

**BETWEEN PIONEERING AND LEADERSHIP:  
BRAZIL'S CONTRIBUTION FOR  
INTERNATIONAL FOREST GOVERNANCE**

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# Abstract

From 2005 until 2009, Brazil went through a prolific period of environmental and climate policy-making and activity. Among that set of initiatives, stands out the Amazon Fund, a pioneering programme of international cooperation with national ownership directed at the protection and conservation of the Amazon rainforest. The Fund contained innovative features that can be found to have proven impactful in fellow rainforest countries and the level of the United Nations' forest mechanisms. Despite this legacy, and because of other behaviours displayed in that period and before, Brazil is not perceived by its peers, nor by literature, as a leader in forest governance.

This dissertation departs from these premises to suggest another categorisation that does Brazil's legacy justice: *environmental pioneer*. After retrieving a framework of analysis from relevant literature on *pioneers*, this work sets out to highlight key moments of environmental leadership by Brazil in the aforementioned time period. In the end, it sustains its central argument by showcasing how Brazil, by having established the Amazon Fund, matches the characteristics of pioneers, policy diffusion and leadership in environmental affairs as identified in literature.

This approach contributes to understanding Brazil's contributions to forest governance, on the one hand; and emphasises mechanisms and initiatives of much-needed pioneering environmental policy-making, on the other.

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# Introduction

“*O Brasil está de volta!*”, “Brazil is back!” On the night of 30 October 2022, Luís Inácio Lula da Silva thanked Brazilians for re-electing him into a third term as the President of Brazil, after he stepped down at the end of 2010. In his victory speech, Lula da Silva vowed to restore the country’s prominence in the international fight against climate change and forest degradation – “Brazil is too big to be relegated to sad role of pariah of the world,” he said.<sup>1</sup> As part of those efforts, the President-elect committed to protect the country’s biomes and their biodiversity, in particular the Amazon rainforest’s. For that, Lula da Silva announced his cabinet was reopening the channels of international cooperation for the preservation of the Amazon, through foreign investment or transfer of resources.<sup>2</sup>

This pledge was reinforced in the preparation for, and early months of, Lula da Silva’s term. When reaffirming Brazil’s presence in spaces such as the United Nations Framework Convention on Climate Change’s (UNFCCC) Conference of the Parties (COP), or meeting with foreign heads of state, Lula da Silva built engagement from world leaders towards financing the protection of the rainforest through pledges to the Amazon Fund.<sup>3</sup>

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<sup>1</sup> Luís Inácio Lula da Silva. ‘Leia e veja a íntegra dos discursos de Lula após vitória nas eleições’ [‘Read and watch Lula’s full speeches after winning the election’]. Speech, São Paulo, October 30th, 2022. G1. October 31st, 2022. Accessed April 7th, 2023. Available at: <https://g1.globo.com/politica/eleicoes/2022/noticia/2022/10/31/leia-e-veja-a-integra-dos-discursos-de-lula-apos-vitoria-nas-eleicoes.ghtml>.

<sup>2</sup> Ibid.

<sup>3</sup> Amato, Fábio. ‘Na COP 27, Lula propõe aliança global contra fome e cobra de países ricos recursos contra mudança climática’ [‘At COP27, Lula proposes a global alliance against hunger and demands from rich countries resources to fight against climate change’]. G1. November 16th, 2022. Accessed April 17th, 2023. Available at: <https://g1.globo.com/politica/noticia/2022/11/16/lula-faz-discurso-na-cop27-no-egito.ghtml>; BBC Brasil. ‘Reino Unido anuncia R\$ 500 milhões para o Fundo Amazônia’ [‘The UK pledges R\$ 500 millions to the Amazon Fund’]. BBC Brasil. May 5th, 2023. Accessed May 20th, 2023. Available at: <https://www.bbc.com/portuguese/articles/c6p98ym9rgjo>; Sebastian Rodriguez. ‘Lula revives \$1 billion Amazon Fund and environmental protections’. *Climate Home News*. January 4th, 2023. Accessed April 18th, 2023. Available at: <https://www.climatechangenews.com/2023/01/04/first-day-office-lula-revives-1-billion-fund-amazon/>.

Created during Lula da Silva's second term in office, the Amazon Fund is a pioneering rainforest protection and conservation programme. Running as a pay-for-performance scheme, it rewards Brazil for preventing deforestation from occurring. The Fund introduces innovations to the area of forest governance through its structure, which incorporates foreign funding with full national autonomy over the management of the programme; and under which projects and initiatives are conceived through a multi-stakeholder method. Moreover, the Fund carries a goal of multi-level societal, economic and institutional change.<sup>4</sup>

Looking into the forest governance space, I find that Brazil was at the forefront of pioneering initiatives that expanded the scope of action and mechanisms available to protect and conserve the Amazon rainforests. Coming to light in 2008, the Amazon Fund stands among them. Brazilian leadership on this domain would create a blueprint for other rainforest countries,<sup>5</sup> and for the United Nations' (UN) Reducing Emissions from Deforestation and Forest Degradation mechanism (REDD+).<sup>6</sup> Despite these instances of leadership and its considerable natural capital, Brazil is not perceived by its peers as a leader in broad environmental governance.<sup>7</sup>

Bearing in mind these premises, this dissertation argues that the design and implementation of the Amazon Fund, together with the broader context in which that programme came in to being, categorise Brazil as an *environmental pioneer* country within the issue area of forest governance, from 2005 until the end of the 2000s.

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<sup>4</sup> Simon Zadek, Maya Forstater and Fernanda Polacow. *The Amazon Fund: Radical Simplicity and Bold Ambition. Insights for Building National Institutions for Low Carbon Development*. Working Paper. Fundación Avina, 2010. Accessed March 26<sup>th</sup>, 2023. Available at: [https://oxfordclimatepolicy.org/sites/default/files/Amazon\\_Fund\\_working\\_paper.pdf](https://oxfordclimatepolicy.org/sites/default/files/Amazon_Fund_working_paper.pdf).

<sup>5</sup> Ibid.

<sup>6</sup> Jeff Tollefson. 'Paying to save the rainforests'. *Nature* 460: 936-937. August 20th, 2009. Accessed March 26th, 2023. Available at: <https://ipam.org.br/bibliotecas/paying-to-save-the-rainforests/>.

<sup>7</sup> Fernanda Viana de Carvalho. 'The Brazilian position on forests and climate change from 1997 to 2012: from veto to proposition'/'A posição brasileira sobre as florestas e a mudança climática de 1997 a 2012: do veto à proposição'. *Revista Brasileira de Política Internacional* 55 (2012): 144-169.

Literature on the topic classifies an *environmental pioneer* as “the first” country “to propagate or introduce a certain environmental policy innovation or by exhibiting the highest level of ambition.”<sup>8</sup> Martin Jänicke adds that pioneers are trend-setters who exert leadership by expanding the regulatory boundaries in a policy-area. He notes that a “coalition of ecological modernisers” tends to exist among national political and economic spaces, and it triggers the formulation of innovative policies that lead the regulatory landscape forward.<sup>9</sup> In agreement with these considerations, Jürgen Blazejczak and Dietmar Edler add that pioneering environmental policy encompasses restrictions to the natural environment and the curtailing of the scope of action accessible to agents’ in the targeted domain.<sup>10</sup>

Analysing Brazil under a *pioneer* lens offers a more nuanced understanding over the country’s performance and contributions to forest protection and conservation. That is because literature on *pioneers* tends to focus on levels of ambition, conditions that foster innovation and policy diffusion. In doing that, it shows how pioneering behaviour from states can, more effective and quickly, advance the pace of action in a given area. As recently as March 2023, the Intergovernmental Panel on Climate Change identified curbing deforestation as one of the five most efficient strategies to halt CO<sub>2</sub> emissions and stay on track to keep global warming below 1,5°C by 2100.<sup>11</sup> That solidifies the

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<sup>8</sup> Duncan Liefferink and Rüdiger K.W. Wurzel. ‘Environmental leaders and pioneers: agents of change?’. *Journal of European Public Policy* 24, no. 7 (2017): 956. DOI: 10.1080/13501763.2016.1161657.

<sup>9</sup> Martin Jänicke. ‘Trend-Setters in Environmental Policy: the Character and Role of Pioneer Countries.’ *European Environment* 15, (2005): 129-142. DOI: 10.1002/eet.375.

