

# Appendix B. Review of Authority for Local Jurisdictions and Agencies to Influence and Regulate GHG Emissions

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## B.1 Introduction

EPIC reviewed constitutionally derived local jurisdiction police power, delegate authority from the state, and federal and state preemption that may limit local authority. EPIC used this analysis to determine if and how local jurisdictions and other agencies in the region may influence or regulate greenhouse gas (GHG) emissions. We also identified key players, regulation, and legislation that effect local authority to add context regarding a local jurisdiction’s ability to act on its own and in concert with others within the San Diego region.

In general, local authority derives from both constitutionally derived police power and delegated authority from state statutes. Constitutionally derived police power grants a broad, elastic grant of authority to act where such action is reasonably related to a legitimate government purpose and has a reasonable tendency to promote public health, safety, or the general welfare of the community. It is limited by general state law and the state and federal constitutions. The full extent of local jurisdiction police power with regards to regulating GHG emissions is unknown. Delegated authority includes, among other things, analyzing land use environmental impacts and mitigating them, adopting more stringent building codes, building infrastructure, or creating community choice aggregators to supply electricity. The following will summarize local authority by decarbonization pathway.

### B.1.1 Summary of Local Authority

Local jurisdiction authority to regulate GHGs is created by broad, general constitutionally derived “police power”<sup>i</sup> or delegated authority under state or federal law. Use of police power may not conflict with “general” law (e.g., state law) under preemption principles found in California Constitutional Article XI, § 7 or federal expressed or implied preemption under the Supremacy Clause of the U.S. Constitution.<sup>ii</sup> State and federal preemption analysis, as well as the analysis on the full extent of local police power to regulate GHG emissions, are factually specific with local jurisdiction authority uncertainty dependent on the type of action.

Police power of a city or county within its own boundaries is as broad as that of the state legislature and subject only to limitations of general law.<sup>iii</sup> Police power "is not a circumscribed prerogative, but is elastic and, in keeping with the growth of knowledge and the belief in the popular mind of the need for its application, capable of expansion to meet existing conditions of modern life and thereby keep pace with the social, economic, moral, and intellectual evolution of the human race."<sup>iv</sup> Its exercise must be both:

- a) Reasonably related to a legitimate government purpose,<sup>v</sup> and
- b) Have a reasonable tendency to promote the public health, morals, safety, or general welfare of the community.<sup>vi</sup>

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<sup>i</sup> Cal. Const. art. XI, § 7.

<sup>ii</sup> U.S. Const. art. VI, § 2.

<sup>iii</sup> *Candid Enters., Inc. v. Grossmont Union High Sch. Dist.*, 39 Cal. 3d 878, 885 (1985); *Birkenfeld v. City of Berkeley*, 17 Cal. 3d 129, 140 (1976); *Carlin v. City of Palm Springs*, 14 Cal. App. 3d 706, 711 (1971).

<sup>iv</sup> *Miller v. Board of Pub. Works*, 195 Cal. 477, 485 (1925).

<sup>v</sup> *Birkenfeld v. City of Berkeley*, 17 Cal. 3d 129, 158 (1976). See *Consolidated Rock Prods. Co. v. City of Los Angeles*, 57 Cal. 2d 515, 522 (1962).

<sup>vi</sup> *Carlin v. City of Palm Springs*, 14 Cal. App. 3d 706, 711 (1971).

Police power is especially well established in enacting and enforcing land use laws. City and county land use authority does not rely on delegated general law of the state or federal government. Instead, state and federal laws are limitations on a city's or county's exercise of its police power.<sup>i</sup> To this end, local jurisdictions act with both police power and delegated authority to establish climate changes policies and regulations to reduce GHGs in general plans (GPs), climate action plans (CAPs), zoning, transit-oriented development regulations, carbon sequestration (including urban forestry), energy conservation actions through green building practices and reach codes, water conservation, and solid waste reduction. Land use authority is subject to the vested right doctrine<sup>ii</sup> and Subdivision Map Act<sup>iii</sup> that limits how a subsequent change in local law or the authority to impose conditions apply to a particular improvement to land or a vesting tentative map for subdivisions.

Local jurisdiction police power is also subject to state preemption. Examples include the California Energy Commission's (CEC) authority to site and license thermal power plants of 50 megawatts<sup>iv</sup> or more and energy storage resources of 20 MWs or more that discharge for at least two hours or more and will deliver net peak energy by October 31, 2021.<sup>v</sup> It is notable that the Governor may curtail local land use authority over siting and regional air quality regulation of these and other related energy resources, including emergency backup generation, when an emergency declaration is issued for a specified time period.<sup>vi</sup> Such declarations can suspend local and state laws by either establishing exclusive licensing authority that preempts or by expressly suspending air quality laws, the California Environmental Quality Act (CEQA), and the California Coastal Act (CAC). Emergency declarations may also have the effect of limiting judicial review of such licenses.

Local land use authority is generally concurrent to, and not preempted by, air quality authority law and regulation of air pollutants from stationary, nonvehicular source of emissions. Concurrent authority may allow local jurisdictions to further regulate air quality under its police power.<sup>vii</sup> It should be noted that there is no power granted to local air districts to infringe on an existing local jurisdiction's authority over land use (e.g., zoning).<sup>viii</sup>

Charter cities and counties act with more autonomy over governance decisions than common law cities and counties,<sup>ix</sup> however, all local jurisdictions are controlled and subject to general state law. Of the nineteen local governments in the San Diego region, there are eight charter cities<sup>x</sup> and the County of San Diego is a charter county. Notably, all cities act with a higher level of autonomy than the county because they are voluntarily formed and perform many essential services. Charter cities also act with

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<sup>i</sup> *DeVita v. County of Napa*, 9 Cal. 4th 763, 782 (1995); *Candid Enters., Inc. v. Grossmont Union High Sch. Dist.*, 39 Cal. 3d 878, 885 (1985).

<sup>ii</sup> *Avco Community Developers v. South Coast Reg'l Comm'n*, 17 Cal. 3d 785, 791 (1976), superseded by statute as stated in *Santa Margarita Area Residents Together v. San Luis Obispo County Bd. of Supervisors*, 84 Cal. 4th 221, 229 (2000).

<sup>iii</sup> See Government Code §§ 66410–66499.38; Government Code §§ 66474.2 & 66498.1(b).

<sup>iv</sup> See Public Resources Code §§ 25500 et seq.; See Public Resources Code §§ 25120 & 25123.

<sup>v</sup> See California Energy Commission Order No. 21-0908-1 (Adopted Sept. 8, 2021).

<sup>vi</sup> See Governor's July 30, 2021 [Proclamation of A State of Emergency](#) to address energy supply and demand issues; see U.S. Const. Amendment X; See California Emergency Services Act: Government Code §§ 8558, 8567, 8571, 8625, & 8627.

<sup>vii</sup> See Health & Safety Code §§ 39002 & 41508.

<sup>viii</sup> See Health & Safety Code §§ 40716(b) & 41015.

<sup>ix</sup> See Cal. Const. art. XI; See Government Code § 34871.

<sup>x</sup> Cities of Carlsbad, Chula Vista, Del Mar, El Cajon, Oceanside, San Diego, San Marcos, and Vista.

more autonomy than common law cities under the “home rule” power to govern matters of “municipal affairs.”<sup>i</sup> Charter counties exercise limited home rule authority.<sup>ii</sup> This power allows local laws to expand beyond state law requirements. However, the extent of home rule authority is a legal determination that depends on the specific charter and municipal code of individual charter jurisdiction, whether the exercised authority is for a municipal affair, and whether the matter is of statewide concern where it is the intent and purpose of the general laws to occupy the field to the exclusion of municipal regulation.<sup>iii</sup> Finally, because counties are the legal subdivision of the state, the state may delegate or rescind any delegated function of the state to a county.

Local jurisdictions also act with the authority to tax,<sup>iv</sup> issue bonds,<sup>v</sup> and impose fees, charges, and rates.<sup>vi</sup> This authority is derived from and limited by the California Constitution and statute, including requiring voter approval for taxes and bonds.<sup>vii</sup>

## B.2 Local Authority to Decarbonize Transportation

Transportation emissions may be reduced by regulating direct (e.g., tailpipe) emissions from vehicles, including by switching to low carbon fuels such as clean electricity, by changing land use patterns to reduce the distances needed to be traveled (e.g., reducing VMT and/or providing alternative transportation modes to single-occupant vehicles), and by designing communities to reduce system inefficiencies such as those caused by transportation congestion (e.g., synchronized traffic lights). The legal authority to regulate each type of transportation emissions is described below.

Local authority over transportation is rooted in land use authority over planning and development that determines where residents live and work. City and county land use authority does not rely on delegated general law of the state or federal government. Instead, state and federal laws are limitations on a city’s or county’s exercise of its police power.<sup>viii</sup> To this end, local jurisdictions act with both police

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<sup>i</sup> Cal. Const. art. XI, § 5.

<sup>ii</sup> Charter County limited “home rule” authority includes: 1) providing for election, compensation, terms, removal, and salary of the governing board; 2) for the election or appointment (except the sheriff, district attorney, and assessor who must be elected), compensation, terms, and removal of all county officers; 3) for the powers and duties of all officers; and for consolidation and segregation of county offices. It excludes additional authority over: 1) local regulations; 2) revenue-raising abilities; 3) budgetary decisions; or 4) intergovernmental relations.

<sup>iii</sup> See Cal. Const. art. XI, § 5, subd. (a).; See *Jackson v. City of Los Angeles*, 111 Cal. App. 4th 899 (2d Dist. 2003); See *City of Santa Clara v. Von Raesfeld*, 3 Cal. 3d 239 (1970); See *Baron v. City of Los Angeles*, 2 Cal. 3d 535 (1970); *Dairy Belle Farms v. Brock*, 97 Cal. App. 2d 146, 217 P.2d 704 (1st Dist. 1950); See *Wilkes v. City and County of San Francisco*, 44 Cal. App. 2d 393, (1st Dist. 1941); See *People ex rel. Scholler v. City of Long Beach*, 155 Cal. 604 (1909); See *Galli v. Brown*, 110 Cal. App. 2d 764 (1st Dist. 1952); See *Pearson v. Los Angeles County*, 49 Cal. 2d 523 (1957).

<sup>iv</sup> Cal. Const. art. XIIC, § 2(a) & (d).

<sup>v</sup> See generally Municipal Bond Act of 1901 (Government Code §§ 43600–43638) & Government Code §§ 50665.1–50670.

<sup>vi</sup> Cal. Const. art. XI, § 7; see also Revenue Bond Act of 1941 (Government Code §§ 54300 et seq., Uniform Standby Charge Procedure Act (Government Code §§ 54984 et seq.); Government Code § 66013; Government Code § 66014; Health & Safety Code §§ 5471 & 5473; See generally Government Code § 37112.

<sup>vii</sup> See generally Cal. Const. art. XIII A, XIIC, & XIID; see Bradley-Burns Uniform Local Sales and Use Tax Law (Revenue & Tax Code §§ 7200 et seq.).

<sup>viii</sup> *DeVita v. County of Napa*, 9 Cal. 4th 763, 782 (1995); *Candid Enters., Inc. v. Grossmont Union High Sch. Dist.*, 39

power and delegated authority to establish climate changes policies and regulations to reduce GHGs from transportation in GPs, CAPs, zoning, and transit-oriented development regulations. Land use authority is subject to the vested right doctrine<sup>i</sup> and Subdivision Map Act<sup>ii</sup> that limit how a subsequent change in local law or the authority to impose conditions apply to a particular improvement to land or a vesting tentative map for subdivisions.

State law creates planning requirements that do not preempt local land use authority. For example, state law directs local jurisdictions to identify and mitigate GHG emissions that are found to have significant environmental impacts under CEQA for projects or GPs and to address infill and reduce vehicle miles traveled (VMT) under SB 743 (Steinberg, Chapter 386, Statutes of 2013). State law also provides CEQA streamlining benefits for implementing sustainable community strategies (SCS) to achieve regional GHG reduction targets under SB 375 (Steinberg, Chapter 728, Statutes of 2008). However, federal and state preemption exists regarding mobile sources of emissions (e.g., vehicles).

### B.2.1 Authority to Reduce VMT through Land Use Planning and Related Transportation GHG Emissions

The following describes the mileage of public roads in San Diego County by regulating authority to provide background on how existing authority may apply to which roads in the region. The discussion then turns to land use planning authority and requirements.

**Table B1** San Diego County Public Road Mileages and Resulting Authority  
2018 Mileage of Maintained Public Roads in Each County by Type of Jurisdiction

COUNTY	CITY	COUNTY	STATE	FEDERAL	OTHER STATE	TOTAL
	ROADS	ROADS	HIGHWAY	AGENCIES	AGENCIES	
SAN DIEGO	6,085	1,953	614	399	53	9,104
<b>STATEWIDE TOTAL</b>	<b>80,162</b>	<b>71,650</b>	<b>15,091</b>	<b>7,781</b>	<b>905</b>	<b>175,589</b>
SAN DIEGO	67%	21%	7%	4%	0.6%	100%
<b>STATEWIDE TOTAL</b>	<b>46%</b>	<b>41%</b>	<b>9%</b>	<b>4%</b>	<b>0.5%</b>	<b>100%</b>

There is limited federal preemption with regards to local land use, but there may be federal preemption for certain transportation land use actions. For example, congestion pricing and low emission zones are local means to reduce VMT on city and county roads under existing local authority,<sup>iii</sup> but there is potential federal preemption under the Energy Policy Conservation Act (EPCA), Clean Air Act (CAA), and Federal Aviation Administration Authorization Act (FAAAA)<sup>iv</sup> that must be evaluated and resolved.<sup>v</sup> Additionally, tolls on “federal-aid highways” would require compliance with Federal United States Code section 23 related to highways and approval from the Federal Highway Administration. SANDAG

Cal. 3d 878, 885 (1985).

