

# CLIMATE BONDS AS A SOLUTION TO THE POST- COVID-19 SOVEREIGN DEBT CRISIS

EMMA OLCOTT

|      |  |     |
|------|--|-----|
| I.   | INTRODUCTION .....   | 179 |
| II.  | COVID-19 AND SOVEREIGN DEBT.....   | 180 |
| III. | COVID-19 AND THE CLIMATE CRISIS .....  | 182 |
| IV.  | ALIGNING SOVEREIGN DEBT RELIEF WITH CLIMATE<br>ACTION.....                     | 185 |
|      | A. <i>Issuance of Debt Linked to Climate and Biodiversity Objectives</i> ..... | 185 |
|      | i. <i>Green bonds</i> .....  | 185 |
|      | ii. <i>Blue bonds</i> .....  | 186 |
|      | iii. <i>Nature performance bonds</i> .....                                     | 188 |
| V.   | CONCLUSION .....   | 190 |

## I. INTRODUCTION

The economic crisis that accompanied the COVID-19 pandemic has increased the vulnerability of many developing countries to the threat of defaulting on their sovereign debt.<sup>1</sup> At the same time, climate change and nature loss are hindering the efforts of these countries to build and sustain prosperous economies capable of servicing and repaying this debt.<sup>2</sup> The pandemic-induced economic setbacks have further exacerbated this issue by reducing developing countries' capacity and fiscal space to advance climate policies.<sup>3</sup> A potential solution to these connected crises could be to link the pandemic economic recovery with climate-aligned sovereign debt relief

---

1. Divjot Singh & Vikram Widge, *Debt-for-Climate Swaps*, CLIMATE POLICY INITIATIVE (May 10, 2021), <https://www.climatepolicyinitiative.org/publication/debt-for-climate-swaps/>.

2. *Recapitalising Sovereign Debt*, FIN. FOR BIODIVERSITY INITIATIVE 1, 1–2 (Sept. 9, 2020), [https://a1be08a4-d8fb-4c22-9e4a-2b2f4cb7e41d.filesusr.com/ugd/643e85\\_e2f3eccae35c45a8b875a974a8918922.pdf](https://a1be08a4-d8fb-4c22-9e4a-2b2f4cb7e41d.filesusr.com/ugd/643e85_e2f3eccae35c45a8b875a974a8918922.pdf) [hereinafter F4B Proposal].

3. Michael Horgan, et al., *Aligning Sovereign Debt with Climate Action is a Post-COVID Way Forward*, POLICY OPTIONS (May 18, 2021), <https://policyoptions.irpp.org/magazines/may-2021/aligning-sovereign-debt-with-climate-action-is-a-post-covid-way-forward/> [hereinafter Horgan, et al. 2021].

mechanisms.<sup>4</sup> This “green recovery” could include the issuance of debt linked to climate change and biodiversity objectives—including green bonds, blue bonds, and nature performance bonds.<sup>5</sup> This paper will first explore the connection between the COVID-19 pandemic, sovereign debt, and climate change, and will then analyze the merits and feasibility of using climate bonds to address these interconnected issues.

## II. COVID-19 AND SOVEREIGN DEBT

The COVID-19 pandemic has been devastating to economies across the world, causing the first increase in extreme poverty in two decades.<sup>6</sup> An estimated 88 to 115 million people were pushed into extreme poverty in 2020, with the potential to reach a total of 150 million by the end of 2021.<sup>7</sup> But even before the pandemic, sovereign debt in developing countries had reached concerningly high levels, surpassing US \$8 trillion in 2019.<sup>8</sup> The pandemic-induced global economic contraction has exacerbated this debt crisis, and in developing countries, debt servicing payments alone are expected to exceed US \$3 trillion in 2020 and 2021.<sup>9</sup> A record five countries defaulted on their sovereign debt in 2020—Argentina (twice), Ecuador, Lebanon, Suriname (twice), and Zambia—and since April 2020, there have been more sovereign debt downgrades than during any financial crisis since 1980.<sup>10</sup> Many other countries remain in or at high risk of debt distress, including 54% of International Development Association

---

4. *Id.*; Paul Steele & Sejal Patel, *Tackling the Triple Crisis: Using Debt Swaps to Address Debt, Climate and Nature Loss Post-COVID-19*, INT’L INST. FOR ENV’T DEV. 1, 4 (Sept. 2020), <https://pubs.iied.org/sites/default/files/pdfs/migrate/16674IIED.pdf>.