<sup>10</sup> Jürgen Blazejczak and Dietmar Edler. ‘Could Too Little and Too Much Turn Out to be Just Right? – On the Relevance of Pioneering Environmental Policy’. In *Governance for Industrial Transformation. Proceedings of the 2003 Berlin Conference on the Human Dimensions of Global Environmental Change*. Ed. Klaus Jacob, Manfred Binder and Anna Wiczorek, 67-78. Environmental Policy Research Centre: Berlin, 2004.

<sup>11</sup> Clemens Schwingshackl, Wolfgang A. Obermeier, Julia Pongratz. ‘Guest post: How land use drives CO<sub>2</sub> emissions around the world’. *Carbon Brief*. April 25th, 2023. Accessed April 25th, 2023. Available at: <https://www.carbonbrief.org/guest-post-how-land-use-drives-co2-emissions-around-the-world/>.

urgency for ambitious forest policies and programmes in the coming years, and pioneer countries have proven to lead the way towards widespread ecological modernisation.<sup>12</sup>

Parallely, as Brazil positions itself to become a champion of climate affairs and Lula da Silva has been raising the ambition towards rainforest protection through the Amazon Fund, it is pertinent to delve into the contributions of that programme to that field.<sup>13</sup> Analysing the Fund through a *pioneer* lens shifts the perspective from its environmental outputs, and instead identifies the novelties and particular features that it introduced. That helps drawing a model that others can emulate. Furthermore, assigning Brazil the category of *pioneer* enables for a clearer analysis of the country's environmental performance in Lula's second term, contributing to set expectations for the coming years.

Finally, this research contributes to the literature about *environmental pioneers* in International Relations (IR) and policy-making by expanding the range of its objects of study. Academic work on environmental pioneers tends to cover European states and their impact within the European Union (EU). Given the particular structures, processes and practices of policy-making in the EU, some of the learnings retrieved from those articles cannot be applied, to full extent, in other governance contexts. Additionally, scholarly pieces on *pioneers* study policies and regulations. These tend to enclose restrictions and delimitations to behaviours.<sup>14</sup> Programmes such as the Amazon Fund, however, offer varied venues of action that allow for the participation, with closer involvement, of actors across multiple societal, economic and political levels, and can complement a country's regulatory landscape.

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<sup>12</sup> Martin Jänicke. 'Ecological Modernisation: New Perspectives'. In *Environmental Governance in Global Perspective: New Approaches to Ecological Modernisation*. Eds. Martin Jänicke and Klaus Jacob, 9-29. Freie Universität Berlin, 2006.

<sup>13</sup> Amato, 'Na COP27, Lula propõe aliança global contra fome e cobra de países ricos recursos contra mudança climática'.

<sup>14</sup> Blazejczak and Edler, 'Could Too Little and Too Much Turn Out to be Just Right?'



Before exploring the insights offered by this approach, I review existing literature on *environmental pioneers*. Jänicke, Katja Biedenkopf, Duncan Liefferink and Rüdiger Wurzel's bodies of work are valuable contributions for that endeavour. Departing from their research, different conceptions of pioneer states and pioneering policies are mapped, and how their leadership impacts environmental policy. The first chapter, a literature review, reflects that diversity of stances. The existing literature also encompasses conflicting views of the intersection of pioneers, leaders and leadership. The final section of the chapter addresses that debate.

The second chapter presents the highlights of the Brazilian foreign climate policy from 2005 until 2008. That summary lays the ground to contextualise the Amazon Fund in the broader behaviour of the country. Afterwards, the Amazon Fund is presented – its history, goals, governance structure, funding scheme described. The last part of the chapter accounts for the programme's innovative features and impact in forest governance initiatives that followed it.

The elements presented in the previous chapter aim to showcase that, by the end of the 2000s, Brazil was a pioneer in international forest governance. The third chapter builds on the literature observed at the beginning of the dissertation. Having framework of criteria and features found in environmental pioneers, this discussion engages that framework with the research from the previous chapter.

Heading to the end, the conclusion chapter summarises the learnings retrieved, indicating questions that build up on top of them and potential research paths.

This research is supported on the guided analysis of scientific articles, academic papers, policy papers, annual reports and organisational documentation. On the one hand, the literature on *environmental pioneers* is expected to bring an analytical framework, a set of features associated to *environmental pioneers* that will later inform the overview

of Brazil and the Amazon Fund. In particular, Jänicke's list of elements that characterise environmental pioneers is to be employed as a framework of analysis. That will be complemented with the presence of policy diffusion.

On the other hand, literature for the latter section looks into the country's foreign policy, diplomacy and domestic politics and policy. This dissertation was particularly informed by two articles. Both Fernanda Viana de Carvalho,<sup>15</sup> and Joana Castro Pereira and Eduardo Viola<sup>16</sup> divide Brazilian climate policy in time periods. While contributing to the same academic debate, these authors examine distinct elements of Brazilian climate policy. While that results in different time stamps, both articles pin down 2005 as the beginning of a prolific phase of pro-environmental policy-making in Brazil, domestically and externally – or “climate activism”, in Castro Pereira and Viola's work.<sup>17</sup> Relying on these scholars' evaluations, this dissertation looks at Brazilian foreign and domestic climate policy from 2005 until 2008.

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<sup>15</sup> Viana de Carvalho, 'The Brazilian position on forests and climate change from 1997 to 2012.'

<sup>16</sup> Joana Castro Pereira and Eduardo Viola. 'Brazilian climate policy (1992–2019): an exercise in strategic diplomatic failure'. *Contemporary Politics* (2021): 1-24. DOI: 10.1080/13569775.2021.1961394.

<sup>17</sup> Ibid.

# Chapter 1: Literature Review

Academic work on environmental pioneers and pioneering environmental policy making can be found across literature from the fields of IR, Comparative Politics, Political Science, Business and Environmental Economics. Researching and writing about pioneers engages with concepts of positions, leadership, policy innovation and diffusion.

Pioneer countries are widely described as those who move ahead of their peers by implementing innovative and ambitious policies that push forward the boundaries of the regulatory and policy landscapes. Jänicke describes pioneers as regulatory trend-setters in the environmental policy space,<sup>18</sup> “intellectual leaders under conditions of uncertainty”, or “first-movers”.<sup>19</sup> Similarly, Liefferink and Wurzel qualify a state as pioneer if it presents a high level of domestic environmental ambitions and a low level of external environmental ambitions.<sup>20</sup> They find this combination drives states to move “ahead of others”.<sup>21</sup>

Other scholars, like Biedenkopf,<sup>22</sup> and Blazejczak and Edler,<sup>23</sup> prefer to label policies as pioneers, refraining from qualifying the enacting state as such. Blazejczak and Edler characterise pioneering environmental policy as that setting “national environmental standards in excess of their optimal level” – the “optimal level” representing a balance between costs and benefits.<sup>24</sup> These scholars value that policies

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<sup>18</sup> Jänicke, ‘Ecological Modernisation’.

<sup>19</sup> Jänicke, ‘Trend-Setters in Environmental Policy’.

<sup>20</sup> Liefferink and Wurzel, ‘Environmental leaders and pioneers: agents of change?’

<sup>21</sup> Ibid., 954; Rüdiger K.W. Wurzel, Duncan Liefferink and Diarmuid Torney. ‘Pioneers, leaders and followers in multilevel and polycentric climate governance’. *Environmental Politics* 28, no. 1 (2019): 1-21. DOI: 10.1080/09644016.2019.1522033.

<sup>22</sup> Katja Biedenkopf. ‘Environmental Leadership Through the Diffusion of Pioneering Policy’. In *Environmental Leadership: A Reference Handbook*. Ed. Deborah Rigling Gallagher, 105-112. SAGE Publications, 2012.

<sup>23</sup> Blazejczak and Edler, ‘Could Too Little and Too Much Turn Out to be Just Right?’

<sup>24</sup> Ibid., 68.

are innovative and expand the regulatory reach within the targeted policy field. That contrasts with Jänicke's association of pioneers with "first-movers".<sup>25</sup> Biedenkopf supports that pioneering environmental policy includes "new and innovative approaches or provisions that go beyond internally and externally existing policies with ambitious scopes or requirements".<sup>26</sup> Biedenkopf's understanding of pioneering policy matches Blazejczak and Edler's.