<sup>i</sup> *Avco Community Developers v. South Coast Reg'l Comm'n*, 17 Cal. 3d 785, 791 (1976), superseded by statute as stated in *Santa Margarita Area Residents Together v. San Luis Obispo County Bd. of Supervisors*, 84 Cal. App. 4th 221, 229 (2000).

<sup>ii</sup> See Government Code §§ 66410–66499.38; Government Code §§ 66474.2 & 66498.1(b).

<sup>iii</sup> See Streets and Highways Code § 900 et seq. & § 1800-1967.11 et seq.

<sup>iv</sup> 49 U.S.C.A. §§ 14501(c)(1) & (c)(2)(A)

<sup>v</sup> Turner, Amy E. and Burger, Michael, "Cities Climate Law: A Legal Framework for Local Action in the U.S." (2021). Sabin Center for Climate Change Law. p. 37: [https://scholarship.law.columbia.edu/sabin\\_climate\\_change/2](https://scholarship.law.columbia.edu/sabin_climate_change/2).

operates high-occupancy toll (HOT) lanes along I-15 under this type of federal approval.<sup>i</sup>

State authority extends over state highways under Streets and Highway Code §§ 250 et seq., which includes acquisition of land, construction of roads, and care to preserve value and utility of the road. State law also authorizes the creation of toll bridges, roads, and ferries.<sup>ii</sup> It is unclear whether the state may create congestion pricing or low emission zones in light of EPCA, CAA, and FAAAA preemption issues. California is also exploring piloting a road user mileage-based fee under SB 339 (Wiener, Chapter 308, Statutes of 2021) that may offer additional means of addressing GHG emissions. Whether there is applicability to the local level will need to be further examined.

Local governments have been granted inherent police powers under the California constitution (California Constitution art. XI, § 7) with primary local control over local land use, including local<sup>iii</sup> and county roads.<sup>iv</sup> The primacy of city and county's control over land use, therefore, does not rely on delegated general law of the state or federal government. Instead, state and federal laws act only as minimal limitations on a city or county's exercise of its police power.<sup>v</sup>

To this end, local jurisdictions may establish climate change policies and regulations to reduce GHGs from transportation in GPs, CAPs, zoning, transit-oriented development regulations, or other types of plans (e.g., Active Transport Plans). However, land use authority is subject to the vested right doctrine<sup>vi</sup> and Subdivision Map Act<sup>vii</sup> that limit how a subsequent change in local law or the authority to impose conditions apply to a particular improvement to land or a vesting tentative map for subdivisions. State law directs local jurisdictions to mitigate GHG emissions that are found to have significant environmental impacts under CEQA for projects or GPs, to address infill and reduce VMT under SB 743 (Steinberg, Chapter 386, Statutes of 2013), and to incorporate Complete Streets plans<sup>viii</sup> in major revisions to a city or county Circulation Element that include all roadway users (e.g., pedestrians and bicyclists). State law provides grant funding under the Active Transportation Program to mitigate the impact of proposed transportation facilities or to enhance the environment, where such actions would otherwise be beyond the authority of the lead agency.<sup>ix</sup> State law also creates a CEQA streamlining benefit to implementing SCS to achieve regional GHG reduction targets under SB 375 (Steinberg, Chapter 728, Statutes of 2008). These planning requirements do not preempt local land use authority but are instead requirements that inform land use decisions.

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<sup>i</sup> See 23 U.S.C.A. § 166.

<sup>ii</sup> See Streets and Highways Code § 30000 et seq.

<sup>iii</sup> See Streets and Highways Code § 1800 et seq.

<sup>iv</sup> See Streets and Highways Code § 900 et seq.

<sup>v</sup> *DeVita v County of Napa*, 9 Cal. 4th 763, 782 (1995); *Candid Enters., Inc. v. Grossmont Union High Sch. Dist.*, 39 Cal. 3d 878, 885 (1985).

<sup>vi</sup> *Avco Community Developers v. South Coast Reg'l Comm'n*, 17 Cal. 3d 785, 791 (1976), superseded by statute as stated in *Santa Margarita Area Residents Together v. San Luis Obispo County Bd. of Supervisors*, 84 Cal. App. 4th 221, 229 (2000).

<sup>vii</sup> See Government Code §§ 66410–66499.38; Government Code §§ 66474.2 & 66498.1(b).

<sup>viii</sup> Government Code § 65302 (b)(2)(A)-(B).

<sup>ix</sup> Note: State law helps to fund Complete Street plans and other active transport activities and plans with funds appropriated through the Active Transport Program; See SB 99 (Committee on Budget and Fiscal Review, Chapter 359, Statutes of 2013) and AB 101 (Committee on Budget, Chapter 354, Statutes of 2013); See also SANDAG Active Transportation Program Funding:

<https://www.sandag.org/index.asp?classid=34&projectid=483&fuseaction=projects.detail>.

State and regional entity authority to preempt local land use authority is limited in terms of transportation land use planning.<sup>i</sup> At the regional level, SANDAG is responsible for, among other things: 1) regional transportation planning, resource allocation, project development (excluding airport and Port of San Diego services); 2) preparing a Regional Housing Needs Assessment; and 3) developing a Regional Comprehensive Plan to integrate transportation and local land use plans. SANDAG, as the region's metropolitan planning organization (MPO), is required to prepare and adopt a regional transportation plan (RTP) under federal law<sup>ii</sup> to receive federal funding. Under state law, the RTP must include a long-range SCS per SB 375 (2008) to achieve CARB's per capita regional GHG reduction targets for 2020 and 2035.<sup>iii</sup> CARB's targets call for the San Diego region to reduce GHG emissions by 15% per capita by 2020 and 19% per capita by 2035 from a 2005 baseline.<sup>iv</sup> SANDAG's SCS must feasibly achieve the GHG reduction goals based on anticipated development patterns pursuant to local plans, or it must prepare an alternative planning strategy showing how the regional targets can be met through alternative development patterns, infrastructure, or additional transportation measures or policies.<sup>v</sup> CARB must approve SCS or an alternative development plan to determine if the relevant plan would achieve the regional emission reduction target. SANDAG submitted and received approval of its most recent RTP for federal funding purposes in 2019. SANDAG is currently developing a 2050 Regional Plan that combines the RTP, the SCS, and a Regional Comprehensive Plan and which aligns the region's transportation, housing, and land use around CARB GHG reduction targets. These CARB GHG reduction targets from the RTP are also required to be addressed in SANDAG's 2050 Regional Plan, recently adopted on December 10, 2021, and the Regional Plan must include strategies that provide for mode shift to public transit per AB 805 (Gonzalez Fletcher, Chapter 658, Statutes of 2017).

Notably, the SCS expressly does not regulate land use decisions nor create state approval authority for local land use decisions, including consistency between the RTP and GPs, or abrogating any existing vested right created by statute or common law.<sup>vi</sup> The primary way that the SCS impacts land use development is through CEQA streamlining. If CARB approves the SCS, then that approved SCS may serve as the basis for CEQA streamlining of certain residential, transit priority (including residential), and infill projects that are consistent with the SCS.<sup>vii</sup>

SB 743 (2013) required the Governor's Office of Planning and Research to create criteria for determining the significance of transportation impacts of projects within and outside of transit priority areas that better align with California's GHG goals.<sup>viii</sup> The Governor's Office of Planning and Research (OPR) amended the CEQA Guidelines to require VMT impacts of projects as the criteria to measure transportation environmental impacts starting on July 1, 2020. Lead agencies still exercise discretionary

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<sup>i</sup> See Streets and Highways Code § 50 et seq.

<sup>ii</sup> 42 U.S.C. § 7506(c); 49 U.S.C. § 5303; 23 C.F.R. Parts 450 & 771; 49 C.F.R. Part 613.

<sup>iii</sup> See Government Code § 65080.

<sup>iv</sup> See California Resources Board (CARB) SB 375 Regional Plan Climate Targets by MPO: <https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plan-targets> ; Note: Per capita GHG emissions include all wells-to-wheels emissions per Appendix F, Final Environmental Analysis, Prepared for the Proposed Update to SB 375 GHG Emissions Reduction Targets (May 9, 2018), p. 69: [https://ww2.arb.ca.gov/sites/default/files/2020-06/SB375\\_Final\\_Target\\_Staff\\_Report\\_%202018\\_AppendixF.pdf](https://ww2.arb.ca.gov/sites/default/files/2020-06/SB375_Final_Target_Staff_Report_%202018_AppendixF.pdf).

<sup>v</sup> Government Code § 65080(b)(2)(B).

<sup>vi</sup> Government Code § 65080(b)(2)(K).

<sup>vii</sup> See Public Resources Code §§ 21155.1, 21094.5, 21159.28, CEQA Guidelines § 15183.3, CEQA Guidelines Appendixes M and N; see also SB 743 (Steinberg, Chapter 386, Statutes of 2013) and Public Resources Code § 21155.4.

<sup>viii</sup> Public Resources Code § 21099(b).

authority over which VMT methods to adopt and how to implement the chosen methodology by project type (e.g., residential, commercial, industrial, etc.).<sup>i</sup> The methodology chosen affects which projects are either exempt or are found to be above or below the environmental impact threshold of significance. This determines directly which projects require transportation impact GHG mitigation and may allow a local jurisdiction to prioritize infill and transit-oriented projects.

Under CEQA, local jurisdictions as lead agencies act with discretion in determining thresholds of significance to evaluate significant environmental impacts and consequent mitigation from transportation.<sup>ii</sup> This may include adopting specific GHG thresholds of significance for the specific jurisdiction, using compliance with California climate policy such as AB 32 (Núñez, Chapter 488, Statutes of 2006) to determine a threshold of significance, or adopting an air pollution control district recommended threshold for transportation GHG emission.<sup>iii</sup> The threshold of significant controls impact analysis and mitigation and drives the use of overriding considerations where impacts cannot be mitigated below the threshold of significance or where mitigation is infeasible.

Recently, the Bay Area Air Quality Management District. (BAAQMD) adopted the following thresholds of significance for both land use projects and land use development plans that lead agency may voluntary adopt:

Land Use Project (Must Include A or B):

A. Project must include, at a minimum, the following design elements:

a) Buildings

- i) The project will not include natural gas appliances or natural gas plumbing (in both residential and nonresidential development).
- ii) The project will not result in any wasteful, inefficient, or unnecessary energy usage as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines

b) Transportation

- i) Achieve a reduction in project-generated vehicle miles traveled (VMT) below the regional average consistent with the current version of the California Climate Change Scoping Plan (currently 15 percent) or meet a locally adopted Senate Bill 743 VMT target, reflecting the recommendations provided in the Governor's Office of Planning and Research's Technical Advisory on Evaluating Transportation Impacts in CEQA:
    - (1) Residential projects: 15 percent below the existing VMT per capita
    - (2) Office projects: 15 percent below the existing VMT per employee
    - (3) Retail projects: no net increase in existing VMT
  - ii) Achieve compliance with off-street electric vehicle requirements in the most recently adopted version of CALGreen Tier 2.
- B. Projects must be consistent with a local GHG reduction strategy that meets the criteria under State CEQA Guidelines Section 15183.5(b)

Land-use Development Plans (Must include A or B):

A. Meet the State's goals to reduce emissions to 40 percent below 1990 levels by 2030 and carbon neutrality by 2045; or

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<sup>i</sup> See Governor's Office of Planning and Research: Transportation Impacts SB 743 (Last visited on October 28, 2021): <https://opr.ca.gov/ceqa/sb-743/>.

<sup>ii</sup> See 14 C.C.R. § 15064.4.

<sup>iii</sup> See *Center for Biological Diversity v. Department of Fish & Wildlife*, 62 Cal. 4th 204, 230 (2015).



- B. Be consistent with a local GHG reduction strategy that meets the criteria under State CEQA Guidelines Section 15183.5(b).<sup>i</sup>

BAAQMD is further developing guidance around these thresholds and will also return to its board in late 2022 with any recommendations on thresholds of significance for climate impacts from stationary sources upon completing additional evaluation.

