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## Carbon Offsets and Washington's Climate Commitment Act: Can Carbon Offsets Be Aligned With Environmental Justice Principles?

Kathryn Rizzo

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#### I. INTRODUCTION

The greenhouse effect, as it naturally occurs, is a necessary process for the earth to remain at an average temperature of fifty-seven degrees Fahrenheit.<sup>1</sup> When greenhouses gases are emitted, they trap the infrared light radiating from the earth into the atmosphere and heat the planet.<sup>2</sup> However, since the industrial revolution, unprecedented upticks in manufacturing and consumption have caused a dramatic and unsustainable increase in the amount of greenhouse gas being released into the atmosphere.<sup>3</sup> The most abundant greenhouse gas being released is carbon dioxide—it accounts for approximately seventy-six percent of human-caused emissions. Carbon dioxide is also the most enduring greenhouse gas—up to forty percent can remain after 100 years and ten percent can remain as long as 100,000 years after release.<sup>4</sup> To address the climate crisis, countries across the globe and states within the US have attempted to put climate policies in place that reduce carbon emissions.

In 2009, the House passed the American Clean Energy Security Act to create a nationwide cap-and-trade system in the US, but the effort died in the Senate.<sup>5</sup> In the aftermath of the nationwide effort stalling in Congress, individual states instituted climate policies that implemented carbon pricing systems in their jurisdictions. The first example of this policy was the formation of the Regional Greenhouse Gas Initiative (RGGI), a cooperative cap-and-trade program formed by a coalition of eleven eastern states in 2009.<sup>6</sup> In 2013, California implemented a statewide cap-and-trade program, which is linked to a program in Quebec, Canada.<sup>7</sup> In 2021, the Oregon legislature adopted the Climate Protection Program (CPP), which limits greenhouse gas emissions from certain stationary sources in Oregon.<sup>8</sup> Additionally, Washington State implemented a cap-and-invest carbon pricing program through the adoption of the Climate Commitment Act (CCA) in 2021.

<sup>&</sup>lt;sup>1</sup> Melissa Denchak, *Greenhouse Effect 101*, NATURAL RESOURCE DEFENSE COUNCIL (July 16, 2019), https://www.nrdc.org/stories/greenhouse-effect-101 [http://perma.cc/EP3X-UZBN].

 $<sup>^{2}</sup>$  Id.

 $<sup>^{3}</sup>$  Id.

<sup>&</sup>lt;sup>4</sup> Id.

<sup>&</sup>lt;sup>5</sup> Cap-and-Trade Basics, CENTER FOR CLIMATE AND ENERGY SOLUTIONS,

https://www.c2es.org/content/cap-and-trade-basics/ [http://perma.cc/7FBE-CNVD] (last visited Nov. 16, 2022, 3:09 PM) [hereinafter *Cap-and-Trade Basics*].

<sup>&</sup>lt;sup>6</sup> About the Regional Greenhouse Gas Initiative, THE REGIONAL GREENHOUSE GAS INITIATIVE (Sept. 2021), https://www.rggi.org/sites/default/files/Uploads/Fact%20Sheets/RGGI\_101\_Factsheet.pdf [http://perma.cc/FN7A-SAJF].

<sup>&</sup>lt;sup>7</sup> Cap-and-Trade Basics, supra note 5.

<sup>&</sup>lt;sup>8</sup> Greenhouse Gas Emissions Program 2021, OREGON.GOV,

https://www.oregon.gov/deq/rulemaking/Pages/rghgcr2021.aspx [https://perma.cc/4KQP-BCWE] (last visited Nov. 19, 2022); Troy Shinn, *Cap & trade comes to Oregon: Understanding the new rules*, CORVALLIS GAZETTE-TIMES (Jan. 23, 2022), https://www.gazettetimes.com/news/local/cap-trade-comes-to-oregon-understanding-the-new-rules/article\_1a62d89b-7824-57fa-9142-31409ac027a9.html [http://perma.cc/VKF4-34UV].

Washington's adoption of the CCA was a response to the multitude of climate emergencies that have unfolded throughout the state including: wildfires, drought, lack of snow melt, and ocean acidification.<sup>9</sup> The Washington Legislature implemented a cap-and-invest program to reduce statewide carbon dioxide emission levels.<sup>10</sup> Specifically, the CCA works alongside other critical climate policies to help Washington achieve its greenhouse gas reduction levels set in state law–ninety-five percent below 1990 levels by 2050.<sup>11</sup> The program was codified under RCW Chapter 70A.65 and commenced on January 1, 2023.<sup>12</sup>

Through the CCA, the Washington Legislature directed the Washington State Department of Ecology to "adopt rules to implement a cap on greenhouse gas emissions, including mechanisms for the sale and tracking of tradable emissions allowances, along with compliance and accountability measures."<sup>13</sup> The CCA employs the use of carbon offset programs that can account for up to five percent of a covered facility's emissions reduction obligations in the first phase of the program's implementation.<sup>14</sup> However, the CCA only mandates that half of these carbon offset programs must provide direct environmental benefits in Washington State.<sup>15</sup> This allows in-state emitters to continue to pollute Washington's air without offsetting that pollution locally.

Carbon offset programs are widely criticized for allowing emitting facilities to continue to pollute common-pool resources without curbing emissions at the source. Essentially, offset programs are seen as outsourcing the benefits of emission reduction programs to non-local jurisdictions, while local communities continue to bear a disproportionate burden of air pollution. In its current iteration, the CCA allows for this type of outsourcing of direct environmental benefits by some of Washington's largest greenhouse gas emitters covered under the program.<sup>16</sup>

The CCA has two key goals: (1) to reduce Washington's in-state greenhouse gas emissions; and (2) to reduce emissions in a way that promotes environmental equity by providing direct relief to communities overburdened with the disproportionate negative impacts of climate change.<sup>17</sup> To achieve its intended goals, the Washington State Department of Ecology must amend the CCA to close the equity gap created by allowing emitting facilities to participate in out-of-state offset programs. To do this, the CCA must eliminate the carbon offset program entirely or mandate that either: (1) emitting facilities must participate in

<sup>9</sup> RCW 70A.45.020 n. 1.

<sup>&</sup>lt;sup>10</sup> Kasia Patora, *Revised Preliminary Regulatory Analyses*, DEPARTMENT OF ECOLOGY STATE OF WASHINGTON (MAY 2022), https://apps.ecology.wa.gov/publications/documents/2202019.pdf at pg. 14 [http://perma.cc/L49C-MB9R].

<sup>&</sup>lt;sup>11</sup> *Id*.

<sup>&</sup>lt;sup>12</sup> Id.

<sup>&</sup>lt;sup>13</sup> Id.

<sup>&</sup>lt;sup>14</sup> RCW 70A.65.170(3)(a).

<sup>&</sup>lt;sup>15</sup> RCW 70A.65.170(3)(a).

<sup>&</sup>lt;sup>16</sup> RCW 70A.65.080.

<sup>&</sup>lt;sup>17</sup> RCW 70.65.005(3).

in-state carbon offset programs; or (2) emitting facilities that participate in out-of-state offset programs must provide supplemental funding for investments in local overburdened communities. The only option that truly aligns the CCA's emission reductions goals with its environmental justice goals is to prohibit the use of carbon offset programs altogether. This assertion echoes the main critique from environmental justice organizations in both California and Washington—cap-and-trade or capand-invest programs should make covered entities pay directly for their emissions. By allowing emitters to use offset credits as compliance instruments, states are not addressing the critical issue of curbing carbon dioxide emissions at their source, which is a key concern for environmental justice communities in both California and Washington.<sup>18</sup>

First, sections two and three of this article will explore the different definitions of environmental justice and explain the place-based nature of environmental justice problems in the context of the global climate crisis. Next, sections four through six of this article will explain the structure and function of carbon offset programs, provide an overview of the CCA generally, and discuss the CCA's carbon offset program. Section seven provides a jurisdictional comparison between Washington's CCA carbon offset program and programs in California and Oregon. Finally, the remaining sections of the paper discuss proposed changes to the CCA, which would help achieve the stated goals of promoting environmental justice and reducing greenhouse gas emissions state-wide.

