

# Carbon Taxation and Investment in Climate Crisis Response

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### I. CLIMATE CRISIS

*[The Climate Crisis] is the biggest crisis humanity has ever faced. This is not something you can like on Facebook.*

— Greta Thunberg<sup>1</sup>

The climate crisis, also known as climate change, is an existential threat not just to humans and societies, but also to the world's biodiversity.<sup>2</sup> Many creatures on land and sea have gone extinct at a rapid pace due to the drastic increase in global temperature.<sup>3</sup> For example, the existence of the Great Barrier Reef's corals is threatened because the algae that protect these corals

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1. Greta Thunberg, Speech at the Austrian World Summit (May 28, 2019).
2. António Guterres, United Nations Secretary-General, Keynote Address at the Austrian World Summit (May 15, 2018) (transcript available at <https://www.un.org/sg/en/content/sg/speeches/2018-05-15/remarks-austrian-world-summit> (last accessed Jan. 8, 2021) [<https://perma.cc/DLV4-GA7R>]).
3. Corey J. A. Bradshaw & Frédéric Saltré, What is a 'mass extinction' and are we in one now?, available at <https://theconversation.com/what-is-a-mass-extinction-and-are-we-in-one-now-122535> (last accessed Jan. 8, 2021) [<https://perma.cc/5LEN-MKAP>].

are dying as a result of the increase in sea temperatures.<sup>4</sup> Because of this, fishes and other invertebrates in the Reef are losing habitat, exposing them to predators and other climatic harms that in turn results in a decline of their population which soon will lead to extinction.<sup>5</sup>

The climate crisis is brought mainly by the release of carbon that was sealed in the Earth's crust into the atmosphere.<sup>6</sup> The amount of carbon, along with other greenhouse gases (GHGs), released into the atmosphere causes the heat from the sun to be trapped in the Earth, which increases the global temperature.<sup>7</sup> As a result, typhoons are getting stronger, glaciers and icebergs are melting, and wildfires are harder to prevent and contain.<sup>8</sup>

The Philippines is a country that is hard-hit with the effects of the climate crisis. It is a country with low carbon emissions,<sup>9</sup> yet because of its geographical location, it becomes one of the "punching bags" of Mother Earth.

In a perfect world, the climate crisis is and should only be a scientific issue — meaning that there should be no debate as to how to solve this crisis, i.e., States should cut carbon emissions and establish carbon capture and storage (CCS).<sup>10</sup> Obviously, the reality strays far away from that. In the world that exists, the climate crisis is a socio-economic, socio-political, and scientific

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4. International Union for Conservation of Nature, Coral reefs and climate change, at \*1, available at [https://www.iucn.org/sites/dev/files/coral\\_reefs\\_and\\_climate\\_change\\_issues\\_brief\\_final.pdf](https://www.iucn.org/sites/dev/files/coral_reefs_and_climate_change_issues_brief_final.pdf) (last accessed Jan. 8, 2021) [<https://perma.cc/WY35-QMM4>].
  5. *See id.* at \*2.
  6. National Aeronautics and Space Administration, The Causes of Climate Change, available at <https://climate.nasa.gov/causes> (last accessed Jan. 8, 2021) [<https://perma.cc/8VZZ-S4PU>].
  7. National Aeronautics and Space Administration, What is the greenhouse effect?, available at <https://climate.nasa.gov/faq/19/what-is-the-greenhouse-effect> (last accessed Jan. 8, 2021) [<https://perma.cc/87E9-QDR4>].
  8. *Id.*
  9. Hannah Ritchie, Where in the world do people emit the most CO<sub>2</sub>?, available at <https://ourworldindata.org/per-capita-co2> (last accessed Jan. 8, 2021) [<https://perma.cc/T8RH-CQ9V>].
  10. SOLOMON GOLDSTEIN-ROSE, THE 100% SOLUTION: A PLAN FOR SOLVING CLIMATE CHANGE 85 (2020).

issue.<sup>11</sup> Furthermore, since it involves the global community, the issue is further mixed with international politics and trade.<sup>12</sup>

*A. The 30-50 and 50-0 Vision*

Since there is a political and economic struggle governing the climate crisis and States are living on different contexts of the crisis, the United Nations, instead of providing a step-by-step plan in addressing the problem, has set a goal to end the crisis.<sup>13</sup> The goal is that by 2030, the world should be able to cut its carbon emissions by half and by 2050, the world should be carbon-neutral, or, more optimistically, carbon-negative.<sup>14</sup> This goal is backed by science, and some States have rolled out their plans to achieve that goal.<sup>15</sup>

Capitalist-backed politicians argue that this goal is not achievable because the rest of the world is not reaching towards that.<sup>16</sup> However, two countries

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11. *See id.* at 228.

12. *Id.* at 206.

13. *See* United Nations, Report: World must cut further 25% from predicted 2030 emissions, available at <https://www.un.org/sustainabledevelopment/blog/2016/11/report-world-must-cut-further-25-from-predicted-2030-emissions> (last accessed Jan. 8, 2021) [<https://perma.cc/4ZU2-JGCK>].

14. António Guterres, United Nations Secretary-General, Video Message at the Finance in Common Summit (Nov. 12, 2020) (transcript available at <https://www.un.org/press/en/2020/sgsm20411.doc.htm> (last accessed Jan. 8, 2021) [<https://perma.cc/EMG8-SEXW>]).

15. *Id.*

16. *See, e.g.,* Amitabh Sinha, Explained: What is net-zero, and what are India's objections?, available at <https://indianexpress.com/article/explained/why-india-opposes-net-zero-7263422> (last accessed Jan. 8, 2021) [<https://perma.cc/GC8M-FD94>]. *See also* Stephanie Dalzell, *Scott Morrison refuses to commit to net zero carbon emissions by 2050*, ABC NEWS, Sept. 20, 2020, available at <https://www.abc.net.au/news/2020-09-20/scott-morrison-refuses-to-commit-net-zero-carbon-emissions-2050/12682714> (last accessed Jan. 8, 2021) [<https://perma.cc/KS3Z-HF72>] & Sandra Rossi, Government opposed to net zero target by 2050, available at <https://www.climatecontrolnews.com.au/news/latest/government-opposed-to-net-zero-target-by-2050> (last accessed Jan. 8, 2021) [<https://perma.cc/RE5W-7U7T>] (These articles reveal that Australia's federal government has not been categorical in adopting the net zero goal for carbon emissions, despite the individual states' commitment to the same.).

have proven that carbon-neutrality is achievable.<sup>17</sup> These countries are Suriname and Bhutan.<sup>18</sup> While these countries are small, their achievements are not to be ignored because their plan worked, and States, like the Philippines, may take some notes as to how they did it.

