski. However, there is no consistent data on the subject. While catadores may work in many more cities than this statistic suggests, in most cases they are not recognized by public officials and are not formally hired as service providers (J. Rutkowski 2021).

“...in the last two or three years, a closer relationship has begun to develop between the waste picker movement and ABRELPE. It's not a courtship yet, you can say it's a flirtation; they are still looking at each other to see if there's chemistry, right? But I already consider this to be a positive thing because before they couldn't talk, they didn't even sit at the same table. Today, they sit at the same table.” (Manetti 2021)

I argue that the reasons for this shift lies in the MNCR's (accurate) perception of fading opportunities under the current presidential administration, which “does not deal with social issues like the previous government” (Anonymous interviewee). However, the effect is to jeopardize the MNCR's founding goal of establishing itself as the protagonist of solid waste systems.

Environmentalists have numerous reasons to be disappointed by the outcomes of the PNRS. Today, 62% of Brazilians have no access to selective collection (Manetti 2021), and 8% of Brazilians have no regular waste collection service at their doorstep (L. Souza 2019). Brazil's overall recycling rate stands at 1.6% (SNIS 2020), a “very early stage of recycling” according to the *Sistema Nacional de Informações sobre Saneamento* (National Sanitation Information System, SNIS). In response to these shortcomings, the private sector blames individual consumers for not properly sorting recyclable materials (Soler 2021; Manetti 2021). In the words of Carlos Silva Filho, president of ABRELPE, “the first stage starts with the citizen, who needs to be aware of the need to separate garbage at home, be educated on how to do this separation correctly, and the vast majority of society Brazilian does not have this awareness” (L. Souza 2019). Producer responsibility now competes with consumer responsibility as the reason for Brazil's low resource recovery rates.

In addition to stagnant recycling rates, environmentalists and waste pickers alike now face a new challenge: incineration technology, which is proliferating in light of geopolitical shifts in recycling trade and the COVID-19 pandemic. China's 2018 Operation National Sword policy restricted shipments of waste into the country and destabilized recycling markets across the world, causing many recovered materials to lose their resale value (O'Neill 2019; Fox 2021).

Additionally, the COVID-19 pandemic has restricted catadores' collection and sorting activities due to public health concerns, prompting municipalities to turn towards other options for waste disposal services. While catadores successfully organized against incineration when Brazilian municipalities were originally exploring the option in 2008, in the wake of the coronavirus pandemic "the industry has aggressively attacked that market again, building coalitions with politicians and industry to bring forward a proposal for waste-to-energy technology" (Gutberlet 2021). These lobbies argue that waste-to-energy (WTE) is a form of recycling that recovers energy, while waste pickers and environmentalists stand aligned in opposition to WTE. Cities using WTE systems invest fewer resources in recycling programs, meaning less material is recovered. Furthermore, WTE "carves into the livelihood" of waste pickers by removing the need for a sorting stage that catadores would perform (Gutberlet 2021). The technology thus poses harmful environmental and social consequences. Yet as federal public defender Cláudio Santos observes, "inclusive public policy is obviously not the platform of an extreme right-wing government," and indeed the Bolsonaro administration has been receptive to these industry lobbies (C. Santos 2021).

Even the modicum of investment that catadores rely on through reverse logistics may be under threat. Signatories of the Packaging Sector Agreement were supposed to release a plan for Phase 2 of the agreement in February 2018, which would include updated goals for reverse logistics based on challenges and lessons from Phase 1 (Fox 2018, 44). As of August 2021 this plan has not yet been published nor even made available for public comment. Describing the delay at implementing Phase 2, Flávio Ribeiro comments:

"Once you are walking, you can go a little bit farther each step of negotiation. I believe the MMA lost its inertia with the possible agreement. But in my opinion they should have continued to negotiate Phase 2." (F. Ribeiro 2021)

Today, industry representatives are negotiating the agreement with the MMA, but the process appears to be even less participatory than the Phase 1 agreement. I did not discover any

evidence to indicate that the waste picker movement is involved in these negotiations, nor that a public consultation process will be conducted. Fabricio Soler, an attorney who works with industry associations, offers a justification for the lack of civil society input in discussions of the Phase 2 agreement:

“It may be that the government does not put it in public consultation because it is a second phase of the agreement. The agreement itself was already up for public consultation back then, so I understand that this phase has already been overcome.”
(Soler 2021)