#### II. WHAT IS ENVIRONMENTAL JUSTICE?

In 1982, the Black community in Warren County, North Carolina founded the Warren County Citizens Concerned about PCBS and began protesting the siting of a toxic waste dump in their community.<sup>19</sup> In the wake of the community's protest, activists and dedicated researchers like Dr. Robert Bullard gave rise to the modern environmental justice movement and shed light on the intersectional nature that race and economic status play in environmental issues.<sup>20</sup> The environmental justice movement also finds roots in a variety of political movements such as: the civil rights movement; the 1980s grassroots anti-toxic

[http://perma.cc/Q5C8-UTJ3] (last visited Nov. 22, 2022, 5:35 PM).

<sup>&</sup>lt;sup>18</sup> Exposing False Solutions Report, FRONT AND CENTERED, https://frontandcentered.org/exposing-falsesolutions-report/ [http://perma.cc/89CR-FYAW] (last visited Nov. 19, 2022, 4:40 PM); Stop REDD from Harming Communities Locally and Globally, CALIFORNIA ENVIRONMENTAL JUSTICE ALLIANCE, https://caleja.org/2016/02/stop-redd-from-harming-communities-locally-and-globally/

 <sup>&</sup>lt;sup>19</sup> CLIFFORD VILLA, ET. AL, ENVIRONMENTAL JUSTICE LAW, POLICY, & REGULATION 3 (3rd ed. 2020).
<sup>20</sup> Id. at 4-6.

movement; Native American activism; organized labor movements; and, to a lesser extent, the traditional environmental movement.<sup>21</sup>

Because of its international, national, and local scope, a precise definition of environmental justice is difficult to articulate. In 1991, the First People of Color Environmental Leadership Summit set forth its 17-point framework developed by environmental justice leaders.<sup>22</sup> Dr. Bullard distilled this framework into five principles of environmental justice: (1) protect all persons from environmental degradation; (2) adopt a public health prevention of harm approach; (3) place the burden of proof on those who seek to pollute; (4) obviate the requirement to prove intent to discriminate; and (5) redress existing inequalities by targeting action and resource.<sup>23</sup> In 1994, President Clinton issued Executive Order 12,898, which adopted the language of "environmental justice" to refer to "disproportionately high and adverse human health or environmental effects…on minority populations and low-income populations."<sup>24</sup>

These definitions of environmental justice are unified by the underlying understanding that there are multiple dimensions from which to deliver environmental justice to communities who face disproportionate environmental harms. These dimensions include: distributive justice (the right of equal treatment and equitable distribution of environmental burdens and benefits); procedural justice (the right to make policy based on mutual respect that centers community selfdetermination and promotes meaningful public engagement at every level of decision-making); corrective justice (the idea that violators of environmental laws should not be allowed to reap the benefits of their illegal behavior that injure communities); and social justice (the concept that places environmental justice into a larger context of intersecting problems implicating racial, social, and economic justice).<sup>25</sup> From this lens, I will begin my discussion of carbon offset programs and the environmental justice issues implicated by allowing polluters to outsource their emission reduction efforts.

#### III. WHY LOCATION MATTERS IN THE CONTEXT OF CARBON OFFSETS

Climate change is a global issue that has global impacts. However, the human activities fueling the rapid uptick in greenhouse gas emissions and causing climate change also cause local problems. If a facility is allowed to emit greenhouse gases, those emissions increase the amount of greenhouse gases in the atmosphere globally, but the particulate matter and pollutants in those greenhouse gases will also have uniquely

<sup>&</sup>lt;sup>21</sup> See generally Luke Cole & Sheila Foster, From the Ground UP: Environmental Racism and the Rise of the Environmental Justice Movement (NYU Press, 2001).

<sup>&</sup>lt;sup>22</sup> Villa, *supra* note 19 at. 11.

<sup>&</sup>lt;sup>23</sup> Id.

<sup>&</sup>lt;sup>24</sup> Exec. Order No. 12,898, 59 Fed. Reg. 7629 (Feb. 16, 1994).

<sup>&</sup>lt;sup>25</sup> Villa, *supra* note 19 at 12-17.

local impacts on communities located near the facility that face disproportionate environmental harms as a result of those emissions.

The United State Supreme Court recognized that climate change is a global issue with local, particularized harms in *Massachusetts v*. EPA. Massachusetts filed suit against the Environmental Protection Agency (EPA) after the EPA declined to issue regulations governing greenhouse gas emissions from new automobiles.<sup>26</sup> To establish it met the particularized injury requirement for standing, Massachusetts presented evidence that it would suffer the injury of loss of its coastal lands due to rising sea levels.<sup>27</sup> The EPA argued any injury caused by greenhouse gas emissions harmed everyone and this global impact created an insurmountable obstacle to establishing the particularized injury element necessary for standing.<sup>28</sup> The court held "[t]hat these climate-change risks are 'widely shared' does not minimize Massachusetts' interest in the outcome of this litigation."<sup>29</sup> The Court reasoned that Massachusetts had shown the existence of a concrete and particularized injury because it demonstrated that a lack of regulation of greenhouse gas emissions would further exacerbate the local effects of the climate crisis through the loss of Massachusetts' coastal lands due to rising sea levels.30

The Court's nuanced understanding of climate change as simultaneously having global and local consequences is useful in understanding why it is imperative that carbon offset programs, if we are to implement them at all, must provide localized benefits in Washington State. Washington's overburdened communities<sup>31</sup> are forced to live with disproportionate levels of air pollution and other negative climate effects that are directly correlated with the emissions produced by in-state facilities emitting greenhouse gases. By allowing facilities to purchase offset credits, the CCA allows covered entities to evade any meaningful emissions abatement at their facilities, which would help ease the burdens on local communities. While reducing the total amount of greenhouse gas in the atmosphere benefits the planet as a whole, abating pollution at its source reduces both the greenhouse gas in the atmosphere and the air pollution in local communities. Therefore, in-state carbon offset programs are the only way to align the CCA's goals of achieving environmental equity and reducing in-state greenhouse gas emissions.

<sup>30</sup> Id.

<sup>&</sup>lt;sup>26</sup> Massachusetts v. E.P.A., 549 U.S. 497, 522, 127 S. Ct. 1438, 1446, 167 L. Ed. 2d 248 (2007).

<sup>&</sup>lt;sup>27</sup> Id.

<sup>&</sup>lt;sup>28</sup> *Id.* at 517.

<sup>&</sup>lt;sup>29</sup> *Id.* at 522.

<sup>&</sup>lt;sup>31</sup> "Overburdened Community" is a term defined as "a geographic area where vulnerable populations face combined environmental harms and health impacts or risks due to exposure to environmental pollutants or contaminates through multiple pathways, which may result in significant disparate adverse health outcomes or effects." RCW 70A.65.010(54).