### *B. Philippine Experience*

The Philippine geography made it possible to experience the harshest effects of climate change.<sup>19</sup> In November 2020, the country experienced four devastating typhoons.<sup>20</sup> One carried strong winds, and another carried a high volume of water.<sup>21</sup> Those typhoons, as well as the negligence of local authorities, caused billions of damages not only in agriculture, but also in infrastructure.<sup>22</sup>

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17. Teresa Madaleno, *A World Going Carbon-Neutral*, available at <https://www.spartagroup.ca/a-world-going-carbon-neutral> (last accessed Jan. 8, 2021) [<https://perma.cc/K28K-J4QP>].

18. *Id.*

19. See generally Climatelinks, *Climate Risk Profile: Philippines*, available at <https://www.climatelinks.org/resources/climate-risk-profile-philippines> (last accessed Jan. 8, 2021) [<https://perma.cc/QJE6-ZHG4>]. According to the country profile,

[t]he Philippines is highly vulnerable to the impacts of climate change, including sea level rise, increased frequency of extreme weather events, rising temperatures and extreme rainfall. This is due to its high exposure to natural hazards (cyclones, landslides, floods, droughts), dependence on climate-sensitive natural resources and vast coastlines where all major cities and the majority of the population reside. The Philippines lies in the world's most cyclone-prone region, averaging 19–20 cyclones each year, of which [seven to nine] make landfall. Sea levels in the Philippines are rising faster than the global average, increasing the hazard posed by storm surges and threatening permanent inundation of low-lying areas.

*Id.*

20. ASEAN Coordinating Centre for Humanitarian Assistance, *Situation Update Super Typhoon Goni in the Philippines*, at 3, available at [https://reliefweb.int/sites/reliefweb.int/files/resources/AHA-Situation\\_Update-no2-Philippines\\_TyphoonGONI.pdf](https://reliefweb.int/sites/reliefweb.int/files/resources/AHA-Situation_Update-no2-Philippines_TyphoonGONI.pdf) (last accessed Jan. 8, 2021) [<https://perma.cc/527T-SSCW>].

21. *Id.* at 4.

22. *Id.*

### C. *Philippine Policies*

Due to the effects of recent catastrophes, the House of Representatives of the Philippines passed a resolution declaring a climate emergency.<sup>23</sup> It recognized that there is an urgent need to adopt measures to resolve the climate crisis on a national scale.<sup>24</sup> While the document is a mere resolution, it could serve as an affirmation that Philippine legislators are on the same page when it comes to climate legislation. It provides a legislative intent to adopt “no coal,” renewable energy, and environmental accountability policies.<sup>25</sup>

Below is a list of laws and National Internal Revenue Code (NIRC) provisions on climate regulation:

- (1) Republic Act No. 10963, Section 33 (2018).<sup>26</sup> This provision amends Section 108 of the NIRC.<sup>27</sup> The amended article provides that services regarding the sale of power or fuel generated through renewable sources of energy are subject to zero percent Value-Added Tax.<sup>28</sup>
- (2) Republic Act No. 10963, Section 45 (2018).<sup>29</sup> This provision amends Section 149 of the NIRC. The amended article provides

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23. Resolution Declaring a Climate and Environmental Emergency, and Calling for the Mobilization of Government Agencies and Instrumentalities and Local Government Units, Towards the Effective Implementation of Environmental, Climate Change Adaptation and Mitigation, and Disaster Risk Reduction and Management Laws, H. Res. No. 1377, 18th Cong., 2nd Reg. Sess. (2020).

24. *See generally* H. Res. No. 1377.

25. *Id.* at 4-5.

26. An Act Amending Sections 5, 6, 24, 25, 27, 31, 32, 33, 34, 51, 52, 56, 57, 58, 74, 79, 84, 86, 90, 91, 97, 99, 100, 101, 106, 107, 108, 109, 110, 112, 114, 116, 127, 128, 129, 145, 148, 149, 151, 155, 171, 174, 175, 177, 178, 179, 180, 181, 182, 183, 186, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 232, 236, 237, 249, 254, 264, 269, and 288; Creating New Sections 51-A, 148-A, 150-A, 150-B, 237-A, 264-A, 264-B, and 265-A; and Repealing Sections 35, 62, And 89; All Under Republic Act No. 8424, Otherwise Known as the National Internal Revenue Code of 1997, as Amended, and for Other Purposes [Tax Reform for Acceleration and Inclusion (TRAIN)], Republic Act No. 10963, § 33 (2018).

27. An Act Amending the National Internal Revenue Code, as Amended, and for Other Purposes [NAT'L INTERNAL REVENUE CODE], Republic Act No. 8424, § 108 (B) (7) (1997) (as amended).

28. *Id.*

29. Tax Reform for Acceleration and Inclusion (TRAIN), § 45.

that hybrid electric vehicles are subject to a lower excise tax and that purely electric vehicles are exempt from the same.<sup>30</sup>

- (3) Republic Act No. 9513, Sections 15 to 23.<sup>31</sup> This policy grants general incentives on the use of renewable energy and renewable energy developers.<sup>32</sup>
- (4) Republic Act No. 10771, Section 5.<sup>33</sup> This policy gives incentives to “business enterprises to generate and sustain green jobs as certified by the Climate Change Commission[.]”<sup>34</sup>
- (5) Republic Act No. 9367, Section 6 (a) to (d).<sup>35</sup> This policy encourages the production, distribution, and development of biofuels by granting tax deductions and exemptions.<sup>36</sup>
- (6) Republic Act No. 9275.<sup>37</sup> The Philippine Clean Water Act “streamlines [the] processes and procedures in the [regulation and control] of [the] pollution of the country’s water resources[.]”<sup>38</sup>
- (7) Republic Act No. 8749.<sup>39</sup> The Philippine Clean Air Act enforces a system of accountability for the environmental impact of projects, programs, or activities on air pollution.<sup>40</sup>

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30. NAT’L INTERNAL REVENUE CODE, § 149 (as amended).

31. An Act Promoting the Development, Utilization and Commercialization of Renewable Energy Resources and for Other Purposes [Renewable Energy Act of 2008], Republic Act No. 9513, §§ 15-23 (2008).

32. *Id.*

33. An Act Promoting the Creation of Green Jobs, Granting Incentives and Appropriating Funds Therefor [Philippine Green Jobs Act of 2016], Republic Act No. 10771, § 5 (2008).

34. *Id.*

35. An Act to Direct the Use of Biofuels, Establishing for this Purpose the Biofuel Program, Appropriating Funds Therefore, and for Other Purposes [Biofuels Act of 2006], Republic Act No. 9367, § 6 (a)-(d) (2007).

36. *Id.*

37. An Act Providing for a Comprehensive Water Quality Management and for Other Purposes [Philippine Clean Water Act of 2004], Republic Act No. 9275 (2004).

38. *Id.* § 2 (a).

39. An Act Providing for a Comprehensive Air Pollution Policy and for other purposes [Philippine Clean Air Act of 1999], Republic Act No. 8749 (1999).

40. *Id.* § 3 (e).