### **B.2.2 Air District Indirect Emissions and Local Jurisdiction Concurrent Authority**

Stationary source direct air pollution is controlled by federal CAA and California air quality laws. Local land use authority is not preemptive by and is generally concurrent to air quality authority statutes and regulations that are used by the San Diego County Air Pollution Control District (SD APCD) to regulate indirect transportation air pollutants from a stationary, nonvehicular source of emissions (e.g., transportation emissions related to buildings). Concurrent authority may allow a local jurisdiction to further regulate air quality under its police power,<sup>ii</sup> although local jurisdictions would need to develop internal technical expertise by hiring staff and avoid state and federal preemption. It should be noted that there is no statutory power granted to SD APCD to infringe on the existing local government authority over land use with regards to air quality regulation (e.g., zoning).<sup>iii</sup>

The SD APCD is expressly authorized to “consider indirect source rule to address pollution from mobile sources that is associated with stationary sources, such as ports, warehouses, and distribution centers,”<sup>iv</sup> but has not done so to date but may do so in the future. The SD APCD may also regulate indirect emissions from transportation to reduce emissions from transportation and areawide emission sources to achieve and maintain state ambient air quality standards.<sup>v</sup> This allows regulation of direct and indirect emissions sources, including large office buildings and large residential and commercial developments. In certain instances, a permit may be required to carry out activities that emit air containment or pollutants. However, there is uncertainty over jurisdiction and how to interpret this authority for indirect emission.<sup>vi</sup> Additionally, existing authority is used by other air districts to create a voluntary GHG reduction credit generation and certification program to help address emissions of this type. Examples exist of creating a voluntary program for transportation emissions reductions at this time that may be applicable to the SD APCD (see Section 4.1 below).<sup>vii</sup>

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<sup>i</sup> Bay Area Air Quality Management District CEQA Threshold for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans, Board of Directors Meeting Agenda Item 15 (Adopted April 20, 2022), p. 152–221: [https://www.baaqmd.gov/~/media/files/board-of-directors/2022/bod\\_agenda\\_042022\\_op\\_rv-pdf.pdf?a=en&rev=c8360ec141654c22b244e5e07f8b88b4](https://www.baaqmd.gov/~/media/files/board-of-directors/2022/bod_agenda_042022_op_rv-pdf.pdf?a=en&rev=c8360ec141654c22b244e5e07f8b88b4).

<sup>ii</sup> See Health & Safety Code §§ 39002, 39037, & 41508.

<sup>iii</sup> See Health & Safety Code §§ 40716(b) & 41015.

<sup>iv</sup> See Health & Safety Code § 40100.6.5.

<sup>v</sup> Health & Safety Code §§ 40910, 40716–40717.

<sup>vi</sup> Health & Safety Code §§ 42300–42339; See Health & Safety Code §§ 40716(b) & 41015 (sometimes interpreted as not prohibiting parallel permitting systems for indirect sources); See 76 Ops Call Atty Gen 11 (1993) (Attorney General opinion that authority of an APCD or AQMD does not extend to requiring permits for indirect sources; Note: Attorney General opinions are nonbinding).

<sup>vii</sup> See Sacramento Metropolitan AQMD Rule 206 Mobile and Transportation Source Emission Reduction Credits (Adopted December 15, 1992; Amended December 5, 1996): <http://www.airquality.org/ProgramCoordination/Documents/rule206.pdf>.

Air pollution control district authority exists to address indirect emissions subject to expressed limits. Health and Safety Code §§ 40716 and 40717 authorizes regulations to reduce VMT and allows the enforcement of transportation control measures in non-attainment areas by SD APCD and SANDAG. Health and Safety Code section 40918 allows for regulation where there is moderate air pollution. This may include transportation control measures to reduce VMT, area wide source control programs, and indirect source control programs.

In this respect, ozone (O<sub>3</sub>) is the only air pollutant with nonattainment status in the San Diego region directly regulated at the local level.<sup>i</sup> Regional O<sub>3</sub> is now considered severe as of July 2, 2021, under the 2015 Eight-Hour Ozone National Ambient Air Quality Standards (NAAQS) by U.S. EPA. Under the previous moderate designation, the current<sup>ii</sup> and previous<sup>iii</sup> Regional Transportation Plan and SD APCD Plan for Attaining Air Quality Standards of Ozone in San Diego County showed implementation surpassed for transportation control measures and indirect regulation of O<sub>3</sub> with all actions and measures implemented.<sup>iv</sup> It is possible that this may be updated to address the recent severe nonattainment designation that now sets August 3, 2033, as the new attainment date.

The following is a non-exhaustive list of additional restrictions on SD APCD and local jurisdiction authority with regards to transportation emissions:

- SD APCD is prohibited from requiring an employee trip reduction program unless required by federal law;<sup>v</sup>
- SD APCD and regional and local jurisdictions are generally prohibited from requiring that private parties impose parking charges, restrict parking, or impose measures to reduce retail shopping trips;<sup>vi</sup>
- SD APCD or its delegate is limited in imposing transport control measures on event centers;<sup>vii</sup>
- SD APCD is prohibited from adopting new or more stringent control measures with respect to pollutants where standards have not been violated unless it prepares an analysis of the costs and benefits of achieving attainment;<sup>viii</sup> and
- SD APCD is prohibited from adopting or enforcing a regulation requiring fleet operators to purchase or lease only those vehicles that meet state motor vehicle pollutant standards,<sup>ix</sup> but under its

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<sup>i</sup> Note: Nonattainment exists in the region for PM<sub>2.5</sub> and PM<sub>10</sub> under 17 C.C.R. §§ 60205 & 60210, but these are directly regulated by CARB with some local enforcement implemented by SD APCD; See SD APCD's Mobile Source Program: <https://www.sdapcd.org/content/sdapcd/compliance/compliance-requirements/mobile-source-program.html>.

<sup>ii</sup> SANDAG San Diego Forward, Federal Regional Transportation Plan, Appendix B Air Quality Planning and Transportation Conformity), p. 22 (Adopted October 25, 2019 by SANDAG; Adopted November 15, 2019 by U.S. DOT: [https://sdforward.com/docs/default-source/2019federalrtp/draftfinal/app-b---air-quality-planning-and-transportation-conformity.pdf?sfvrsn=1a47ff65\\_2](https://sdforward.com/docs/default-source/2019federalrtp/draftfinal/app-b---air-quality-planning-and-transportation-conformity.pdf?sfvrsn=1a47ff65_2).

<sup>iii</sup> SANDAG Federal Regional Transportation Plan for 2050, Appendix B Air Quality Planning and Transportation Conformity (2011), p. B-16.

<sup>iv</sup> SD APCD Plan for Attaining National Air Quality Standards for Ozone in San Diego County, Attachment H (October 2020), p. H-1 (p.338): [https://www.sdapcd.org/content/dam/sdapcd/documents/grants/planning/Att%20A%20\(Attainment%20Plan\)\\_ws.pdf](https://www.sdapcd.org/content/dam/sdapcd/documents/grants/planning/Att%20A%20(Attainment%20Plan)_ws.pdf).

<sup>v</sup> Health & Safety Code § 40717.9 (a).

<sup>vi</sup> Health & Safety Code § 40717.6.

<sup>vii</sup> Health & Safety Code § 40717.8.

<sup>viii</sup> Health & Safety Code § 40930.

<sup>ix</sup> See *Engine Mfrs. Ass'n v. South Coast Air Quality Mgmt. Dist.*, 541 U.S. 246 (2004).

authority to regulate indirect sources of air pollution may regulate emissions from groups of non-road construction equipment at development sites (Note: non-road construction equipment is included as “off-road” emissions in regional and local GHG inventories).<sup>i</sup>

### B.2.3 Legal Authority to Regulate Direct Emissions from Vehicles

Federal and state law and regulation preempt local jurisdictions from regulating GHG emissions directly from on-road and off-road mobile sources. The federal Energy Policy & Conservation Act (EPCA) preempts California or a local jurisdiction from setting fuel economy standards or average fuel economy standards for automobiles.<sup>ii</sup> Several federal courts have held that local jurisdictions are preempted under the EPCA from requiring clean energy technology for certain classes of vehicles (e.g., hybrid taxis).<sup>iii</sup> Direct tailpipe GHG emissions are also regulated by the U.S. EPA under the CAA Section 202.<sup>iv</sup> U.S. EPA and Department of Transportation (DOT) National Highway Transportation Safety Administration (NHTSA) act with concurrent jurisdiction to regulate GHGs and fuel economy standards for light-duty and heavy-duty vehicles under the CAA.

Through this concurrent jurisdiction, the U.S. EPA and NHTSA have promulgated fuel economy standards with GHG tailpipe emissions standards for specified model years. Consequently, federal preemption exists under NHTSA’s Corporate Average Fuel Economy (CAFE)<sup>v</sup> standards for passenger cars and light-duty truck models (model years 2017–2021 and 2021–2026<sup>vi</sup>), medium-duty vehicles (model years 2014–2018), and heavy-duty vehicles (model years 2014–2018<sup>vii</sup> and 2018–2027 (currently stayed and pending proposal to withdraw<sup>viii</sup>)).

California uses delegated federal authority to enforce more stringent emission standards under its California State Implementation Plan (SIP) for new vehicles using the CAA Section 209 waiver provision. California, through CARB, regulates light-duty vehicles under the Advanced Clean Cars (ACC) program

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<sup>i</sup> See *National Ass'n of Home Builders v. San Joaquin Valley Unified Air Pollution Control Dist.*, 627 F.3d 730 (9th Cir 2010).

<sup>ii</sup> 49 U.S.C.A § 32919(a).

<sup>iii</sup> *Metro. Taxicab Bd. of Trade v. City of New York*, 615 F.3d 152, 157 (2d Cir. 2010), *cert. denied*, 562 U.S. 1264 (2011); *Ophir v. City of Boston*, 647 F.Supp. 2d 86, 94 (D. Mass. 2009).

<sup>iv</sup> See Revised 2023 and Later Model Year Light Duty Vehicle Greenhouse Gas Emission Standards (Model Years 2023–2024), Final Rule Docket No. EPA-HQ-OAR-2021-0208, 40 C.F.R Part 19, 86, 523, 600, 1066, & 1867: <https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-revise-existing-national-ghg-emissions>.

<sup>v</sup> See NHTSA: Corporate Average Fuel Economy (Last visited October 29, 2021): <https://www.nhtsa.gov/laws-regulations/corporate-average-fuel-economy>.

<sup>vi</sup> 40 CFR Parts 531, 531.5(d) and 533; Note: NHTSA proposed new CAFE rules for model years 2024–2026 on August 10, 2021: DOT, NHTSA, 49 CFR Parts 531, 533, 536, and 537, Docket No. NHTSA-2021-0053, RIN 2127-AM34, Proposed Rulemaking: <https://www.govinfo.gov/content/pkg/FR-2021-09-03/pdf/2021-17496.pdf>.

<sup>vii</sup> 40 CFR Parts 85, 86, 600, 1033, 1036, 1037, 1039, 1065, 1066, and 1068 (U.S. EPA) and 40 CFR Parts 523, 534, and 535 (NHTSA); partially withdrawn in 2013 under 40 CFR Part 1037, 1039, 1042, and 1068 (U.S. EPA) and 40 CFR Parts 535 (NHTSA).

<sup>viii</sup> See Final Rule for Phase 2 fuel efficiency and GHG emissions standards for medium- & heavy-duty vehicles, MY2018–2027 is currently stayed pursuant to an order of the United States Court of Appeals for the District of Columbia Circuit issued on September 29, 2020 in Case No. 16-1430; NHTSA proposed to repeal the stayed SAFE I rule on April 22, 2021: DOT, NHTSA, 49 CFR Parts 531 and 533, Docket No. NHTSA-2021-0030, RIN 21217-AM33, CAFE Preemption, Notice of Proposed Rule Making: [https://www.nhtsa.gov/sites/nhtsa.gov/files/2021-04/cafe\\_preemption\\_nprm\\_04222021\\_1\\_0.pdf](https://www.nhtsa.gov/sites/nhtsa.gov/files/2021-04/cafe_preemption_nprm_04222021_1_0.pdf).

with recent action including adopting GHG standards for model years 2022–2025, requiring zero emission vehicles (ZEV) be developed and sold by manufacturers, developing regulations for model years 2026 and beyond (Advanced Clean Cars II<sup>i</sup> and LEV IV), and enforcing particulate matter standards.<sup>ii</sup> CARB approved its funding plan for the Fiscal Year 2021–2022 on November 19, 2021; allocating \$675 million to light-duty related incentives, including \$150 million for equity programs (see programs below). Notably, the CAA preempts the SD APCD from adopting or enforcing any state or local standard relating to the control of emissions from new motor vehicles or motor vehicle engines.<sup>iii</sup>

It is unclear whether local jurisdiction police power or delegated permit, fees, rules, and regulations under California Public Utilities Code § 5371.4 (f)–(g) related to city and counties may allow for the acceleration of the reduction targets and goals for transportation network companies (TNCs). TNCs are regulated under SB 1014 (Skinner, Chapter 269, Statutes of 2018), with CARB mandated to establish GHG emission reduction targets, goals, and baselines that are then implemented by the California Public Utilities Commission (CPUC) to reduce GHG emission per passenger-mile starting in 2023 as part of the CPUC’s regulation of TNCs as charter-party carriers.<sup>iv</sup> Additionally, the San Diego County Regional Airport Authority (SDCRAA) is authorized by the CPUC to directly regulate TNCs at its airports, which may allow further regulation of GHG emissions from TNC related trips either through these rules,<sup>v</sup> its Clean Vehicle Conversion Incentive Program,<sup>vi</sup> or through its local police and land use authority<sup>vii</sup> related to environmental impacts for current and future construction, which is subject to federal preemption over airport operations and review under National Environmental Protection Act (NEPA).<sup>viii</sup>

In terms of medium- and heavy-duty vehicles, there are a wide range of regulations for on-road vehicles that include prohibitions on diesel idling for heavy-duty long haul trucks<sup>ix</sup> and school buses,<sup>x</sup> the LEV III

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<sup>i</sup> See CARB Public Workshop on Advanced Clean Cars II, Draft Regulatory Language for ACC II (October 13, 2021).

<sup>ii</sup> See Low-Emission Vehicle (LEV) Regulation, LEV III Criteria & LEV III GHG, ZEV Regulation, and ACC II & LEV IV; see 13 California Code of Regulations (C.C.R.) § 1360 et seq.