Whether scholars label the country or the policies as pioneers, the normative dimension upon which that classification relies is consensual. Therefore, authors account for the levels of ambition around the formulation of the policy at hand,<sup>27</sup> the innovation and novelty inherent to its content,<sup>28</sup> and/or how they expand existing normative frameworks,<sup>29</sup> instead of using the actual or expected environmental impact of such policy as a measure. That is because the consensus over what is deemed "good" or "bad" for the environment has been evolving, as scientific research develops, and the climate crisis unfolds.<sup>30</sup>

Moreover, pioneering is issue and time specific: pioneers tend to wield pioneering policy within restricted issue-areas, and through limited periods of time. Even for states considered environmental pioneers, discrepancies within the vast field of environmental policy are acknowledged by research, as are contradictions across areas.<sup>31</sup> Besides, taking

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<sup>25</sup> Jänicke, 'Trend-Setters in Environmental Policy'.

<sup>26</sup> Biedenkopf, 'Environmental Leadership Through the Diffusion of Pioneering Policy', 105.

<sup>27</sup> Liefferink and Wurzel, 'Environmental leaders and pioneers'; Wurzel, Liefferink and Torney, 'Pioneers, leaders and followers in multilevel and polycentric climate governance'.

<sup>28</sup> Biedenkopf, 'Environmental Leadership Through the Diffusion of Pioneering Policy'; Blazejczak and Edler, 'Could Too Little and Too Much Turn Out to be Just Right?'; Jänicke, 'Trend-Setters in Environmental Policy'; Joseph Szarka, 'From inadvertent to reluctant pioneer? Climate strategies and policy style in France'. *Climate Policy* 5, no. 6 (2006): 627-638, DOI: 10.1080/14693062.2006.9685583.

<sup>29</sup> Jänicke, 'Ecological Modernisation'; Martin Jänicke and Klaus Jacob, 'Lead Markets for Environmental Innovations: A New Role for the Nation State'. In *Environmental Governance in Global Perspective: New Approaches to Ecological Modernisation*. Eds. Martin Jänicke and Klaus Jacob, 30-50. Freie Universität Berlin, 2006.

<sup>30</sup> Blazejczak and Edler, 'Could Too Little and Too Much Turn Out to be Just Right?'; Liefferink and Wurzel, 'Environmental leaders and pioneers'.

<sup>31</sup> Blazejczak and Edler, 'Could Too Little and Too Much Turn Out to be Just Right?'; Jänicke, 'Trend-Setters in Environmental Policy'; Liefferink and Wurzel, 'Environmental leaders and pioneers'; Szarka,

a pioneering position in environmental policy-making can be restricted to finite periods. These can be determined by the circumstances or actors at play.<sup>32</sup> This is exemplified in Joseph Szarka's case-study of France: a pioneer in low-carbon energy matrixes in the immediate aftermath of the Kyoto Protocol, France lost that status as it failed to keep up with policy innovations for emissions reductions in the following years.<sup>33</sup> Another example is Germany, the Netherlands and Denmark's "Green Troika": between the 1980s and the mid-1990s, these countries aligned efforts to drive forward environmental policy innovation within the EU.<sup>34</sup> The case of the Amazon Fund, too, mirrors that tendency: it is the product of a time of particularly ambitious environmental drive in Brazil.

Jänicke enunciates a list of factors common to countries that are pioneers in environmental affairs.<sup>35</sup> First, he identifies that those states hold political and environmental capacity, and societal adherence to initiatives in this field. These ensure the existence of adequate institutional, economic and informational structures and a "'green' advocacy coalition". Second, Jänicke agrees that pioneers tend to reserve their policy innovation efforts to specific issues, particularly those in which there is history of action, competences or path dependency. Moreover, he acknowledges situation-specific factors at play, or "policy windows": these encompass the political context, regulatory landscape, technology development and situational opportunities suitable to foster pioneering policy. Finally, he considers that existing capacities and a favourable context ought to be met with a degree of "will and skill", or strategic factors.<sup>36</sup>

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'From inadvertent to reluctant pioneer?'; Wurzel, Liefferink and Torney, 'Pioneers, leaders and followers in multilevel and polycentric climate governance'.

<sup>32</sup> Liefferink and Wurzel, 'Environmental leaders and pioneers'; Wurzel, Liefferink and Torney, 'Pioneers, leaders and followers in multilevel and polycentric climate governance'.

<sup>33</sup> Szarka, 'From inadvertent to reluctant pioneer?.'

<sup>34</sup> Jänicke, 'Ecological Modernisation'; Jänicke, 'Trend-Setters in Environmental Policy'; Wurzel, Liefferink and Torney, 'Pioneers, leaders and followers in multilevel and polycentric climate governance'.

<sup>35</sup> Jänicke, 'Trend-Setters in Environmental Policy'.

<sup>36</sup> Ibid.

Jänicke attributes to the existence of a “green” advocacy coalition” the key to move countries into the direction of pioneering environmental policy.<sup>37</sup> He adopts this concept from Paul Sabatier’s work, and the relevance of such a coalition is demonstrated by the centrality it takes in Jänicke’s definition of pioneers: “countries where a strong green advocacy coalition is skilful enough to (...) introduce more than one environmental policy innovation contributing to international regulatory trends”.<sup>38</sup> Such a coalition gathers “actors of environmental administrations or of the ecology movements”, the “strength and competence” of environment-related government bodies and the strength of environmental civil society organisations.<sup>39</sup> These coalitions work as venues where modernisers’ ambition and vision meets traditional actors’ pre-existing tools and resources. Here, the issue and time specificity apply too: these “green” advocacy coalitions are circumstantial.<sup>40</sup>

Taking a Business School perspective, the criteria employed by Blazejczak and Edler to identify pioneering environmental policy is the restriction of “the use of the natural environment”; imposition of “more severe restrictions on agents”, in comparison to other countries, thus increasing agents’ “operational costs”; and that the policy is rationalisation, by politicians, through “international offsets”.<sup>41</sup>

Departing from the understanding that globalisation and the proliferation of international organisations have created a benchmark for policy-making and expanded the policy competition arena, Jänicke affirms that, by acting as pioneers in environmental policy-making, countries acquire leverage and reputational gains. This can work to the

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<sup>37</sup> Ibid; Jänicke, ‘Ecological Modernisation’.

<sup>38</sup> Ibid., 130.

<sup>39</sup> Ibid., 136.

<sup>40</sup> Ibid.

<sup>41</sup> Blazejczak and Edler, ‘Could Too Little and Too Much Turn Out to be Just Right?’, 68.

advantage of countries that, otherwise, lack conditions to stand out in other matters, Jänicke explains.<sup>42</sup>

Wurzel, Liefferink and Diarmuid Torney are on the same page as Jänicke regarding the weight of reputation and image gains in propelling actors to become environmental pioneers.<sup>43</sup> In addition to that, these authors attribute that motivation to context, motivations and capacities at the institutional, political, technological and knowledge levels. They find the combination of these factors fuels states with a “go at it alone” attitude, particularly “if they consider themselves constrained by followers or laggards” in the pursuit of their “high internal and low external ambitions”.<sup>44</sup>

While pioneers collect some benefits themselves, Jänicke argues that broad “ecological modernisation” is the most important gain to be extracted from pioneering behaviours and the competitive context that enables their existence.<sup>45</sup> The shift from individual, “go at it alone” policies to more mainstream regulatory schemes operates through policy diffusion.<sup>46</sup>

Policy diffusion is the transfer of a policy from a “jurisdiction” to another without any formal agreements.<sup>47</sup> Biedenkopf considers it an organic process that can occur through learning, emulation or adjustment. The first two mechanisms result from spread of information; the latter depends on a change of circumstances in the receiver jurisdiction.<sup>48</sup> Biedenkopf places importance in policy diffusion to the extent that she considers that only if others adhere to its policies, can a state be deemed a pioneer.<sup>49</sup>

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<sup>42</sup> Jänicke, ‘Ecological Modernisation’; Jänicke, ‘Trend-Setters in Environmental Policy’.

<sup>43</sup> Wurzel, Liefferink and Torney, ‘Pioneers, leaders and followers in multilevel and polycentric climate governance’.

<sup>44</sup> Ibid., 8.

<sup>45</sup> Jänicke, ‘Ecological Modernisation’.

<sup>46</sup> Ibid.; Biedenkopf, ‘Environmental Leadership Through the Diffusion of Pioneering Policy’; Jänicke and Jacob, ‘Lead Markets for Environmental Innovations’; Liefferink and Wurzel, ‘Environmental leaders and pioneers.’

<sup>47</sup> Biedenkopf, ‘Environmental Leadership Through the Diffusion of Pioneering Policy’.

<sup>48</sup> Ibid.

<sup>49</sup> Ibid.