#### IV. GENERAL OVERVIEW OF CARBON OFFSET PROGRAMS

Cap-and-trade systems are "a market of emission allowances and offsets, where industry is forced to participate in the system by continually lowering allowed emissions generally and by each regulated facility."32 A carbon offset represents a reduction in greenhouse gas emissions or an increase in carbon storage.<sup>33</sup> Carbon offsets usually entail reducing or removing greenhouse gas emissions in one place to compensate for greenhouse gas emissions elsewhere.<sup>34</sup> If an emitting facility invests in a carbon offset project, that investment creates an offset credit which can be used for program compliance.<sup>35</sup> Carbon offset credits are transferrable instruments certified by the government that represent an emission reduction of one metric ton of carbon dioxide equivalent.<sup>36</sup> Thus, under a cap-and-trade system, carbon offset credits can be used to fulfill a covered entity's compliance obligations in place of an emissions allowance.<sup>37</sup> While cap-and-trade carbon pricing systems could exclusively permit the use of emissions allowances, offset credits are used to lower the price of compliance, create maximum flexibility for program participation, and allow the design of specific cap-and-trade systems to purchase offset credits.<sup>38</sup>

Carbon offset programs take various forms. Some common types of carbon offset programs include implementing reforestation initiatives, building renewable energy infrastructure, adopting carbon-storing agricultural practices, and managing waste and landfills.<sup>39</sup> Because carbon offset programs attempt to compensate for emissions in one place by funding emission reductions or carbon removal in another place, these programs can be used to help or harm emissions reductions initiatives depending on how they are implemented.<sup>40</sup>

Carbon offset programs are the subject of frequent criticism because many programs do not provide the benefits they promise. For carbon offsets to genuinely compensate for emissions, the offsets must provide real and additional climate benefits beyond what would have happened in the absence of the offset program—this is known as the principle of additionality.<sup>41</sup> If the offset program does not provide

<sup>38</sup> Id.

(CARBON)PLAN (April 29, 2021), https://carbonplan.org/research/forest-offsets-explainer [http://perma.cc/4VTX-X8DS].

 <sup>&</sup>lt;sup>32</sup> SCOTT D., DEATHERAGE, CARBON TRADING LAW AND PRACTICE 19 (Oxford University Press, 2011).
<sup>33</sup> Id. at 34.

<sup>&</sup>lt;sup>34</sup> Carbon Offsets Illustrated, THE NATURE CONSERVANCY (May 17, 2021), https://www.nature.org/en-

us/what-we-do/our-insights/perspectives/carbon-offsets-markets-illustrated/ [http://perma.cc/7TER-YKDN]. <sup>35</sup> Deatherage, *supra* note 32.

<sup>&</sup>lt;sup>36</sup> RCW 70A.65.010(51).

<sup>&</sup>lt;sup>37</sup> Deatherage, *supra* note 32.

<sup>&</sup>lt;sup>39</sup> Angelo Gurgel, *Carbon Offsets*, CLIMATE PORTAL (Nov. 8, 2022),

https://climate.mit.edu/explainers/carbon-offsets [http://perma.cc/8GJD-Y436].

<sup>&</sup>lt;sup>40</sup> *Carbon Offsets Illustrated*, THE NATURE CONSERVANCY (May 17, 2021), https://www.nature.org/enus/what-we-do/our-insights/perspectives/carbon-offsets-markets-illustrated/ [http://perma.cc/7TER-YKDN].

<sup>&</sup>lt;sup>41</sup> Grayson Badgley et al., Systematic over-crediting in California's forest carbon offsets program,

benefits in excess of what would have occurred without the program, the program risks over-crediting. Over-crediting is the process of inaccurately applying an inflated amount of offset credits to an offset program that has not reduced or sequestered its purported amount of carbon.<sup>42</sup> For example, if a company pays to preserve a stand of forest, but the forest was never going to be cut down, the company has not offset its emissions because there is no additionality—the forest would have been spared regardless of the company's investment.

Beyond additionality, concerns with offset programs also arise from the lack of program regulation. An example of the detrimental effects of under-regulation can be seen in a 2021 study of California's forestry carbon offset program. The study revealed that the program had been dramatically over-crediting because of a statistical error used to calculate the program's average carbon stocks per tract of forest.<sup>43</sup> To qualify as an offset project, landowners must calculate how much carbon is stored in their forest and compare that to the amount of carbon that is stored in similar forests---or baseline forests. These baseline forest calculations are referred to as regional averages, which are calculated by the California Air Resources Board (CARB).<sup>44</sup> To make these calculations, CARB used course data that did not consider the critical carbon storage nuances among different types of forests.<sup>45</sup> This resulted in projects receiving more credits than they were qualified to claim because CARB's data derived from erroneously averaging carbon-dense and less carbon-dense forest types togethers. Ultimately, researchers found that within California's forestry carbon offset program-the largest program of its kind in existence-projects had been over-credited by 29.4% resulting in an over-crediting value of \$410,000,000.46

California's experience is emblematic of the challenges offset programs around the world face—lack of regulation leading to sweeping and systematic program-wide errors. There are some groups, including a nonprofit research group called CarbonPlan,<sup>47</sup> who argue these systematic program errors are resulting in California's forest offset program increasing greenhouse gas emissions as opposed to reducing statewide emissions.<sup>48</sup>

<sup>&</sup>lt;sup>42</sup> Id.

<sup>&</sup>lt;sup>43</sup> Id.

<sup>&</sup>lt;sup>44</sup> *California's Compliance Offset Program*, CALIFORNIA AIR RESOURCES BOARD (Oct. 27, 2021), https://ww2.arb.ca.gov/sites/default/files/2021-10/nc-forest\_offset\_faq\_20211027.pdf at 3 [http://perma.cc/7NV6-VR9Q].

<sup>&</sup>lt;sup>45</sup> Id.; Kevin Stark, *California Not Doing as Well as It Thinks in Reducing Carbon, Investigation Finds*, KQED (June 7, 2021), https://www.kqed.org/science/1975164/california-not-doing-as-well-as-it-thinks-in-reducing-carbon-investigation-finds [http://perma.cc/CZH6-52VN].

<sup>&</sup>lt;sup>46</sup> Badgley, *supra* note 41.

<sup>&</sup>lt;sup>47</sup> Stark, *supra* note 45.

<sup>&</sup>lt;sup>48</sup> Id.

Additionally, wildfires are a unique challenge for western states because they destroy huge swaths of forest land used for offset programs. For example, the Summit Trail Fire of 2021 set ablaze tracts of forestland on the Colville Reservation that were being used to offset the emissions of some of California's covered entities.<sup>49</sup> As a result of the fire, millions of metric tons of carbon stored in the coniferous forest were released back into the atmosphere completely negating any efforts to offset carbon emissions.<sup>50</sup> The Colville project is not a solitary case of forest fires compromising carbon offset programs. In 2021, CarbonPlan reported that at least six large offset project sites in California, Oregon, and Washington have burned as a result of forest fires in the last five years.51

The increasing number of offset programs affected by forest fires could have serious and sweeping consequences for the accuracy and effectiveness of carbon offset programs nationwide. For example, the forestry offset projects within California's program store more than 190 million metric tons of carbon dioxide.<sup>52</sup> If forests continue to burn, millions of tons of carbon dioxide will be released into the atmosphere, undoing the progress made in reducing emissions and compromising national climate goals.

In terms of the CCA, these issues with carbon offsets are only made worse when considering other states are using Washington's forests for their carbon offset programs. Other states investing in Washington's forests leaves a dwindling supply of in-state carbon offset forestry projects available for investment by in-state emitters. This is significant because, as California has proven, forestry is the most popular field for offset projects and the most likely candidate for investment.