<sup>iii</sup> 42 U.S.C.A. § 7543 (a); *Engine Mfrs. Ass’n v. South Coast Air Quality Mgmt. Dist.*, 541 U.S. 246 (2004).

<sup>iv</sup> See Cal. Const. art. XII; See California Passenger Charter-party Carriers’ Act (California Public Utilities Code §§ 5351 et seq.); See California Public Utilities Commission Rulemaking R.12-12-011 & Decision D.13-09-045, Order Instituting Rulemaking on Regulations Relating to Passenger Carriers, Ridesharing, and New Online-Enabled Transportation Services (2013); See California Public Utilities Commission General Order 157-E (Effective October 31, 2019): <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M322/K150/322150628.pdf>.

<sup>v</sup> California Public Utilities Commission D.13-09-045, Decision Adopting Rules and Regulation to Protect Public Safety While Allowing New Entrants To the Transportation Industry (September 23, 2013), p. 33:

<https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M077/K192/77192335.PDF>; See San Diego County Regional Airport Authority (SDCRAA) Rules and Regulations, V7.0, § 5.4 (July 2019): <https://www.san.org/DesktopModules/Bring2mind/DMX/API/Entries/Download?EntryId=7364&Command=CoreDownload&language=en-US&PortalId=0&TabId=585>.

<sup>vi</sup> See SDCRAA Clean Transportation Plan (July 2020), p. 28 & 47:

[https://www.san.org/Portals/0/Documents/Environmental/2020-Plans/2020\\_Clean-Transportation-Plan-min.pdf](https://www.san.org/Portals/0/Documents/Environmental/2020-Plans/2020_Clean-Transportation-Plan-min.pdf).

<sup>vii</sup> See SDCRAA Carbon Neutrality Plan (July 2020), p. 51.

<sup>viii</sup> See U.S. Department of Transportation Federal Aviation Administration, Western-Pacific Region, Finding of No Significant Impact and Record of Decision, Proposed Airfield Improvements and Terminal 1 Replacement Project, San Diego International Airport, San Diego, San Diego County, California (October 21, 2021), p. 8:

<https://www.san.org/DesktopModules/Bring2mind/DMX/API/Entries/Download?Command=CoreDownload&EntryId=14744&language=en-US&PortalId=0&TabId=225>.

<sup>ix</sup> 13 C.C.R. § 2485.

<sup>x</sup> 13 C.C.R. § 2480.

standards as part of the ACC program,<sup>i</sup> GHG emission control through Phase 1 and Phase 2 GHG standards,<sup>ii</sup> the Advanced Clean Trucks regulation,<sup>iii</sup> Truck and Bus Regulation,<sup>iv</sup> Tractor-Trailer Greenhouse Gas (TTGGH) regulation, the Heavy-Duty Omnibus Regulation,<sup>v</sup> and other regulations specific to class or use case.<sup>vi</sup> These regulations will continue to change to address the executive orders and to more directly regulate GHG emissions out to 2035. CARB approved its funding plan for the Fiscal Year 2021–2022 on November 19, 2021; allocating \$678.14 million to heavy-duty related incentive programs (see more detail on these programs below).

Regulation of non-road and off-road engines includes both regulations from U.S. EPA and CARB applied to specific types and uses of vehicles and engines (Note: off-road is omitted from the policy opportunity section of Chapter 8). Notably, most of these regulations do not address GHG emissions directly or regulate GHG emissions indirectly by regulating other pollutants. Zero emission technology also may not be feasible for off-road engines leaving combustion standards as the best means to reduce emissions. CARB approved its funding plan for the Fiscal Year 2021–2022 on November 19, 2021, allocating specifically \$194.5 million to the Clean Off-Road Equipment Vouchers (CORE) program with additional supports of these regulations by other allocations to heavy-duty vehicle programs.

Local authority may exist to regulate certain small off-road engines, but further research is required. Existing regulations apply to small off-road engines (excluding engines under 25 horsepower (hp)),<sup>vii</sup> off-highway recreational vehicles and engines,<sup>viii</sup> off-road compression-ignition engines and equipment,<sup>ix</sup> SIP credit for mobile agricultural equipment in the San Joaquin Valley APCD,<sup>x</sup> off-road large spark-ignition engines,<sup>xi</sup> spark-ignition marine engines,<sup>xii</sup> in-use off-road diesel-fueled fleets (Tier 4 regulations<sup>xiii</sup> (U.S. EPA preempts emission standards for new farm and construction equipment with engines less than 175 HP (130 kW)<sup>xiv</sup>)) with Tier 5 regulation stakeholder engagement proposals just introduced<sup>xv</sup>), portable

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<sup>i</sup> 13 C.C.R. § 1956.8.

<sup>ii</sup> 13 C.C.R. §§ 1963 et. seq.

<sup>iii</sup> See Truck and Bus Regulation information: <https://ww2.arb.ca.gov/our-work/programs/truck-and-bus-regulation>.

<sup>iv</sup> See TTGGH Regulation Information: <https://ww2.arb.ca.gov/our-work/programs/ttghg>.

<sup>v</sup> See Heavy-Duty OBD Regulation and Rulemaking: <https://ww2.arb.ca.gov/resources/documents/heavy-duty-obd-regulations-and-rulemaking>.

<sup>vi</sup> See Zero-Emission Transport Refrigeration Units Regulation: 13 C.C.R §§ 2477.1–2477.6; 13 C.C.R § 2477.13; 13 C.C.R §§ 2477.17–2477.19; see Zero-Emission Powertrain Certification Regulation: 13 C.C.R § 1956.8; see Zero-Emission Drayage Truck Regulation: 13 C.C.R § 2027.

<sup>vii</sup> 13 C.C.R. §§ 2400–2409.

<sup>viii</sup> 13 C.C.R. §§ 2410–2419.4.

<sup>ix</sup> 13 C.C.R. §§ 2420–2427.

<sup>x</sup> 13 C.C.R. §§ 2428.

<sup>xi</sup> 13 C.C.R. §§ 2430–2439.

<sup>xii</sup> 13 C.C.R. §§ 2440–2448.

<sup>xiii</sup> 13 C.C.R. §§ 2449–2449.3 & Appendix A; See also CARB Non-Road Diesel Engine Certification Tier Chart (Last accessed on November 1, 2021): [https://ww2.arb.ca.gov/resources/documents/non-road-diesel-engine-certification-tier-chart?utm\\_medium=email&utm\\_source=govdelivery](https://ww2.arb.ca.gov/resources/documents/non-road-diesel-engine-certification-tier-chart?utm_medium=email&utm_source=govdelivery).

<sup>xiv</sup> See SORE – List to Determine Preempt Off-Road Applications (Last accessed November 1, 2021): <https://ww2.arb.ca.gov/sore-list-determine-preempt-road-applications>.

<sup>xv</sup> See CARB, Potential Amendments to the Diesel Engine Off-Road Emission Standards: Tier 5 Criterial Pollutants and CO2 Standards (last access on November 1, 2021): [https://ww2.arb.ca.gov/our-work/programs/tier5?utm\\_medium=email&utm\\_source=govdelivery](https://ww2.arb.ca.gov/our-work/programs/tier5?utm_medium=email&utm_source=govdelivery); see CARB November 3, 2021 Workshop to Discuss Potential Amendments to the Diesel Engine Off-Road Emission Standards: Tier 5 Criterial Pollutants and

engine and equipment<sup>i</sup> (including fuel containers and spouts<sup>ii</sup>), portable outboard marine tanks and components<sup>iii</sup>, aftermarket off-road parts certification procedures<sup>iv</sup>, and off-road airborne toxic control measures for in-use diesel-fueled transport refrigeration units (TRU) and TRU generator sets (including facilities where TRUs operate).<sup>v</sup> Additional off-road regulations include evaporative emission requirements for off-road equipment<sup>vi</sup>, large spark-ignition (LSI) engine fleet requirements,<sup>vii</sup> regulation of retrofits to control emission from off-road large spark-ignition engines,<sup>viii</sup> and evaporative emission requirements for spark-ignition marine watercraft with gasoline-fueled engines.<sup>ix</sup> There are certain engine sizes and types that are not regulated, such as small off-road engines under 25 hp, that may be regulated by a local jurisdiction. It is uncertain as to whether a local jurisdiction may regulate these types of engines and vehicles for GHG purposes where emissions are regulated for criteria pollutants and airborne toxins.

California continues to invest heavily in reducing emissions from all transportation sources through its state agencies and programs, particularly CARB and the CEC. Aligning local actions and policies with state policy and funding may accelerate local implementation and decrease costs. It is unclear how much previous or future funding has been or will be received by the San Diego region, but increasing funding from these sources should be a priority. The region will compete for these funds as most if not all, funds are administered through a competitive bidding process.

CARB administered Air Quality Improvement Program (AQIP) funded \$438 million in projects from Fiscal Year 2008–2009 through Fiscal Year 2019–2020 and the Low Carbon Transportation Project allocation from Fiscal Year 2013–2014 through Fiscal Year 2019–2020 totals \$2.134 billion.<sup>x</sup> The State Budget Year for Fiscal Year 2021–22, including over \$1.5 billion for a ZEV Acceleration Package and Air Quality Improvement Program, received an appropriation of over \$1.5 billion for CARB with an additional \$3.9 billion over the next three fiscal years across all state agencies (CARB expects to receive \$2.3 billion of this over the next three fiscal years).<sup>xi</sup> CARB’s approved the following funding plan for Fiscal Year 2021–2022 on November 19, 2021, for a total of \$1,548.09 million allocated in the following ways:

- \$525 million for Vehicle Purchase Incentives (Light-duty Clean Vehicle Rebate Project (CVRP) and Electric Bicycles);

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CO2 Standards (last access on November 1, 2021): [https://ww2.arb.ca.gov/our-work/programs/tier-5/meetings-workshops?utm\\_medium=email&utm\\_source=govdelivery](https://ww2.arb.ca.gov/our-work/programs/tier-5/meetings-workshops?utm_medium=email&utm_source=govdelivery).

<sup>i</sup> 13 C.C.R. §§ 2540–2466.

<sup>ii</sup> 13 C.C.R. §§ 2467–2467.9.

<sup>iii</sup> 13 C.C.R. §§ 2468–2468.10.

<sup>iv</sup> 13 C.C.R. §§ 2470–2476.

<sup>v</sup> 13 C.C.R. §§ 2477–2479.

<sup>vi</sup> 13 C.C.R. §§ 2750–2774.

<sup>vii</sup> 13 C.C.R. §§ 2775–2775.2.

<sup>viii</sup> 13 C.C.R. §§ 2780–2789.

<sup>ix</sup> See 13 C.C.R. §§ 2850–2869.

<sup>x</sup> CARB Proposed Fiscal Year 2020–21 Funding Plan for Clean Transportation Incentives (Release Date: November 6, 2020; Board Consideration: December 10–11, 2020), p. 5–8: [https://ww2.arb.ca.gov/sites/default/files/2020-11/proposed\\_fy2020-21\\_fundingplan.pdf](https://ww2.arb.ca.gov/sites/default/files/2020-11/proposed_fy2020-21_fundingplan.pdf).

<sup>xi</sup> CARB, Proposed Fiscal Year 2021–22 Funding Plan for Clean Transportation Incentives (October 8, 2021 Release) (Board Vote on November 19, 2021), p. 4: [https://ww2.arb.ca.gov/sites/default/files/2021-10/fy21-22\\_fundingplan.pdf](https://ww2.arb.ca.gov/sites/default/files/2021-10/fy21-22_fundingplan.pdf).



- \$150 million for Clean Transportation Equity Investments (includes Clean Cars 4 All, Financing Assistance, Clean Mobility Options, Clean Mobility In Schools Pilot Project, Sustainable Transportation Equity Project (STEP), and others);
- \$873.09 million for Heavy-Duty and Off-Road Equipment (including Clean Truck and Bus Vouchers (HVIP), Clean Off-Road Equipment Vouchers (CORE), Drayage Truck and Infrastructure Project, Truck Loan Assistance, and Demonstration and Pilot Projects).<sup>i</sup>

The CEC currently administers the \$100 million per year Clean Transportation Fund (formerly the Alternative and Renewable Fueled and Vehicle Technology Program) created by AB 118 (Núñez, Chapter 759, Statutes of 2007) and reauthorized by AB 8 (Perea, Chapter 401, Statutes of 2013). This program received additional funding this fiscal year with the CEC approving a 2021–2023 Investment Plan Update totaling \$1.4 billion on November 15, 2021.<sup>ii</sup> In terms of vehicle-related investment, the plan will fund \$244 million for ZEV manufacturing that complements CARB administered funding. It sunsets in January 2024.