5. Ulrich Volz et al., *Debt Relief for a Green and Inclusive Recovery: A Proposal*, DEBT RELIEF FOR GREEN AND INCLUSIVE RECOVERY 1, 17, 28 (Nov. 16, 2020), <https://drg.org/files/2020/11/DRGR-report.pdf>; Horgan, et al. 2021, *supra* note 3.

6. Horgan, et al. 2021, *supra* note 3.

7. Christoph Lakner, et al., *Updated Estimates of the Impact of COVID-19 on Global Poverty: Looking Back at 2020 and the Outlook for 2021*, WORLD BANK BLOGS (Jan. 11, 2021), <https://blogs.worldbank.org/opendata/updated-estimates-impact-covid-19-global-poverty-looking-back-2020-and-outlook-2021>.

8. Steele & Patel, *supra* note 4, at 4.

9. *Id.*

10. *Sovereign Defaults Hit Record in 2020; More Are Possible*, FITCH RATINGS (Jun. 8, 2021), <https://www.fitchratings.com/research/sovereigns/sovereign-defaults-hit-record-in-2020-more-are-possible-08-06-2021>; Volz, et al., *supra* note 5, at 15.

(IDA) countries at the end of 2020.<sup>11</sup> Public debt in emerging markets is expected to reach 61% of GDP by the end of 2021.<sup>12</sup>

Early in the pandemic, the Group of 20 (G20) recognized the looming debt crisis and established the Debt Service Suspension Initiative (DSSI), which allowed for a temporary suspension of interest and principal repayments on official G20 bilateral loans for the world's poorest countries.<sup>13</sup> However, while the DSSI did provide some momentary breathing room for highly indebted countries—especially those hit hard by collapses in commodity prices, export revenues, and tourism—it merely rescheduled debt payments, rather than writing them off to reduce overall debt levels.<sup>14</sup> At the same time, these countries, which already had lower debt-carrying capacities than wealthier countries, have confronted increased spending needs in order to finance the health response and support struggling households and companies.<sup>15</sup> Moreover, private creditors, many of whom have lent to developing countries on non-concessional terms, have not participated in the DSSI.<sup>16</sup> Over forty low-income countries have utilized the DSSI's temporary debt-serving relief, but many remain vulnerable to sovereign debt solvency risks.<sup>17</sup> A study by the United Nations Development Programme (UNDP) found that seventy-two developing countries are vulnerable to sovereign debt default, with nineteen of those countries classified as severely vulnerable.<sup>18</sup>

---

11. *Sovereign Debt and the COVID-19 Pandemic*, CONG. RSCH. SERV. (July 16, 2021), <https://sgp.fas.org/crs/row/IF11880.pdf> [hereinafter CRS Report].

12. *Id.* This figure excludes public debt in China.

13. Although still officially considered an emerging market, China was excluded from this public debt-to-GDP calculus. *Debt Service Suspension and COVID-19*, WORLD BANK (July 28, 2021), <https://www.worldbank.org/en/news/factsheet/2020/05/11/debt-relief-and-covid-19-coronavirus> [hereinafter WB DSSI Fact Sheet].

14. CRS Report, *supra* note 11; UN/DESA Policy Brief #72: *COVID-19 and Sovereign Debt*, U.N. DEPT OF ECON. & SOC. AFFS. (May 14, 2020), <https://www.un.org/development/desa/dpad/publication/un-desa-policy-brief-72-covid-19-and-sovereign-debt/> [hereinafter UN/DESA Policy Brief #72].