Meanwhile, non-compliance with reverse logistics has become a serious issue. Nina Orlow comments that the private sector typically behaves more responsibly in European countries than in Brazil, likely because the laws and enforcement in Europe are much more rigorous (Orlow 2021). Brazil’s system depends on political will to function, and while enforcement under the PT was strong, the Bolsonaro administration is less attentive to private sector compliance (J. Rutkowski 2021). Indeed, today many small companies in Brazil are not executing reverse logistics programs (Soler 2021). Interestingly, the drift towards non-compliance has had negative ramifications for the Business Coalition. Originally brought together by CEMPRE, the Business Coalition is not a formal entity, but rather a group of industry associations working in cooperation. Because CEMPRE is a legally articulated organization, it became the target of public civil actions against the Sectoral Agreement, brought by public prosecutors who demanded companies expand their reverse logistics activities (Manetti 2021). Due to differentiated levels of compliance and these civil suits, CEMPRE left its leadership role in the Business Coalition. In the wake of CEMPRE’s departure, “the Business Coalition has totally lost its meaning today; it dismembered and each association works alone [to fulfill reverse logistics for packaging]” (Anonymous interviewee). As of now the rate of material recovery mandated by the Sectoral Agreement continues to stand at 22%, despite the original plan for this percentage to grow over time. Companies have resisted any incremental

increase in recovery goals, arguing that the waste produced by consumers does not have enough recyclable materials in it (despite a SNIS report that shows 30% of all waste produced in Brazil is recyclable) (SNIS 2020). For waste pickers, this means a continued trend of low investment in cooperatives' activities.

Concluding remarks: Insights for coalition-building, labor-environment alliances, and participatory policy-making

Brazil's National Solid Waste Policy was by all accounts an unlikely victory. The policy shifted a traditionally local policy problem into the arena of national politics, while facing resistance from organized industry lobbies. It reflected the aspirations and policy goals of urban environmentalists and waste pickers, reminiscent of Brazil's socio-environmental tradition that approaches environmental policy from a pro-poor perspective. Yet the PNRS did pass after two decades of debate and controversy in the federal Chamber of Deputies. What factors allowed this to occur?

In Chapter Two, I addressed this research question, analyzing three significant factors that enabled this unlikely policy victory. First, waste pickers and their civil society allies formed a blue-brown coalition that agitated and pressured policy makers to move the national waste bill forward. Second (and operating in a feedback loop with the first factor), a window of political opportunity opened under President Lula, who both exhibited personal commitment to the catadores' cause and whose administration was filled with sympathetic civil servants, "ping-ponging" between different ministries and advancing catadores' goals. Finally, the third factor that enabled the PNRS's passage was a shift in the political agenda of the producer sector, who had formerly obstructed the bill's advance. Faced with increasing pressure from the international environmental community, the private sector pivoted towards a platform of corporate social responsibility (CSR), which prompted it to support the law while also shaping the language to suit its own economic interests. Together, the waste picker movement and its

civil society allies, the federal government, and the business sector altered the course of a bill that for many years looked unlikely to advance.

As with most coalitions, waste pickers and urban environmentalist groups built partnerships on the premise of complementary policy goals. By incorporating a social and environmental agenda, the PNRS was supposed to be a shared win for these two actors. But were these proponents able to achieve in practice what they worked to pass on paper? In Chapter Three, I examined the law's language, whose vagueness at times generated conflicting interpretations of which actor bore responsibility for different aspects of the waste management chain. In Chapter Four, I reviewed the PNRS's implementation process, particularly the Packaging Sector Agreement, which fell short of environmentalists' goals for a strong enforcement of the "polluter pays" principle. Moreover, waste picker cooperatives found themselves still struggling for contracts with municipalities. Compounding these unfavorable social and environmental outcomes, a shift of presidential administrations left the waste picker movement and urban environmentalists more politically vulnerable than they had been under President Lula's administration. In response to my second research question, I showed that a socio-environmental win was not achieved, which generated negative ramifications for the blue-brown coalition that until this point had worked together harmoniously on a complementary policy agenda. By following the discussions around the Sectoral Packaging Agreement, I have argued that the MNCR made a political calculation to support and partner with the business sector in exchange for a modicum of assistance to cooperatives. Their position contrasts with environmentalists, who criticized both the producer sector for avoiding EPR, and the waste picker movement in turn for lending legitimacy to the agreement.

