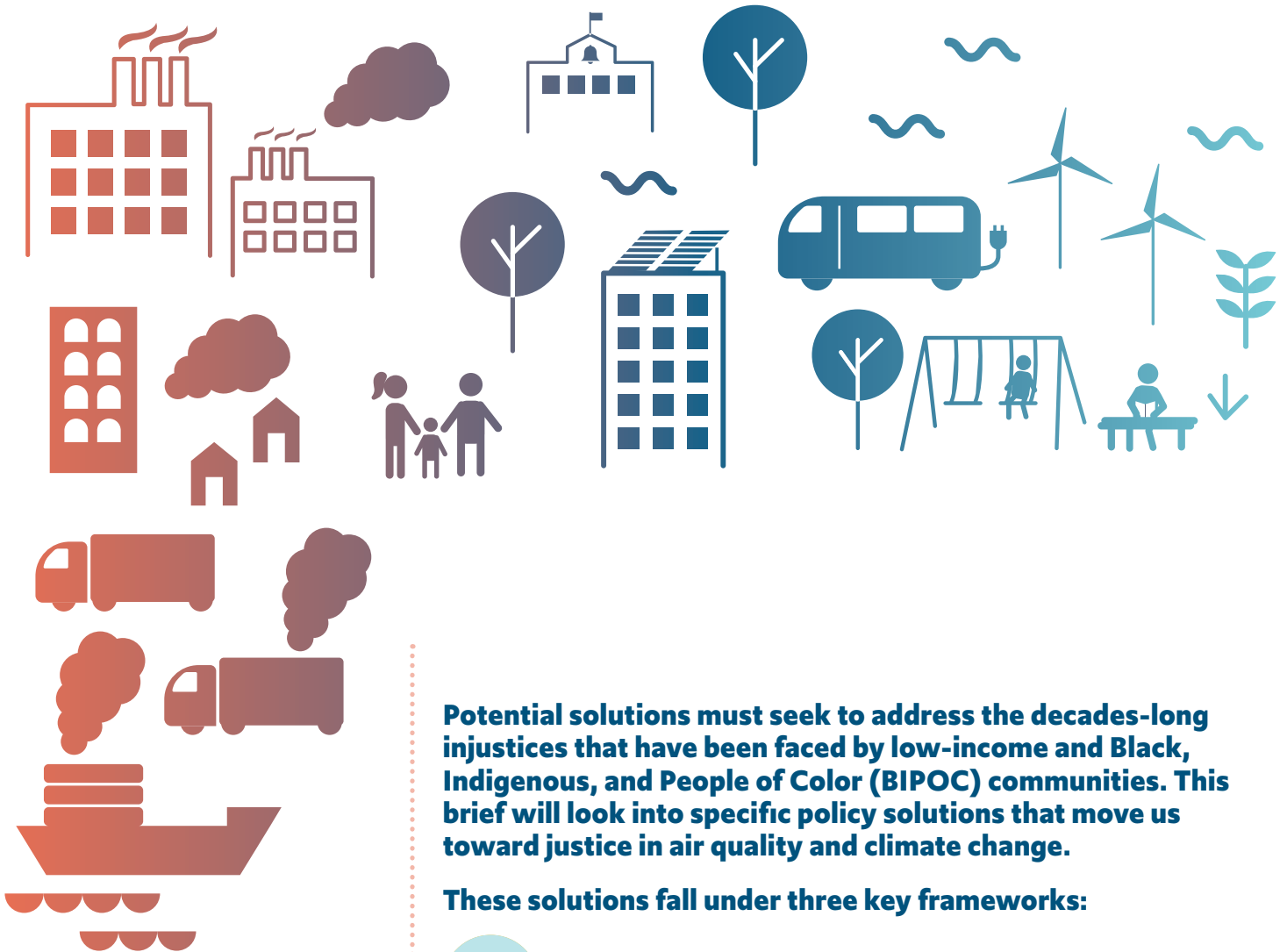


- 1 Overview
- 2 Towards Justice for Air Quality and Climate Change
- 3 **Policy Solutions**



Potential solutions must seek to address the decades-long injustices that have been faced by low-income and Black, Indigenous, and People of Color (BIPOC) communities. This brief will look into specific policy solutions that move us toward justice in air quality and climate change.