15. Volz, et al., *supra* note 5, at 21; UN/DESA Policy Brief #72, *supra* note 14.

16. WB DSSI Fact Sheet, *supra* note 13; *Questions and Answers on Sovereign Debt Issues*, IMF (last updated Apr. 8, 2021), <https://www.imf.org/en/About/FAQ/sovereign-debt#DSSI> [hereinafter IMF DSSI FAQ].

17. Horgan, et al. 2021, *supra* note 3.

18. Lars Jensen, *Sovereign Debt Vulnerabilities in Developing Economies*, UNDP (Apr. 1, 2021), <https://www.undp.org/publications/sovereign-debt-vulnerabilities-developing-economies>.

In November 2020, the G20 and the Paris Club (plus China) endorsed a new “Common Framework for Debt Treatments beyond the DSSI,” which proposed a reduction in overall debt levels for countries deemed to have unsustainable debt, a determination made on a case-by-case basis.<sup>19</sup> While the Common Framework was a step in the right direction, some criticized it as not going far enough.<sup>20</sup> For example, several middle-income countries, including small island developing states (SIDS), are not eligible for Common Framework debt relief despite experiencing unsustainable levels of debt.<sup>21</sup> Like the DSSI, the Common Framework also does not provide for private sector involvement. With the expiration of the DSSI at the end of 2021, and the Common Framework an imperfect solution, the COVID-19 recovery should aim to include novel, climate-aligned bonds that engage private creditors to avert economic collapse in countries with high levels of debt distress.<sup>22</sup>

### III. COVID-19 AND THE CLIMATE CRISIS

The global economic slowdown caused by COVID-19 has greatly reduced government revenue, hindering the ability of many developing countries to mobilize resources in the fight against climate change.<sup>23</sup> Further, since many of these countries are using between 30% to 70% of these revenues to service debt payments, spending dedicated to achieving climate goals will likely not be prioritized.<sup>24</sup> As one study points out, “instead of being able to support their people to weather the crisis and invest in a sustainable recovery, governments are required to repay their creditors.”<sup>25</sup> Under current proposed remedies, we face a situation in which the cost of a non-green recovery exhausts the financial resources available to combat climate change.<sup>26</sup>

Economic and social costs of climate change—resulting from prolonged drought, extreme heat and wildfires, and coastal flooding, just to name a few—are also disproportionately felt by developing countries, many of which contribute the least to anthropogenic global

---

19. Volz, et al., *supra* note 5, at 9; CRS Report, *supra* note 11.

20. Volz, et al., *supra* note 5, at 9.

21. *Id.*

22. IMF DSSI FAQ, *supra* note 16.

23. Volz, et al., *supra* note 5, at 9.

24. Volz, et al., *supra* note 5, at 9; Singh & Widge, *supra* note 1.

25. Volz, et al., *supra* note 5, at 17.

26. Steele & Patel, *supra* note 4, at 4.

warming.<sup>27</sup> The effects of climate change are worsening each year and have a financial toll. For example, in 2017 alone, natural disasters cost US \$340 billion worth of damage to the global economy, increasing sovereign debt loads for afflicted countries as they attempted to rebuild and recover from these disasters.<sup>28</sup> This increased exposure to costly climate events in turn increases developing countries' borrowing costs in the international markets and affects their credit ratings, exacerbating the already high debt risks.<sup>29</sup> And, since nature plays a critical role in driving economic productivity and prosperity, nature degradation and biodiversity loss can inhibit economic growth and reduce financial capital, making it difficult to service and repay sovereign debt.<sup>30</sup> Developing countries thus face a vicious cycle, made worse by COVID-19, where "greater climate vulnerability raises the cost of debt and diminishes the fiscal space for investment in climate resilience."<sup>31</sup> Aligning the COVID-19 recovery with climate objectives has the potential not only to help mitigate the current debt crisis, but also to create more sustainable sovereign debt moving forward, especially for countries that are heavily reliant on natural resources and disproportionately affected by climate change.