By studying the PNRS through its formulation and implementation, this thesis has interrogated the complex relationships that exist between business interests, environmental movements, and organized labor in the public policy-making arena. By examining a historic coalition between Brazilian urban environmentalists and waste pickers to pass an

unprecedented national policy governing waste, the project generates new insights about how such coalitions may approach policy-making endeavors and achieve shared wins. In the following three sections, I present key takeaways about challenges for maintaining coalitions, the prospect of alliances between labor movements and environmental movements, and ensuring meaningful inclusion of civil society actors in policy-making processes.

Obstacles to movement coalitions

This case study demonstrates that even deep, common-cause coalitions are vulnerable to obstacles, and generates new insights about the relationships between well-documented factors that cause stress. Recall the two typologies of coalition drawn from the work of Amanda Tattersall and Carola Frege. Frege et al. distinguishes vanguard coalitions (in which a labor organization is subordinate to its ally), integrative coalitions (in which a non-labor partner supports the goals of a labor organization), and common-cause coalitions (in which partners identify complementary interests and engage in joint collective action) (Frege, Heery, and Turner 2018). Tattersall's coalition typologies ranges from ad hoc (coalitions of convenience), support (coalitions that endure but have limited engagement and one partner is favored), mutual-support (coalitions that involve partners pursuing complementary self-interests), and deep (coalitions with a breadth of spaces for member participation and wide range of mutual interests) (Tattersall 2005). Based on the degree of joint collective action and depth of member engagement, I argued that the blue-brown coalition was a deep, common-cause coalition. Evaluated on multiple metrics, the coalition stands as a strong example of two actors engaging across multiple spaces of membership (like the Waste & Citizenship Forums) and sharing complementary goals. Yet even this coalition was vulnerable to fractures under stress from antagonistic actors like the business sector.

While previous scholarly literature has enumerated various factors that may catalyze tensions between coalition partners, this project illuminates nuances in the relationships

between these different factors. Social movement scholars note that cultural barriers and unequal access to resources may challenge a coalition's longevity (Bandy and Smith 2005; Van Dyke and Amos 2017; Bandy 2004; Khagram 2018; Mix and Cable 2006; Staggenborg 2010; B. Obach 1999; Frege, Heery, and Turner 2018). Both of these conditions characterized the allied actors in the years before the passage of the PNRS. Waste pickers came from different socio-economic backgrounds than their professionalized environmentalist allies, and had vastly different resources at their disposal. However, tensions between brown environmentalists and waste pickers remained dormant during the years of Lula's administration. During these years, favorable political circumstances allowed both the social and environmental agendas within the PNRS to progress, prompting synergistic outlooks among each side. While the blue and brown actors might have held different priorities, it was possible to overlook during times of stability. Rather, two other intervening phenomena, shifting political opportunity structures and the accompanying decline in resource availability, animated the internal contradictions within the allied actors. The blue-brown coalition found itself under greater threat during the Dilma Rousseff administration, as business interests gained more control over the PNRS's implementation process and were able to avoid responsibility for selective collection and remunerating waste pickers for their work. It was at this point that the underlying contradictions within the coalition crystallized into conflict. Threats to the socio-environmental agenda amplified the differential access to resources felt by economically vulnerable waste pickers and professionalized environmentalists, and even their cultural differences.³⁷ Each of these factors activated tensions in the coalition, that in turn made the aforementioned cultural and class distinctions between the two actors more salient. Thus, this thesis produces new insights about the relationality *between* different factors that negatively impact coalitions.

³⁷ Here, I refer back to Alex Cardoso's testimony about catador logics of "*pé de barro*" compared to "bourgeois" environmentalist organizations (Cardoso 2021).

Building labor-environment alliances

By studying the nature of relationships between business, environmental movements, and workers, this thesis has analyzed the opportunities and challenges for building coalitions between environmentalists and organized labor. The alliance formed by the waste picker movement and other sectors of civil society (particularly urban environmentalists) demonstrates the potential for labor-environment coalitions that scholars like Brian Obach and Stefania Barca advocate (Barca 2014; 2016; Khale 2014; Brecher, Blackwell, and Uehlein 2014; B. K. Obach 2004a). Such “blue-green” alliances carry the potential to build social causes into environmental struggles, and thus avert ecological crisis while also centering the needs of the most economically vulnerable. The complementary objectives of the blue-brown coalition under study—extended producer responsibility and waste picker inclusion—carried collective benefits for society as a whole (Rizpah Besen 2021; Grimberg 2007). The fact that the years following the PNRS’s passage saw tensions between actors formerly in alignment suggests lessons about the obstacles and opportunities for labor and environment coalitions to form and achieve meaningful policy victories.