To Biedenkopf's arguments, Jänicke and Klaus Jacob add that the action of pioneering countries accelerates the pace and trajectory of policy-making in international governance: "empirical research on the development of environmental policy reveals that it is most often pioneering nation states that push for advances in environmental policy",<sup>50</sup> with international organisations acting as "agents of diffusion of environmental policy innovations".<sup>51</sup>

For Jänicke and Jacob, this proves that, in light of complex international governance systems, nation-states remain "the most competent and best-organised" problem-solvers and policy entrepreneurs to tackle climate change.<sup>52</sup> Simultaneously, Jänicke expects that "knowledge-based policies", rather than "power-based strategies", will grow in relevance.<sup>53</sup> That conclusion is matched by Liefferink and Wurzel's considerations over how traditional hard power seemingly has been losing prominence in environmental affairs.<sup>54</sup> Biedenkopf goes a step further in this direction, coining pioneering policy as a "third mode of external governance", hand in hand with "jointly negotiated agreements between jurisdictions and coercive pressure by the pioneer on potential followers".<sup>55</sup> Jänicke summarises:

"By offering innovative solutions for global environmental needs, [pioneer] countries demonstrate that they do not have to be powerful to be influential: if their solutions have a demonstrated effect and are widely communicated, they can even exert pressure for change within other countries."<sup>56</sup>

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<sup>50</sup> Jänicke and Jacob, 'Lead Markets for Environmental Innovations', 30.

<sup>51</sup> *Ibid.*, 38-39.

<sup>52</sup> *Ibid.*

<sup>53</sup> Jänicke, 'Ecological Modernisation', 22.

<sup>54</sup> Liefferink and Wurzel, 'Environmental leaders and pioneers.'

<sup>55</sup> Biedenkopf, 'Environmental Leadership Through the Diffusion of Pioneering Policy', 111.

<sup>56</sup> Jänicke, 'Ecological Modernisation', 22-23.



## 1.1. Pioneers, leaders and leadership:

Given the lack of consensus in literature over attributing a status or category to countries that enact pioneering environmental policy, different approaches stand out. On the one hand, some scholars prefer to label policies, rather than actors. On the other, some pieces of literature use “pioneer” and “leader” interchangeably.<sup>57</sup>

Biedenkopf, Liefferink, Wurzel, Torney, Jänicke and Jacob agree that, by enacting pioneering environmental policy, countries exert leadership. They understand leadership as a set of behaviours, a practice that actors enact. Following that, a state exercising leadership can be characterised as an environmental leader, in Biedenkopf’s view (“The fact that other jurisdictions follow the lead of the pioneering jurisdiction makes this jurisdiction an environmental leader”);<sup>58</sup> an intellectual leader or pioneer, in Jänicke’s work;<sup>59</sup> or a pioneer or leader in Liefferink and Wurzel’s research. The latter’s analytical framework distinguishes between four types of leadership/“pioneership”: structural, entrepreneurial, cognitive and exemplary.<sup>60</sup> Of those, only exemplary leadership coins countries as pioneers; the rest categorise them as leaders.<sup>61</sup>

Liefferink and Wurzel stand out as the authors who commit to outlining the nuances that differentiate leaders and pioneers, as well as to describing the diversity of forms of leadership in environmental policy-making. In their view, both pioneers and leaders expand the existing environmental policy frameworks, and what sets them apart

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<sup>57</sup> Biedenkopf, ‘Environmental Leadership Through the Diffusion of Pioneering Policy’; Blazejczak and Edler, ‘Could Too Little and Too Much Turn Out to be Just Right?’; Liefferink and Wurzel, ‘Environmental leaders and pioneers’; Wurzel, Liefferink and Torney, ‘Pioneers, leaders and followers in multilevel and polycentric climate governance’.

<sup>58</sup> Biedenkopf, ‘Environmental Leadership Through the Diffusion of Pioneering Policy’, 105.

<sup>59</sup> Jänicke, ‘Ecological Modernisation’; Jänicke, ‘Trend-Setters in Environmental Policy’; Jänicke and Jacob, ‘Lead Markets for Environmental Innovations’.

<sup>60</sup> Liefferink and Wurzel, ‘Environmental leaders and pioneers’.

<sup>61</sup> Ibid.

is the intention to build a following – a “high level of external ambitions”.<sup>62</sup> As such, pioneers are framed as countries that move ahead of the mainstream, paving the way and creating the conditions for others to adopt the same direction, but doing so without any goals of building a following. “An ideal-typical pioneer has no external ambitions. It is not interested in attracting followers, does not provide external leadership and fails to exert any other externally directed types of leadership”.<sup>63</sup>

In contrast, Liefferink and Wurzel understand leaders as states that strive to influence other actors and build a following,<sup>64</sup> seeking that others “adopt the same or at least similar [high] ambitions” as theirs.<sup>65</sup> The type of leadership they exert matches Yan Xuetong’s description of political leader: “a leading body that has the capability to enlist the support of other individuals, teams, or organizations in the accomplishment of a common task”.<sup>66</sup> It is also supported by Joseph Nye’s explanation of leadership: “[it] is not just about issuing commands (...) but also involves leading by example and attracting others to do what you want... Having others buy into your values.”<sup>67</sup>

Xuetong and Nye’s conceptualisations of leadership clash with Liefferink and Wurzel’s dividing line between leaders and pioneers – intending to be followed. That distinction does not find parallel in other pieces of literature either. Jänicke disregards whether countries intended to build a following from the get-go – he rather privileges the presence of a “green” advocacy coalition as the defining feature.<sup>68</sup> Not only that, he explains that an environmental policy is deemed successful by being adopted “by a

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<sup>62</sup> Ibid.; Wurzel, Liefferink and Torney, ‘Pioneers, leaders and followers in multilevel and polycentric climate governance’.

<sup>63</sup> Ibid., 160.

<sup>64</sup> Ibid.; Wurzel, Liefferink and Torney, ‘Pioneers, leaders and followers in multilevel and polycentric climate governance’.

<sup>65</sup> Wurzel, Liefferink and Torney, ‘Pioneers, leaders and followers in multilevel and polycentric climate governance’, 8.

<sup>66</sup> Yan Xuetong, *Leadership and the Rise of Great Powers*, 29. Princeton University Press, 2019.

<sup>67</sup> Joseph Nye in Liefferink and Wurzel, ‘Environmental leaders and pioneers’, 960.

<sup>68</sup> Jänicke, ‘Ecological Modernisation’; Jänicke, ‘Trend-Setters in Environmental Policy’.

relevant or a majority of other countries”, producing policy convergence.<sup>69</sup> Mirroring Jänicke, Biedenkopf acknowledges that states may or may not have the prior intention of influencing others, but finds that irrelevant for her characterisation of pioneers.<sup>70</sup> She emphasises, however, that it is the adherence of others that makes the pioneer.<sup>71</sup>

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<sup>69</sup> Jänicke, ‘Trend-Setters in Environmental Policy’, 130.

<sup>70</sup> Biedenkopf, ‘Environmental Leadership Through the Diffusion of Pioneering Policy’.

<sup>71</sup> Ibid.

## Chapter 2: Highlights of Brazilian Climate and Environmental Policy, 2005 – 2009

*“We’re not merely lighting a match to the Amazon and imperilling everything that lives in it with extinction, but also summoning creatures long dead to return to Earth’s surface and give up the ancient energy they took to the grave.”<sup>72</sup>*

The main values anchoring Brazilian climate diplomacy are the right to development, including the defence of sustainable development; and the national sovereignty over the administration of its own territory and resources, product of security concerns over external meddling in the Amazon rainforest.<sup>73</sup> These are paired with agreement with the principle of historic responsibilities for climate change, from which ensues that developed, wealthy nations should bear the costs of climate and nature conservation action. That entails supporting the transfer of financial and technical resources to the Global South, as seen under “common but differentiated responsibilities” and “polluter pays” principles.<sup>74</sup>

The pillars of these positions date back to before the transition to democracy, but were consolidated since the negotiations for the 1997 Kyoto Protocol.<sup>75</sup> They are mirrored in Brazilian positions on forest governance, and shape initiatives targeted at the Amazon

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<sup>72</sup> Peter Brannen. ‘The Amazon Is Not Earth’s Lungs’. *The Atlantic*. August 27th, 2019. Accessed May 4th, 2021. Available at: <https://www.theatlantic.com/science/archive/2019/08/amazon-fire-earth-has-plenty-oxygen/596923/>.