These solutions fall under three key frameworks:



1. Prioritize the most polluted communities;



2. Target the dirtiest sources; and



3. Clean up how we move.



# 1. Prioritize the most polluted communities: Integrated equity-based climate and air quality policies

**1.1 Identify communities that face a disproportionate burden of pollution.** Policymakers need a way to identify communities that are most vulnerable to pollution and climate change. Over the past decade, new tools have been developed that identify a range of pollution and socioeconomic indicators and map which communities have high rates of all indicators. These tools use a “cumulative impact” framework. This approach takes into account the reality that many low-income communities and communities of color face a whole range of pollution burdens as well as socioeconomic factors (such as poverty and unemployment) that make people more vulnerable to pollution. **Cumulative impacts** are defined as “the exposures, public health or environmental effects from the combined emissions and discharges, in a geographic area, including environmental pollution from all sources, whether single or multimedia, routinely, accidentally, or otherwise released. Impacts will take into account sensitive populations and socioeconomic factors, where applicable and to the extent data are available.” Areas with high concentrations of these factors have a greater “cumulative impact.”<sup>38</sup>

Environmental justice screening tools are most effective when implemented on a smaller geographic scale, such as census-tract level. Examples of state-level tools include the **CalEnviroScreen** tool developed in California,<sup>39</sup> the **Washington**

**Environmental Health Disparities** map,<sup>40</sup> and the **Massachusetts Environmental Justice Communities** map.<sup>41</sup> Other examples of even more localized environmental justice maps include the **Twin Cities Environmental Justice Mapping** tool<sup>42</sup> and the **Cumulative Environmental Vulnerabilities Assessment of California’s San Joaquin Valley**.<sup>43</sup>

Creating such a tool can be a foundational step towards targeting benefits and increased protections to overburdened communities. State policies can direct agencies to create and utilize a cumulative impact screening tool in various programs and for funding. The term “disadvantaged communities” has emerged in several state policy contexts as a way to refer to communities identified through screening tools. The State of New York’s **Climate Leadership and Community Protection Act** requires that a Climate Justice Advisory Committee “establish criteria to identify disadvantaged communities for the purposes of co-pollutant reductions, greenhouse gas (GHG) emissions reductions, regulatory impact statements, and the allocation of investments.”<sup>44</sup> California’s CalEnviroScreen tool has been used in numerous policies to direct increased funding and environmental protections into communities identified as highly impacted through the statewide screening method.<sup>45</sup> Washington’s **SB 5489 on Healthy**

38 <https://oehha.ca.gov/media/downloads/calenviroscreen/report/cireport123110.pdf>; <https://www.epa.gov/risk/framework-cumulative-risk-assessment>

39 <https://oehha.ca.gov/calenviroscreen/about-calenviroscreen>

40 <https://www.doh.wa.gov/DataandStatisticalReports/EnvironmentalHealth/WashingtonTrackingNetworkWTN/InformationbyLocation/WashingtonEnvironmentalHealthDisparitiesMap>

41 <https://www.mass.gov/info-details/environmental-justice-communities-in-massachusetts>

42 <http://ceed.org/ej-story-maps/>

43 <https://regionalchange.ucdavis.edu/news/ceva-san-joaquin-valley>

44 <https://legislation.nysenate.gov/pdf/bills/2019/S6599>

45 [https://calgreenzones.org/wp-content/uploads/2018/09/CEJA-CES-Report-2018\\_web.pdf](https://calgreenzones.org/wp-content/uploads/2018/09/CEJA-CES-Report-2018_web.pdf)

**Environments for All** directs state agencies to adopt a cumulative impact analysis tool to identify highly impacted communities.<sup>46</sup> New York City's **Environmental Justice Study bill** requires the city to identify environmental justice areas within the city and to create a public online map of the areas and create recommendations for legislation, policy, budget initiatives, and other measures to address environmental concerns affecting environmental justice communities.<sup>47</sup>

## 1.2 Require analyses of climate and air quality impacts in overburdened communities.

Because so many clean energy policies are at the state and national level, detailed data on the impacts of climate change and air quality at the localized level are very important and can result in significant and useful policy recommendations. For example, California's **Renewable Portfolio Standard** required a study on the barriers and opportunities to increase renewable energy and energy efficiency programs within disadvantaged communities.<sup>48</sup> California's governor also directed state agencies to produce an annual report on the benefits and impacts of GHG emissions limits within disadvantaged communities, to be updated at least every three years.<sup>49</sup>