Even for developed, wealthier countries, the pandemic has threatened to avert both resources and attention away from much needed climate action.<sup>32</sup> This distraction comes at a critical time—scientists have warned that unless greenhouse gas emissions are steeply curbed in this decade, the Paris Agreement's goal of limiting global warming to 1.5 degrees Celsius above pre-industrial levels will be

---

27. Horgan, et al. 2021, *supra* note 3.

28. *Blue Bonds: An Audacious Plan to Save the World's Ocean*, THE NATURE CONSERVANCY (last updated Mar. 4, 2021), <https://www.nature.org/en-us/what-we-do/our-insights/perspectives/an-audacious-plan-to-save-the-worlds-oceans/> [hereinafter TNC Plan].

29. *Id.*

30. F4B Proposal, *supra* note 2, at 2. According to a 2019 UN Report, "[l]and degradation has reduced the productivity of 23% of the global land surface, up to US \$577 billion in annual global crops are at risk from pollinator loss and 100-300 million people are at increased risk of floods and hurricanes because of loss of coastal habitats and protection." *UN Report: Nature's Dangerous Decline 'Unprecedented'; Species Extinction Rates 'Accelerating.'* U.N. SUSTAINABLE DEV. GOALS (May 6, 2019), <https://www.un.org/sustainabledevelopment/blog/2019/05/nature-decline-unprecedented-report/>.

31. Volz, et al., *supra* note 5, at 21.

32. Justin Worland, *How Coronavirus Could Set Back the Fight Against Climate Change*, TIME (Mar. 10, 2020) <https://time.com/5795150/coronavirus-climate-change/>.

impossible to reach.<sup>33</sup> Greenhouse gas emissions levels need to reach a global peak as soon as possible if there is to be any hope of achieving a climate neutral world by mid-century.<sup>34</sup> While these goals will require aggressive climate plans, some are concerned that the COVID-19 crisis will lead world leaders to instead devote all their energy and “political capital” to boosting the economy in any way possible, without regard for climate considerations.<sup>35</sup> Short-term stimulus measures may include carbon intensive infrastructure, and economic shocks may affect the ability of countries to meet their existing Paris Agreement emissions pledges and nationally determined contributions (NDCs).<sup>36</sup>

Perhaps more importantly, the pandemic has distracted countries from efforts to advance new climate policies and made them less likely to be willing or able to undertake increased emissions reduction commitments, or invest in the technology to be able to do so.<sup>37</sup> Although important climate conferences that had been postponed—such as COP26 in Glasgow—were eventually rescheduled, the deferral of action represented a loss of momentum to the climate action movement at a critical time.<sup>38</sup> Further, preliminary data suggests that the roughly yearlong reduction in greenhouse gas emissions that resulted from lockdowns are unlikely to have any meaningful impact on overall long-term environmental health.<sup>39</sup> This temporary decline in emissions is thus not an adequate substitute for urgent and significant climate change mitigation measures.

The COVID-19 pandemic has damaged global efforts—in developed and developing countries alike—to fight climate change and global warming. This situation, combined with the simultaneous sovereign debt and global economic crises, presents a unique opportunity to advance a climate-aligned recovery plan.

---

33. Horgan, et al. 2021, *supra* note 3; *The Paris Agreement*, UNFCCC, <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement> (last visited Feb. 26, 2022).

34. *The Paris Agreement*, *supra* note 33.

35. Worland, *supra* note 32.

36. *Id.*; John M. Reilly, et al., *The COVID-19 Effect on the Paris Agreement*, HUMANS & SOC. SCIS. COMM'NS 1, 2 (Jan. 18, 2021), <https://www.nature.com/articles/s41599-020-00698-2.pdf>.