<sup>73</sup> Ans Kolk. ‘From Conflict to Cooperation: International Policies to Protect the Brazilian Amazon’. *World Development* 26, no. 8 (1998): 1481-1493; Joana Bezerra. *The Brazilian Amazon: Politics, Science and International Relations in the History of the Forest*. Springer International Publishing Switzerland, 2015; Viana de Carvalho, ‘The Brazilian position on forests and climate change from 1997 to 2012’.

<sup>74</sup> Bezerra, *The Brazilian Amazon*; Viana de Carvalho, ‘The Brazilian position on forests and climate change from 1997 to 2012’.

<sup>75</sup> Castro Pereira and Viola, ‘Brazilian climate policy (1992–2019)’; Viana de Carvalho, ‘The Brazilian position on forests and climate change from 1997 to 2012’.

rainforest. Brazil has pushed for these values in the international arena, including in its participation in debates on forest governance.<sup>76</sup>

Viana de Carvalho considers that, since the 1990s, Brazil employed “solid and coherent technical and scientific arguments” to transmit its “principles and political views”.<sup>77</sup> At times, the country comes to be considered a “leader” of the “coalition of developing countries” for its steady opposition to quantified emissions reductions commitments, that could hinder developing countries’ development. In other occasions, Brazil’s reluctance to adhere to regulatory mechanisms, such as deforestation and forest degradation mitigation measures, under the veil of sovereignty, isolated it. These instances of disagreement with its peers prevented Brazil from establishing itself as a leader in forest governance, argues Viana de Carvalho.<sup>78</sup> As she puts it, a country cannot be considered a leader if its proposals and preferences do not match the majority’s in its group.<sup>79</sup> Only in 2003 would Brazil become more favourable to deepening the inclusion of forests in governance arrangements at the UNFCCC.<sup>80</sup>

Despite the reluctance to cooperate within the UNFCCC, Brazil engaged with international, multilateral cooperation schemes for forest protection with the Pilot Program to Conserve the Brazilian Rainforest (PP-G7). Launched in 1992, this programme fostered deforestation prevention, forest conservation and sustainable development in the Brazilian Amazon and Atlantic Coastal rainforests.<sup>81</sup> PP-G7 brought together the World Bank, donor countries from the Global North, and Brazilian federal

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<sup>76</sup> Viana de Carvalho, ‘The Brazilian position on forests and climate change from 1997 to 2012’.

<sup>77</sup> *Ibid.*, 154.

<sup>78</sup> *Ibid.*

<sup>79</sup> *Ibid.*

<sup>80</sup> *Ibid.*

<sup>81</sup> World Bank. *Pilot Program to Conserve the Brazilian Rain Forest (PPG7)*. December 14th, 2005.

Accessed March 20th, 2023. Available at:

<https://documents1.worldbank.org/curated/en/880921468238160692/pdf/9241002005Dec10t0PUBLIC0Box0385367B.pdf>.

institutions, as well as relevant stakeholders on the ground. From the get-go, it was embedded that the programme ought to act as a learning playground for future activities.<sup>82</sup>

The Brazilian Ministry of the Environment (MMA) coordinated the programme and its projects, assigning to relevant stakeholders the project design, implementation and monitoring. These stakeholders included residents, local government representatives, representatives of indigenous communities, NGOs, and private businesses. Project-specific stakeholder commissions ensured “that [their] views [were] considered and their interests safeguarded”.<sup>83</sup>

The PP-G7 marked a turning point in international development initiatives: because Brazil was involved in the design of the programme, heavily influencing its architecture and goals; and, for the World Bank, it created a blueprint for future engagement in environmental protection initiatives.<sup>84</sup>

By 1998, the PP-G7 was deemed a model of international environmental cooperation. It was praised for mobilising local communities and state authorities in the full cycle of its projects, and for proving that such programmes can conciliate external actors’ participation without infringing on national sovereignty.<sup>85</sup>

Following 2005, and until the end of the decade, significant changes in domestic forest governance and climate diplomacy operated in Brazil. This comprises Lula da Silva’s two Presidential terms.<sup>86</sup>

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<sup>82</sup> World Bank. ‘The Sustainable Production Project: Bringing Business Know-How to Small Producers’. *Brazil Rain Forest Pilot Program Update – Newsletter of the Pilot Program to Conserve the Brazilian Rain Forest* 8, no.1 (2000). Accessed March 20th, 2023. Available at: <https://documents1.worldbank.org/curated/en/664571468744254613/pdf/multi0page.pdf>; World Bank, *Pilot Program to Conserve the Brazilian Rain Forest (PPG7)*.

<sup>83</sup> World Bank, *Pilot Program to Conserve the Brazilian Rain Forest (PPG7)*, 9.

<sup>84</sup> Kolk, ‘From Conflict to Cooperation’.

<sup>85</sup> Ibid.; Giorgio De Antoni. ‘O Programa Piloto para Proteção das Florestas Tropicais do Brasil (PPG-7) e a globalização da Amazônia’ [‘The Pilot Program to Conserve the Brazilian Rainforest (PPG-7) and the globalisation of the Amazon’]. *Ambiente & Sociedade* 13, no. 2 (2010): 299-313.; Kolk, ‘From Conflict to Cooperation’.

<sup>86</sup> Castro Pereira and Viola, ‘Brazilian climate policy (1992–2019)’; Viana de Carvalho, ‘The Brazilian position on forests and climate change from 1997 to 2012’.

From 2003, a set of policies to decrease deforestation is implemented. Lula's cabinet makes gradual changes in the legal architecture of the rainforest governance and monitoring which covered "clearer ownership of land and forests";<sup>87</sup> reforms and amendments to the National Forest Code, setting at 80% the percentage of required set-aside forest area, and transferring portions of forest land to private owners committed to sustainable management for commercial use; issuing of land titles; launching a Forest Protection Payment pilot-programme, which effectively compensated local residents for maintaining the integrity of forests; creating the Amazon Fund; establishing new parks and conservation units within the Amazon; and overall improvements in institutional capacity to oversee and manage forest-related activities. Many of these actions stemmed from the Action Plan for the Prevention and Control of Deforestation in the Amazon, the result of the work of a Permanent Inter-ministerial Working Group, created by the MMA.<sup>88</sup>

These policy and regulatory advances can be largely attributed to the proactivity and influence of Marina Silva, Minister of the Environment. Between 2003 and 2008, Silva equipped forest conservation and protection efforts with "more effective law enforcement" and "stronger institutional capacity".<sup>89</sup> She also established mechanisms for closer cooperation between state authorities and the federal government: states became responsible for designing their own plans to reduce deforestation, while the federal government monitored their implementation. Throughout most of her tenure, Marina Silva's vision was supported by Brazilian civil society, state governors from the

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<sup>87</sup> Kathryn Hochstetler and Eduardo Viola. 'Brazil and the politics of climate change: beyond the global commons'. *Environmental Politics* 21, no. 5 (2012): 760. DOI: 10.1080/09644016.2012.698884.

<sup>88</sup> Ibid.; Castro Pereira and Viola, 'Brazilian climate policy (1992–2019)'; Viana de Carvalho, 'The Brazilian position on forests and climate change from 1997 to 2012'.

<sup>89</sup> Ibid., 761.

Amazon region, NGOs, the private sector, and public opinion abroad. Her successor, the environmentalist Carlos Minc, continued her work during his tenure, from 2008 to 2010.<sup>90</sup>

For the first time, the MMA held greater influence in the balance of power, with implications for national and external climate policy. This phase of “climate activism”<sup>91</sup> is better understood bearing in mind that the MMA’s influence over the President was greater than the Ministry of External Relations’ (MRE) or the Ministry of Science and Technology’s (MCT), who held more conservative preferences.<sup>92</sup>

At this time, Lula da Silva’s cabinet profited from a commodity boom to achieve exponential, sustained economic growth. Contrary to prior trends, economic growth was not achieved at the cost of deforestation, but, on the contrary, paralleled its decrease.<sup>93</sup> From 2005 to 2010, Brazil registered a 75% drop of deforestation: from 28,000km<sup>2</sup> to 7000km<sup>2</sup>.<sup>94</sup>

On the foreign policy front, Lula adopted a strategy of “autonomy through diversification”: the government sought to deepen Brazil’s ties to other Global South countries and with “non-traditional partners” like China and Eastern European states.<sup>95</sup> While remaining aligned with dominant international principles and norms, Brazil aimed to affirm its “autonomy in relation to the great powers”.<sup>96</sup> According to Joana Bezerra, Lula da Silva’s foreign policy was meant to support his cabinet’s goals of “economic and

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<sup>90</sup> Ibid.