#### V. OVERVIEW OF THE CCA

The CCA only regulates the carbon emissions of "covered entities."53 Covered entities are Washington's largest emitting sources and industries, which, taken in the aggregate, account for roughly seventy-five percent of statewide carbon emissions.<sup>54</sup> Generally, businesses fall under the purview of the CCA if they generate emissions in excess of 25,000 metric tons of carbon dioxide equivalent per year.<sup>55</sup> Covered entities typically include fuel suppliers, natural gas and electric

<sup>&</sup>lt;sup>49</sup> Emily Pontecorvo and Shannon Osaka, California is banking on forests to reduce emissions. What happens when they go up in smoke?, GRIST (Oct. 27, 2021), https://grist.org/wildfires/california-forests-carbon-offsetsreduce-emissions/ [http://perma.cc/Y6PF-XXTH].

<sup>&</sup>lt;sup>50</sup> Id.

<sup>&</sup>lt;sup>51</sup> Id. <sup>52</sup> Id.

<sup>53</sup> RCW 70A.65.080.

<sup>&</sup>lt;sup>54</sup> Washington's cap-and-invest program, DEPARTMENT OF ECOLOGY STATE OF WASHINGTON, https://ecology.wa.gov/Air-Climate/Climate-Commitment-Act/Cap-and-invest [http://perma.cc/7JT5-4SU2] (last visited Nov. 18, 2022, 8:22 PM) [hereinafter Washington's cap-and-invest program].

<sup>&</sup>lt;sup>55</sup> Id.

utilities, waste-to-energy facilities (starting in 2027), and railroads (starting in 2031).<sup>56</sup> Emissions sources that are exempt from the program include businesses with emissions below the 25,000 metric ton threshold, agricultural businesses, aviation and marine fuel businesses, and landfills.<sup>57</sup>

Under the CCA, covered entities have compliance obligations, which require them to submit compliance instruments equivalent to the amount of carbon dioxide equivalent they emit during a compliance period to the Department of Ecology.<sup>58</sup> Compliance instruments can take the form of either an emissions allowance or an offset credit issued by the Department of Ecology, or by an external greenhouse gas emissions trading program to which Washington has linked its cap-and-invest program.<sup>59</sup> One compliance instrument is equal to one metric ton of carbon dioxide equivalent.<sup>60</sup>

The CCA is divided into different compliance periods. Compliance periods are four-year phases for which a covered entity's program compliance obligation is calculated.<sup>61</sup> The first compliance period ranges from calendar years 2023 to 2026.<sup>62</sup> The second compliance period ranges from calendar years 2027 to 2030.<sup>63</sup> The compliance periods continue in four-year blocks ending with the final compliance period ranging from calendar years 2047 to 2050.<sup>64</sup>

Within each compliance period, the Department of Ecology holds emissions allowance auctions through which they distribute compliance instruments—four each year for every year in the compliance period.<sup>65</sup> Emissions allowances are a compliance instrument that authorize emissions up to one metric ton of carbon dioxide equivalent.<sup>66</sup> Whereas, carbon offset credits are a compliance instrument that represents an emissions reduction or emissions removal of one metric ton of carbon dioxide equivalent.<sup>67</sup> Covered entities must fulfill their compliance obligations by the end of a compliance period, but they can use carbon offsets to account for up to 5 percent of their emission reductions within the first compliance period.

<sup>&</sup>lt;sup>56</sup> Id.

<sup>&</sup>lt;sup>57</sup> Id.

<sup>58</sup> RCW 70A.65.010(19).

<sup>&</sup>lt;sup>59</sup> RCW 70A.65.010(18).

<sup>&</sup>lt;sup>60</sup> RCW 70A.65.010(18).

<sup>&</sup>lt;sup>61</sup> RCW 70A.65.010(20).

<sup>&</sup>lt;sup>62</sup> RCW 70A.65.070(1)(a). <sup>63</sup> RCW 70A.65.070(1)(b).

<sup>&</sup>lt;sup>64</sup> Washington's cap-and-invest program, supra note 54.

<sup>&</sup>lt;sup>65</sup> RCW 70A.65.100(1)-(2)(a).

<sup>&</sup>lt;sup>66</sup> RCW 70A.65.010(1).

<sup>67</sup> RCW 70A.65.010(51).

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Carbon offsets must provide environmental benefits, which are activities that do one of three things: (1) "prevent or reduce existing environmental harms or associated risks that contribute significantly to cumulative environmental health impact;" (2) "prevent or mitigate impacts to overburdened communities or vulnerable populations from, or support community response to, the impacts of environmental harm;" or (3) "meet a community need formally identified to a covered agency by an overburdened community or vulnerable population."<sup>68</sup> Beyond reducing Washington's carbon emissions, the CCA aims to recognize and support certain communities that bear the disproportionate effects of climate change—overburdened communities.<sup>69</sup> The program mandates that no less than thirty-five percent of total investments made with program funds must provide direct and meaningful benefits to overburdened communities.<sup>70</sup>

The CCA works to provide environmental benefits to overburdened communities through investments made from a range of different accounts targeting specific issues.<sup>71</sup> There are six accounts in total that all aim to provide funding for different issues related to greenhouse gas emissions.<sup>72</sup> Each year, when allocating funds from the accounts, agencies must conduct an environmental justice assessment and establish that no less than thirty-five percent—with a goal of forty percent—of total investments provide direct and meaningful benefits to vulnerable populations within the boundaries of overburdened communities.<sup>73</sup>

The air quality and health disparities improvement account is notable in that its primary goal is to provide support for improving air quality in and improving the health of local overburdened communities.<sup>74</sup> The investments from the air quality and health disparities improvement account are intended do two things: (1) improve air quality by reducing criteria pollutants through air quality monitoring and establishing baseline emissions data; and (2) reduce health disparities in overburdened communities by improving health through reducing environmental harms and promoting environmental benefits.<sup>75</sup> The legislature intends that a minimum of \$20,000,000 be dedicated to this account every biennium.<sup>76</sup>

VI. CURRENT OFFSET STRUCTURE OF THE CCA

<sup>68</sup> RCW 70A.02.010(4)(a)-(c).

<sup>&</sup>lt;sup>69</sup> RCW 70A.65.005(3).

<sup>&</sup>lt;sup>70</sup> RCW 70A.65.230(1)(a).

<sup>&</sup>lt;sup>71</sup> RCW 70A.65.030(1). <sup>72</sup> *Id*.

<sup>&</sup>lt;sup>73</sup> Id.

<sup>74</sup> RCW 70A.65.280.

<sup>&</sup>lt;sup>75</sup> RCW 70A.65.280(1)(a)-(b).

<sup>&</sup>lt;sup>76</sup> RCW 70A.65.280(3).