Firstly, the debate over “shared responsibility” versus extended producer responsibility in the PNRS demonstrates an inherent conflict of interest between environmentalists and business that is well-documented in scholarly literature (B. K. Obach 2004a; Barca 2015). Throughout this thesis, I have shown that the positions of these two actors are informed by different ideologies of sustainability and environmental policy.³⁸ In this tension over different green policy approaches, the question of labor’s allegiance is less clear cut. Labor movements may align with environmental groups to build coalitional strength and achieve shared policy

³⁸ I argue that both a corporate social responsibility (CSR) vision of sustainability and EPR both attempt to use market mechanisms to “green” the capitalist economy. However, it is important to note that the producer sector’s CSR approach is clearly more “environmental-lite” than EPR, entailing a “greenwashing” of capitalism in which corporations bear limited financial stake in environmental stewardship of their waste (Williams 2007, 264). The extended producer responsibility model is predicated on stronger accountability mechanisms for environmental responsibility.

wins. However, the two actors hold different attributes that can complicate the longevity and success of these alliances. Some of the objectives and values held by environmental movements may clash with labor interests, as demonstrated by Chapter Four's discussion of hygienist attitudes, *controle* views, and a waste reduction agenda. Moreover, inherent attributes of labor and environmentalists may always present obstacles to coalition-building: for example, workers from marginalized backgrounds have different identities, ideologies, and resource access than professionalized environmentalists. These differences set up potential for contradictions within labor-environment alliances. Broadly speaking, these differences in positionality may complicate the prospect of achieving shared social and environmental policy victories.

However, the current state of the blue-brown coalition demonstrates that these actors can set a long-haul objective that reinforces the depth of their alliance and weathers obstacles. The *Aliança Resíduo Zero Brasil* (ARZB) continues to function as a convening space for the MNCR and environmentalist organizations, who are working together towards one another's policy objectives. While the Sectoral Agreement may have exposed different priorities held by each side, the ARZB is evidence that this labor-environment alliance is capable of maintaining a strong, trusting relationship and fostering meaningful dialogue even when the two parties disagree. This finding suggests that even when labor-environment alliances suffer a political loss or face closing windows of opportunity, they can still find common ground and preserve ties.

Participatory policy-making

This case study holds insights about the obstacles to ensure meaningful civil society participation in policy-making processes. The thesis has referenced the participatory nature of the PNRS, and the political significance of the MNCR's participation in the policy-making sphere under President Lula. By some readings, the PNRS was a product of its political moment, in which civil society actors like the waste picker movement and environmental groups had

unprecedented access to policy-making spaces. Alexandre Pereira affirms this attitude when he describes that “the PNRS tried to put everybody together” to collaborate on creating a policy (Neves Pereira 2021). Calling the negotiations of the PNRS and the Sectoral Agreement “very conflicting, very difficult, [but]... a really rich moment”, Alexandre argues that the *conflicts* between these actors are what made this process exceptional. Alexandre’s interpretation of the process seems to view participation is an end unto itself: ensure a participatory process, and in doing so guarantee a vibrant democracy.

However, I argue that this interpretation obscures the power differentials of the participants in the debate. While spaces for dialogue amongst a wide array of actors may symbolize a level field of participation, this thesis has indicated that the substance of the process was anything but. In their article “Participatory urban planning in Brazil”, Teresa Caldeira and James Holston explore Brazil’s participatory urban planning model, showing that this model is susceptible to co-optation by affluent citizens. Individuals with greater access to resources hold large advantages in participatory systems, and may exploit the system to implement restrictive zoning, limitations on development, and other neoliberal policies that erode a mission of social justice. Caldeira and Holston expose the limitations of participatory spaces to foster democratic management and collective interests (Caldeira and Holston 2015). I argue that much like affluent citizens have co-opted local participatory planning institutions, private sector interests have asserted dominance in federal policy-making spaces around the PNRS. The outcomes of the PNRS favored these interests, to the detriment of environmentalists and waste pickers.