<sup>91</sup> Castro Pereira and Viola, ‘Brazilian climate policy (1992–2019)’.

<sup>92</sup> Ibid.; Hochstetler and Viola, ‘Brazil and the politics of climate change’; Viana de Carvalho, ‘The Brazilian position on forests and climate change from 1997 to 2012’.

<sup>93</sup> Ibid.; Bezerra, *The Brazilian Amazon*; Hochstetler and Viola, ‘Brazil and the politics of climate change’; Viana de Carvalho, ‘The Brazilian position on forests and climate change from 1997 to 2012’.

<sup>94</sup> Climate & Company et al. *Bridging sustainable finance and sustainable land use initiatives to reduce deforestation: An overview of EU and Brazilian legislation*. November 2022. Accessed December 11<sup>th</sup>, 2022. Available at:

[https://urldefense.com/v3/\\_\\_https://issuu.com/climateandcompany/docs/overview\\_of\\_eu\\_and\\_br\\_legislation\\_eng\\_\\_;!!DOxrgLBm!DIE3OzbE2zokBgCRjkWw2L0S8UHm4M2n-g88RiEZu8cI6KVAVOr\\_i-NLvFtaPGzJN60E2nU6Z-J4ja6\\_lpaC1ZTNIOE\\$](https://urldefense.com/v3/__https://issuu.com/climateandcompany/docs/overview_of_eu_and_br_legislation_eng__;!!DOxrgLBm!DIE3OzbE2zokBgCRjkWw2L0S8UHm4M2n-g88RiEZu8cI6KVAVOr_i-NLvFtaPGzJN60E2nU6Z-J4ja6_lpaC1ZTNIOE$).

<sup>95</sup> Bezerra, *The Brazilian Amazon*, 121.

<sup>96</sup> Ibid., 121.



social development projects in Brazil, promoting trade liberalisation with social justice”.<sup>97</sup>

Viana de Carvalho notes that Brazil’s environmental proactivity was matched by its diplomacy. As the results of policies against deforestation became noticeable, the country produced more substantial interventions in international negotiations, including proposals of financial mechanisms for mitigation efforts.<sup>98</sup> Despite Brazil’s influence near other developing, tropical forest countries, Viana de Carvalho refrains from considering this a moment of leadership within the domain of forest governance. That is in part due to a shift of preferences, among forest endowed nations, towards market-oriented approaches.<sup>99</sup> Contrastingly, Castro Pereira and Viola characterise Brazil as a “constructive leader among the developing countries”, especially by the end of the decade.<sup>100</sup>

## 2.1. The Amazon Fund:

In the 2006 UNFCCC COP12, in Nairobi, Brazil submits its first proposal for a mechanism that financially compensated deforestation reduction. The text proposes that “Annex 1 countries and corporations would contribute to a fund that would distribute financial resources according to the performance of countries in voluntarily reducing deforestation rates.”<sup>101</sup> The proposal is not supported by the majority of rainforest countries, as the main preference, at the time, leaned towards the inclusion of native forests in offset market mechanisms.<sup>102</sup>

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<sup>97</sup> Ibid., 121.

<sup>98</sup> Viana de Carvalho, ‘The Brazilian position on forests and climate change from 1997 to 2012’.

<sup>99</sup> Ibid; Hochstetler and Viola, ‘Brazil and the politics of climate change’.

<sup>100</sup> Castro Pereira and Viola, ‘Brazilian climate policy (1992–2019)’, 8.

<sup>101</sup> Hochstetler and Viola, ‘Brazil and the politics of climate change’, 762.

<sup>102</sup> Instituto de Pesquisa Ambiental da Amazônia – IPAM. *Considerações iniciais sobre o Fundo Amazônia [Initial Considerations about the Amazon Fund]*. October 2nd, 2008. Accessed March 26th, 2023. Available at: <https://ipam.org.br/wp->

A landmark of Brazilian climate diplomacy, this proposal was conceived by the MMA. As the ministry successfully accommodated the MRE and MCT's preference of keeping the mechanism free from ties to carbon markets, this instance enhances the MMA's growing relevance in shaping foreign environmental and climate policy.<sup>103</sup>

A year later, in 2007, a group of nine NGOs launched an initiative to put an end to deforestation within seven years. Gathering several sectors of civil society, they teamed up with the Brazilian Development Bank (BNDES), to discuss strategies to attract private, domestic and international funding to operationalise the initiative.<sup>104</sup>

At the federal government, the National Climate Change Strategy had been announced. Under this plan, the government committed to eliminating net forest loss by 2015, through afforestation and reforestation activities; and to reduce deforestation rates in 70% by 2017 (at COP15, in 2009, this figure was updated to 80% by 2020).<sup>105</sup>

The combination of these contributions from the MMA, the President, NGOs and recent climate legislation amounted to a favourable context for the proposal that was rejected at COP12, in 2006, to flourish domestically.

In August 2008, Lula da Silva would create the Amazon Fund, with the goal of attracting donations that compensated Brazil for preventing, monitoring and combatting deforestation; and for promoting the conservation and sustainable, low-carbon development of the Amazon rainforest. The mandate of the Fund would be enacted through projects on the ground, the deployment of law enforcement to the region, and the

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content/uploads/2008/04/considerações\_iniciais\_sobre\_o\_fundo\_ama.pdf; Viana de Carvalho, 'The Brazilian position on forests and climate change from 1997 to 2012'.

<sup>103</sup> Hochstetler and Viola, 'Brazil and the politics of climate change'; Viana de Carvalho, 'The Brazilian position on forests and climate change from 1997 to 2012'.

<sup>104</sup> Viana de Carvalho, 'The Brazilian position on forests and climate change from 1997 to 2012'.

<sup>105</sup> Ibid.; Instituto de Pesquisa Ambiental da Amazônia – IPAM. *O que é o Fundo Amazônia?* [What is the Amazon Fund?] Accessed March 26th, 2023. Available at: <https://ipam.org.br/entenda/o-que-e-o-fundo-amazonia/>; Tollefson, 'Paying to save the rainforests'; Zadek, Forstater and Polacow, *The Amazon Fund*.

protection of forest reserves.<sup>106</sup> The first batch of projects was announced in 2009 at COP15, in Copenhagen.<sup>107</sup>

The architecture of the Fund was modelled after private philanthropic funds and independent conservation trust funds. It also was informed by lessons-learned through the PP-G7 and Institute for Amazon Research's (IPAM) inputs and resources. The BNDES acts as the managing institution, responsible for fundraising and managing donations; a Scientific Committee certifies emissions reductions; and an Orienting Committee assembles elements from the federal and states governments, civil society, academia and indigenous communities, who outline the criteria for investments. The Fund is subjected to the Brazilian legal framework, and its activities are expected to align with, and contribute to, national and federal, environmental and climate, strategies and goals.<sup>108</sup>

By designating the BNDES as the managing institution, Brazil retains full ownership over the operations of the Amazon Fund. Viana de Carvalho views “this as another indicator of” Brazil’s “search for *protagonismo* in the forest agenda”.<sup>109</sup> Besides, the BNDES was expected to employ its know-how, developed in its prior work with the aforementioned NGOs, about attracting funding for deforestation-focused initiatives.<sup>110</sup>

The Orienting Committee is considered a “key strength” of the Amazon Fund, as it ensures that, one, the decision-making around projects accounts for the perspectives of economic, political and civil society actors; and, second, that the Fund serves its stakeholders.<sup>111</sup>

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<sup>106</sup> Hochstetler and Viola, ‘Brazil and the politics of climate change’; IPAM, *O que é o Fundo Amazônia?*; Viana de Carvalho, ‘The Brazilian position on forests and climate change from 1997 to 2012’; Zadek, Forstater and Polacow, *The Amazon Fund*.

<sup>107</sup> Zadek, Forstater and Polacow, *The Amazon Fund*.

<sup>108</sup> Ibid.; IPAM, *O que é o Fundo Amazônia?*; Viana de Carvalho, ‘The Brazilian position on forests and climate change from 1997 to 2012’.

<sup>109</sup> Viana de Carvalho, ‘The Brazilian position on forests and climate change from 1997 to 2012’, 159;

<sup>110</sup> Zadek, Forstater and Polacow, *The Amazon Fund*

<sup>111</sup> Ibid., 4.