## 1.3 Require climate policies to include air quality benefits and protections in overburdened communities.

Climate policies should include explicit goals to achieve air quality and public health co-benefits in overburdened communities, as well as explicit language to safeguard against disproportionate impacts. California's **100-percent renewable energy bill** explicitly outlines the need to improve air quality in disadvantaged communities.<sup>50</sup> California's **AB 32**, the first major climate change law in the nation, also included several specific protections for overburdened communities, such as: 1) requirements that do not disproportionately impact low-income communities; 2) implementation that considers overall societal benefits and the potential for

direct, indirect, and cumulative emission impacts from any market-based mechanisms, especially for already-burdened communities; and 3) assurances that any market-based mechanism prevent increases in toxic air contaminants or criteria air pollutants.<sup>51</sup> It should be noted that these examples from California, while some of the first of their kind, are still vague and have come with their own set of challenges in practice.

## 1.4 Direct regulatory agencies to identify and adopt all feasible measures that reduce GHGs, criteria pollutants, and toxic air contaminants in disadvantaged communities.

With such a large potential for co-benefits across climate and air quality issues, regulatory agencies should seek to identify measures that can achieve the benefits of reducing air contaminants as well as GHGs. For example, California's **AB 197** directs state agencies to prioritize "emission reduction rules and regulations that result in direct emission reductions at large stationary sources of greenhouse gas emissions sources and direct emission reductions from mobile sources."<sup>52</sup>

## 1.5 Require compatible databases for air quality and GHG emission tracking and reporting.

Greenhouse gas and air contaminant reporting should utilize compatible databases that include shared identification numbers for all facilities reporting. These databases should be understandable to community members. For example, California's **AB 617** requires the statewide regulatory agency to establish a uniform statewide system of annual reporting on emissions of criteria pollutants and toxic air contaminants for stationary sources. However, such reporting systems still have a long way to go in terms of accuracy of measurements and the inclusion of toxic sources.

46 <http://lawfilesexternal.leg.wa.gov/biennium/2019-20/Pdf/Bill%20Reports/House/5489-S2%20HBR%20APP%2019.pdf>

47 <https://legistar.council.nyc.gov/LegislationDetail.aspx?ID=1805815&GUID=8901A89B-078E-4D47-88D8-EA3E48E715A1>

48 [https://www.energy.ca.gov/sb350/barriers\\_report/](https://www.energy.ca.gov/sb350/barriers_report/)

49 <https://oehha.ca.gov/media/downloads/environmental-justice/report/oehhaab32report020217.pdf>

50 [https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill\\_id=2017201805B100](https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=2017201805B100)

51 <https://www.arb.ca.gov/cc/docs/ab32text.pdf>

52 [https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill\\_id=201520160AB197](https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160AB197)



## 2. Target the dirtiest sources: Policies for stationary sources

**2.1 Expedite technology-based standards.** These standards require the use of certain technologies to ensure facility-based emissions are as clean as feasibly possible. The type of technology requirements depends initially on whether the pollutant is classified as a “criteria” air pollutant or a “hazardous” air pollutant. Technology-based standards, applied under the jurisdiction of the Clean Air Act, were the backbone of the **Clean Power Plan**.<sup>53</sup> The Clean Air Act establishes technology-based emission standards for both criteria and hazardous air pollutants. For criteria air pollutants, sources can be required to meet different standards, including “Best Available Control Technology” and “Lowest Achievable Pollution Rate,” depending on the size of the source, whether it is a new or modified source, and where the source is located. Sources located in areas not meeting ambient air requirements are generally required to meet more stringent requirements. Sources of a certain size that emit any of the 187 hazardous air pollutants are required to meet similar but different requirements, including a requirement called “Maximum Available Control Technology.”<sup>54</sup> Unfortunately, the application of these standards is often uneven, and different jurisdictions may use different standards.