- (8) Republic Act No. 10174, Section 13.<sup>41</sup> The Climate Change Act established the People’s Survival Fund, which aims to provide a national strategic framework in addressing climate-related catastrophes.<sup>42</sup>

With regard to the investment policy of the Philippines, the enactment of the Corporate Recovery and Tax Incentives for Enterprises (CREATE) Act,<sup>43</sup> the second phase of the TRAIN program of the Government, did not address the need to incentivize corporations in adopting sustainable means of production or operation.<sup>44</sup>

## II. CLIMATE POLICIES AROUND THE WORLD

Despite the existing policies, the Philippines should adopt a comprehensive climate crisis response framework. This framework shall involve a backward and a forward thinking in approaching the crisis.<sup>45</sup> This thinking is necessary because the problem of climate crisis is one that is caused by humanity’s past actions, which confined humanity in a chamber where these past actions persist at present and in the future; the crisis is solved by “breaking the norm” so that this form of confinement will not be permanent.<sup>46</sup>

States have started adopting measures that break away from coal and oil dependency,<sup>47</sup> and the move has created ripples into cutting down carbon

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41. An Act Establishing the People’s Survival Fund to Provide Long-Term Finance Streams to Enable the Government to Effectively Address the Problem of Climate Change, Amending for the Purpose Republic Act No. 9729, Otherwise Known as the “Climate Change Act of 2009”, and for Other Purposes, Republic Act No. 10174, § 13 (2012).

42. An Act Mainstreaming Climate Change Into Government Policy Formulations, Establishing The Framework Strategy And Program On Climate Change, Creating For This Purpose The Climate Change Commission, And For Other Purposes [Climate Change Act of 2009], Republic Act No. 9729, § 18 (2009).

43. An Act Reforming the Corporate Income Tax and Incentives System, Amending for the Purpose Sections 20, 22, 25, 27, 28, 29, 34, 40, 57, 109, 116, 204 and 290 of the National Internal Revenue Code of 1997, As Amended, and Creating Therein New Title XIII, and for Other Purposes [Corporate Recovery and Tax Incentives for Enterprises Act], Republic Act No. 11534 (2021).

44. Note, however, that the Corporate Recovery and Tax Incentives for Enterprises Act was enacted during the publication of this Article.

45. See GOLDSTEIN-ROSE, *supra* note 10, at 17-18.

46. See *id.* at 261.

47. See, e.g., Just Transition Centre, Just Transition: A Report for the OECD, at 7, available at <https://www.oecd.org/environment/cc/g20-climate/>



emissions and adopting more eco-friendly processes not only in electricity production and transportation, but also in agriculture and production.<sup>48</sup>

The common measures adopted by States are: (1) the traditional exercise of police power, such as prohibitions and limitations and (2) carbon pricing.<sup>49</sup>

#### A. *The Methods Used*

Traditional exercise of police powers is the prevailing method in the Philippines, as seen through legislation. To name a few, the Philippine Clean Air Act bans the incineration of biomedical or hazardous wastes, as well as small-scale methods of neighborhood sanitation or *sigá* as it is traditionally known.<sup>50</sup> The Philippine Clean Water Act also prohibits the “[t]ransport, dumping, or discharge of prohibited chemicals, substances or pollutants as listed under [the law.]”<sup>51</sup>

One innovation is carbon pricing.<sup>52</sup> Policymakers are more convinced in adopting carbon pricing because the climate crisis is a product of capitalism.<sup>53</sup> To combat this crisis requires changing the existing capitalist system by forcing

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collapsecontents/Just-Transition-Centre-report-just-transition.pdf (last accessed Jan. 8, 2021) [https://perma.cc/DU5R-UM6R]. Canada committed to coal-fired power phaseout by 2030. *Id.*

48. See Emma Bryce, As coal pollution declines, crops begin to flourish, *available at* <https://www.anthropocenemagazine.org/2020/02/as-coal-pollution-declines-crops-begin-to-flourish> (last accessed Jan. 8, 2021) [https://perma.cc/Z4C5-GVKD].

49. See GOLDSTEIN-ROSE, *supra* note 10, at 114.

50. Philippine Clean Air Act of 1999, § 20.

51. Philippine Clean Water Act of 2004, § 27 (f).

52. Carbon Pricing Leadership Coalition, What is Carbon Pricing?, *available at* <https://www.carbonpricingleadership.org/what> (last accessed Jan. 8, 2021) [https://perma.cc/FK5F-5DYS]. By definition,

[c]arbon pricing is an approach to reducing carbon emissions (also referred to as greenhouse gas, or GHG, emissions) that uses market mechanisms to pass the cost of emitting on to emitters. Its broad goal is to discourage the use of carbon dioxide-emitting fossil fuels in order to protect the environment, address the causes of climate change, and meet national and international climate agreements.

*Id.* See GOLDSTEIN-ROSE, *supra* note 10, at 43.

53. See generally WORLD BANK GROUP, STATE AND TRENDS OF CARBON PRICING (2020) & Jonathan T. Park, *Climate Change and Capitalism*, 14 CONSilIENCE 189, 201 (2015).

it to change itself. These measures include: (1) cap-and-trade<sup>54</sup> and (2) carbon taxation.<sup>55</sup>

The cap-and-trade measure involves the provision of permits, wherein businesses, such as electric companies and transportation companies, are allowed to operate but have a limited allowable carbon emission per quarter or year.<sup>56</sup> If a business did not exhaust the allowable carbon emission, it may either (1) sell the “leftover” to other businesses or (2) return the permit to the government in exchange for tax incentives.<sup>57</sup> This measure encourages businesses not only to cut their carbon emissions, but also to adopt energy-efficient technologies which would result in a situation for businesses to make the sales of carbon emission permits part of their revenue-making activities or cost-cutting measures.

On the other hand, a carbon tax involves the charging of a particular amount per ton of carbon emitted because of the consumption of the product.<sup>58</sup> Usually, this tax burden is passed to consumers.<sup>59</sup> As a result, consumers would cut their consumption patterns, buy less products, and travel less. This mechanism would force industries to cut down on carbon emissions and to adopt technologies that are efficient,<sup>60</sup> so that people will go back to their old consumption patterns. As a long-term effect, people will have a normal way of living, i.e., pre-carbon tax, but they produce less carbon into the atmosphere.<sup>61</sup>

### *B. States' Reception*

The idea of having cap-and-trade and carbon taxation has worked in several States, regardless of political and economic systems. In the next Sections of this Article, the methods adopted by the following States on carbon pricing

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54. Will Kenton, Cap and Trade, *available at* <https://www.investopedia.com/terms/c/cap-and-trade.asp#:~:text=Cap%20and%20trade%20is%20a,alternative%20to%20a%20carbon%20tax>. (last accessed Jan. 8, 2021) [<https://perma.cc/V7YU-JNAN>].

55. *Id.*

56. *Id.*

57. *Id.*

58. Julia Kagan, Carbon Tax, *available at* <https://www.investopedia.com/terms/c/carbon-dioxide-tax.asp> (last accessed Jan. 8, 2021) [<https://perma.cc/XJV2-WYXD>].