It is fitting then Alex Cardoso calls the PNRS the product of a “hallway discussion”, in which powerful private sector stakeholders asserted influence over the law’s development outside of formal institutional spaces, undermining the social justice intent behind the participatory policy-making process (Cardoso 2021). This raises questions about the efficacy of participatory processes, which may be vulnerable to co-optation by powerful economic interests and even provide additional leverage for these actors to influence the public agenda. As Caldeira

and Holston note, “there is no guarantee that the practice of popular participation will produce social justice” in municipal urban planning institutions (Caldeira and Holston 2015, 2013). This same conclusion applies to policy-making at the federal level, where a participatory structure does not by default level the playing field between industry lobby groups and actors from civil society or social movements. The case of the PNRS shows that governments committed to social democratic principles must act affirmatively towards social movements and civil society actors, uplifting their agendas in order to ensure that these actors achieve their policy goals.

Moving forward: A future of hope?

Throughout this thesis, I have shown how an initially strong labor-environment coalition ended up experiencing fissures while implementing a policy that promised, at least on paper, a shared win for the waste picker movement and urban environmentalist groups. The idea of coalitions between labor and environmental organizations holds significant implications for achieving more sustainable livelihoods. Indeed, the concept of just transition is predicated on just such a marriage of social justice and environmental agendas. Yet given the insights produced by this thesis about the relationship between political opportunity and coalition success, the prospect of realizing a socio-environmental policy agenda seems uncertain. A rise of far-right sentiment across Brazilian politics seems to indicate a bleak future for these movements.

Nonetheless, I contend that even in this dire moment there is room for optimism about the future of the waste picker movement and environmental responsibility. This is based on the fact that political threats from antagonists often provoke social movements to form (Van Dyke 2003), and even gain greater access to resources as their supporters provide aid (Staggenborg 1986). The best evidence is the early waste picker movement, which arose during a decades-long military dictatorship that attempted to minimize space for such left-wing movements. While the organizing process was long and slow, the incipient movement gained political strength from the

grassroots as the left-wing Workers' Party rose to prominence in Brazilian municipalities during the 1980's and 1990's.

A similar bottom-up process may be underway today. Vishwas Satgar, a scholar who studies the solidarity economy, describes witnessing a dialogue amongst Brazilian activists and progressive scholars in the weeks following President Bolsonaro's 2018 election. These thought leaders were remembering the roots of their social movements, and questioning the compromises and negative dynamics that emerged within them during the years of the PT government cycle. Vishwas recalls: "[these leaders] were in the process of re-engaging and building the solidarity economy from below", paying heed to the origins of their movements (Satgar 2021). Vishwas's testimony suggests that movement-building efforts may be set back by hostile political actors, but not extinguished. Moreover, as of September 2021, a change of political tides may lie ahead. Cleared of all corruption charges, former president Lula is poised to run for president in Brazil's 2022 elections. By rebuilding a strong foundation of support and enduring periods of stress, the blue-brown coalition has the capacity to recapture the political strength it once enjoyed, and advance policies to achieve a just and sustainable future.

APPENDIX 1: LIST OF INTERVIEW SUBJECTS

Interviewee Name	Background
Alex Cardoso	Catador and leader in the MNCR
Alexandre Neves Pereira	Teaching assistant at International Development Institute at King's College London, studies participatory space
Anonymous interviewee	Worked for World Wildlife Fund (WWF)
Cláudio Santos	Federal public defender, has participated in events organized by the ARZB (Brazil Zero Waste Alliance)
Davi Amorim	Communications coordinator at the MNCR
Denise Braun	Founder of All About Waste
Dione Manetti	Executive Director of <i>Pragma Soluções Sustentáveis</i> (Pragma Sustainable Solutions), former Director of Development in SENAES (Brazil's National Secretariat of Solidarity Economy)
Elisabeth Grimberg	Coordinator of the Solid Waste Program at Instituto Pólis, affiliated with the ARZB (Brazil Zero Waste Alliance)
Fabiano Harada	Liaison between the packaging company Tetra Pak and Brazilian waste pickers
Fabricio Soler	Lawyer specializing in environmental law, has worked with various Brazilian industry associations
Felipe Rodriguez Torres	Plastics advisor and zero waste specialist at Global Alliance of Incinerator Alternatives (GAIA)
Flávia Rossi	Researcher who studies the MNCR
Flávio de Miranda Ribeiro	Professor and former São Paulo state environmental planner
Gina Rizpah Besen	Researcher at the <i>Instituto de Energia e Ambiente</i> (Institute of Energy and Environment) at the University of São Paulo, affiliated with the ARZB (Brazil Zero Waste Alliance)
Igor Brandão	Researcher who studies the PNRS and MNCR
Jacqueline Rutkowski	Researcher at <i>SUSTENTAR Interdisciplinar de Estudos e Pesquisas em Sustentabilidade</i> (Interdisciplinary Institute for Studies and Research on Sustainability)
José Valverde	Former technical advisor to federal deputy Arnaldo Jardim in the Chamber of Deputies