37. *Id.*

38. Worland, *supra* note 32.

39. Reilly, et al., *supra* note 36, at 2–3.

## IV. ALIGNING SOVEREIGN DEBT RELIEF WITH CLIMATE ACTION

A. *Issuance of Debt Linked to Climate and Biodiversity Objectives*i. *Green bonds*

Green bonds are fixed income debt instruments that operate like normal bonds, offering stated returns.<sup>40</sup> The main difference between green bonds and normal bonds is that the proceeds of green bonds are used to finance climate-friendly projects, such as wind and solar farms, clean public transportation, and green buildings.<sup>41</sup> These bonds can be issued by public, private or multilateral entities.<sup>42</sup> Green bonds have become extremely popular, so much so that the E.U. recently issued almost US \$14 billion of these bonds in October 2021, representing the world's largest such issuance to date.<sup>43</sup> The International Finance Corporation (IFC) arm of the World Bank Group has also issued 178 green bonds in 20 currencies worth US \$10.5 billion.<sup>44</sup> The IFC bonds are owned by governments of 185 member countries and are consistently rated AAA or Aaa by S&P and Moody's, respectively.<sup>45</sup> Over US \$500 billion worth of green bonds were issued in 2021, a number which is predicted to increase significantly moving forward—the Climate Bond Initiative projects that over US \$1 trillion will be issued in 2022, with annual issuances potentially topping US \$5 trillion by 2025.<sup>46</sup> As a growth industry, the green bonds market has untapped

---

40. *About Green Bonds*, MUN. SECS. RULEMAKING BD. (2018), <https://www.msrb.org/-/media/Files/Resources/About-Green-Bonds.ashx> [hereinafter MSRB].

41. Patrick Henry, *Explainer: What is the Green Bond Market and Why is it Growing So Fast?*, WORLD ECON. F. (Oct. 26, 2021), <https://www.weforum.org/agenda/2021/10/what-are-green-bonds-climate-change/>.

42. MSRB, *supra* note 40.

43. *NextGenerationEU: European Commission Successfully Issues First Green Bond to Finance the Sustainable Recovery*, EUR. COMM'N (Oct. 12, 2021), [https://ec.europa.eu/commission/presscorner/detail/en/ip\\_21\\_5207](https://ec.europa.eu/commission/presscorner/detail/en/ip_21_5207).

44. *Green Bonds Factsheet*, INT'L FIN. CORP. (Oct. 2021), <https://www.ifc.org/wps/wcm/connect/ec19bca1-3568-4f23-8984-8c7163494d8f/FY22+Green+Bonds+Factsheet.pdf?MOD=AJPERES&CVID=nPL-AdL> [hereinafter IFC Fact Sheet].

45. *Id.*

46. Liam Jones, *\$500bn Green Issuance 2021: Social and Sustainable Acceleration: Annual Green \$1tn in Sight: Market Expansion Forecasts for 2022 and 2025*, CLIMATE BONDS INITIATIVE (Jan. 31, 2022), <https://www.climatebonds.net/2022/01/500bn-green-issuance-2021-social-and-sustainable-acceleration-annual-green-1tn-sight-market>.

potential, representing a promising path forward in the quest for sustainable sovereign debt financing solutions.

One concern when issuing green bonds is potential “greenwashing,” which occurs when issuers make false or misleading claims about how climate-friendly the financial product actually is.<sup>47</sup> Even if the project being financed is in fact “green,” the risk remains that the net benefit will be minimal, appearing on its face to represent productive climate action, but in reality deviating minimally from the status quo.<sup>48</sup> Thus, it is imperative that negligibly beneficial green bonds not become a stand-in for meaningful climate-saving measures. Guidelines known as the “Green Bond Principles,” which many issuers adhere to, are endeavoring to make the market for green bonds more transparent, and there are now companies that will assess and certify green bonds.<sup>49</sup>

ii. *Blue bonds*

A newer form of sustainability bonds—blue bonds—are similar in structure to green bonds, except they are used to support investments in healthy oceans and blue economies.<sup>50</sup> Like green bonds, blue bonds are often “use of proceeds” bonds and can be issued by governments, banks, or corporations.<sup>51</sup> Blue economy sectors can include projects related to ecosystem management and restoration, coastal and marine tourism, wastewater and sanitation, and marine