## B.2.4 Fuels and Infrastructure

State preemption exists in the form of the CARB administered Low-Carbon Fuel Standard (LCFS), which regulates the carbon intensity of transportation fuels in California by reducing the carbon intensity of fuel by at least 20% by 2030 from a 2010 baseline<sup>iii</sup> and requires continuing to reduce the carbon intensity of fuels beyond 2030 with consideration of the full life cycle of carbon.<sup>iv</sup> State preemption also exists in the form of what types of reformed fuels are sold in California, including the Low Emission Diesel and Standards for Diesel Fuel regulations.<sup>v</sup> California’s Alternative Diesel Fuel regulation governs the development and commercialization of alternative diesel fuels for sale in California.<sup>vi</sup> Notably, the CPUC does not automatically regulate compressed natural gas and hydrogen fueling stations<sup>vii</sup> but acts with regulatory authority over intrastate pipelines for natural gas and hydrogen with authority over entities that meet the public utility definition. There is uncertainty as to whether the Federal Energy Regulatory Commission (FERC) acts with authority over interstate hydrogen pipelines under the Natural Gas Act specific to whether hydrogen is considered an “artificial gas” and whether, and at what percentage, hydrogen is mixed with natural gas.<sup>viii</sup>

In terms of fuels, local jurisdictions may exercise police and land use authority to prohibit zoning for new

<sup>i</sup> CARB, Proposed Fiscal Year 2021–22 Funding Plan for Clean Transportation Incentives (Release Date: October 8, 2021; Board Consideration: November 19, 2021), p. 27: [https://ww2.arb.ca.gov/sites/default/files/2021-10/fy21-22\\_fundingplan.pdf](https://ww2.arb.ca.gov/sites/default/files/2021-10/fy21-22_fundingplan.pdf); CARB approves \$1.5 billion investment — largest to date — in clean cars, trucks, mobility options, Press Release, Release No. 21-57 (November 19, 2021): <https://ww2.arb.ca.gov/news/carb-approves-15-billion-investment-largest-date-clean-cars-trucks-mobility-options>.

<sup>ii</sup> CEC Lead Commissioner Report, 2021–2023 Investment Plan Updated for the Clean Transportation Program, CEC-600-2021-038-LCF (November 2021): <https://www.energy.ca.gov/publications/2021/2021-2023-investment-plan-update-clean-transportation-program>.

<sup>iii</sup> See 17 C.C.R. §§ 95480–95503.

<sup>iv</sup> Executive Order N-79-20, Order No. 9 (September 23, 2020): <https://www.gov.ca.gov/wp-content/uploads/2020/09/9.23.20-EO-N-79-20-Climate.pdf>.

<sup>v</sup> See 13 C.C.R. §§ 2281–2285, 2299–2299.5; 17 C.C.R. §§ 93114, 93117, 93118, 93118.2, 93118.3, 93118.5; 13 C.C.R. §§ 2281–2285 & 2299–2299.5.

<sup>vi</sup> 13 C.C.R. §§ 2293-2293.9.

<sup>vii</sup> California Public Utilities Code § 216 (f).

<sup>viii</sup> See 14 U.S.C.A §717a (5).

gas stations or support alternative fuel infrastructure through zoning and expediting permitting for renewable natural gas fueling stations, hydrogen fueling stations, and electric vehicle charging equipment (EVSE). Local jurisdictions may also require installation or pre-wiring for EVSE in the public right of way, on new residential and/or nonresidential buildings, or when additions or alterations to existing residential and/or non-residential buildings occur.<sup>i</sup>

Local authorities should also consider state assessments of infrastructure need and funding to inform the exercise of their own authority to develop and fund fuels and infrastructure. California analyzes the need for and funds infrastructure to achieve the statutory goals for transportation electrification under SB 350 (de León, Chapter 547, Statutes of 2015) and ZEVs under Executive Order N-79-20. To this end, SB 2127 (Ting, Chapter 365, Statutes of 2018) requires the CEC, CARB, and CPUC to conduct a biannual assessment for electric vehicle charging infrastructure needs to support 5 million ZEVs by 2030 and to reduce emissions of GHG to 40% below 1990 level by 2030; AB 8 (Perea, Chapter 401, Statutes of 2013) directs CARB to evaluate fuel cell electric vehicle deployment and hydrogen fuel station network development; and Executive Order N-79-20 Order 4 directs the CEC, CPUC, and CARB to accelerate affordable fueling and charging options for ZEVs, particularly in low-income and disadvantaged communities, and Order 6, subsection c) directs the State Transportation Agency, Department of Transportation, and the California Transportation Commission to support ZEV and infrastructure as part of larger transportation projects.

CARB's previously discussed Fiscal Year 2021–2022 funding plan provides significant funding in this regard, specific to use case and vehicle type. However, infrastructure development is the primary focus of CEC's Clean Transportation Program funding approved on November 15, 2021, to close the infrastructure gap necessary to meet California's ZEV goals as follows:

- \$314 million for light-duty electric vehicle charging infrastructure;
- \$690 million for medium- and heavy-duty ZEV infrastructure (battery-electric and hydrogen);
- \$77 million for hydrogen refueling;
- \$25 million for zero and near-zero carbon fuel production and supply; and
- \$15 million for workforce training and development.<sup>ii</sup>

Specific to hydrogen, AB 8 (2013) set a target of co-funding 100 hydrogen fueling stations (currently, there are 48 hydrogen fueling stations with another \$115.7 million in CEC grant solicitation to co-fund another 94 stations<sup>iii</sup>) and 200 hydrogen stations by 2025 per Executive Order B-48-18. There is currently one operational hydrogen station in San Diego County, with one more expected to open in 2021<sup>iv</sup> and three more stations expected to open in 2022.<sup>v</sup> There is an opportunity to further develop San Diego County hydrogen fueling stations with the available state funds and matching private or local funding.

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<sup>i</sup> See 12 C.C.R. Part 11 (2021); See Health & Safety Code §§ 17958.5, 17958.7 & 18941.5(b).

<sup>ii</sup> CEC Approves \$1.4 Billion Plan for Zero-Emission Transportation Infrastructure and Manufacturing (November 15, 2021): <https://www.energy.ca.gov/news/2021-11/cec-approves-14-billion-plan-zero-emission-transportation-infrastructure-and>; CEC Lead Commissioner Report, 2021-2023 Investment Update for the Clean Transportation Program (November 2021): <https://www.energy.ca.gov/publications/2021/2021-2023-investment-plan-update-clean-transportation-program>.

<sup>iii</sup> CARB, 2021 Annual Evaluation of Fuel Cell Electric Vehicle Deployment and Hydrogen Fuel Station Network Development (September 2021), p. ix: [https://ww2.arb.ca.gov/sites/default/files/2021-09/2021\\_AB-8\\_FINAL.pdf](https://ww2.arb.ca.gov/sites/default/files/2021-09/2021_AB-8_FINAL.pdf).

<sup>iv</sup> It is unknown whether this station opened as of January 7, 2022.

<sup>v</sup> CARB, 2021 Annual Evaluation of Fuel Cell Electric Vehicle Deployment and Hydrogen Fuel Station Network Development (September 2021), Appendix B.



Investor Owned Utility (IOU) specific electric vehicle investment funding began in 2016 and was augmented by SB 350's (2015) mandate to electrify transportation.<sup>i</sup> The CPUC approved SDG&E's first pilot in 2016<sup>ii</sup> for \$45 million at 350 sites corresponding to approximately 3,500 EV stations over three years, and the CPUC recently approved a renewal of its Power Your Drive Extension Program for \$43.5 million to fund nearly 2,000 L2 EVSEs at workplaces and multi-family dwellings in its service territory.<sup>iii</sup> The pilot and original Power Your Drive Program installed 3,040 utility-owned and operated charging ports at 254 sites at a total cost of \$70,253,053, exceeding the approved budget by \$25,253,053, marking the difficulty and expense of implementing this type of program.<sup>iv</sup> Additionally, AB 1082 (Burke, Chapter 637, Statutes of 2017) and AB 1083 (Burke, Chapter 638, Statutes of 2017) authorized but did not require IOUs to support charging infrastructure at schools, state parks, and beaches. SDG&E applied and received approval for 30 school sites (184 L2 ports and 12 DC Fast Chargers (DCFCs) with either the customer or SDG&E owning the EVSE), 12 state park and beach sites (64 L2 ports & 10 DCFCs owned by SDG&E), and 10 sites at city and county parks (52 L2 ports & 10 DCFCs owned by SDG&E).<sup>v</sup>

Finally, the Volkswagen Diesel Emission Settlement Beneficiary Mitigation Plan<sup>vi</sup> provides \$10 million statewide for light-duty vehicle fueling infrastructure, split evenly between electric vehicles and hydrogen.

## B.2.5 New Vehicle Sales and Fleet Procurement Requirements

Local jurisdictions act with clear authority to procure fleets for their operations with limited federal preemption under the "market participant exception." The market participant exception applies to the Dormant Commerce Clause and is expressly included in the EPCA,<sup>vii</sup> applied by case law to the CAA,<sup>viii</sup> and applied by case law to the FAA.<sup>ix</sup> Local jurisdictions have been prohibited from mandating the purchase of the certain type of clean technology vehicles for private classes of vehicles, such as taxis.<sup>x</sup>

Local jurisdictions act with clear authority to procure fleets for their operations with limited preemption by the state. However, California policy seeks to create a zero-emission only market for new vehicles under Executive Order No. N-79-20, establishing a 100% in-state sales of new zero-emission passenger

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<sup>i</sup> Public Utilities Code § 740.12(a)(1).

<sup>ii</sup> CPUC D.16-01-045, Decision Regarding Underlying Vehicle Integration Application and Motion to Adopt Settlement Agreement (February 4, 2016):

<https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M158/K241/158241020.PDF>.

<sup>iii</sup> CPUC D. 19-10-012, Decision Authorizing SDG&E Company's Power Your Drive Extension Electric Vehicle Charging Program (April 19, 2021): <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M378/K429/378429298.PDF>.

<sup>iv</sup> CPUC R.18-12-006, Electric Vehicle-Grid Integration Pilot Program Eight Semi-Annual Report of SDG&E Company (U902-E) (April 1, 2020), p. 3: <https://www.sdge.com/sites/default/files/regulatory/R.18-12-006%20SDG%26E%20April%201%2C%202020%20Eighth%20Semi%20Annual%20PYD%20Report.pdf>.

<sup>v</sup> CPUC D. 19-11-017, Decision on the Transportation Electrification Pilots for Schools and Parks Pursuant to Assembly Bills 1082 and 1083 (November 7, 2019).

<sup>vi</sup> State of California Beneficiary Mitigation Plan For the Volkswagen Environmental Mitigation Trust (June 2018), p. 33–36: [https://ww2.arb.ca.gov/sites/default/files/2018-07/bmp\\_june2018.pdf](https://ww2.arb.ca.gov/sites/default/files/2018-07/bmp_june2018.pdf).

<sup>vii</sup> 49 U.S.C.A § 32919(c).

<sup>viii</sup> See *Engine Mfrs. Ass'n v. South Coast Air Quality Mgmt. Dist.*, 498 F.3d 1031, 1040 (9th Cir. 2007).

<sup>ix</sup> *Tocher v. City of Santa Ana*, 219 F.3d 1040, 1049 (9th Cir. 2000); See also *City of Columbus v. Ours Garage & Wrecker Serv., Inc.*, 536 U.S. 424, 431 (2002).

<sup>x</sup> *Metro. Taxicab Bd. of Trade v. City of New York*, 615 F.3d 152, 157 (2d Cir. 2010), cert. denied, 562 U.S. 1264 (2011); *Ophir v. City of Boston*, 647 F.Supp. 2d 86, 94 (D. Mass. 2009).

cars and truck by 2035, and to build the electric vehicle charging infrastructure to deploy 5 million ZEVs by 2030 under Executive Order B-48-18 and to develop ZEV and related supply chains and infrastructure in California under Executive Order B-16-12.

Consequently, the Innovative Clean Transit (ICT) regulation requires all public transit agencies to gradually transition to a 100-percent zero-emission bus fleet and encourages these agencies to provide innovative first and last-mile connectivity and improved mobility for transit riders.<sup>i</sup> The Advanced Clean Trucks (ACT) regulation sets a ZEV sales requirement and a one-time reporting requirement for large entities and fleets.<sup>ii</sup> The Zero-Emission Airport Shuttle regulation<sup>iii</sup> requires private and public airport shuttle fleet owners with fixed routes serving California’s 13 largest airports (including San Diego International Airport) to fully transition their fleet to zero-emission shuttles by 2035 to reduce and eliminate GHG emissions, NOx, and other criteria pollution reductions.<sup>iv</sup>

Additionally, CARB is proposing an Advanced Clean Fleet (ACF) regulation to deploy medium- and heavy-duty ZEV where feasible. CARB describes this proposed rule as requiring the deployment of ZEVs as follows: 100% of new drayage trucks by 2035; 100% of new off-road vehicles and equipment by 2035 (where feasible), and 100% medium- and heavy-duty vehicles by 2045 (where feasible).<sup>v</sup> It is expected that similar types of programs will be implemented for light-duty vehicles post-2026 model years.

Significant state funding exists to achieve state policy. The Volkswagen Environmental Mitigation Trust provides the following amounts per use-case:

- \$130 million for zero-emission transit, school, and shuttle buses;
- \$90 million for zero-emission Class 8 freight and drayage trucks;
- \$70 million for zero-emission freight and marine projects; and
- \$60 million for freight and marine projects.<sup>vi</sup>

The CEC’s funding provides the following:

- \$75 million SB 110 (Committee on Budget and Fiscal Review, Chapter 55, Statutes of 2017) per Proposition 39 and \$14 million Clean Transportation Program funds for school bus replacement.<sup>vii</sup>

CARB adopted the following funding allocations for Fiscal Year 2021–2022 for a total of \$1,548.09 million allocated in the following ways:

- \$525 million for Vehicle Purchase Incentives including:
  - \$515 million for the Light-duty Clean Vehicle Rebate Project (CVRP); and
  - \$10 million for the Electric Bicycle Incentive program;
- \$150 million for Clean Transportation Equity Investments including:
  - \$75 million for Clean Cars 4 All;

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<sup>i</sup> 13 C.C.R. §§ 2023 et seq.