59. *Id.*

60. *See e.g.*, GOLDSTEIN-ROSE, *supra* note 10, at 240.

61. *See* GOLDSTEIN-ROSE, *supra* note 10, at 255.

had generally produced a positive effect in the economy. The following statistics provide a brief background on the correlation of the imposition of carbon pricing schemes and GDP per capita.

### 1. Scandinavian Countries

In Sweden, carbon tax was introduced as early as 1991 at a rate of €24 per ton of fossil carbon dioxide emitted.<sup>62</sup> This tax has gradually increased to €114 per ton in 2021.<sup>63</sup> Sweden's Ministry of Finance reports that "[b]y increasing the tax level gradually and in a stepwise manner, households and businesses have been given time to adapt, which has improved the political feasibility of tax increases."<sup>64</sup> According to the World Bank, Sweden's GDP per capita has seen a steady increase from 1991 up until present day.<sup>65</sup> Sweden's Minister of Finance, Magdalena Andersson, has stated that "[t]he Swedish carbon tax has been an effective instrument for decreasing emissions of greenhouse gases while maintaining economic growth."<sup>66</sup> Andersson further discussed that "[t]he Swedish example shows that decoupling between emissions of greenhouse gases and economic growth is in fact possible."<sup>67</sup>

In Norway, carbon tax was introduced in 1991.<sup>68</sup> It was further reported that —

[t]he levels of the greenhouse gas taxes in Norway vary [among] different sources of emissions, [among] different types of greenhouse gases[,] and[,] to

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62. Sweden Ministry of Finance, Sweden's Carbon Tax, *available at* <https://www.government.se/government-policy/taxes-and-tariffs/swedens-carbon-tax> (last accessed Jan. 8, 2021) [<https://perma.cc/9WGT-7J3X>].

63. *Id.*

64. *Id.*

65. World Bank, GDP per capita, PPP (current international \$) — Sweden, *available at* <https://data.worldbank.org/indicator/NY.GDP.PCAP.PP.CD> (last accessed Jan. 8, 2021) [<https://perma.cc/NN8Z-9X6T>].

66. Magdalena Andersson, Minister of Finance, Swedish Government, Speech at The Hague (June 20, 2019) (transcript *available at* <https://www.government.se/speeches/20192/06/speech-by-magdalena-andersson-at-conference-on-carbon-pricing-and-aviation-taxes> (last accessed Jan. 8, 2021) [<https://perma.cc/S6ER-KJVP>].

67. *Id.*

68. Annegrete Bruvold & Hanne Marit Dalen, Pricing of CO<sub>2</sub> emissions in Norway, at 4, *available at* [https://www.ssb.no/a/english/publikasjoner/pdf/doc\\_200916\\_en/doc\\_200916\\_en.pdf](https://www.ssb.no/a/english/publikasjoner/pdf/doc_200916_en/doc_200916_en.pdf) (last accessed Jan. 8, 2021) [<https://perma.cc/4JCV-X7RY>].

some extent[, among] which parts of the economy that are causing the emissions. This cause[d] large variations in the marginal cost of reducing emissions. In 2008[, ] the CO<sub>2</sub> taxes varied between zero and 354 Norwegian krone (NOK) per ton[ ] of CO<sub>2</sub>.<sup>69</sup>

It is also important to note that —

[f]or 2021, the tax rate is proposed in the National Budget at NOK 1.27 per standard cubic met[er] of gas or per lit[er] of oil or condensate. For combustion of natural gas, this is equivalent to NOK 543 per ton[ ] of CO<sub>2</sub>. For emissions of natural gas, the tax rate is NOK 8.76 per standard cubic met[er].<sup>70</sup>

According to the World Bank, the GDP per capita of Norway has been increasing since 1991 and has reached as high as U.S.\$102,913.451 in 2013.<sup>71</sup>

The development of carbon taxation in Iceland is fairly recent as it was only imposed in 2010.<sup>72</sup> According to the World Bank, the GDP per capita of Iceland has been steadily from U.S.\$41,333.419 in 2009 to U.S.\$66,944.833 in 2019.<sup>73</sup> It was further stated that “Iceland aims to achieve carbon neutrality before 2040 and to cut greenhouse gas emissions by 40% by 2030 under the Paris Agreement. A Climate Action Plan, updated in 2020, contains 48 actions and is Iceland’s main policy instrument to reach its goals of cutting emissions and reach carbon neutrality.”<sup>74</sup>

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69. *Id.*

70. Norwegian Petroleum, Emissions to Air, *available at* <https://www.norskpetroleum.no/en/environment-and-technology/emissions-to-air> (last accessed Jan. 8, 2021) [<https://perma.cc/8UE4-Z4TG>].

71. World Bank, GDP per capita (current US\$) — Norway, *available at* <https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?locations=NO> (last accessed Jan. 8, 2021) [<https://perma.cc/9SL7-NSX8>].

72. International Monetary Fund, Advancing Tax Reform and the Taxation of Natural Resources, at 11, *available at* <https://www.imf.org/external/pubs/ft/scr/2011/cr111138.pdf> (last accessed Jan. 8, 2021) [<https://perma.cc/NVE7-44SL>].

73. World Bank, GDP per capita (current US\$) — Iceland, *available at* <https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?locations=IS> (last accessed Jan. 8, 2021) [<https://perma.cc/G9KW-YNNL>].

74. Government of Iceland, Climate Change, *available at* <https://www.government.is/topics/environment-climate-and-nature-protection/climate-change> (last accessed Jan. 8, 2021) [<https://perma.cc/D9FK-N2ZY>].

## 2. Other European Union Countries

Beat Hintermann & Maja Zarkovic, in their Article entitled *Carbon Pricing in Switzerland: A Fusion of Taxes, Command-and-Control, and Permit Markets* expound —

Switzerland has one of the highest carbon tax rates in place worldwide. Currently, this tax is CHF96 per ton of CO<sub>2</sub> equivalent. The tax is levied on fossil fuels as they cross the Swiss border. However ... the tax applies to combustion fuels[,] but not to transportation fuels. There are ongoing discussions in the Swiss parliament about extending carbon pricing to the transport sector, which is responsible for a third of total greenhouse gas emissions in Switzerland, and which is the only sector where emissions have remained constant [ ].<sup>75</sup>

The Council of the European Union adds that “[recently], Switzerland [has] become the first country to successfully link its greenhouse gas emissions trading system with the EU emissions trading system (EU ETS).”<sup>76</sup> They further stated that

[t]he development of a well-functioning international carbon market through bottom-up linking of emissions trading systems is a long[-]term policy goal of the EU and the international community. It helps contribute to the climate objectives under the Paris Agreement. According to the rules of the EU ETS, it can be linked with other emissions trading systems provided [that] they are mandatory, have an absolute cap on emissions[,] and are compatible with it, as it is the case with the Swiss system.<sup>77</sup>

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75. Beat Hintermann & Maja Zarkovic, *Carbon Pricing in Switzerland: A Fusion of Taxes, Command-and-Control, and Permit Markets*, at 35, available at <https://www.ifo.de/DocDL/ifo-dice-2020-1-Hintermann-Zarkovic-Carbon-Pricing-in-Switzerland-A-Fusion-of-Taxes%2CCommand-and-Control%2Cand-Permit-Markets-spring.pdf> (last accessed Jan. 8, 2021) [<https://perma.cc/73CG-4TGR>].