**2.2 Strengthen performance standards.** Performance standards set an emission standard that all regulated entities must meet, without prescribing how an entity should achieve the standard.<sup>55</sup> For example, the Clean Air Act has **New Source Performance Standards**, which are nationally uniform, technology-based standards that establish a consistent baseline

for pollution control for all regulated entities for large stationary sources.<sup>56</sup> The benefit of a technology standard is that it does not require the complicated determination of a facility-by-facility emission reduction target, which can vary widely across industries, polluters, and even types of contaminants. Performance standards are commonly used to ensure that the amount of pollution per kilowatt per hour from power plants is below a certain level. For example, **Washington’s performance standard for power plants** requires new plants to emit greenhouse gas at a rate of no more than 1,100 pounds per megawatt-hour.<sup>57</sup> In order to effectively reduce emissions, these standards often need to be updated and strengthened.

**2.3 Establish facility-level co-pollutant caps or GHG caps.** This requirement would cap a facility’s GHG or co-pollutants at a set level. A facility-level GHG cap would ensure that certain facilities do not increase production and emissions above a certain value, operating under the assumption that by controlling GHG emissions, co-pollutant levels are also controlled. A co-pollutant cap would ensure that co-pollutants do not increase. **Hawaii** requires large existing stationary sources to reduce GHG emissions 16 percent below actual baseline levels, and each affected source must submit a plan for establishing measures that will be used to meet the emission cap.<sup>58</sup>

Certain co-pollutants may require their own set of regulations and standards. **Box 3A** describes policy and regulation options for methane, one of the most potent short-lived climate pollutants.

53 <https://www.c2es.org/content/regulating-industrial-sector-carbon-emissions/>

54 <https://www.everycrsreport.com/reports/RL30853.html>

55 <https://climatepolicyinfohub.eu/non-market-based-climate-policy-instruments>

56 [https://www.everycrsreport.com/reports/RL30853.html#\\_Toc480973756](https://www.everycrsreport.com/reports/RL30853.html#_Toc480973756)

57 <https://ecology.wa.gov/Air-Climate/Air-quality/Business-industry-requirements/GHG-standards-for-power-plants>

58 <http://health.hawaii.gov/cab/hawaii-greenhouse-gas-program/>

## Box3A:

### Methane regulation for oil and gas operations

The urgent need to eliminate methane has only more recently gained recognition. Methane is the largest constituent of natural gas. Oil and gas operations emit methane by venting or combustion or through leaks, such as those in utility lines. Coal mines, gas storage facilities, and pipeline leakages also release large quantities of methane. Recent studies have shown that methane leaks are 60 percent higher than estimated by the U.S. Environmental Protection Agency.<sup>59</sup> While phasing off both natural gas and other fossil fuels is the long-term solution needed, short-term policy solutions to reduce methane from oil and gas fall into several main categories:

#### Overall regulation of methane

- **Establish a goal for methane reductions.** For example, **Massachusetts** has imposed annually declining methane emission limits on natural gas distribution system operators.<sup>60</sup> **California** set a goal to cut methane and hydrofluorocarbon gases by 40 percent and black carbon (soot) by 50 percent below 2013 levels by 2030.<sup>61</sup> **Colorado** recently adopted a bill to update their oil and gas regulations, creating a comprehensive approach to methane regulation that increases requirements to address leaks, prioritizes health and safety in permitting, increases the authority of local governments to regulate oil and gas operations, and re-vamps the regulatory board in charge of oil and gas regulation to have a stronger focus on environmental health and protection.<sup>62</sup>

#### Increased regulations on oil and gas operations

- **Require oil and gas companies to find and fix methane leaks and to install equipment to capture most of the emissions.** **Colorado** was the first state to enact this kind of broad methane regulation.
- **Restrict methane venting and flaring.** A 2016 EPA regulation restricted methane venting and flaring by creating new performance standards for oil and gas operators on public and tribal lands, but this requirement was rolled back by the Trump administration in 2018.<sup>63</sup> Now in 2021, the Biden administration hopes to restore methane regulation to even stricter standards than in 2016.<sup>64</sup>

#### Increased requirements for utilities to stop natural gas leaks and improve storage

- **Require regular methane leak inspections.** Inspections should be carried out across the supply chain, including underground storage, pipes, processing plants, and well heads.<sup>65</sup>
- **Require utility companies to fix all leaks in pipelines.** Repairs should not just address leaks that are deemed hazardous, which is the *de facto* requirement. In 2019, **Massachusetts** passed a regulation that requires utilities to identify these “super leaks”—and repair them within two years.<sup>66</sup>

Overall, however, we need a transformation beyond gas through decarbonizing homes while keeping energy bills affordable. This approach will help phase out our reliance on planet-warming and health-damaging gas infrastructure.