<sup>ii</sup> See 13 C.C.R. §§ 1963, 1963.1, 1963.2, 1963.3, 1963.4, 1963.5, 2012, 2012.1, & 2012.2.

<sup>iii</sup> 17 CCR §§ 95690.1, 95690.2, 95690.3, 95690.4, 95690.5, 95690.6, 95690.7, and 95690.8.

<sup>iv</sup> 17 C.C.R. §§ 95690.1, 95690.3, 95690.5, and 95690.6.

<sup>v</sup> See CARB, Advanced Clean Fleets Fact Sheet (Last accessed on July 12, 2022): <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-fleets/advanced-clean-fleets-fact-sheets>.

<sup>vi</sup> State of California Beneficiary Mitigation Plan for the Volkswagen Environmental Mitigation Trust (June 2018), p. 20–32: [https://ww2.arb.ca.gov/sites/default/files/2018-07/bmp\\_june2018.pdf](https://ww2.arb.ca.gov/sites/default/files/2018-07/bmp_june2018.pdf).

<sup>vii</sup> CEC Lead Commissioner Report, 2021–2023 Investment Plan Updated for the Clean Transportation Program, CEC-600-2021-038-LCF, p. 32 (November 2021): <https://www.energy.ca.gov/publications/2021/2021-2023-investment-plan-update-clean-transportation-program>

- \$23.5 million for Financing Assistance;
- \$10 million for Clean Mobility Options;
- \$10 million for Clean Mobility In Schools Pilot Project;
- \$25 million for the Sustainable Transportation Equity Project (STEP);
- \$5 million for Outreach, Community Needs Assessment, Technical Assistance, and Access Clean California; and
- \$1.5 million for Workforce Training and Development;
- \$873.09 for Heavy-Duty and Off-Road Equipment including:
  - \$569.5 million for the Clean Truck and Bus Vouchers (HVIP) program;
  - \$194.95 million for the Clean Off-Road Equipment Vouchers (CORE);
  - \$28.64 million for the Truck Loan Assistance; and
  - \$80 million for the Demonstration and Pilot Projects (includes \$40 million for the Drayage Truck and Infrastructure Project).<sup>i</sup>

An example of local implementation of funding from state programs includes a local Clean Cars 4 All program approved by CARB on November 19, 2021, that will fund a \$5 million program in the County of San Diego administered by the SD APCD.<sup>ii</sup> San Diego County Supervisors voted in October 2019 to bring this program to San Diego County, but the COVID-19 pandemic delayed it until 2021. SD APCD also operates a Scrap Car Reimbursement Assistance Program (SCRAP) that provides \$1000 for qualified cars from 1997 or older that are voluntarily retired to reduce air pollution.<sup>iii</sup>

### B.3 Local Authority Related to Building Decarbonization

At the local level, the police power and delegated authority to regulate energy end-uses are the primary means of implementing building decarbonization actions. Local jurisdictions may use their police power to prohibit the installation of natural gas plumbing in new buildings,<sup>iv</sup> identify buildings or neighborhoods that are in need of natural gas infrastructure replacement to electrify (e.g., natural gas infrastructure pruning), require energy benchmarking for buildings not covered by Title 20 Benchmarking requirements,<sup>v</sup> and/or encourage fuel switching to low- or zero-emission fuels (e.g., renewable natural gas or green hydrogen) through GHG emission performance standards based on energy benchmarking information and disclosure. Local jurisdictions act with delegated authority to require more stringent Title 24, Part 6 Energy Codes, Part 11 CALGreen Codes, and procurement

<sup>i</sup> CARB, Proposed Fiscal Year 2021–22 Funding Plan for Clean Transportation Incentives (Release Date: October 8, 2021; Board Approved: November 19, 2021), p. 6: [https://ww2.arb.ca.gov/sites/default/files/2021-10/fy21-22\\_fundingplan.pdf](https://ww2.arb.ca.gov/sites/default/files/2021-10/fy21-22_fundingplan.pdf).

<sup>ii</sup> See CARB, Proposed Fiscal Year 2021–22 Funding Plan for Clean Transportation Incentives (Release Date: October 8, 2021; Board Approved: November 19, 2021), p 59–60: [https://ww2.arb.ca.gov/sites/default/files/2021-10/fy21-22\\_fundingplan.pdf](https://ww2.arb.ca.gov/sites/default/files/2021-10/fy21-22_fundingplan.pdf); See also SD APCD Passenger Vehicle Programs: Clean Cars 4 All: <https://www.sdapcd.org/content/sdapcd/grants/grants-equipment/passenger-vehicles.html>.

<sup>iii</sup> SD APCD Passenger Vehicle Programs: SCRAP: <https://www.sdapcd.org/content/sdapcd/grants/grants-equipment/passenger-vehicles.html>.

<sup>iv</sup> Note: the City of Berkeley’s prohibition is currently on appeal to the Ninth Circuit Court of Appeals (*CRA v. City of Berkeley*, No. 21-16278, (9th Cir. filed August 5, 2021)); See *CRA v. City of Berkeley*, Docket No. 4:19-cv-07668, Judgment, Document 76 (N.D. Cal. Nov. 21, 2019) which dismissed with prejudice cause of action for EPCA preemption and dismissed without prejudice California state law preemption cause of action.

<sup>v</sup> See AB 802 (Williams, Chapter 590, Statutes of 2015); 20 C.C.R. § 1680 (2021) et seq.; see also City of San Diego Building Benchmarking Ordinance adopted pursuant to 20 C.C.R. § 1684 (2021).

authority, including sole source procurement authority for energy conservation, cogeneration, and alternative energy supply projects on public buildings.<sup>i</sup> Local governments should evaluate how to align local requirements and actions with state policy and programs to decrease costs related to building decarbonization.

At the federal level, the Energy Act of 2020 updated and added provisions and funding for, among other things, energy and water efficiency, renewable energy and storage, carbon management and removal from buildings and industry, industry and manufacturing technologies that decrease emissions, grid modernization and building integration, and related research, development, and deployment.<sup>ii</sup> President Biden recently signed Executive Order 14057 directs the federal executive branch to achieve a net-zero emissions path by 2050. Specific to building decarbonization, the Executive Order, among other things, orders:

- 100 percent carbon pollution-free electricity on a net annual basis by 2030, including 50 percent 24/7 carbon pollution-free electricity;
- A net-zero emissions building portfolio by 2045, including a 50 percent emissions reduction by 2032;
- A 65 percent reduction in scope 1 and 2 greenhouse gas emissions, as defined by the Federal Greenhouse Gas Accounting and Reporting Guidance, from Federal operations by 2030 from 2008 levels;
- Net-zero emissions from Federal procurement, including a Buy Clean policy to promote the use of construction materials with lower embodied emissions; and
- Climate resilient infrastructure and operations.<sup>iii</sup>

This order builds upon Executive Order 13990 that directed federal agencies to review action from 2017–2022 that may be inconsistent with or conflict with improving public health, protecting the environment, accessing clean air and water, reducing GHG emissions, and bolstering resiliency to climate change. Additionally, Executive Order 14008 sets goals for a carbon-free electricity by 2035 and economy wide net-zero emissions by 2050. Whether these executive order are codified in federal law remains to be seen, and the orders are subject to rescission by future Administrations.

California policy benefits from over forty years of state regulation designed to decrease energy consumption from buildings and appliances with a focus on reducing consumer energy consumption and GHG emissions from buildings. In 2015, AB 350 (de León, Chapter 547, Statutes of 2019) set a goal of cumulative doubling energy efficiency savings and demand reduction in electricity and natural gas end-uses by January 1, 2030. AB 350 (2015) tasked the CEC with establishing an annual target to achieve these reductions with the CEC and the CPUC taking further action through buildings standards, appliance standards, and CPUC regulated energy efficiency programs administered by IOUs, CCAs, and other third-party program administrators.<sup>iv</sup> CCAs may also create their energy efficiency programs separate from

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<sup>i</sup> See Government Code § 4217.10 et seq.

<sup>ii</sup> 47 H.R. 133 – 116<sup>th</sup> Congress (2019-2020): Consolidated Appropriation Act, 2021. December 27, 2020 (Public Law No: 116-260), Division Z (Energy Act of 2020): <https://www.congress.gov/bill/116th-congress/house-bill/133/text>.

<sup>iii</sup> Presidential Executive Order No. 14057, Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability 86 Federal Register 70935 (2021-27114), Sec. 102 (December 8, 2021): <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/12/08/executive-order-on-catalyzing-clean-energy-industries-and-jobs-through-federal-sustainability/> & <https://www.federalregister.gov/documents/2021/12/13/2021-27114/catalyzing-clean-energy-industries-and-jobs-through-federal-sustainability>.

<sup>iv</sup> See CPUC Energy Efficiency Rule Making R.13-11-005 & R.19-01-011.

CPUC regulated programs. Innovation is needed to achieve the SB 350 targets, particularly when converting energy efficiency to avoid GHG emissions, in terms of how to implement demand reduction flexibility that decreases energy use when GHG emissions are the highest (e.g., seasonal and daily peak electric load).<sup>i</sup>

This resulted in a major policy shift towards building decarbonization in 2018 with Executive Order B-55-18 directing state agencies to achieve carbon neutrality by 2045, AB 3232 (Friedman, Chapter 373, Statutes of 2018) requiring the CEC in consultation with CARB, the CPUC, and CAISO to assess the potential to reduce GHG in buildings by 40% below 1990 levels by 2030, and SB 1477 (Stern, Chapter 378, Statutes of 2018) allocating \$50 million per year through 2023 to fund the Building Initiative for Low-Emissions Development (Build) and Technology and Equipment for Clean Heating (TECH). Additionally, the CPUC adopted changes to its existing energy efficiency rolling portfolio that will set energy efficiency goals to maximize GHG reductions and grid benefits, including equity, using a Total System Benefit (TSB) test that expresses the dollar value of lifecycle energy, capacity, and GHG benefits on a utility's energy efficiency program portfolio starting in 2024.<sup>ii</sup> The CPUC set energy efficiency portfolio goals for 2022–2032 in D.21-09-037 on September 23, 2021.

Pursuant to AB 3232 (2018), the CEC issued a California Building Decarbonization Assessment<sup>iii</sup> report showing that achieving reduction of GHG by 40% below 1990 level by 2030 requires residential and commercial building decarbonization through electrification, decarbonizing electricity supply, energy efficiency, refrigerant conservation and leakage reduction, distribute energy resources (DER) deployment, gas system decarbonization, and demand flexibility. The report found the most readily achievable pathway to meet the AB 3232 target was through efficient electrification of space and water heating in buildings combined with refrigerant leakage reduction.

Local governments should evaluate how to align local requirements and actions with state policy and programs to decrease costs related to building decarbonization. The CEC's most recent ratepayer-funded Electric Program Investment Charge (EPIC) plan for 2021–2025 reflects continued investment in achieving these targets for electrification, high efficiency and low-GWP heat pump water heaters and HVAC heater pumps, building envelope upgrades, combined heat pump for hot water and heating conditioning, nanogrid HVAC module development, smart energy management systems, large building HVAC decarbonization, industrial decarbonization, low-carbon and high-temperature industrial heating, energy efficient and decarbonization of concrete manufacturing, and industrial energy efficiency separation processes.<sup>iv</sup> These investments will serve to vet viable actions to decarbonize these types of end-uses and lower costs. It will also help to determine what end-uses cannot be decarbonized and which GHG emissions by source must be removed or sequestered.

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<sup>i</sup> See CEC Final Staff Report, 2019 California Energy Efficiency Action Plan, November 2019, p. 4.

<sup>ii</sup> See CPUC D.21-05-031, Rulemaking 12-11-005 Assessment of Energy Efficiency Potential and Goals and Modification of Portfolio Approval and Oversight Process (May 31, 2021), p. 2:

<https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M385/K864/385864616.PDF>.

<sup>iii</sup> California Energy Commission: Final Commission Report California Building Decarbonization Assessment, Publication Number: CEC-400-2021-006-CMF (2021): <https://www.energy.ca.gov/publications/2021/california-building-decarbonization-assessment>.

<sup>iv</sup> California Energy Commission: Final Commission Report The Electric Program Investment Charge Proposed 2021–2025 Investment Plan, EPIC 4 Investment Plan, (November 2021), p. 130-181:

<https://www.energy.ca.gov/publications/2021/electric-program-investment-charge-proposed-2021-2025-investment-plan-epic-4>.

Per SB 1477 (2018), the BUILD program aims to incent near-zero-emission building technologies that reduce GHG emissions significantly beyond minimum code requirements for residential buildings. BUILD currently provides incentives to new residential housing projects that are all-electric and have no hook up to the gas distribution system. The TECH program aims to advance California’s market for low-emission space and water heating technologies that are in early-stage development. These programs, combined with existing utility energy efficiency programs, form the state policy to address building decarbonization. Local governments should evaluate how to align local requirements and actions with state policy and programs to decrease costs related to building decarbonization. There is also an opportunity to engage in the CPUC’s proceeding on building decarbonization that is implementing the BUILD and TECH programs, amongst other building decarbonization efforts.<sup>i</sup>

### **B.3.1 Energy Efficiency and Building Material Conservation and Resource Efficiency**

Using delegated authority, local jurisdictions may adopt more stringent building code standards that address energy efficiency, water conservation, building material conservation, or resource efficiency based on GHG requirements (e.g., material carbon intensity). Where the requirement addresses energy consumption, the adopted local code must be at least as energy efficient as the state codes, cost-effective (e.g., all-electric reach codes or building performance standards),<sup>ii</sup> and submitted to the CEC to review for compliance with state law.<sup>iii</sup> In all cases where Title 24 is amended, the standards must be submitted to the Building Standard Commission with the findings for local climatic, geological, or topical conditions that authorize the change to Title 24. In terms of police authority, the full extent of local jurisdiction police authority is unknown and largely untested. Additional research is required to vet other local actions.