76. Council of the European Union, *Linking of Switzerland to the EU emissions trading system — entry into force on 1 January 2020*, available at <https://www.consilium.europa.eu/en/press/press-releases/2019/12/09/linking-of-switzerland-to-the-eu-emissions-trading-system-entry-into-force-on-1-january-2020> (last accessed Jan. 8, 2021) [<https://perma.cc/CX7X-N6XR>].

77. *Id.*

According to the World Bank, the GDP per capita of Switzerland has been steadily increasing from 2008 up to present.<sup>78</sup>

### 3. The Americas

The Canadian Government, as a backgrounder, explained that “[u]nder the Greenhouse Gas Pollution Pricing Act [of Canada], which came into force in [ ] 2018, the ... pricing system [set by the federal government can be divided into] two parts.”<sup>79</sup> First, “a pollution price on fuel, known as the fuel charge,”<sup>80</sup> and second, “a pollution price for industry, known as the Output-Based Pricing System (OBPS).”<sup>81</sup> They further explained the OBPS in this wise —

The OBPS is designed to put a price on carbon pollution for industrial facilities that emit 50,000 [tons] or more per year, while maintaining their competitive position relative to international peers. To minimize competitiveness and carbon leakage risks for additional facilities in some sectors while maintaining the incentive to reduce their emissions, facilities emitting 10,000 [tons] or more in certain sectors can also apply to participate voluntarily in the OBPS.<sup>82</sup> The OBPS sets a performance standard ... for each sector under the system. Facilities that produce more emissions than the standard have to compensate for the excess. Facilities whose emissions are below the standard get credits they can sell or save to use later. That means the least efficient (highest polluting) facilities pay on more of their emissions, while the top performers are rewarded, and all facilities have an incentive to cut carbon pollution and support clean innovation.<sup>83</sup>

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78. World Bank, GDP per capita (current US\$) — Switzerland, *available at* <https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?locations=CH> (last accessed Jan. 8, 2021) [<https://perma.cc/JK36-VLQ9>].

79. Government of Canada, Pricing carbon pollution in Canada, *available at* <https://www.canada.ca/en/environment-climate-change/services/climate-change/pricing-pollution-how-it-will-work/industry/pricing-carbon-pollution.html> (last accessed Jan. 8, 2021) [<https://perma.cc/HVY2-AEW4>].

80. *Id.*

81. *Id.*

82. *Id.*

83. *Id.*

According to the World Bank, the GDP per capita of Canada has been steady in the years starting from 2018 when the pricing act was first imposed.<sup>84</sup>

The State of California was the first State to impose a cap-and-trade program with the signing of Assembly Bill No. (AB No.) 32 (the California Global Warming Solutions Act of 2006) in 2006.<sup>85</sup> In 2017, the State amended AB No. 32 with AB No. 398<sup>86</sup> which extended the cap-and-trade program that was set to expire without any legislative action.<sup>87</sup> The program, along with other State carbon reduction measures, ensures that California will meet its target to reduce greenhouse gas emissions 40% below 1990 levels by 2030.<sup>88</sup> According to Statista, a leading provider of market and consumer data, the GDP per capita of California has been increasing since the implementation of the cap-and-trade program in 2006 to a high of U.S.\$70,662 in 2019.<sup>89</sup> The

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84. World Bank, GDP per capita (current US\$) — Canada, *available at* <https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?locations=CA> (last accessed Jan. 8, 2021) [<https://perma.cc/E688-GHNG>].

85. An Act to Add Division 25.5 (Commencing with Section 38500) to the Health and Safety Code, Relating to Air Pollution [California Global Warming Solutions Act of 2006], Assembly Bill No. 32, (2006) (U.S.).

86. An Act to Amend, Repeal, and Add Sections 38501, 38562, and 38594 of, and to Add and Repeal Sections 38505.5, 38590.1, 38591.1, 38591.2, 38591.3, 38592.5, and 38592.6 of, the Health and Safety Code, to Add Section 4213.05 to, to Add Article 3 (Commencing with Section 4229) to Chapter 1.5 of Part 2 of Division 4 of, and to Repeal Chapter 1.5 (Commencing with Section 4210) of Part 2 of Division 4 of, the Public Resources Code, and to Amend Section 6377.1 of the Revenue and Taxation Code, Relating to Public Resources, and Declaring the Urgency thereof, to Take Effect Immediately [California Global Warming Solutions Act of 2006], Assembly Bill No. 398, § 4 (2017) (U.S.) (amending § 38562 (c) (2) (G) of the Health and Safety Code).

87. *Id.*

88. *Id.* The Legislative Counsel's Digest provides —

The [State Air Resources Board] is required to approve a statewide greenhouse gas emissions limit equivalent to the statewide greenhouse gas emissions level in 1990 to be achieved by 2020 and to ensure that statewide greenhouse gas emissions are reduced to at least 40% below the 1990 level by 2030. The act requires the state board to prepare and approve a scoping plan for achieving the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions and to update the scoping plan at least once every [five] years.

*Id.*

89. Statista Research Department, Per capita real Gross Domestic Product of California from 2000 to 2019, *available at* <https://www.statista.com/statistics/>

Public Policy Institute of California, an independent, non-profit research institution, demonstrates that

[a] majority of Californians say it is very important (54%) that the state is a world leader in fighting climate change; 24% say it is somewhat important. Democrats (67%) are much more likely than independents (48%) and Republicans (23%) to say it is very important. Strong majorities of Latinos (68%) and African Americans (65%)—and fewer whites (47%) and Asian Americans (46%)—say it is very important. Two in three Californians (65%) favor the state acting independently of the federal government to combat global warming, while 28% are opposed. Democrats (82%) are far more likely than independents (61%) or Republicans (29%) to favor state efforts. Majorities across regions and age, education, gender, income, and racial/ethnic groups support state action.<sup>90</sup>

The World Bank also elucidates that “[i]n Argentina, the 2017 Tax Reform simplified the system pertaining to the taxation of energy use. It replaced the ad-valorem tax system with a per metric unit system, and introduced a Carbon Tax of [U.S.\$]10 per [ton CO<sub>2</sub>] on fossil fuels, which is in place since March 2018.”<sup>91</sup> According to the World Bank, the GDP per capita of Argentina has been decreasing from U.S.\$14,613.042 in 2017 to U.S.\$9,912.282 in 2019.<sup>92</sup> The Organisation for Economic Co-operation and Development (OECD), an intergovernmental economic organization, further demonstrates —

[In Colombia, t]he [n]ational [c]arbon [t]ax ... is set to a rate of [€5] per ton[ ] of CO<sub>2</sub>, [and] is adjusted annually to inflation plus one percentage point. The tax applies to liquid and gaseous fossil fuels that are used as propellant, in stationary combustion engines, or as heating fuels. It does not apply to coal and other solid fossil fuels nor to natural gas unless used by refineries or

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304615/california-gdp-per-capita (last accessed Jan. 8, 2021) [https://perma.cc/FUG8-BJA5].