59 <https://pubs.acs.org/doi/full/10.1021/acs.est.6b00705>

60 <https://www.usclimatealliance.org/slcp>

61 <https://www.c2es.org/content/short-lived-climate-pollutants/>

62 <https://leg.colorado.gov/bills/sb19-181>

63 [https://www.kirkland.com/siteFiles/Publications/Recent\\_Developments\\_in\\_the\\_Regulation\\_of\\_Methane\\_Venting\\_and\\_Flaring\\_from\\_Natural\\_Gas\\_Wells\\_on\\_Public\\_and\\_Tribal\\_Lands\\_and\\_Potential\\_Next\\_Steps.pdf](https://www.kirkland.com/siteFiles/Publications/Recent_Developments_in_the_Regulation_of_Methane_Venting_and_Flaring_from_Natural_Gas_Wells_on_Public_and_Tribal_Lands_and_Potential_Next_Steps.pdf), <https://www.nytimes.com/2018/09/18/climate/trump-methane-rollback.html>

64 <https://www.npr.org/2021/11/02/1051302469/biden-proposes-new-rules-to-cut-climate-warming-methane-emissions>

65 <https://insideclimatenews.org/news/10022016/california-new-methane-rules-would-be-nation-strongest-oil-gas-aliso-canyon>

66 <https://www.wbur.org/earthwhile/2019/04/01/natural-gas-methane-leaks-massachusetts-rule>



## 3. Clean up how we move: Policies for mobile sources

*Note: Many additional mobile source air quality measures are covered in the policy brief on Electrifying Transportation.*

### 3.1 Adopt an ISR (Indirect Source Rule) for major area-wide sources of emissions.

In the regulatory context of air quality, an ISR applies to facilities that attract mobile traffic sufficient to cause violations that exceed air quality standards, such as large freight facilities including ports, railyards, warehouses, and distribution centers. These sources, which typically do not fall under standard air quality regulations, are often drivers of air contamination and related health impacts in communities of color as well as major emitters of GHGs.

An ISR holds developers and operators of these facilities responsible for the traffic-related emissions coming into their facilities and requires them to implement various mandatory measures and regulations to reduce emissions. In the long term, the vehicles coming into and leaving these facilities must be electrified and land-use planning shifted to prevent the creation of new area sources, such as the construction of new warehouses. However, an ISR is an important part of reducing immediate, and harmful, air quality impacts. In other words, ISRs can help minimize the amount of pollution released by the thousands of trucks and ships going in and out of depots and ports every day.

An ISR can be complicated to implement because of the many sources involved, and facility operators can claim they are not responsible for pollution from vehicles. In the case of railyards, state jurisdiction is limited to intrastate locomotives; trains moving across state boundaries fall under federal authority. The **South Coast Air Quality Management District of California** has an ISR for large warehouses, requiring operations to implement a range of mitigation measures to reduce emissions and air pollutants.<sup>67</sup>

The “indirect source rule” (ISR) refers to whether the facility is directly or indirectly owned by the polluter. It is primarily used in air quality regulation to provide different incentives and rules to different actors. This concept is not the same as direct vs. indirect emissions. An ISR is applied to polluting hubs that congregate mobile sources emitting direct emissions and, therefore, decreases in pollution at these facilities directly benefit nearby local communities.

<sup>67</sup> <https://www.aqmd.gov/docs/default-source/news-archive/2021/board-adopts-waisr-may7-2021.pdf>



**3.2 Increase funding for innovative clean transit programs serving rural communities.** Rural communities face unique mobile source challenges because of the long distances between many locations and the lack of public transportation options. Statewide clean transportation policies should support innovative clean transit programs and pilot projects that can reduce vehicle emissions and air pollutants while meeting the transportation needs of rural communities. One example is dedicated funding for clean shared-mobility pilot projects for rural communities, such as van pooling and ride sharing.