In the first compliance period, participating entities can cover up to five percent of their emissions with offset credits, and can cover an additional three percent with credits from projects on federally recognized tribal lands.<sup>77</sup> During this period, only half of a covered entity's available offset credits are required to be sourced from programs that provide direct environmental benefits in Washington.<sup>78</sup> In the second compliance period, the general limit drops to four percent and an additional two percent is available for programs located on federally recognized tribal lands.<sup>79</sup> During this period, three-quarters of a covered entity's available offset credits are required to be sourced from programs that provide direct environmental benefits in Washington.<sup>80</sup>

The CCA mandates that carbon offset programs must reduce, remove, or avoid greenhouse gas emissions.<sup>81</sup> Offsets programs include activities like reforestation, planting trees in urban areas, and removing ozone from the atmosphere.<sup>82</sup> Under the CCA, an offset program must result in greenhouse gas reductions that are real, permanent, quantifiable, verifiable, and enforceable.<sup>83</sup> The emissions reductions must also comply with the principle of additionality. Furthermore, the offset programs must be certified by a recognized registry.<sup>84</sup> Finally, the programs must provide direct environmental benefits to Washington *or* be located in a jurisdiction with which Washington has entered into a carbon trading program linkage agreement.<sup>85</sup>

While Washington's program is not yet linked with any other jurisdiction, the CCA makes clear that jurisdictional linkage agreements are a future goal using statutory language such as "the department [of Ecology] shall seek to enter into linkage agreements with other jurisdictions with external greenhouse gas emissions trading programs...."<sup>86</sup> Additionally, results of an independent study of the CCA revealed that merging Washington's carbon market with those of California and Quebec would significantly reduce the price of emissions allowances and would expand the market.<sup>87</sup> This is likely to result in jurisdictional linkage agreements occurring as soon as 2025,<sup>88</sup> which is within the first compliance period. When these jurisdictional linkage

<sup>80</sup> Id.

<sup>77</sup> RCW 70A.65.170(3)(a).

<sup>&</sup>lt;sup>78</sup> Id.

<sup>&</sup>lt;sup>79</sup> RCW 70A.65.170(3)(b).

 <sup>&</sup>lt;sup>81</sup> Washington's cap-and-invest program, supra note 54.
<sup>82</sup> Id.

<sup>&</sup>lt;sup>83</sup> RCW 70A.65.170(2)(b)-(c).

<sup>&</sup>lt;sup>84</sup> Id.

<sup>&</sup>lt;sup>85</sup> Id.

<sup>&</sup>lt;sup>86</sup> RCW 70A.65.210(1).

<sup>&</sup>lt;sup>87</sup> Nicholas Turner, *Large polluters to get free passes in WA carbon trading market*, THE SEATTLE TIMES (Aug. 3, 2022, 6:00 AM), https://www.seattletimes.com/seattle-news/environment/41-large-polluters-to-get-free-passes-in-washingtons-carbon-trading-market/ [http://perma.cc/5P2S-GMVL] [hereinafter *Overview of ARB Emissions Trading Program*].

<sup>&</sup>lt;sup>88</sup> Id.

agreements are put in place, they will allow carbon offset programs to take place outside of Washington State, thus depriving Washington's overburdened communities of the direct environmental benefits the CCA aims to provide.

#### VII. JURISDICTIONAL COMPARISON: CALIFORNIA AND OREGON

Different jurisdictions have different approaches to structuring their carbon offset programs. This can be seen in the contrasting constructions of the California and Oregon programs. California's program has been in place since 2013 and despite leading the nation on cap-and-trade, its implementation has been controversial.<sup>89</sup> Oregon's program was adopted through rulemaking in 2021,<sup>90</sup> and has undergone additional rulemakings in both 2022 and 2023.<sup>91</sup> Oregon's program, while fairly new, shows a more nuanced approach to achieving emission reduction goals through an approach that centers environmental justice and equity.

#### A. California Program

California's cap-and-trade program was created in 2013 through Assembly Bill 32 (AB32)<sup>92</sup> and is administered by the California Air Resources Board (CARB).<sup>93</sup> Covered entities include factories, power plants, and other companies that are required to pay for the greenhouse gas emissions–covering about 450 entities total.<sup>94</sup> California's program allocates greenhouse gas emissions allowances to covered entities and allows them to buy and sell these emissions allowances through an auction process.<sup>95</sup>

The CCA's offset provisions are modeled after California's offset provisions.<sup>96</sup> This was done in an attempt to facilitate and accelerate the use of offset credits in Washington's program from the outset, while providing the time needed to develop and implement an

<sup>&</sup>lt;sup>89</sup> Overview of ARB Emissions Trading Program, CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY AIR RESOURCES BOARD (Feb. 9, 2015), https://ww2.arb.ca.gov/sites/default/files/cap-andtrade/guidance/cap\_trade\_overview.pdf [http://perma.cc/J4QR-KTY9] [hereinafter Overview of ARB

Emissions Trading Program].

<sup>&</sup>lt;sup>90</sup> Greenhouse Gas Emissions Program 2021, OREGON.GOV,

https://www.oregon.gov/deq/rulemaking/Pages/rghgcr2021.aspx [https://perma.cc/4KQP-BCWE] (last visited Nov. 19, 2022).

<sup>&</sup>lt;sup>91</sup> Temporary Rulemaking: Climate Protection Program 2022, OREGON.GOV,

https://www.oregon.gov/deq/rulemaking/Pages/cpp2022.aspx [https://perma.cc/T5V8-ACDF] (last visited Nov. 19, 2022); *Climate 2023*, OREGON.GOV,

https://www.oregon.gov/deq/rulemaking/Pages/climate2023.aspx [https://perma.cc/9S6U-B7ZQ] (last visited Nov. 19, 2022).

<sup>&</sup>lt;sup>92</sup> Overview of ARB Emissions Trading Program, supra note 90.

<sup>93</sup> Environmental Justice Communities and Local Air Pollution, CALIFORNIA AIR RESOURCES BOARD,

https://ww2.arb.ca.gov/resources/documents/faq-cap-and-trade-program [http://perma.cc/JL3P-7TXV] (last visited Nov. 19, 2022, 10:24 AM) [hereinafter Environmental Justice Communities and Local Air Pollution]. <sup>94</sup> Cap-and-Trade Regulation Instructional Guidance, CALIFORNIA AIR RESOURCES BOARD,

https://ww2.arb.ca.gov/sites/default/files/cap-and-trade/guidance/chapter1.pdf [http://perma.cc/G2AJ-P88Y] (last visited Nov. 19, 2022, 10:33 AM); Overview of ARB Emissions Trading Program, supra note 84.

<sup>&</sup>lt;sup>95</sup> Overview of ARB Emissions Trading Program, supra note 90.

<sup>&</sup>lt;sup>96</sup> Patora, *supra* note 10 at 153 §6.4.4.

offset system that is more customized to Washington's specific needs.<sup>97</sup> California's program applies to emissions that make up approximately eighty-five percent of its in-state greenhouse gas emissions.<sup>98</sup> Like Washington's CCA, the California program decreases the amount of emissions allowances available each year in lockstep with a declining program cap on overall emissions.

In the first compliance period, the California program allowed for up to eight percent of a facility's compliance obligation to be met through the use of carbon offset credits.<sup>99</sup> In the second compliance period, covered entities could meet up to four percent of their compliance obligation through the use of carbon offset credits.<sup>100</sup> In the third compliance period, covered entities could meet up to six percent of their compliance obligation through the use of carbon offset credits.<sup>101</sup> To qualify as a compliance instrument, offset programs are required to produce emissions reductions in the United States.<sup>102</sup> Offset projects are restricted to five areas: (1) forestry; (2) urban forestry; (3) dairy digesters; (4) destruction of ozone-depleting substances; and (5) mine methane capture.<sup>103</sup> Offset programs are subject to an independent verification program to make sure they are providing additional emissions reductions and accurate emissions reduction data.<sup>104</sup> Additionally, starting with 2021 emissions, the California program mandated only half of carbon offsets could come from projects that did not provide direct environmental benefits in California.<sup>105</sup>

In terms of direct environmental benefits, Assembly Bill 398 defines offset projects that meet the program's direct environmental benefits requirement as those that result in the "reduction or avoidance of emissions of any air pollutant in the state or the reduction or avoidance of any pollutant that could have an adverse impact on the waters of the state."<sup>106</sup> Within California's cap-and-trade regulations, in-state programs must meet the requirements found in § 95989(a) and out-of-state programs must meet the requirements of § 95989(b).<sup>107</sup> In-state projects

<sup>99</sup> Id.