90. Public Policy Institute of California, *Californians’ Views on Climate Change*, available at <https://www.ppic.org/publication/californians-views-on-climate-change> (last accessed Jan. 8, 2021) [https://perma.cc/G9MA-3DT5].
91. Organisation for Economic Co-operation and Development, *Taxing Energy Use 2019: Country Note — Argentina*, available at <https://www.oecd.org/tax/tax-policy/taxing-energy-use-argentina.pdf> (last accessed Jan. 8, 2021) [https://perma.cc/4BWY-DF5B].
92. World Bank, *GDP per capita (current US\$) — Argentina*, available at <https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?locations=AR> (last accessed Jan. 8, 2021) [https://perma.cc/2DRL-G6R4].



in the petrochemical industry. Emitters have the option to meet their carbon tax liability by using offset credits generated from domestic projects.<sup>93</sup>

According to the World Bank, the GDP per capita of Colombia has been steadily increasing from 2016 to present day.<sup>94</sup> The OECD additionally expounds —

In Chile, as part of the Green Tax, a CO<sub>2</sub> tax applies to CO<sub>2</sub> emissions at a uniform rate of USD 5 per ton of CO<sub>2</sub>. The tax, which is classified as an explicit carbon tax, applies to facilities of which the total thermal power capacity of boilers and turbines are at least 50 Mwt. There is no tax on emissions from fixed sources for which the primary source of energy is biomass.<sup>95</sup>

World Bank data indicates that the GDP per capita of Chile has been steadily increasing from 2016 to present day.<sup>96</sup> In Mexico, President Peña Nieto's administration presented carbon taxing in 2013.<sup>97</sup> Patricia Prat, in her article entitled *Mexico's Well Established Carbon Tax and Pilot Emissions Trading System with California and Quebec*, explains that —

[t]he carbon tax is a tax rate applied to the emission of greenhouse gases into the atmosphere. By setting a tax rate on the carbon dioxide content of fossil fuels the tax results in establishing a price on the carbon.

...

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93. Organisation for Economic Co-operation and Development, Taxing Energy Use 2019: Country Note — Colombia, *available at* <https://www.oecd.org/tax/tax-policy/taxing-energy-use-colombia.pdf> (last accessed Jan. 8, 2021) [<https://perma.cc/FFK6-ZWTR>].
94. World Bank, GDP per capita (current US\$) — Colombia, *available at* <https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?locations=CO> (last accessed Jan. 8, 2021) [<https://perma.cc/V6TV-SFVG>].
95. Organisation for Economic Co-operation and Development, Taxing Energy Use 2019: Country Note — Chile, *available at* <https://www.oecd.org/tax/tax-policy/taxing-energy-use-chile.pdf> (last accessed Jan. 8, 2021) [<https://perma.cc/B8S4-HLL8>].
96. World Bank, GDP per capita (current US\$) — Chile, *available at* <https://data.worldbank.org/indicator/NY.GDP.PCAP.PP.CD?locations=CL> (last accessed Jan. 8, 2021) [<https://perma.cc/BFR4-NJHV>].
97. Patricia Prat, Mexico's Well Established Carbon Tax and Pilot Emissions Trading System with California and Quebec *available at* <https://www.climatecorecard.org/2020/03/mexicos-well-established-carbon-tax-and-pilot-emissions-trading-system-with-california-and-quebec> (last accessed Jan. 8, 2021) [<https://perma.cc/9R2P-DHKZ>].

In addition to the carbon tax and with the support of the local governments of California and Quebec, Mexico began its pilot program for the implementation of an Emissions Trading Scheme (ETS) in 2019. An ETS has the purpose of reducing the greenhouse effect emissions through setting a cap on emissions and allowing for the purchase of emission permits. The pilot program is set to run for three years, two years corresponding to the pilot phase and one to transition into the fully operational ETS which is scheduled to begin in 2023.<sup>98</sup>

According to the World Bank, the GDP per capita of Mexico has stabilized from decreasing in the years of 2013 to 2019.<sup>99</sup>

#### 4. Asia Pacific

Australia's efforts in carbon pricing were short lived as it was only effective from 2012 to 2014.<sup>100</sup> During the carbon tax's middle year in 2013, Australia's CO<sub>2</sub> to GDP ratio had its sharpest drop ever.<sup>101</sup> Charles Komanoff, an energy-policy analyst, elucidates that "[e]conomic activity was unaffected by the carbon tax, as indicated by the minimal difference between the 3.01% average annual rise in GDP for the years 2012, 2013[,] and 2014 vs. the 3.07% average rise for the remainder of the 1990-2017 period for which we had data."<sup>102</sup> In New Zealand, the government has enacted an emissions trading scheme which creates a financial incentive for businesses to reduce their emissions and landowners to earn money by planting forests.<sup>103</sup> The Government gives eligible foresters units for carbon dioxide that is absorbed by their trees.<sup>104</sup> The foresters can sell these units on the N.Z. ETS market.<sup>105</sup> Businesses with surrender obligations (legal obligations to hand over units)

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98. *Id.*

99. World Bank, GDP per capita (current US\$) — Mexico, *available at* <https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?locations=MX> (last accessed Jan. 8, 2021) [<https://perma.cc/2HD8-UH9P>].

100. Charles Komanoff, Australia's Brief, Shining Carbon Tax, *available at* <https://www.carbontax.org/blog/2020/01/07/australias-brief-shining-carbon-tax> (last accessed Jan. 8, 2021) [<https://perma.cc/PTJ4-RHK8>].

101. *Id.*

102. *Id.*

103. New Zealand Ministry for the Environment, About the New Zealand Emissions Trading Scheme, *available at* <https://environment.govt.nz/what-government-is-doing/key-initiatives/ets/about-nz-ets> (last accessed Jan. 8, 2021) [<https://perma.cc/A89J-53V5>].