For example, in several isolated rural communities in **California's Central Valley**, local government and community-based organizations have worked together to fund the purchase of electric rideshare vans and to create a dispatch system to connect riders with the driver.<sup>68</sup> Another small town in the Central Valley has a **Green Raiteros (Green Riders) program**, which is helping the informal, individual ridesharing networks become more systematized and also purchasing electric vehicles for drivers.<sup>69</sup> The State of Washington has one of the largest **Vanpool Grant programs** in the country, and there are more than 2,400 vanpools in the Puget Sound Region active every day.<sup>70</sup>

**3.3 Increase funding and planning mandates for equitable, clean public transit.** Clean, affordable, and accessible mass transit is critical to reducing climate change and improving air quality. It is one of the most impactful ways to reduce our reliance on energy-intensive cars while offering a wide range of social and health benefits—including cleaner air—to low-income, frontline, or BIPOC communities, especially because these communities are least likely to own a private vehicle.

States should prioritize expanding and building new public transit projects that reduce GHGs and serve low-income communities and communities of color. In the United States, this issue can be complex because it intersects with land-use, transportation, air quality, and climate planning. Achieving clean public transit systems that serve low-income communities requires fundamental shifts in how cities and communities are planned and built, as well as major changes in public revenue allocations. The intersections with land use and electrification are discussed more in-depth in the Equity Fund's policy briefs on transportation.<sup>71</sup> In essence, transportation planning that prioritizes the most vulnerable and marginalized communities is a critical piece of building clean and healthy communities and, ultimately, clean air for all.

A few of the policy solutions to expand equitable, clean public transportation options include the following.

**3.3.1. Create equity-focused public transit criteria or priorities within existing transportation funding allocations and planning processes.** Some sources of transportation funding can be earmarked to prioritize public transportation in low-income communities. For example, the **SF Metropolitan Transit Agency** has developed an "Equity Strategy" to improve bus service in low-income neighborhoods.<sup>72</sup> The California climate investments include a mandatory set aside of 35 percent total for disadvantaged and low-income communities, as well as dedicated funding for particular programs, such as the Transit and Intercity Rail Capitol Program.<sup>73</sup> Other policy solutions include requiring transit agencies to include criteria on access and transit ridership in planning and grants. The **Virginia Department of Transportation** created a

68 <https://www.governing.com/news/headlines/gov-eco-friendly-rideshare-cantua-creek-rural-california-unincorporated.html>

69 <https://cal.streetsblog.org/2018/10/25/greening-the-heart-of-the-central-valley/>

70 <https://www.wsdot.wa.gov/transit/rideshare/vanpool>

71 The Equity Fund's policy briefs on transportation can be found on our website: <https://www.theequityfund.org/policy-accelerator>.

72 <https://www.sfmta.com/projects/muni-service-equity-strategy>

73 [https://ww3.arb.ca.gov/cc/capandtrade/auctionproceeds/ccidoc/tircp\\_082718\\_ada.pdf](https://ww3.arb.ca.gov/cc/capandtrade/auctionproceeds/ccidoc/tircp_082718_ada.pdf)

prioritization program for transportation projects that includes explicit criteria on environmental sustainability, as well as access for low-income individuals and efficiency of land use.<sup>74</sup> The **City of Minneapolis** also conditioned transportation capital spending through a set of criteria in which nearly 50 percent of possible points are awarded based on concentration of people of color, low-income populations, low vehicle-ownership, and overall population density.<sup>75</sup>

Similar equity-focused considerations must be elevated at the federal level. The Biden administration's **Justice40 Initiative** provides one avenue to increase targeted investments for critical infrastructure such as public transit.<sup>76</sup> Without federal-level support, state-level action may come up against significant roadblocks as statewide sources of transportation revenues face legal limits on spending. Advocates should always research the state specifics in crafting relevant policy solutions.

**3.3.2. Require clear goals and increase funding for public transit access and affordability for low-income public transit users and other vulnerable communities.** Improving service availability and reliability increases public transit ridership and, thus, reduces personal vehicle travel. However, many public transit systems do not provide adequate service necessary to ensure they are reliable sources of transportation for everyday needs. In many states, public transit is under-funded, under-prioritized, or relies on aging infrastructure. State agencies can set goals for expanding service levels within public transit systems, such as identifying a minimum percentage of the population with access to public transit, improving accessibility for target populations (such as low-income communities, seniors, youth, or people with disabilities), as well as agency planning for increased investments across all modes of public transit.

**3.3.3. Create fare assistance programs for low-income public transit users and other vulnerable communities.** Programs that provide free or low-cost fare passes for low-income, youth, or other vulnerable populations can ensure access to transportation as well as increase public transit ridership. Multiple cities offer reduced-fare programs for low-income residents, such as **Los Angeles, Portland, the Twin Cities (Minneapolis–Saint Paul), and Seattle.** Programs should avoid no-cash policies, as these tend to hurt those without access to banking and credit the most.