---

47. Henry, *supra* note 41.

48. Horgan, et al. 2021, *supra* note 3.

49. Henry, *supra* note 41; *Green Bond Principles*, INT’L CAP. MKT. ASS’N 1, 2–3 (June 2021), <https://www.icmagroup.org/assets/documents/Sustainable-finance/2021-updates/Green-Bond-Principles-June-2021-140621.pdf>. The EU also has its own EU green bond standard (EUGBS), a voluntary standard that companies and public authorities issuing green bonds can use to assure investors of their legitimacy and reduce the risk of greenwashing. *European Green Bond Standard*, EUR. COMM’N, [https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/european-green-bond-standard\\_en](https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/european-green-bond-standard_en) (last visited Feb. 26, 2022). The IFC has their green bonds certified by CICERO Shades of Green, and eligible projects must be in various pre-approved sectors. IFC Fact Sheet, *supra* note 44.

50. *Sovereign Blue Bonds: Quick Start Guide*, ASIAN DEV. BANK (Sept. 2021), <https://www.adb.org/sites/default/files/publication/756966/adb-sovereign-blue-bonds-start-guide.pdf> [hereinafter ADB Blue Bond Guide].

51. *Id.*

renewable energy, among others.<sup>52</sup> These innovative financial instruments may be particularly useful in the sovereign debt context because many SIDS, whose economies rely heavily on oceans to sustain their fisheries and ecotourism industries, are especially vulnerable to the impacts of climate change.

Blue bonds have a narrower range of applicability and feasibility than green bonds. In the context of sovereign debt issuance, blue bonds will only make sense for countries reliant on blue economies. Since blue bonds by their nature require economic activities related to oceans, it is important that countries hoping to issue sovereign blue bonds have strong regulatory and transparency systems in place.<sup>53</sup> These systems can help prevent bluewashing from becoming as prolific as greenwashing, an especially critical aim given that blue bonds face risks beyond mere “fake” progress. Without tight regulation and careful oversight, projects that on their face appear to help blue economies may actually have perverse incentives that harm the ocean—for example, by overdeveloping fisheries.<sup>54</sup>

Blue bonds are still very new financial instruments, and began with relatively small-scale, discrete projects. The world’s first sovereign blue bond was issued by the Seychelles in 2018, raising US \$15 million from international investors in a project aimed at supporting sustainable marine and fisheries.<sup>55</sup> While small in scale, the World Bank hoped the blue bond issuance, which combined public and private investment, would “demonstrate the potential for countries to harness capital markets for financing the sustainable use of marine resources.”<sup>56</sup> In 2018, the Nordic Investment Bank launched a much

---

52. *Id.* In defining “blue” economic activities, it is important to remember that blue bonds are debt instruments that are meant to be repaid to investors, with interest. *Id.* As “blue” as some projects may be—for example, marine protected areas barring economic activity for conservation purposes—they may be inappropriate candidates for blue bonds if they are unable to generate any revenue. *Id.* Blue economy projects with promising potential to generate revenue include sustainable fishing, ecotourism, waste management, and marine renewable energy. *Id.*

53. *Id.* The Asian Development Bank (ADB) also recommends that countries interested in utilizing this finance mechanism have “robust ocean governance, sustainable economic activities, and sizeable pipelines of loan projects.” *Id.*

54. *Id.* Thus, before issuing blue bonds, countries should be sure to carefully define the types of economic activities that qualify as “blue,” and have mechanisms in place to ensure protection of ocean health, including robust compliance and enforcement measures. *Id.*

55. *Seychelles Launches World’s First Sovereign Blue Bond*, WORLD BANK (Oct. 29, 2018), <https://www.worldbank.org/en/news/press-release/2018/10/29/seychelles-launches-worlds-first-sovereign-blue-bond>.