 $^{101}$  Id.

<sup>&</sup>lt;sup>97</sup> Id.

<sup>&</sup>lt;sup>98</sup> Overview of ARB Emissions Trading Program, supra note 90.

<sup>&</sup>lt;sup>100</sup> Compliance Offset Program, CALIFORNIA AIR RESOURCES BOARD, https://ww2.arb.ca.gov/our-work/programs/compliance-offset-program/about [http://perma.cc/R6C6-MM2S] (last visited Nov. 19, 2022, 10:40 AM).

<sup>&</sup>lt;sup>102</sup> Overview of ARB Emissions Trading Program, supra note 90.

 $<sup>^{103}</sup>$  Id.

 $<sup>^{104}</sup>$  *Id*.

<sup>&</sup>lt;sup>105</sup> Compliance Offset Program, supra note 101.

<sup>&</sup>lt;sup>106</sup> Direct Environmental Benefits in the State (DEBS), CALIFORNIA AIR RESOURCES BOARD, https://ww2.arb.ca.gov/our-work/programs/compliance-offset-program/direct-environmental-benefits [http://perma.cc/AQ7U-ZKSR] (last visited Nov. 19, 2022, 10:48 AM) [hereinafter Direct Environmental Benefits in the State (DEBS)].

<sup>&</sup>lt;sup>107</sup> Id.

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must be located within the State of California<sup>108</sup> and each program's compliance determination is based on individualized criteria.<sup>109</sup>

The California program justifies the use of carbon offsets because they are typically a slightly cheaper option than buying emissions allowances at the state-run emissions allowance auctions.<sup>110</sup> While CARB maintains that all offset programs are subject to rigorous third-party verification to ensure emissions reductions are real, quantifiable, permanent, and additional, there is evidence of rampant over-crediting within California's forestry offset program.<sup>111</sup> Additionally, because the California Program requires only half of offset programs to provide direct environmental benefits in-state,<sup>112</sup> covered entities can continue to emit carbon dioxide in California, while up to half of their offset credits do nothing to address the effects of air pollution on California's overburdened communities. Because Washington's CCA was modeled on California's program, it is no coincidence that the problems in California's program mirror the problems the CCA will face outsourcing the environmental benefits derived from offset programs.

#### B. Oregon Program

In 2020, Governor Kate Brown signed EO-20-04, which aimed to reduce Oregon's greenhouse gas emissions by at least eighty percent below 1990 levels by 2050.<sup>113</sup> In order to achieve these emissions reduction goals, the Oregon Department of Environmental Quality was tasked with developing and implementing a state-wide cap for greenhouse gas emissions.<sup>114</sup> This process resulted in the Oregon Environmental Quality Commission voting to adopt the Climate Protection Program (CPP).<sup>115</sup>

Oregon's CPP has twin goals that mirror the CCA, which include reducing Oregon's greenhouse gas emissions and enhancing public welfare for Oregon's environmental justice—or overburdened communities.<sup>116</sup> The key approaches for regulating greenhouse gases under the CPP are (1) establishing declining caps on greenhouse gas emissions from the use of fossil fuels; and (2) using the best available emissions reductions approach for other site-specific emissions at

<sup>&</sup>lt;sup>108</sup> Id.

<sup>&</sup>lt;sup>109</sup> Id.

<sup>&</sup>lt;sup>110</sup> Environmental Justice Communities and Local Air Pollution, supra note 94.

<sup>&</sup>lt;sup>111</sup> Badgley, *supra* note 41.

<sup>&</sup>lt;sup>112</sup> Direct Environmental Benefits in the State (DEBS), supra note 107.

<sup>&</sup>lt;sup>113</sup> Derek Green, Olivier Jamin, and Taylor Sutton, *Oregon Joins California and Washington in Adopting Its Own Program Capping and Reducing Greenhouse Gas Emissions*, DAVIS WRIGHT TREMAINE LLP (Mar. 17, 2022), https://www.dwt.com/blogs/energy--environmental-law-blog/2022/03/oregon-ghg-reduction-program [http://perma.cc/W8ZX-6HF7].

<sup>&</sup>lt;sup>114</sup> Îd. <sup>115</sup> Id.

<sup>&</sup>lt;sup>116</sup> Climate Protection Program, Program Brief, OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY (Dec. 22, 2021), https://www.oregon.gov/deq/ghgp/Documents/CPP-Overview.pdf [http://perma.cc/J53Z-WVH3] [hereinafter Climate Protection Program, Program Brief].

facilities.<sup>117</sup> The 2022 base cap is set at 28.1 million metric tons of carbon dioxide equivalent.<sup>118</sup> The cap decreases each compliance period, which last three years.<sup>119</sup> By 2035, the cap decreases to 15.0 million metric tons of carbon dioxide equivalent.<sup>120</sup>

Under the CPP, covered entities include fossil fuel suppliers like natural gas utilities and suppliers of gasoline, diesel, kerosene, and propane with emissions that meet or exceed the threshold for inclusion.<sup>121</sup> Other covered entities include stationary sources that have annual emissions that meet or exceed a threshold of 25,000 metric tons of carbon dioxide equivalent.<sup>122</sup> For every metric ton of carbon dioxide equivalent emitted, a covered entity must submit a compliance instrument or community climate investment credit.<sup>123</sup> While the submission of compliance instruments mirrors the CCA, the use of community climate investments is a new and innovative way to reduce greenhouse gas emissions in Oregon.

The community climate investments program allows covered entities to earn credits by contributing to third-party entities that implement projects reducing greenhouse gas emissions in Oregon.<sup>124</sup> Covered entities may use community climate investments to account for up to ten percent of their emissions reductions requirements under the CPP.<sup>125</sup> Covered entities may only contribute funds to third parties called Community Climate Investment (CCI) entities—that have been approved by the Department of the Environmental Quality.<sup>126</sup> Through the community climate investment program, the Department aims to: (1) reduce emissions by at least one metric ton of carbon dioxide equivalent; (2) reduce non-greenhouse gas emissions; (3) promote benefits for environmental justice communities; and (4) accelerate the transition from fossil fuels to low carbon energy sources.<sup>127</sup>

The Department works with an equity advisory committee to assist in the application review process for CCI entities.<sup>128</sup> The committee then advises the Department on which CCI entities and projects would achieve the greatest benefit for environmental justice communities.<sup>129</sup> Then the Department, the committee, and the selected

<sup>122</sup> Id. <sup>123</sup> Id.

<sup>125</sup> Shinn, *supra* note 8.

- <sup>127</sup> Id.
- <sup>128</sup> Id.

<sup>&</sup>lt;sup>117</sup> Id.

<sup>&</sup>lt;sup>118</sup> Id.

<sup>&</sup>lt;sup>119</sup> Green, *supra* note 114.

<sup>&</sup>lt;sup>120</sup> Climate Protection Program, Program Brief, supra note 117.

<sup>&</sup>lt;sup>121</sup> Id.

 $<sup>^{124}</sup>$  Id.

<sup>&</sup>lt;sup>126</sup> Climate Protection Program, Program Brief, supra note 117.

<sup>&</sup>lt;sup>129</sup> Id.