Jutta Gutberlet	Professor of geography, studies participatory resource management in Brazil
Luzia Maria Honorato	Catadora and leader in the MNCR
Marcela de Oliveira Santos	Lawyer who has represented ASSEMAE (National Association of Municipal Sanitation Services)
Nina Orlow	Promoter of the ARZB (Brazil Zero Waste Alliance), affiliated with <i>Movimento Estadual pelos ODS—São Paulo</i> (São Paulo Movement for the Sustainable Development Goals) and <i>Rede Nossa São Paulo</i> (Our Network São Paulo)
Rebecca Abers	Researcher who studies social and environmental movements in Brazil and participatory institutions
Roseane Souza	Director of the <i>Associação Brasileira de Engenharia Sanitária e Ambiental – São Paulo</i> (Brazil Association of Sanitary and Environmental Engineers in São Paulo, ABES-SP)
Silvano Silvério da Costa	Former director of the Urban Environment Department at the Ministry of the Environment (MMA), former director of the Secretariat of Water Resources and Urban Environment in the MMA
Talia Fox	Sustainability Planning Manager, studied the PNRS and corporate social responsibility in her planning master's
Taylor Cass Talbott	Project officer at Women in Informal Employment Globalizing and Organizing (WIEGO)
Tião Santos	Catador, former member of the MNCR, leader of <i>Movimento Eu Sou Catador</i> (I Am a Catador Movement)
Vishwas Satgar	Professor of International Relations, helping develop the Climate Justice Charter in South Africa
Vital Ribeiro	Coordinator at <i>Projeto Hospitais Saudáveis</i> (Healthy Hospitals Project), affiliated with the ARZB (Brazil Zero Waste Alliance)
Wladimir Ribeiro	Lawyer who has represented ASSEMAE (National Association of Municipal Sanitation Services), affiliated with the ARZB (Brazil Zero Waste Alliance)

APPENDIX 2: THEMES AND CODES USED FOR QUALITATIVE DATA ANALYSIS

Theme	Sample Codes
Actors	Waste pickers; producer sector; ABRELPE; ARZB; sanitary engineers
Federal government	Ministry of the Environment; Ministry of Cities; Ministry of Social Development; SENAES
Political leaders	Lula; Dilma Rousseff; Jair Bolsonaro
Coalitions	Labor-environment coalitions; other coalitions; tensions in coalitions
Environmentalism	Socio-environmentalism; brown environmental agenda; green environmental agenda
PNRS	Creation; praise; criticism; shared responsibility; selective collection; waste picker inclusion
Sectoral Agreement	Negotiation; outcomes; waste picker remuneration; Phase I; Phase II; municipal remuneration
Miscellaneous	Useful quotes; useful statistic; main argument; corruption; COVID-19; political will; incineration; waste reduction