56. *Id.*

larger project, issuing over US \$200 million of Nordic-Baltic Blue Bonds.<sup>57</sup> Blue bonds thus have the potential for large-scale deployment, representing a promising path forward in combatting both the sovereign debt and climate crises.<sup>58</sup>

iii. *Nature performance bonds*

Nature performance bonds (NPBs), a newly proposed sovereign debt instrument, would link the cost of sovereign debt and cost of capital with the successful meeting of country- and deal-specific climate and biodiversity protection targets.<sup>59</sup> The Finance for Biodiversity Initiative (F4B), a group seeking to factor biodiversity into financial decision-making, has proposed this innovative solution, which “would tie the cost of debt repayments to quantified biodiversity and emissions reductions targets.”<sup>60</sup> The performance targets could include climate outcomes, such as reduced emissions and improved climate resilience, as well as social and economic objectives.<sup>61</sup>

If the borrowers—in the sovereign context, countries—meet the agreed upon targets, they would be permitted to pay less interest as part of the bond repayment, or potentially write off a portion of the newly

---

57. Like the Seychelles blue bonds, these bonds will be used to finance projects related to water resource management and protection, with a focus on pollution from human activity. *NIB Issues First Nordic-Baltic Blue Bond*, NORDIC INV. BANK (Jan. 24, 2019), <https://www.nib.int/releases/nib-issues-first-nordic-baltic-blue-bond>.

58. The ADB recommends that blue bonds be at least US \$50 million to US \$500 million in scale to offset the costs of issuing the bonds. ADB Blue Bond Guide, *supra* note 50. Further, issuances should include a “sizeable portfolio” of new and existing blue projects, the total value of which exceeds the first issuance as a contingency and long-term planning measure. *Id.* Finally, as is common practice with green bonds, blue bonds should be certified by independent evaluators to ensure they are sufficiently environmentally robust to qualify for the blue bond label. *Id.*

59. F4B Proposal, *supra* note 2, at 2–3.

60. Todd Gillespie & Greg Ritchie, *Nature Bonds May Be the Next Big Thing for Emerging Markets*, BLOOMBERG (Feb. 25, 2021), <https://www.bloomberg.com/news/articles/2021-02-25/first-sovereign-nature-bonds-get-lift-from-world-bank-backed-hub>.

61. F4B Proposal, *supra* note 2, at 3–4. F4B also identifies five key benefits to using these incentive-based NPBs: 1) reduced debt repayments; 2) improved outlooks for climate change and the environment; 3) strengthened resilience and productivity for debtor countries; 4) reduced risk profile and corresponding improvement in access to capital for debtor countries; and 5) increased appeal for debtor countries as long-term investment destinations for foreign direct investment. *Id.* at 3.

issued debt.<sup>62</sup> This release of funding would be dependent upon certified performance against agreed upon indicators,<sup>63</sup> and under the proposal, countries could also use carbon credits to pay back debt.<sup>64</sup> NPBs are meant to reward countries for taking robust action to protect and rehabilitate their ecosystems by making it easier to mobilize capital for this type of green development.<sup>65</sup>

Pakistan is in the process of rolling out a plan to become the first country to issue an NPB, with a target US \$1 billion of these new sovereign bonds.<sup>66</sup> Pakistan is an attractive candidate to test drive this new financing mechanism because it faces the same emissions contribution versus climate vulnerability disparity. Despite being the world's fifth most populous country, Pakistan contributes less than 1% to global carbon emissions; at the same time, the nation is among the top ten most vulnerable to the negative impacts of climate change.<sup>67</sup> The performance targets associated with these bonds would include the restoration of fifteen national parks and the expansion of the "Ten Billion Tree Tsunami Project," an initiative aimed at conserving Pakistan's forests and wildlife, while simultaneously creating hundreds of thousands of green jobs.<sup>68</sup> The NPB would reward meeting or expanding these targets, and would also have secondary development

---

62. Qamar-uz-Zaman, *Pakistan Eyes World's First 'Nature Performance Bond,'* ECO-BUSINESS (July 12, 2021), <https://www.eco-business.com/news/pakistan-eyes-worlds-first-nature-performance-bond/>.