CCI entities conduct outreach to environmental justice communities throughout Oregon to seek input on projects that might be of interest to those communities.<sup>130</sup> Importantly, projects funded by these investments are structured to benefit environmental justice communities and to be located in and near these communities.<sup>131</sup> Community climate investments function similarly to offsets, but they are structured to ensure that any environmental benefits achieved will be located in Oregon within or near affected environmental justice communities and implemented with guidance from those communities. This is arguably the most progressive and environmental justice-focused carbon pricing program in the nation and serves as an example of how to replace problematic carbon offset programs with community-based emissions reductions projects funded by the investments of covered entities.

#### VIII. SUGGESTED RECOMMENDATIONS FOR THE CCA'S OFFSET PROGRAM

The current iteration of the CCA's carbon offset program does not align with the Act's stated goals of reducing Washington's carbon emissions and addressing the disproportionate effects of climate change faced by overburdened communities. Under the CCA, only half of the offset credits used by covered entities to achieve their program compliance obligations must provide direct environmental benefits to Washington. This structure allows emitters to evade curbing emissions at the source and fails to provide relief to overburdened communities facing direct environmental harm due to in-state emissions such as health problems and environmental degradation caused by air pollution and accumulated particulate matter.<sup>132</sup> Additionally, carbon offset programs have become an increasingly unreliable avenue for genuine carbon emissions reduction because of lack of regulation, shoddy verification processes, and threats to offset program carbon sequestration abilities.<sup>133</sup>

#### A. Washington's Future Through a Critique of California

The California program, which served as the model for Washington's carbon offset program, foreshadows the critiques that Washington will likely face. The California program received backlash on two fronts: (1) it did not accurately achieve greenhouse gas emissions reductions; and (2) it exacerbated air pollution problems in overburdened communities. California's cap-and-trade program is the largest program in the country and the first to allow for forest offset projects.<sup>134</sup> The

<sup>&</sup>lt;sup>130</sup> Id.

<sup>&</sup>lt;sup>131</sup> Community Climate Investments, OREGON.GOV,

https://www.oregon.gov/deq/ghgp/cpp/Pages/Community-Climate-Investments.aspx [http://perma.cc/45CB-EY7X] (last visited Nov. 19, 2022, 3:31 PM).

<sup>&</sup>lt;sup>132</sup> Turner, *supra* note 82.

<sup>&</sup>lt;sup>133</sup> Badgley, *supra* note 41; Stark, *supra* at note 45.

<sup>&</sup>lt;sup>134</sup> Kassie Kometani, The Polluter Pays, but So Do Communities: Environmental Justice Concerns with California's Forest Carbon Offsets, AMERICAN BAR ASSOCIATION (Nov. 9, 2022),

https://www.americanbar.org/groups/environment\_energy\_resources/publications/fr/the-polluter-pays/ [http://perma.cc/2EZU-4FK5].

forest offset projects can be located in or out-of-state, which environmental justice advocates argue has led to greater disproportionate environmental harm.<sup>135</sup> A 2019 study discussed the environmental justice concerns regarding California's cap-and-trade carbon pricing program.<sup>136</sup> The study found that facilities regulated under California's cap-and-trade program were disproportionately located in disadvantaged<sup>137</sup> communities.<sup>138</sup> Neighborhoods located within 2.5 miles of a regulated facility had on average fifty-nine percent higher population density, thirty-four percent higher proportion of residents of color, and twentythree percent higher proportion of low-income residents.<sup>139</sup>

Additionally, the study found most regulated facilities increased their greenhouse gas emissions during the first two years of the program's implementation as compared to the two years prior to implementation.<sup>140</sup> On average, the majority of facilities had fifty-two percent higher greenhouse gas emission averages after program implementation.<sup>141</sup> While the program boasted reduced greenhouse gas emissions, that decrease was primarily achieved through cutbacks on purchases of carbon-intensive electricity imported from out-of-state, rather than reductions from in-state emissions.<sup>142</sup> The study found that neighborhoods that experienced increases of average greenhouse gas emissions were more likely to be designated as "disadvantaged" and had higher proportions of residents of color and rates of poverty.<sup>143</sup>

Additionally, the study found that during the program's first compliance period, the majority of offset credits—75.6 percent—were from out-of-state offset projects.<sup>144</sup> The authors noted that the use of offset credits was worrisome due to the challenges of verifying offset projects to ensure they provide additional environmental benefits.<sup>145</sup> The authors asserted that out-of-state offset programs do not provide the same benefits as localized emission reductions projects because air pollution caused by emissions are a localized problem.<sup>146</sup> In response to these critiques, the California legislature adopted AB 398, which aimed to reduce the use of carbon offsets generally and increase the amount of

<sup>&</sup>lt;sup>135</sup> Id.

<sup>&</sup>lt;sup>136</sup> Lara Cushing, et al., Carbon trading, co-pollutants, and environmental equity: Evidence from California's cap-and-trade program (2011-2015), PLOS MEDICINE (July 10, 2018),

https://journals.plos.org/plosmedicine/article/file?id=10.1371/journal.pmed.1002604&type=printable [http://perma.cc/6QBU-LRNJ].

<sup>&</sup>lt;sup>137</sup> "Disadvantaged" is a classification of neighborhood used by CalEnvrioScreen which uses census data to classify neighborhood demographics.

<sup>&</sup>lt;sup>138</sup> See generally, Cushing, supra note 137.

<sup>&</sup>lt;sup>139</sup> *Id.* at 9-10.

<sup>&</sup>lt;sup>140</sup> *Id.* at 10.

<sup>&</sup>lt;sup>141</sup> Id. <sup>142</sup> Id.

 $<sup>^{143}</sup>$  Id. at 13.

 $<sup>^{144}</sup>$  Id. at 14.

 $<sup>^{145}</sup>$  Id.

<sup>&</sup>lt;sup>146</sup> Id.

offsets generated by in-state offset projects.<sup>147</sup> The bill reduced the total amount of carbon offsets available for entities to use to fulfill their compliance obligations to four percent from 2021 to 2025, and half of an entity's offset credits must be from in-state projects or provide direct environmental benefits to California. While AB 398 was a step in the right direction and mirrors the CCA's carbon offset program, allowing carbon offset programs to take place out-of-state or provide no direct environmental benefits in-state can result in higher annual averages of greenhouse gas emissions in the communities these carbon pricing programs are attempting to provide with relief.

#### B. How Can Washington Reimagine the CCA's Carbon Offset Program

There are two distinct pathways for restructuring the CCA's carbon offset program to achieve its goal of reducing the impact of air pollution on overburdened communities: (1) prohibit the use of carbon offset programs entirely; or (2) mandate that one hundred percent of offset programs must either be in-state projects or require entities that use outof-state projects to make an additional investment into the air quality and health disparities improvement account.

#### i. Approach One: Prohibiting Carbon Offsets

The best way to align the CCA's dual goals of reducing statewide carbon emissions and supporting local overburdened communities is to prohibit the use of all carbon offsets as compliance instruments. The pitfalls of carbon offset programs are numerous: lack of regulation, questionable verification processes, over-crediting, lack of additionality, and challenges posed by natural disasters. All these challenges work together to create a system that is arguably beyond the point of salvation. Studies have shown that regulation of offset projects is so dubious that some projects have led to more carbon emissions being produced than abated.<sup>148</sup> It seems both counterintuitive and counterproductive to fight to reform a system that is deeply flawed and so widely criticized by scientists, researchers, environmental advocates, and community leaders alike.

Fundamentally, carbon offsets are a mechanism by which covered entities are purchasing their right to continue polluting. Instead of forcing a covered entity to reduce emissions at the source and thereby reduce the amount of pollution affecting local communities, entities can simply buy offsets and continue to emit. As emissions continue unabated, local community members are subject to high levels of criteria pollutants in the air, which cause health problems such as respiratory infections, asthma, headaches, and nosebleeds.<sup>149</sup> Carbon offsets allow covered entities to avoid localized emissions reductions, while continuing to

<sup>&</sup>lt;sup>147</sup> Id.