The Scientific Committee is connected to the MMA and receives inputs from the Brazilian National Space Research Institute (INPE). To certify deforestation reductions, the Committee assesses deforestation data provided by the MMA, firstly gathered by INPE's satellite monitoring systems. The Committee calculates areas deforested and the amount of carbon emitted per hectare as a consequence of that. Those values are compared against the average deforestation rate observed in the ten years prior (the first comparison period was 1996-2005), to assess whether deforestation decreased.<sup>112</sup>

Simon Zadek, Maya Forstater and Fernanda Polacow consider that, by relying on multi-stakeholder (the Orienting Committee) and technical (the Scientific Committee) committees, the Fund guarantees “legitimacy and assurance” that it is not “a donor-led or federal government [programme]”, and that it is safeguarded from “narrow interests or short-term political pressures”.<sup>113</sup>

The Fund is run on a “pay-for-performance” scheme:<sup>114</sup> donors pledge certain amounts of dollars per emissions (CO<sub>2</sub> tons) avoided. Brazil receives the funds once certified that those emissions were prevented. This generates an incentive for achieving effective results, which, in turn, attract more donors and funding.<sup>115</sup>

Donations are voluntary and, as the Amazon Fund was conceived outside the UNFCCC, do not render carbon credits for countries, nor carbon offsets for private entities. Any country, multilateral organisation, NGO or company could contribute. The governments of Germany and Norway, and Petrobras, the Brazilian state-owned oil and gas company, were among the initial donors.<sup>116</sup>

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<sup>112</sup> BNDES. *Fundo Amazônia: Relatório de Atividades 2021 [Amazon Fund: 2021 Activities Report]*. 2021. Accessed March 26th, 2023. Available at: [https://www.fundoamazonia.gov.br/export/sites/default/pt/.galleries/documentos/rafa/RAFA\\_2021\\_port.pdf](https://www.fundoamazonia.gov.br/export/sites/default/pt/.galleries/documentos/rafa/RAFA_2021_port.pdf); IPAM, *O que é o Fundo Amazônia?*.

<sup>113</sup> Zadek, Forstater and Polacow, *The Amazon Fund*, 14.

<sup>114</sup> Viana de Carvalho, ‘The Brazilian position on forests and climate change from 1997 to 2012’, 159.

<sup>115</sup> Ibid.; Zadek, Forstater and Polacow, *The Amazon Fund*.

<sup>116</sup> Ibid.; IPAM, *O que é o Fundo Amazônia?*

The Amazon Fund was considered a “pioneer national payment-for-performance scheme for reduction of deforestation”,<sup>117</sup> an “experiment in developing a national climate change fund”,<sup>118</sup> and “the single largest tropical forest conservation [programme] in history.”<sup>119</sup> Zadek, Forstater and Polacow single out the features that make the Amazon Fund pioneering among national “direct access” institutions: the funding scheme, the “learn by doing” structure, and what the authors call the Fund’s “theory of change”.<sup>120</sup>

First, the Amazon Fund “broke with convention” by relying on performance-based financing, fed in by voluntary donations. That feature, combined with the multi-stakeholder Orienting Committee, allows flexibility for change when implementing projects on the ground.<sup>121</sup>

Concerning the structure, there was consensus, among politicians and the BNDES, to espouse a “start fast and evolve”, “learn and adapt” approach: “the Amazon Fund began with just enough structure to get the Fund from idea to reality and to bring together each of the key actors needed to get it started”.<sup>122</sup> From then, involved stakeholders from all stages of the activity of the Fund were asked for feedback, that became competency-building to fill in gaps. This shows the Fund is adaptable and flexible to respond to change, challenging and unexpected events, enabling it to rise up the political, policy and legal circumstances.<sup>123</sup>

Lastly, Zadek, Forstater and Polacow note the ability of the Amazon Fund to drive change in the political and policy landscapes, and in the economic sector – the Fund’s

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<sup>117</sup> Ibid.

<sup>118</sup> Zadek, Forstater and Polacow, *The Amazon Fund*, 5.

<sup>119</sup> World Wildlife Fund – WWF. ‘The Amazon Region Protected Areas program is the single largest tropical forest conservation program in history’. World Wildlife, Summer 2014. Accessed March 26th, 2023. Available at: <https://www.worldwildlife.org/magazine/issues/summer-2014/articles/the-amazon-region-protected-areas-program-is-the-single-largest-tropical-forest-conservation-program-in-history>.

<sup>120</sup> Zadek, Forstater and Polacow, *The Amazon Fund*.

<sup>121</sup> Ibid.

<sup>122</sup> Ibid., 3.

<sup>123</sup> Ibid.; IPAM, *Considerações iniciais sobre o Fundo Amazônia*.

“theory of change”.<sup>124</sup> First, the Fund’s projects support Brazil’s deforestation and climate goals, enhancing balance of ecosystems, and the inflow of funding into the country. Simultaneously, due to the monitoring and control mandate of the Fund, political and institutional elements on the ground see their presence and effectiveness reinforced; at the state-level, actions carried under the Fund foster confidence for more ambitious deforestation policies. This spills-over towards “economic pressures”, as the Fund’s goal of promoting the sustainable development of the Amazon region entails liaising with economic actors capable of large-scale transformations.<sup>125</sup>

Before the Fund, international climate finance arrangements existed within global institutions such as the Global Environmental Fund or the UNFCCC Adaptation Fund, or national “direct access” institutions.<sup>126</sup> Zadek, Forstater and Polacow place the Amazon Fund in the spectrum of the latter. “These ‘direct access’ institutions are needed as the link between the global financial architecture and the financing of national policies and [programmes]”, they explain, and can exist as conservation trust funds, multi-donor climate change funds, or national funds implemented by governmental entities. The researchers describe how these traditional aid funding structures either combine features of donor and national control, or government and stakeholder influence. Within this landscape, the Amazon Fund constitutes a novelty by belonging in the intersection of “stakeholder responsiveness and national control”. This effectively makes the Fund a national climate funding mechanism, reflective of the country’s priorities, “more cost effective, less bureaucratic and more responsive to local needs and stakeholder concerns”.<sup>127</sup>

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<sup>124</sup> Ibid.

<sup>125</sup> Ibid.

<sup>126</sup> Ibid.

<sup>127</sup> Ibid., 3-7.

## Chapter 3: Discussion

Previous chapters of this dissertation laid out the main contributions, in the literature, for characterising environmental pioneers and pioneering policy. Following the highlights of Brazilian climate diplomacy and environmental policy from 2005 to 2009, and an exposition of the Amazon Fund, this chapter sustains the argument that Brazil was an environmental pioneer in international forest governance in that time period.

The framework drawn from literature, made up of Jänicke's list of features of environmental pioneers and the presence of policy diffusion, are employed to support the argument. The last section of the discussion is dedicated to the debate about leadership, leaders and pioneers, and intends to solidify Brazil's categorisation in the latter category.

Jänicke considers that *environmental pioneers*: are endowed with the political and environmental capacities to enact ambitious policy in this field, sustained by adequate structures and bolstered by societal support; display pioneering behaviour in specific issue areas only; rely on "policy windows"; and articulate "will and skill".<sup>128</sup>

As described in the previous chapter, Lula da Silva's cabinet and an ambitious MMA deepened the climate and environmental regulatory landscape in Brazil. That period of prolific policy and legislative activity produced the Action Plan for the Prevention and Control of Deforestation in the Amazon, and the National Climate Change Strategy, among other outputs. These are argued to match Jänicke's requirement of political and environmental policy capacities. These institutional capacities were reinforced by the favourable economic moment the country was going through.

Jänicke also emphasises the importance of a "green" advocacy coalition to trigger innovative policy: that can be found in Marina Silva's drive, later matched by Carlos

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<sup>128</sup> Jänicke, 'Trend-Setters in Environmental Policy'.

Minc. The heads of the MMA can be considered “modernisers”, for their action to overcoming the traditional balance of power and introducing new forms of environmental policy-making. These “modernisers” built consensus with “traditional” proponents in the MCT and MRE, NGOs and civil society organisations, and state-level politicians. This translated into innovations at for domestic and foreign climate and environmental policy.

The issue-specificity and “policy window” criteria are met by contextualising this phase of prolific policy-making. As the country holding the majority of the biggest rainforest in the world, the Amazon rainforest, Brazil has a vast body of policies and in-house know-how on forest management, on the one hand; and its participation within international environmental governance frameworks to gravitate towards the issue of forests, on the other. Simultaneously, the Amazon Fund comes to exist in a phase of “climate activism” in Brazil, a period of more proactive climate diplomacy that still honoured the country’s sovereignty and autonomy over its natural resources.<sup>129</sup> Finally, the programme benefitted from the MMA and the BNDES’ know-how in international forest protection programmes – the equivalent of Jänicke’s “will and skill”.