63. To measure whether Pakistan has successfully met its targets, monitors will rely on certifications from independent evaluators, satellite imagery, and consultations with local communities. *Id.*

64. Mark Halle, *Rewarding Nature Performance in Pakistan*, FIN. FOR BIODIVERSITY INITIATIVE (July 5, 2021), <https://www.f4b-initiative.net/post/rewarding-nature-performance-in-pakistan>; Gillespie & Ritchie, *supra* note 60.

65. Halle, *supra* note 64. While F4B expects initial interest in NPBs to come from sovereign creditors with policy interests connected to environmental outcomes, F4B hopes that they can eventually become a hybrid solution which makes use of private creditors as well. F4B Proposal, *supra* note 2, at 4.

66. Qamar-uz-Zaman, *supra* note 62.

67. *Id.*

68. *Id.*; *Ten Billion Tree Tsunami Programme*, MINISTRY OF CLIMATE CHANGE, GOV'T OF PAK., <http://www.mocc.gov.pk/ProjectDetail/M2QzOWJmMjUtZTU3MC00NmFkLWE4YmMtZDFhMmRlOGU2NGRh> (last visited Feb. 26, 2022); *Pakistan's Ten Billion Tree Tsunami*, UNEP (June 2, 2021), <https://www.unep.org/news-and-stories/story/pakistans-ten-billion-tree-tsunami>.

targets, including rural employment, community participation, and capacity building.<sup>69</sup>

It is of note that the capital accessed when nature performance targets are met is not “earmarked for the environment”—the money is instead released to the government of the country for allocation through its standard budget process, with the hope that it will be directed towards green development.<sup>70</sup> As such, some have expressed skepticism that Pakistan will actually honor its commitment to use the money for pro-environment projects once they meet their targets.<sup>71</sup> Others have concerns that NPBs could present another opportunity for greenwashing; according to one expert, developed countries can “look good that they are investing in climate change” and “pacify domestic concerns and fulfill commitments of spending on climate,” while developing countries need realize only modest environmental progress to access funds then available for use at their discretion.<sup>72</sup> There is thus a fine line between allowing developing countries free reign to spend their NPB proceeds and imposing strict conditionality.

## V. CONCLUSION

With the right fiscal policy, there does not have to be a trade-off between sustainable recovery and economic progress.<sup>73</sup> Climate policy need not take a back seat while we recover from the economic fallout of the COVID-19 pandemic—it can be a critical component of the recovery plan. Action and investment today to tackle the worsening climate change crisis have the potential to realize significant long-term economic benefits, generating dividends and cost savings in the future.<sup>74</sup> By contrast, continuing to defer climate action merely delays the inevitable and undermines future growth, and will in the end be much more costly than investing today.<sup>75</sup> Green bonds, blue bonds, and NPBs present a promising path to pandemic recovery and climate protection, one that can simultaneously make sovereign debt more sustainable and free up fiscal space in developing countries.

---

69. Halle, *supra* note 64. By basing the target performance upon the expansion of existing government programs, and including a variety of indicators, F4B hopes Pakistan’s NPB can avoid the problems that often come when developing countries are subjected to strict conditionality requirements in exchange for financial support. *Id.*

70. *Id.*

71. Qamar-uz-Zaman, *supra* note 62.

72. *Id.*

73. Volz, et al., *supra* note 5, at 21.

74. *Id.*

75. *Id.*