Federal preemption exists over setting energy efficiency standards for covered products<sup>iv</sup> (e.g., appliances) under EPCA with limited exception for new construction.<sup>v</sup> Local jurisdictions are subject to state preemption in the form of Title 20 appliance standards that regulate many appliances not preempted by the EPCA and the triennially updated Title 24 building standards that the CEC adopts.

In California, there is delegated authority for local jurisdictions to adopt more stringent building standards under Title 24 for energy efficiency and building materials. For example, local jurisdictions may adopt more stringent Green Building programs — including water conservation<sup>vi</sup> — by making voluntary CALGreen standards mandatory or other measures that may include building material

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<sup>i</sup> See CPUC R. 19-01-011: Order Instituting Rulemaking Regarding Building Decarbonization: [https://apps.cpuc.ca.gov/apex/f?p=401:56:0::NO:RP,57,RIR:P5\\_PROCEEDING\\_SELECT:R1901011](https://apps.cpuc.ca.gov/apex/f?p=401:56:0::NO:RP,57,RIR:P5_PROCEEDING_SELECT:R1901011).

<sup>ii</sup> See to Public Resources Code § 25402.1(h)(2) and Health & Safety Code §§ 17958.5 & 17958.7.

<sup>iii</sup> See Public Resources Code § 25402.1 (h)(2); see Title 24, Part 6, Section 10-106 (2021).

<sup>iv</sup> 42 U.S.C. § 6295; See also 10 CFR Parts 430, 431, & 429.

<sup>v</sup> 42 U.S.C. §§ 6297(c) & 6297(f)(3); see also 42 U.S.C. §§ 6291 et seq. (Part A-Energy Conservation Program for Consumer Products Other Than Automobiles); 42 U.S.C. §§ 6311 et seq. (Part A-1-Certain Industrial Equipment).

<sup>vi</sup>Note: Water conservation and enforcement programs are also authorized by Water Code §§ 375–378 & 1009, including water saving devices and rate structure design, which must also comply with Prop 218 limits (Cal. Const. art. XIII C–XIII D); See also Water Code §§ 10680.20, 10680.24 (urban retail water suppliers must develop urban water use targets that cumulatively result in a 20 % reduction from a baseline daily per capita water use by December 31, 2020); see also Water Code §§ 10609.2, 10609.4 (requires the State Water Control Board, in coordination with the Department of Water Resources, to adopt a long-term standard for efficient use of water and establish 55 gallons per capita as the daily indoor residential standard water use).



conservation and resource efficiency based on GHG emissions<sup>i</sup>, carbon intensity, or carbon sequestration (e.g., cement made from synthetic aggregate produced from captured compressed CO<sub>2</sub>) if it is reasonably necessary because of local climatic, geological, or topographical conditions.<sup>ii</sup> SB 596 (Becker, Chapter 246, Statutes of 2021) aids in this endeavor by requiring CARB to develop a strategy to achieve net-zero emission of GHG associated with cement used within California as soon as possible, but no later than December 31, 2045, with interim targets that include a carbon intensity reduction for cement of 40% below 2019 average levels by December 31, 2035. It may be possible for local jurisdictions to help accelerate or surpass this type of state mandate.

### **B.3.2 CEQA Environmental Impact Mitigation Authority**

CEQA offers another means to address emissions from the built environment. A lead agency acts with discretion to determine whether an adverse environmental effect identified in an environmental impact report (EIR) should be classified as "significant" or "less than significant."<sup>iii</sup> A lead agency may adopt and publish a threshold of significance that sets a high threshold for GHG emissions, which could include requiring all projects to be carbon neutral or zero net carbon,<sup>iv</sup> and must be based on scientific and factual data to the extent possible<sup>v</sup> to meet the substantial evidence standard.<sup>vi</sup> This is limited by existing implied or expressed authority to impose mitigation measures on a project.<sup>vii</sup> Mitigation measures cannot be legally infeasible<sup>viii</sup> — meaning that they may not be beyond the power conferred on lead and responsible agencies — and are also subject to express limitations, including limits on reducing housing units.<sup>ix</sup>

### **B.3.3 Direct Regulation of Building GHG Emissions**

Direct regulation of GHG emissions, not currently regulated by Cap-and-Trade, may provide additional means to reduce emissions, but uncertainty exists around authority. It may be possible to create a GHG performance standards for buildings. It may also be possible to directly regulate building and appliance oxides of nitrogen (NOx) emissions from natural gas under existing authority. Finally, it is uncertain whether existing tax or fee authority may be used to regulate GHGs.

At the state level, California addresses GHG emissions through both direct emissions regulation as well as procurement of renewable fuel sources. California's Cap-and-Trade program also regulates covered entities that emit 25,000 metric tons or more of CO<sub>2</sub>e per data year, including cogeneration, self-

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<sup>i</sup> Note: current mandatory and voluntary 2019 Title 24, Part 11 CALGreen Codes are not based on GHG life cycle analysis except for Nonresidential Voluntary Section A5.409 Life Cycle Assessment which allows GHG to be used in the impacts considered for the analysis of life cycle.

<sup>ii</sup> See 12 C.C.R. Part 11 (2021); See Health & Safety Code §§ 17958.5, 17958.7 & 18941.5(b).

<sup>iii</sup> 14 C.C.R. § 15064(b)(1) (2021).

<sup>iv</sup> 14 C.C.R. § 15064.7(b) (2021); see also definition of "threshold of significance" under 14 CCR § 15064.7(a) (2021); See also Bay Area Air Quality Management District CEQA Threshold for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans, Board of Directors Meeting Agenda Item 15 (Adopted April 20, 2022), p. 152–221: [https://www.baaqmd.gov/~media/files/board-of-directors/2022/bod\\_agenda\\_042022\\_op\\_rv-pdf.pdf?la=en&rev=c8360ec141654c22b244e5e07f8b88b4](https://www.baaqmd.gov/~media/files/board-of-directors/2022/bod_agenda_042022_op_rv-pdf.pdf?la=en&rev=c8360ec141654c22b244e5e07f8b88b4).

<sup>v</sup> 14 C.C.R. § 15064(b)(1) (2021).

<sup>vi</sup> Mission Bay Alliance v. Office of Community Inv. & Infrastructure, 6 Cal. App. 5th 160, 206 (2016).

<sup>vii</sup> See 14 C.C.R. § 15040(d)–(d).

<sup>viii</sup> See Public Resources Code § 21004; See 14 C.C.R. § 15040.

<sup>ix</sup> See Public Resources Code § 21159.26; See 14 C.C.R. § 15092(c).

generation of electricity, cement production, glass production, hydrogen production, iron and steel production, lead production, nitric acid production, petroleum and natural gas system, petroleum refining, pulp and paper manufacturing, suppliers of natural gas, suppliers of RBOB and distillate fuel oil, suppliers of liquefied petroleum gas, suppliers of liquified natural gas and compressed natural gas, carbon dioxide suppliers, and stationary combustion.<sup>i</sup> Regulation of sources below the 25,000 metric ton of CO<sub>2</sub>e per data year is not preempted but would require identifying authority to directly regulate, such as the police power.

For example, it may be possible to create GHG performance standards for buildings based on building type, square footage, and emission profiles. This would be an exercise of either police power or delegated authority to amend Title 24 if it is reasonably necessary because of local climatic, geological, or topographical conditions using Health and Safety Code Sections 17958.5, 17958.7, and 18941.5(b). Because such standards do not address the diminution of energy, a CEC review would not be required. The same authority can also be used to create building benchmarking requirements for energy use and GHG emission disclosures at point-of-sale or point-of-listing that are more expansive than those required under AB 802 (2015).<sup>ii</sup> The energy and GHG benchmarking would then serve as the measure to implement building GHG emission standards that utilize enforcement authority under existing municipal code for compliance.<sup>iii</sup> A potential funding source for upgrades could include creating a transfer tax rebate that refunds a percentage of the transfer tax to property owners who make electrification, energy efficiency, and water conservation retrofits.<sup>iv</sup> Equity considerations must be addressed. Because a fund transfer rebate only benefits property owners who made a recent purchase, other funding would need to be identified to fund upgrades for recent low-income owners, renters, and long-term homeowners with limited incomes. Additional research is required to further vet this action.

SD APCD is one of nine air districts that regulates NO<sub>x</sub> emissions from space heaters and water heaters and currently sets the most stringent emission limit of 10 ng/j NO<sub>x</sub> for water heaters in the state.<sup>v</sup> It may be possible for a city, county, or air district to take additional action to strengthen these regulations for water, space heating, or other natural gas end-use or directly regulate natural gas NO<sub>x</sub> emissions from buildings and appliances using Health and Safety Code Sections 39002, 39013, 39037, and 41508. For example, it may be possible for SD APCD to use an incentive to encourage purchase of zero-emission technologies, adopt zero-emission NO<sub>x</sub> regulations for space and water heating, and/or regulations to reduce NO<sub>x</sub> where zero-emission appliances may not be technically feasible.<sup>vi</sup> Any regulation that

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<sup>i</sup> 17 C.C.R. §§ 95811 (a)–(b) & 95812(c).

<sup>ii</sup> California Public Resources Code § 25402.10 (d)(2)(F) & 20 C.C.R. § 1684; See City of Berkeley Municipal Code 19.81 – the Building Energy Savings Ordinance (BESO) (2021).

<sup>iii</sup> See City of Berkeley Administrative Draft, Existing Buildings Electrification Strategy (April 2021), p. 140–141; See City of Berkeley Building Energy Savings Ordinance Evaluation Report, p. 12–21, Appendix C, & Appendix I, (February 11, 2020); See City of Berkeley Municipal Code 1.28 – Administrative Citations (2021).

<sup>iv</sup> See City of Berkeley Building Energy Savings Ordinance Evaluation Report (February 11, 2020), p. 5.

<sup>v</sup> See SD APCD Rules 68-69.6: <https://www.sdapcd.org/content/sdapcd/rules.html>; see also CARB, Draft 2022 State Strategy for the State Implementation Plan, January 31, 2022, p. 86:

[https://ww2.arb.ca.gov/sites/default/files/2022-01/Draft\\_2022\\_State\\_SIP\\_Strategy.pdf?utm\\_source=Master+List+Created+on+1%2F23%2F2017&utm\\_campaign=d9aa050b56-EMAIL\\_CAMPAIGN\\_2018\\_05\\_14\\_COPY\\_01&utm\\_medium=email&utm\\_term=0\\_0c851e413b-d9aa050b56-92657441](https://ww2.arb.ca.gov/sites/default/files/2022-01/Draft_2022_State_SIP_Strategy.pdf?utm_source=Master+List+Created+on+1%2F23%2F2017&utm_campaign=d9aa050b56-EMAIL_CAMPAIGN_2018_05_14_COPY_01&utm_medium=email&utm_term=0_0c851e413b-d9aa050b56-92657441).

<sup>vi</sup> See South Coast AQMD. 2021. "Agenda Item 5 - Proposed Draft NO<sub>x</sub> Stationary Source Measures." Air Quality Management Plan - November 10, 2021 Public Workshop. Available at: <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2022-air-quality-management-plan/am-pres-agenda-item-5->



requires zero-emission NO<sub>x</sub> emitting appliances within its district would also need to be concurrent with regulation on the installation of natural gas appliances across the district.<sup>i</sup> It is also possible that SD APCD would enforce similar state zero-emission regulation if CARB decides to develop and adopt a rule to ban natural gas water and space heaters by 2030 under the proposed 2022 California State Implementation Plan and 2022 Draft AB 32 Scoping Plan.<sup>ii</sup>

Because these code sections further allow local authorities (e.g., city or county) to enact such regulation under Health and Safety Code Section 39002 as the entity with primary responsibility for air pollution from all sources other than vehicle sources, it suggests that additional action is possible beyond existing or future SD APCD regulation. Any such standard may be set more stringent than set by law or CARB for non-vehicle sources. The full extent of this authority is unknown and untested in terms of a zero-emission NO<sub>x</sub> regulation but there are air districts with existing more stringent space heating standards<sup>iii</sup> than SD APCD and other air districts are proposing incentives and zero-emission NO<sub>x</sub> regulations for water, space, and other natural gas end-uses.<sup>iv</sup> Importantly, there are no examples of an exercise of this type of authority by a city or county in this respect. It would likely be expensive for a city or county to create and operate such a program, given the required technical expertise needed to implement and enforce it.