104. *Id.*

105. *Id.*

must purchase enough units to cover their emissions.<sup>106</sup> These units are then surrendered to the Government.<sup>107</sup>

In Singapore, “[t]he carbon tax is set at a rate of [U.S.]\$5 per ton[ ] of GHG emissions (tCO<sub>2</sub>e) from 2019 to 2023.”<sup>108</sup> The Singapore National Environment Agency illustrates their action plan where “Singapore will review the carbon tax rate by 2023, with plans to increase it to between [U.S.]\$10 and [U.S.]\$15 per ton[ ] of GHG emissions by 2030.”<sup>109</sup>

#### 5. African Nations

In South Africa, recent legislation has been passed as the South African industry was subjected to carbon tax.<sup>110</sup> Specifically, “[t]he tax is to start at 120 rand a ton[ ] of CO<sub>2</sub> ([U.S.]\$8). In the first phase, polluters will get 60-95% of carbon allowances free, bringing the effective tax rate down to R6-48/t. These rates are to be reviewed before phase two, spanning 2023-30.”<sup>111</sup> In Malawi, a carbon tax on vehicles was implemented recently where “[t]he annual tax ranges from 4,000 kwacha to 15,500 kwacha[s] ([U.S.]\$5.50-[U.S.]\$21), depending on the engine size, according to an emailed statement from the Malawi Revenue Authority.”<sup>112</sup> Additionally, “[a]ll government-owned vehicles, including ambulances, are exempted from the tax.”<sup>113</sup>

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106. *Id.*

107. *Id.*

108. Singapore National Environment Agency, Carbon Tax, *available at* <https://www.nea.gov.sg/our-services/climate-change-energy-efficiency/climate-change/carbon-tax> (last accessed Jan. 8, 2021) [<https://perma.cc/VF2S-V4JN>].

109. *Id.*

110. Megan Darby, South Africa’s Ramaphosa signs carbon tax into law, *available at* <https://www.climatechangenews.com/2019/05/28/south-africas-ramaphosa-signs-carbon-tax-law> (last accessed Jan. 8, 2021) [<https://perma.cc/35ZL-EPSH>].

111. *Id.*

112. Frank Jomo, Malawi Introduces Annual Carbon Tax for Vehicles, *available at* <https://news.bloombergtax.com/daily-tax-report-international/malawi-introduces-annual-carbon-tax-for-vehicles-from-monday> (last accessed Jan. 8, 2021) [<https://perma.cc/LCS8-PFXS>].

113. *Id.*

In Nigeria, the carbon tax act came into force just in 2019.<sup>114</sup> This legislation took effect in this manner —

The first tax returns and payments for [affected] taxpayers will be due July 2020. This return would cover the period 1 June 2019 to 31 December 2019; subsequent periods will run from 1 January to 31 December. Companies who are considered to operate emission generation facilities are required to register in terms of the Customs and Excise Act as a taxpayer through local SARS offices. Primary emitters of carbon dioxide and other greenhouse gasses are taxed.<sup>115</sup>

Generally, the effects of carbon pricing on African countries *cannot* be observed as they are newly implemented.

## 6. Summary

Generally, there is a positive correlation and reception in a carbon pricing scheme. There is also a tendency for fiscal conservatives, i.e., those who believe that the government should not impose too much tax and that the government should only have a power limited, at most, to law enforcement and military defense, to accept and support these impositions to compel producers to reduce emissions.<sup>116</sup>

While there is no one-size-fits-all policy that could be adopted as States have different demographics, geographies, and industries, there is an indication that imposing cap-and-trade and carbon taxes yields positive results. Considering these, the Philippines may adopt its own version of these taxation schemes as long as the methods will be, as much as possible, revenue-neutral and accommodating of the needs of the lower and middle classes.

## III. WHERE TO INVEST AND WHAT TO EXPECT

If the Philippines will be imposing carbon pricing, government revenues are expected to increase to some extent. It must be noted that these schemes are imposed on the premise that these policies are for the protection of the people and the environment. These are special levy, which must be dedicated for a special purpose.<sup>117</sup> The question now is where will the money go? Below are

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114. PKF Nigeria, The Carbon Tax Act, *available at* <http://www.pkf-ng.com/news/network-news/the-carbon-tax-act> (last accessed Jan. 8, 2021) [<https://perma.cc/3UM6-LES4>].

115. *Id.*

116. *See* Goldstein-Rose, *supra* note 10, at 229.

117. PHIL. CONST. art. VI, § 29 (3).

policy suggestions that the Philippine Government could adopt should it decide to impose carbon pricing schemes.

#### *A. Climate Crisis Response*

One of the effects of the climate crisis in the country is the rampage of natural disasters towards the country. It is obvious that there is a need to invest in the country's disaster risk reduction and disaster response programs. Unfortunately, with the current fiscal policy of the Philippines, there is an annual reduction of budget for disaster response.<sup>118</sup>

Imposing these revenue schemes will give funding to the government to have a climate disaster fund that could be used in the rehabilitation of disaster-stricken areas. Furthermore, this fund should not just be treated as a savings account, but as an insurance fund for the government, i.e., the government should make sure that the fund grows to meet the increase in expenses in rehabilitation of those areas hit by the climate-related disaster.

Doing this would not give the Philippine Government an excuse not to act promptly whenever there is a disaster because there is a readily available fund. It will also decrease debt-dependence in addressing the devastations done by these catastrophes because there is a revenue clearly on hand and readily available. In 2020, the Philippines borrowed around ₱4.2 Billion for the disaster response because of the typhoons in November 2020.<sup>119</sup> If the National Government had enough in its coffers at that time, there would have been little to no necessity to borrow.

#### *B. Investment in Clean Energy and Electrification*

The leading contributors to climate change are the energy, manufacturing, and transportation industries.<sup>120</sup> The reliance of the machineries used in

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118. IBON Foundation, Lower disaster budget shows lack of govt priority, *available at* <https://www.ibon.org/lower-disaster-budget-shows-lack-of-govt-priority> (last accessed Jan. 8, 2021) [<https://perma.cc/U9ZX-6YQ4>]. *But see* JC Gotinga, *Senators support House call for bigger calamity fund in 2021*, *RAPPLER*, Nov. 23, 2020, *available at* <https://www.rappler.com/nation/senators-support-house-call-bigger-calamity-fund-2021> (last accessed Jan. 8, 2021) [<https://perma.cc/5V42-KAHS>].

119. Ben O. de Vera, *PH expects 2 more World Bank loans worth \$880M*, *PHIL. DAILY INQ.*, Nov. 13, 2020, *available at* <https://business.inquirer.net/311607/ph-expects-2-more-world-bank-loans-worth-880m> (last accessed Jan. 8, 2021) [<https://perma.cc/S98B-2LB4>].