A measure of pioneering policy, as agreed by Biedenkopf, Jänicke, Jacob, Liefferink and Wurzel is policy diffusion, leading to broader ecological modernisation.<sup>130</sup> The influence of the Amazon Fund stretched beyond the environmental benefits: it steered the debate on forest governance arrangements and led other rainforest countries to set-up similar schemes. With that, it also brought Brazil reputational gains internationally, both near its peers and in the UNFCCC.

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<sup>129</sup> Castro Pereira and Viola, ‘Brazilian climate policy (1992–2019)’; Viana de Carvalho, ‘The Brazilian position on forests and climate change from 1997 to 2012’.

<sup>130</sup> Biedenkopf, ‘Environmental Leadership Through the Diffusion of Pioneering Policy’; Jänicke, ‘Ecological Modernisation’; Jänicke and Jacob, ‘Lead Markets for Environmental Innovations’; Liefferink and Wurzel, ‘Environmental leaders and pioneers.’



The experimental and pioneering nature of the Amazon Fund has been highlighted. The Amazon Fund became an example for other countries looking to launch their “parallel” climate funding mechanisms or institutions. Some examples are the Bangladesh Multi-Donor Trust Fund, the Congo Basin Forest Fund, the Cambodia Climate Change Trust Fund, the Indonesian Climate Change Trust Funds, and the China CDM Fund.<sup>131</sup>

For the broader international climate change regime, and for forest governance in particular, the Amazon Fund became an example of what a successful implementation of REDD+ should look like<sup>132</sup> – “a fundamental test case for the rest of the world”, in the words of the head of research at IPAM, Paulo Moutinho, in 2009.<sup>133</sup> Thanks to the Amazon Fund, Brazil would be awaited with great expectation in Copenhagen, for 2009’s COP. After all, the Fund showed “how tropical-forest protection might be folded into the global-warming treaty that international leaders hope[d] to sign in” that year’s UNFCCC COP.<sup>134</sup> This brought reputation gains for Brazil, consolidating its reputation as a “proponent of the forests issue in the UNFCCC”. Brazil acquires soft power and legitimacy that will employ in the ongoing talks over REDD+ (and, later, in dictating the terms of the incorporation of the Amazon Fund in that mechanism).<sup>135</sup>

The case of the Amazon Fund further confirms Biedenkopf’s point of view about pioneering policy acting as a third “mode of external governance”.<sup>136</sup> as explained above, the Amazon Fund was a form of “policy development” that led forward the scope of mechanisms and practices in forest governance at the country and international levels.<sup>137</sup>

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<sup>131</sup> Zadek, Forstater and Polacow, *The Amazon Fund*.

<sup>132</sup> Ibid.; Tollefson, ‘Paying to save the rainforests’.

<sup>133</sup> Tollefson, ‘Paying to save the rainforests’, 936.

<sup>134</sup> Ibid., 936.

<sup>135</sup> Viana de Carvalho, ‘The Brazilian position on forests and climate change from 1997 to 2012’, 159.

<sup>136</sup> Biedenkopf, ‘Environmental Leadership Through the Diffusion of Pioneering Policy’, 110.

<sup>137</sup> Ibid, 110.

This case also reinforces Jänicke and Jacob's claim that the ingenuity of pioneer states is the driver of ecological modernisation and bolder environmental action.<sup>138</sup> From here ensues that state-level, pioneering initiatives such as the Amazon Fund can be the answer to Robert Keohane and David Victor's critique of the inefficiency of global environmental governance structures' in addressing the climate challenges of our time.<sup>139</sup> An example that comes to mind is how REDD+ took from 2007 until 2015 to be inscribed into a UNFCCC agreement.

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<sup>138</sup> Jänicke and Jacob, 'Lead Markets for Environmental Innovations'.

<sup>139</sup> Robert O. Keohane and David G. Victor. 'The Regime Complex for Climate Change'. *Perspectives on Politics* 9, no. 1 (2011): 7-23. DOI: 10.1017/S1537592710004068.

## Conclusion

This dissertation supports the argument that Brazil is an *environmental pioneer* in forest governance. The country balanced policy innovation and leadership in that issue area through key initiatives from 2005 until the end of that decade. The Amazon Fund stands out as the culmination of those endeavours.

Throughout the period observed in the past chapters, it is possible to find how Brazil moves “ahead” of others, indicating newfound avenues for forest governance and international cooperation for nature protection. The Amazon Fund does that by bolstering Brazil’s climate change and forest protection strategies, and its sustainable development; and opening the door for external collaboration while staying faithful to its principles in regard to foreign cooperation (the notion that agency must remain in the domestic sphere) and historical responsibilities. On top of being a pioneering arrangement, the Amazon Fund served as a blueprint for other countries, who built similar national funds; and to the discussion of forests in the UNFCCC.

While it was established that the Amazon Fund constitutes a pioneering programme, and that Brazil exerted leadership in its creation, the designation of the country as an *environmental pioneer* is one of many suitable possibilities to describe the Brazilian performance within the environmental space in the observed time period.

In light of the arguments ruling out the framing of Brazil as a leader in environmental affairs, as emphasised by Viana de Carvalho,<sup>140</sup> this dissertation set out to argue in favour of the attribution of the category of environmental pioneer. Notwithstanding that, I conclude this work by proposing that the category of pioneer, by

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<sup>140</sup> Viana de Carvalho, ‘The Brazilian position on forests and climate change from 1997 to 2012’.

virtue of being time and issue-specific, does not need to be an exclusive label in order to still apply to a given state.

In the case of Brazil, the country has built itself a reputation of emergent, or rising power, carved, for instance, through the participation in groups such as BRICS; Lula da Silva also fed into that reputation during his first two cabinets. I suggest that a link can be found between a state with such a positioning and that of a pioneer: by expanding existing regulatory and policy frameworks, pioneers defy the status-quo; in the case of environmental pioneers, by doing so at the margin of traditional global governance structures, they feed into an alternative “mode of external governance”.<sup>141</sup> Thus, more than one category can be assigned to Brazil.

Further research on *environmental pioneers* can benefit from looking into the intersections between that position and a state’s broader status ambitions in the international arena.

Another debate in the literature is the distinction between leaders and pioneers. Once established that both these types of actors exert leadership, Liefferink and Wurzel’s careful distinction between *that who paves the way* (the pioneer) and *that who shows the way* (the leader) is convenient to set these positions apart.<sup>142</sup> Once emphasised those differences, however, those scholars place a high degree of importance in the prior intention of being followed (leaders) or the its inexistence or unintentionality of such (pioneers). Other authors acknowledge that a leader can only be crowned as such if others follow it<sup>143</sup> (and the lack of a following rules out the idea that Brazil is a leader in forest governance, in the eyes of Viana de Carvalho),<sup>144</sup> but the broad dialogue on these themes

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<sup>141</sup> Biedenkopf, ‘Environmental Leadership Through the Diffusion of Pioneering Policy’.

<sup>142</sup> Liefferink and Wurzel, ‘Environmental leaders and pioneers’.

<sup>143</sup> Ibid.; Biedenkopf, ‘Environmental Leadership Through the Diffusion of Pioneering Policy’; Jänicke, ‘Trend-Setters in Environmental Policy’.

<sup>144</sup> Viana de Carvalho, ‘The Brazilian position on forests and climate change from 1997 to 2012’.

is not aligned with that. The devil is, thus, in the details. There is room, in the literature, for further research delving into the behaviours and features that set apart these two categories.

Moreover, another viable research avenue within the topic of environmental pioneers is to expand the scope of objects of study beyond, one, the European region; and second, policy-making and regulations, looking to encompass programmes and other initiatives with proven results in moving forward the fight against climate change.

As Brazil begins a new phase of environmental and climate diplomacy and policy-making, it can be pertinent to revisit this work in some years' time. The fact that the country was a pioneer in the second half of the 2000s is not an indication that such a behaviour is to be expected. Nevertheless, those who remember the first decade of the millennium can identify parallelisms: Lula da Silva is back in office, Marina Silva is again at the helm of the MMA, and Brazil is looking to carve itself a place of *protagonismo* in international affairs. In light of repeated declarations about the country's commitment to nature protection, can an ambitious, environmental pioneer Brazil be expected?

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