**APPENDIX 3: ORGANIZATIONS PRESENT AT THE FIRST
NATIONAL WASTE & CITIZENSHIP FORUM IN 1998**

ABEMA	Associação Brasileira de Entidades do Meio Ambiente (Brazilian Association of State Environmental Entities)
ABES	Associação Brasileira de Engenharia Sanitária e Ambiental (Brazilian Association of Sanitary and Environmental Engineering)
ABMP	Associação Brasileira de Magistrados e Promotores de Justiça do Infância e do Juventude (Brazilian Association of Magistrates and Prosecutors of Children and Youth)
ABONG	Associação Brasileira de ONGs (Brazilian Association of NGOs)
ABMPA	Associação Brasileira de Promotores Públicos do Meio Ambiente (Brazilian Association of Public Promoters of the Environment)
Água e Vida Centro de Estudos de Saneamento Ambiental	Water and Life Center for Environmental Sanitation Studies
AIDIS/DIRSA	Associação Interamericana de Engenharia Sanitária e Ambiental/Divisão de Resíduos Sólidos (Inter-American Association of Sanitary and Environmental Engineering/Solid Waste Division)
ANAMA	Associação Nacional de Municípios do Meio Ambiente (National Association of Environmental Municipalities)
ANDI	Agencia de Noticias dos Direitos da Infância (Children's Rights News Agency)
ASMARE	Associação dos Catadores de Papel, Papelão e Material Reciclável (Association of Paper, Cardboard and Recyclable Material Collectors)
ASSEMAE	Associação Nacional dos Serviços Municipais de Saneamento (National Association of Municipal Sanitation Services)
BNDES	Banco Nacional de Desenvolvimento Econômico e Social (Brazilian Development Bank)
CAIXA	Federal Savings Bank
CEMPRE	Compromisso Empresarial para Reciclagem (Business Commitment for Recycling)
CENPEC	Centro de Estudos e Pesquisa em Educação, Cultura, e Ação Comunitária (Center for Studies and Research in Education, Culture, and Community Action)

CNBB	Conferência Nacional dos Bispos do Brasil – Pastoral da Criança (National Conference of Brazilian Bishops – Children's Pastoral)
CNQA	Comitê Nacional de Qualidade de ABES (ABES National Quality Committee)
COUI	Comissão de Desenvolvimento Urbano e Interior da Câmara dos Deputados (Committee on Urban and Interior Development of the Chamber of Deputies)
Comitê Resol	Comitê de Resíduos Sólidos de ABES (ABES Solid Waste Committee)
CONAMP	Associação Nacional dos Membros do Ministério Público (National Association of Members of the Public Prosecution Service)
FASE	Federação de Órgãos para Assistência Social e Educacional (Federation of Organs for Social and Educational Assistance)
FENAE	Federação Nacional das Associações do Pessoal da Caixa Econômica Federal (National Federation of Personnel Associations of Caixa Econômica)
FUNASA	Fundação Nacional de Saúde (National Health Foundation)
Fórum PETI	Fórum Nacional de Prevenção e Erradicação do Trabalho Infantil (National Forum for the Prevention and Eradication of Child Labor)
Fundação Athos Bulcão	Athos Bulcão Foundation
IBAM	Instituto Brasileiro da Administração Municipal (Brazilian Institute of Municipal Administration)
IBAMA	Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis (Brazilian Institute for the Environment and Renewable Natural Resources)
IBASE	Instituto Brasileiro de Análises Sociais e Econômicas (Brazilian Institute of Social and Economic Analysis)
Fund Friedrich Ebert	Friedrich Ebert Foundation
MDIC/SPI/PBR	Ministério do Desenvolvimento, Indústria, e Comércio/Secretaria de Política Industrial/Programa Brasileira de Reciclagem (Ministry of Development, Industry, and Commerce/Department of Industrial Policy/Brazilian Recycling Program)
MEC	Ministério de Educação (Ministry of Education)
MI	Ministério de Integração (Ministry of National Integration)
Missão Criança	Child Mission Program

MMA/SQA	Ministério do Meio Ambiente – Secretaria de Qualidade Ambiental nos Assentamentos Humanos (Ministry of the Environment – Department of Environmental Quality in Human Settlements)
MPF/PGR	Ministério Público Federal/Procuradoria Geral da República (Federal Public Ministry/Attorney General's Office)
OPAS	Organização Pan-Americana de Saúde (Pan American Health Organization)
Instituto Pólis	Pólis Institute
SEDU	Secretaria Especial de Desenvolvimento Urbano da Presidência da República (Special Secretariat for Urban Development of the Presidency of the Republic)
Site RESOL	Resol Engenharia Ltda. (Resol Engineering LLC)
UFPE	Universidade Federal de Pernambuco (Federal University of Pernambuco)
UFV	Universidade Federal de Viçosa (Federal University of Viçosa)
UNICEF	O Fundo das Nações Unidas para a Infância (The United Nations Children's Fund)
V&S Lula Vieira	Lula Vieira Agencia de Publicidade (Lula Vieira Advertising Agency)

(S. Dias 2009, 380)

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