**3.4 Incentivize best practices for railyards, ports, heavy-duty trucks, and other freight infrastructure.** While not as effective as directly reducing emissions, reducing exposure to pollution from freight transport is a great way to improve the air quality for environmental justice communities. This approach could use strategies like changing truck routes, creating buffer zones, reducing idle time, and replacing older trucks with newer, more efficient models.<sup>77</sup> Such actions should not take the place of efforts to reduce emissions, but can serve as a starting point for cleaner freight-wide planning. Ports in **Baltimore, Los Angeles, Long Beach, Georgia, and New York–New Jersey** all have clean truck programs to improve air quality through truck replacement and/or reduced idling.<sup>78</sup>

74 <http://smartscale.org/about/default.asp>

75 <http://transitcenter.org/wp-content/uploads/2018/07/Inclusive-1.pdf>

76 <https://www.whitehouse.gov/omb/briefing-room/2021/07/20/the-path-to-achieving-justice40/>

77 <https://www.epa.gov/ports-initiative/best-clean-air-practices-port-operations>

78 <https://www.epa.gov/ports-initiative/drillage-truck-best-practices-improve-air-quality>



**3.5 Adopt California vehicle fuel efficiency standards.** Fuel standards mandate how far one can travel on a tank of gas, thus increasing efficiency and reducing GHG emissions. While there is a national **Corporate Average Fuel Economy (CAFE) vehicle standard**, which sets minimum vehicle performance levels, California adopted more strict standards established by the **California Air Resources Board (CARB)**, and states are allowed to adopt the California standards if they choose. Currently, 13 other states and the District of Columbia follow the CARB standards, representing nearly 40 percent of new vehicles sold in the United States. In 2012, President Obama issued revised and strengthened standards, which would have doubled the average fuel economy of passenger vehicles to the equivalent of 54.5 miles per gallon by 2025, but the Trump administration halted the implementation of these standards.<sup>79</sup> The Biden administration is now in the process of restoring states' rights to re-establish the standards.

**3.6 Ban or restrict the sale or use of internal combustion engines.** These policies reduce the amount of gas-powered vehicles on the road by banning or restricting the sale of internal combustion engines (ICEs). Sixteen countries have taken action to phase out the sale of ICE vehicles on various timelines, but these goals have all been non-binding.<sup>80</sup> Policies can also restrict the registration of new or used internal combustion engines. For example, **Tokyo** has banned vehicles that do not meet emission standards that reduce smog.<sup>81</sup> Some cities are restricting the areas where ICE vehicles can be driven through the creation of "low emission zones," placing limits on diesel vehicles in particular. In **Paris**, older diesel cars are gradually being banned from the city, and by 2030, only low-emission vehicles will be allowed in the center city area.<sup>82</sup>

**3.7 Create a low-carbon fuel standard.** A fuel standard entails a standard on the carbon intensity of all fuels sold by a distributor for transportation use. Fuel standards generally allow the regulated companies to purchase credits for fuels with lower carbon intensity (blended fuels, electricity as fuel) to balance their higher-intensity products. In doing so, they can spur markets for alternative fuels, but this trade does not create a transition off gasoline by itself. The alternatives often include fuels such as renewable natural gas or biomethane that are not fully renewable or have other negative environmental impacts. A fuel standard focuses on lowering per vehicle pollution and is therefore relative. If the number of vehicles continues to increase, it does not necessarily lead to lower fuel consumption overall. Both **Oregon** and **California** have laws that put a limit on the lifecycle carbon intensity of oil distributors.

79 <https://insideclimatenews.org/news/02042018/climate-change-car-fuel-efficiency-cafe-standards-epa-pruitt-auto-pollution-gas-mileage-california-global-warming>

80 <https://climateprotection.org/wp-content/uploads/2018/10/Survey-on-Global-Activities-to-Phase-Out-ICE-Vehicles-FINAL-Oct-3-2018.pdf>

81 <http://www.kankyo.metro.tokyo.jp/en/automobile/diesel.html>

82 <https://www.reuters.com/article/us-france-paris-pollution/greater-paris-to-ban-old-diesel-cars-from-summer-2019-idUSKCN1NH2BC>