120. United States Environmental Protection Agency, Global Greenhouse Gas Emissions Data, *available at* <https://www.epa.gov/ghgemissions/global->

production and transportation on gas and other petroleum products continues to increase carbon emissions.<sup>121</sup> Furthermore, even if there is an increase in the use of electrified systems, if the source of electricity is fuel-dependent, then the efforts on electrification would be rendered nugatory.<sup>122</sup>

Because of the foregoing, the State must first invest in and incentivize the use of clean energy.<sup>123</sup> Thereafter, the State must invest in and incentivize electrification.<sup>124</sup>

Investing in clean energy would cost billions of pesos, e.g., the biggest solar plant in the country is worth ₱5 billion.<sup>125</sup> However, investing in the creation of clean energy plants alone is not enough. The investment must include the cheapening of cost of the capital used in these powerplants.<sup>126</sup> At the moment, solar power plants cannot function at night, and there is a need for these plants to purchase solar batteries, which are currently expensive.<sup>127</sup>

Additionally, the increase in the use of electrified systems would significantly reduce carbon emissions (assuming that the economy has transitioned to cleaner energy sources) because the need for fuel will be lessened, if not abandoned.<sup>128</sup> Furthermore, if the population has access to cheap electric vehicles and electric transport systems, then carbon emissions will significantly decline.<sup>129</sup>

Finally, investment in CCS may also be undertaken to remove the pre-existing carbon in the atmosphere to help in neutralizing the carbon emission

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greenhouse-gas-emissions-data (last accessed Jan. 8, 2021) [<https://perma.cc/7NJJ-FACA>].

121. *See id.*

122. *See* GOLDSTEIN-ROSE, *supra* note 10, at 55-56.

123. *Id.* at 56.

124. *Id.*

125. Doris Dumlao-Abadilla, *PH largest solar farm up in Batangas*, PHIL. DAILY INQ., Mar. 1, 2016, available at <https://technology.inquirer.net/46928/ph-largest-solar-farm-up-in-batangas> (last accessed Jan. 8, 2021) [<https://perma.cc/MUJ6-UULD>].

126. GOLDSTEIN-ROSE, *supra* note 10, at 60 & 139.

127. *Id.* at 27.

128. *See id.* at 117-24.

129. *Id.*

of the country while it is undergoing transition from carbon-based dependent technologies to carbon-neutral technologies.<sup>130</sup>

*C. Carbon Dividend, Government Transparency, and Climate Investment Corporation*

These measures will be useless if there is no government transparency or if the system that would implement these measures is inefficient or is not suitable for this activity. An idea that may be applied is the creation of Climate Investment Corporation, which will serve as the implementing agency of the climate action plan and is a government-owned and controlled corporation that has a *sui generis* character.<sup>131</sup>

It is *sui generis* because the idea is that every Filipino adult is a stockholder, and thus, everyone is on equal footing.<sup>132</sup> As a corporation, it is required to be transparent as to how much it receives as revenues and its sources of revenues. Furthermore, there is a need for an annual expenditure plan that is more comprehensive, and the projects are streamlined and clearly identified. The approval of the national government in implementing those projects is no longer necessary because it acts as an independent body.<sup>133</sup> However, it is subject to the Commission on Audit's jurisdiction for accountability.<sup>134</sup>

As a corporation, it may also declare the so-called "carbon dividend," wherein the excess revenues from the carbon pricing plan of the government will be given back to the people. In this way, the people could have a stronger claim of ownership over this program.

If, however, the government is averse to creating a government-owned and controlled corporation to implement this, the government must create a mechanism wherein people could actually see the revenue streams and expenses paid in real-time and is much more comprehensive than the existing Freedom of Information mechanisms. This is because the climate response plan is always something that the people could claim ownership of.

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130. *See id.* at 180.

131. *See id.* at 75-76.

132. *See* GOLDSTEIN-ROSE, *supra* note 10, at 78.

133. *Id.* at 75.

134. *See* Commission on Audit, 2009 Revised Rules of Procedure of The Commission on Audit [2009 Revised Rules of Procedure of the Commission on Audit], Rule II, § 1 (Oct. 28, 2009) (as amended).

*D. Summary*

When the country adopts a clear fiscal policy in raising funds to combat the climate crisis, the government must first invest in climate crisis response, e.g., typhoon-proofing of communities, investing in disaster response equipment, and agricultural equipment that could address climate change. While it may be viewed as a mere band-aid solution, investing in said aspect is still necessary because there is a continued occurrence of typhoons and other climate-related catastrophes in the country. With regard to the investment in clean energy and electrification, this phase may be done along with the investment in disaster-response by incentivizing the private sector to adopt said measures. The final step is to adopt the suggested *sui generis* corporation and carbon dividend because it presupposes that the country is already prepared to face any climate-related catastrophe and what is left for the country to do is to suppress its carbon emissions.

## IV. CONCLUSION

Currently, the idea of adopting carbon pricing is not off the table. It was stated by the Department of Finance that a carbon pricing scheme is intended to be adopted in the fifth tranche of the TRAIN.<sup>135</sup> While it is a good step that the government is open to the idea of imposing carbon taxes, it is submitted that there is no need for the government to wait for the fifth tranche of TRAIN<sup>136</sup> because carbon tax may be treated as a levy independent of the National Internal Revenue Code.<sup>137</sup> As a matter of fact, the carbon tax will be a special levy that should be spent on a special purpose. Additionally, because there is an urgent need for a comprehensive plan to combat the climate crisis and its effects, waiting for the fifth tranche of TRAIN<sup>138</sup> would be too late for the Philippines. The goal, as seen in the Paris Accord,<sup>139</sup> is that countries should cut their carbon emissions by 50% in 2030, and it is done through the adoption

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135. Elijah Joseph C. Tubayan, *Finance dep't studying carbon-emissions tax*, BUSINESSWORLD, July 19, 2018, available at <https://www.bworldonline.com/finance-dept-studying-carbon-emissions-tax> (last accessed Jan. 8, 2021) [<https://perma.cc/QH4P-EXH3>].

136. Tax Reform for Acceleration and Inclusion (TRAIN).

137. NAT'L INTERNAL REVENUE CODE (as amended).

138. Tax Reform for Acceleration and Inclusion (TRAIN).

139. Paris Agreement under the United Nations Framework Convention on Climate Change, *opened for signature* Apr. 22, 2016.



of policies.<sup>140</sup> The Philippines passed the second tranche of TRAIN<sup>141</sup> three years after the passage of the first tranche; as can be gleaned from this, if the country will wait for the fifth tranche, then it will be too late.<sup>142</sup>

The year 2030 is not very far from the publication of this Article. The Philippines has to move towards being a carbon-neutral country quickly. There are already policies in place, but there is a need to improve on them. Investments must be made both from the public and private sectors.<sup>143</sup> Once the country has perfected the model in addressing the climate catastrophe, it could set an example to the bigger economies that carbon-neutrality is achievable.

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140. United Nations, *supra* note 13.

141. Tax Reform for Acceleration and Inclusion (TRAIN).

142. Department of Finance, Package 1: TRAIN, *available at* <https://taxreform.dof.gov.ph/tax-reform-packages/p1-train> (last accessed Jan. 8, 2021) [<https://perma.cc/H3ER-4VBL>] & Department of Finance, Package 2: Corporate Recovery and Tax Incentives for Enterprises (CREATE) Act, *available at* <https://taxreform.dof.gov.ph/tax-reform-packages/p2-corporate-recovery-and-tax-incentives-for-enterprises-act> (last accessed Jan. 8, 2021) [<https://perma.cc/2R86-EK3R>].

143. See GOLDSTEIN-ROSE, *supra* note 10, at 224.