<sup>&</sup>lt;sup>148</sup> Stark, *supra* at note 45; Cushing, *supra* note 137.

<sup>&</sup>lt;sup>149</sup> Kometani, *supra* note 135.

cause environmental and health problems.<sup>150</sup> Even worse, under the CCA, covered entities can use offset credits from projects that are not located in Washington—as only half of an entity's offset credits must provide direct environmental benefits in-state.<sup>151</sup>

The CCA is explicit in its intent to address the problems overburdened communities face due to their disproportionate exposure to air pollution and the negative effects of climate change. The legislature stated it intends to "identify overburdened communities where the highest concentrations of criteria pollutants occur, determine the sources of those emissions and pollutants, and pursue significant reductions of emissions and pollutants in those communities."<sup>152</sup> However, the legislature has compromised this goal by mandating only half of carbon offset programs must provide direct environmental benefits in Washington. To ensure that overburdened communities are receiving the direct environmental benefits of emissions reductions, the CCA should prohibit the use of all carbon offset projects and make emitters reduce their emissions at the source. The only way to ensure cap-and-trade programs align with environmental justice principles is to mandate and incentivize localized emissions reductions.

### *ii.* Approach Two: Localizing Offset Programs Until Complete Phase-Out is Feasible

While carbon offset programs certainly have significant and persistent problems, they are, in theory, a mechanism by which a more rapid transition to a carbon-neutral economy is made feasible. Carbon offsets allow companies who are unable to immediately reduce emissions at the source to offset those emissions somewhere else. However, this cannot be the final solution to pollution control and greenhouse gas emissions reduction. If carbon offsets must be used, they should serve as a temporary tool that furthers the aim of prohibiting offset projects altogether.

If the CCA continues to include a carbon offset program, the legislature should make two significant changes to ensure that all carbon offset projects provide direct environmental benefits in Washington. The legislature should amend the CCA to only allow covered entity to claim a carbon offset-based compliance instrument if: (1) the offset project is located in Washington; or (2) the offset program is located outside of Washington and the covered entity makes a supplementary investment in the air quality and health disparities improvement account. This supplemental investment in the existing air quality and health disparities improvement account would provide direct benefits and relief to

<sup>&</sup>lt;sup>150</sup> Id.

<sup>&</sup>lt;sup>151</sup> RCW 70A.65.170(3)(a).

<sup>&</sup>lt;sup>152</sup> RCW 70A.65.005(7).

overburdened communities through mandatory investments. Both provisions must be enacted together to ensure covered entities are not allowed to benefit from carbon offset programs that do not provide relief for local overburdened communities.

By mandating additional investment for every out-of-state offset credit used by a covered entity, the air quality and health disparities improvement account would increase the revenue available for investment in local overburdened communities. The stated purpose of the account is that it "must result in long-term environmental benefits and increased resilience to the impacts of climate change."<sup>153</sup> These supplemental investments would provide more funding to increase these efforts, but a key change must be implemented—overburdened communities must play a central role in shaping and approving the projects this revenue will fund.

Oregon's structure for Community Climate Investments offers a strong model for how to increase autonomy for overburdened communities in this process. Additionally, Oregon's model of creating an equity advisory committee to assist the Department of Environmental Quality in deciding what projects CCI entities are allowed to use can be readily adapted in Washington. The Environmental Justice Council (EJC) is a body of community representatives that must provide recommendations to the legislature, agencies, and governor in the development and implementation of the CCA and the programs funded from most of the investment accounts created by the CCA.<sup>154</sup> However, the air quality and health disparities improvement account is strikingly absent from this list.<sup>155</sup>

Therefore, the role of the EJC must be expanded in two ways in order to align with environmental justice principles of self-determination and community-based solutions.<sup>156</sup> First, the EJC's input must not simply be to provide recommendations, rather the EJC must be viewed as an equal partner in the decision-making process and be afforded consequential input at all stages. This structural change aligns with the language of the CCA, which acknowledges that carbon pricing policies "can be well-intended to reduce greenhouse gas emissions and provide environmental benefits to communities, [but] the policies may not do enough to ensure environmental health disparities are reduced and environmental benefits are provided to those communities most impacted by environmental harms from greenhouse gas and air pollutant emissions."<sup>157</sup> The principles of environmental justice dictate that the communities faced with the disproportionate effects of climate change must have "the right to participate as [an] equal partner at every level of

<sup>155</sup> Id.

<sup>157</sup> RCW 70A.65.005(4).

<sup>153</sup> RCW 70A.65.280(2).

<sup>&</sup>lt;sup>154</sup> RCW 70A.65.040(1).

<sup>&</sup>lt;sup>156</sup> See generally Cole, supra note 21; Villa, supra note 19 at 12-17.

decision-making including needs assessment, planning, implementation, enforcement and evaluation.<sup>158</sup>

Second, the EJC must be the primary decision-making body in assessing what projects to fund with the investments held in the air quality and health disparities improvement account. The EJC consists of fourteen members appointed by the Governor.<sup>159</sup> The CCA requires that EJC members "be persons who are well-informed regarding and committed to the principles of environmental justice and who, to the greatest extent practicable, represent diversity in race, ethnicity, age, and gender, urban and rural areas, and different regions of the state."<sup>160</sup> Specifically, the Council must have: seven community representatives, including one youth representative between the ages of eighteen and twenty-five; two tribal members representing tribal communities-one from eastern and one from western Washington; two representatives who are environmental justice practitioners or academics to serve as experts; one representative of a business that is regulated by a covered entity; one representative who is a member or officer of a union representing workers in the building and construction trades; and one representative at large.<sup>161</sup>

While the EJC is not made up solely of members of overburdened communities, it is the mechanism by which those voices are represented, and it is better positioned to understand the particular problems communities are faced with and advocate for the most effective solutions. To make the membership of the EJC more adequately represent overburdened communities in Washington, the CCA should expand the EJC and create local subcommittees for communities designated as overburdened under the CCA. Those subcommittees should be tasked with gathering information about the immediate and long-term needs of their particular community and endorsing projects they deem best suited to meet those needs.

#### IX. CONCLUSION

Washington's CCA is a step in the right direction, but significant improvements must be made to achieve greenhouse gas emissions reduction goals, while addressing the disproportionate adverse effects of emissions on Washington's overburdened communities. Because carbon offsets are deeply incompatible with the goals of the CCA, the legislature should prohibit the use of all carbon offset projects as a means to generate compliance instruments under the CCA. In the alternative, the

<sup>&</sup>lt;sup>158</sup> Villa, *supra* note 19 at 12-17.

<sup>&</sup>lt;sup>159</sup> RCW 70A.02.110(2).

 $<sup>^{160}</sup>$  *Id*.

<sup>&</sup>lt;sup>161</sup> RCW 70A.65.110(2)(a)-(e).

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legislature should mandate all offset programs must either: (1) take place in Washington and provide direct environmental benefits in-state; or (2) take place out-of-state but require a mandatory supplemental investment into the air quality and health disparities improvement account.

Local greenhouse gas emissions have local effects, and it is imperative that Washington's overburdened communities are given the support they need to address the disproportionate climate challenges they face. Thus, if the legislature intends for the CCA to achieve its goal of reducing greenhouse gas levels to ninety-five percent below 1990 levels by 2050 in a just and equitable way, it cannot employ carbon offsets in its long-term program structure.