It is uncertain whether a local government may raise a tax or fee on GHG emissions. Local jurisdictions act with authority — subject to voter approval if a tax — to raise general taxes, special taxes, and fees for specified purposes under California Constitution Article XIII C & D. Taxes may be placed on real property and tangible personal property where the property is located. Taxes may also take the form of license taxes, sale and use taxes, documentary transfer taxes, retail transaction and use taxes, utility users' taxes, occupancy taxes, local vehicle license fees,<sup>v</sup> community facilities taxes, and excise taxes on developers. Under California Constitution Article XIII C § 2, general taxes must be approved by a majority vote, while special taxes must be approved by a two-thirds vote. Additionally, a charge that meets one

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[nox-measures-110621.pdf?sfvrsn=6](#); see also Bay Area AQMD. 2021. "Draft Amendments to Building Appliance Rules Regulation 9, Rule 4: Nitrogen Oxides from Fan Type Residential Central Furnaces and Rule 6: Nitrogen Oxides Emissions from Natural Gas-Fired Boilers and Water Heaters." Available at: [https://www.baaqmd.gov/rules-and-compliance/rules/reg-9-rule-4-nitrogen-oxides-from-fan-type-residential-central-furnaces?rule\\_version=2021%20Amendment](https://www.baaqmd.gov/rules-and-compliance/rules/reg-9-rule-4-nitrogen-oxides-from-fan-type-residential-central-furnaces?rule_version=2021%20Amendment).

<sup>i</sup> See City of Berkeley, Administrative Draft Existing Building Electrification Strategy, April 2021, p. 129.

<sup>ii</sup> CARB, Draft 2022 State Strategy for the State Implementation Plan, January 31, 2022, p. 86-88:

[https://ww2.arb.ca.gov/sites/default/files/2022-01/Draft\\_2022\\_State\\_SIP\\_Strategy.pdf?utm\\_source=Master+List+Created+on+1%2F23%2F2017&utm\\_campaign=d9aa050b56-EMAIL\\_CAMPAIGN\\_2018\\_05\\_14\\_COPY\\_01&utm\\_medium=email&utm\\_term=0\\_0c851e413b-d9aa050b56-92657441](https://ww2.arb.ca.gov/sites/default/files/2022-01/Draft_2022_State_SIP_Strategy.pdf?utm_source=Master+List+Created+on+1%2F23%2F2017&utm_campaign=d9aa050b56-EMAIL_CAMPAIGN_2018_05_14_COPY_01&utm_medium=email&utm_term=0_0c851e413b-d9aa050b56-92657441); see also CARB Draft 2022 Scoping Plan Update, May 10, 2022, p. 172: <https://ww2.arb.ca.gov/sites/default/files/2022-05/2022-draft-sp.pdf>.

<sup>iii</sup> San Joaquin Valley and South Coast Air Quality Management District (AQMD) set an emission limit of 14 ng/J NO<sub>x</sub> for space heaters.

<sup>iv</sup> See South Coast AQMD. 2021. "Agenda Item 5 - Proposed Draft NO<sub>x</sub> Stationary Source Measures." Air Quality Management Plan – November 10, 2021 Public Workshop. Available at: <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2022-air-quality-management-plan/am-pres-agenda-item-5-nox-measures-110621.pdf?sfvrsn=6>; see also Bay Area AQMD. 2021. "Draft Amendments to Building Appliance Rules Regulation 9, Rule 4: Nitrogen Oxides from Fan Type Residential Central Furnaces and Rule 6: Nitrogen Oxides Emissions from Natural Gas-Fired Boilers and Water Heaters." Available at: [https://www.baaqmd.gov/rules-and-compliance/rules/reg-9-rule-4-nitrogen-oxides-from-fan-type-residential-central-furnaces?rule\\_version=2021%20Amendment](https://www.baaqmd.gov/rules-and-compliance/rules/reg-9-rule-4-nitrogen-oxides-from-fan-type-residential-central-furnaces?rule_version=2021%20Amendment).

<sup>v</sup> See California Revenue Code § 11101 et seq.

of the requirements is not considered a tax under California Constitution Article XIII C, § 1 (e)(1)-(7) including, but not limited to:

- A charge imposed for a specific benefit conferred or privilege granted directly to the payor that is not provided to those not charged, and which does not exceed the reasonable costs to the local government of conferring the benefit or granting the privilege;
- A charge imposed for a specific government service or product provided directly to the payor that is not provided to those not charged, and which does not exceed the reasonable costs to the local government of providing the service or product;
- A charge imposed for the reasonable regulatory costs to a local government for issuing licenses and permits, performing investigations, inspections, and audits, enforcing agricultural marketing orders, and the administrative enforcement and adjudication thereof;
- A charge imposed for entrance to or use of local government property, or the purchase, rental, or lease of local government property;
- A charge imposed as a condition of property development; and
- Assessments and property-related fees imposed in accordance with the provisions of Article XIII D.

If the charge or fee is a “property-related service,” it must also meet the requirements of California Constitution Article XIII D. It is unclear if any of these charges are viable to place a fee on GHG emissions and whether California Constitution Article XIII D would apply.

### **B.3.4 Fuel Switching and Emissions related to End-Uses**

Police power authority may be used to require fuel switching to low or zero-carbon sources through prohibitions on the installation of certain energy infrastructure (e.g., natural gas plumbing) in buildings. Police power may take the form of adopting an ordinance that expressly prohibits natural gas plumbing without either amending Title 24, Part 6, changing minimum efficiency standards for covered products under the EPCA, or requiring the installation of specific appliances or systems as a condition of approval.<sup>i</sup> There is currently an effort to preempt local jurisdiction police power under the EPCA. The City of Berkeley’s Ordinance No. 7,672-N.S. adopted on July 16, 2019, used police power without amending Title 24 to prohibit natural gas plumbing in new construction. This ordinance survived the preemption challenge in federal district court and is now on appeal in the Ninth Circuit.<sup>ii</sup>

There is an opportunity to engage in the legislature and CPUC on the future of natural gas infrastructure. California regulates natural gas supply, transmission, storage, and the development of renewable natural gas or biomethane, including procurement targets for IOUs preempting some but not all additional local action or regulation.<sup>iii</sup> Natural gas distribution and storage monitoring, leak abatement, and decreasing emissions from short-lived climate pollutants round out current state policy.<sup>iv</sup> The CPUC

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<sup>i</sup> See City of Berkeley Ordinance No. 7,672-N.S. (Adopted July 16, 2019), City of Morgan Hill Ordinance No. 5906 (adopted October 23, 2019), City of San Jose Ordinance No. 30330 (adopted September 17, 2019), and City of Santa Cruz Ordinance No. 2020-06 (adopted April 14, 2020).

<sup>ii</sup> See *California Restaurant Ass. v. City of Berkeley*, Order Granting in Part and Denying in Part Motion to Dismiss, Document 75, Case No. 4:19-cv-07668-YGR (July 6, 2021); See *California Restaurant Ass. v. City of Berkeley*, Case No. 21-16278 (9th Cir.), filed Aug. 5, 2021.

<sup>iii</sup> See AB 2313 (Williams, Chapter 571, Statutes of 2016); SB 1440 (Hueso, Chapter 739, Statutes of 2018); see also AB 1900 (Gatto, Chapter 602, Statutes of 2012); See also SB 1440 (Hueso, Chapter 739, Statutes of 2018); AB 3163 (Salas, Chapter 358, Statutes of 2020).

<sup>iv</sup> See AB 1496 (Thurmond, Chapter 604, Statutes of 2015), SB 1371 (Leno, Chapter 525, Statutes of 2014) and SB 887 (Pavley, Chapter 673, Statutes of 2016), SB 605 (Lara, Chapter 523, Statutes of 2014), SB 1383 (Lara, Chapter

also mandated to decrease GHG emissions from the intrastate transmission and distribution lines.<sup>i</sup> In addition, the CPUC regulates climate impacts to and adaptation for IOU infrastructure<sup>ii</sup> and is currently adjudicating a proceeding over the future regulation of natural gas in California.<sup>iii</sup> These proceedings and the decisions that come out of them will determine how infrastructure is maintained, invested in, removed, and how stranded costs will be socialized.

Local jurisdiction act with authority to develop local hydrogen production and infrastructure through land use, constitutional authority to provide municipal services under California Constitution Article XI, § 9, franchise agreement authority, and police power authority. The CPUC would regulate intrastate hydrogen pipelines as a public utility if not owned by a municipal-owned utility.<sup>iv</sup> Development, procurement, and use of hydrogen also exist in state law through the statutory designation of E-hydrogen procurement as an eligible and carbon-neutral form of energy storage that can be used prospectively in the renewable energy grid or to fuel certain forms of transportation that can be used by IOUs to achieve state policy.<sup>v</sup> Hydrogen development offers more opportunities to support or further fuel switching to low-emission or green hydrogen as a fuel source for buildings, industrial processes, or thermal power plants.<sup>vi</sup> However, current hydrogen production is small, and hydrogen infrastructure and end-use equipment and appliances are nonexistent or limited. There are current CEC and U.S. Department of Energy (U.S. DOE) funding efforts to decrease cost and develop end-uses.<sup>vii</sup>

End-uses that depend on ozone depleting substances (ODS) and ODS substitutes with high-GWP gases, particularly HFC refrigerants, are subject to federal and state regulations that ban, limit or phase out the regulated substance. GHG emissions are caused by annual leakage during the equipment's use and at end-of-life when the high-GWP gas is vented instead of being captured and destroyed as required by law. Local authorities may seek to strengthen or accelerate state and federal actions by providing local enforcement, incentives to install low-GWP equipment, or potentially regulating equipment that uses these substances under its police power, if not preempted.

HFC refrigerants are common in heat pumps and commercial refrigeration, and certain industrial production with heat-pump installation projected to increase significantly because of building

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395, Statutes of 2016), and AB 1496 (Thurmond, Chapter 604, Statutes of 2015).

<sup>i</sup> See SB 1371 (Leno, Chapter 525, Statutes of 2014).

<sup>ii</sup> See CPUC Rulemaking R.18-04-019, Order Instituting Rulemaking to Consider Strategies and Guidance for Climate Change Adaptation; See CPUC Rulemaking R.18-12-005, Order Instituting Rulemaking to Examine Electric Utility De-Energization of Power Lines in Dangerous Conditions; See CPUC Rulemaking R. 18-10-007, Order Instituting Rulemaking to Implement Electric Utility Wildfire Mitigation Plans Pursuant to SB 901 (2018).

<sup>iii</sup> See CPUC Rulemaking R. 20-01-007, Order Instituting Rulemaking to Establish Policies, Processes, and Rules to Ensure Safe and Reliable Gas Systems in California and Perform Long-Term Gas System Planning.

<sup>iv</sup> See Public Utilities Code § 216.

<sup>v</sup> See SB 1369 (Skinner, Chapter 567, Statutes of 2018).

<sup>vi</sup> See LADWP Joins HyDeal LA, Targets Green Hydrogen at \$1.50/Kilogram by 2030 (May 17, 2021): <https://www.ladwpnews.com/ladwp-joins-hydeal-la-targets-green-hydrogen-at-1-50-kilogram-by-2030/>; See Mayor Eric Garcetti, City of Los Angeles, Announcement of Findings of Historic 100 Percent Renewable Energy Study; See Mayor Eric Garcetti's 2021 State of City Address: <https://lamayor.org/SOTC2021>; See HyDeal Los Angeles: <https://www.ghcoalition.org/hydeal-la>.

<sup>vii</sup> See California Energy Commission, Introduction of EPIC Initiative – The Role of Green Hydrogen in a Decarbonized CA – A Roadmap and Strategic Plan, Docket No. 21-IEPR-05, TN# 239050, (July 27, 2021), accessed from Docket Log: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=21-IEPR-05>; see US DOE Hydrogen Shot, <https://www.energy.gov/eere/fuelcells/hydrogen-shot>.

electrification.<sup>i</sup> The U.S. EPA regulates acceptable substitutes for existing refrigerants used in various end-use applications in the refrigeration and air conditioning (including transportation), foam blowing, and fire suppression sectors under the Significant New Alternatives Policy (SNAP).<sup>ii</sup> On May 6, 2021, new final SNAP regulations became effective, authorizing new refrigerant options with lower-GWP for retail food cooling as well as residential and light commercial air conditioning and heat pumps.<sup>iii</sup> The American Innovation and Manufacturing (AMI) Act of 2020, part of the Consolidated Appropriations Act of 2021,<sup>iv</sup> required the U.S. EPA to phase down production and consumption of HFCs in the United States by 85 percent over the next 15 years. On April 30, 2021, the U.S. EPA proposed an HFC phase down regulation for refrigerants and other industrial purposes under an allowance allocation and trading program<sup>v</sup> to implement the recently passed AMI Act of 2020.<sup>vi</sup> The rule will phase down the production and importation of 18 types of HFCs. This rule became effective on November 4, 2021, except for amendatory instruction 3 adding 40 CFR part 84, which became effective on October 5, 2021.

The CAA further prohibits the production and use of CFCs in the United States,<sup>vii</sup> preventing replacing a high-GWP ODS substitute with a new lower-GWP CFC refrigerant system. CAA Title VI, Section 605 also phased out the allowed use of HCFCs, starting with specific HCFCs and then moving to a total ban subject to limited exceptions.<sup>viii</sup> Beginning January 1, 2020, there is a ban on the production and import of HCFC-22 and HCFC-142b,<sup>ix</sup> and it will be unlawful to produce any HCFCs after January 1, 2030.<sup>x</sup> Additionally, CAA Title VI, Section 608<sup>xi</sup> sets national recycling and emission reduction standards for Class I ODS covered under Sections 604 and Class II ODS under Section 605.

California regulates high-GWP refrigerants under its Refrigerant Management Program<sup>xii</sup> created by AB 32 (Núñez, Chapter 433, Statutes of 2006), set a target of a 40% reduction of HFC emission below 2014 levels by 2030 under SB 1383 (Lara, Chapter 395, Statutes of 2016), operates a California SNAP program<sup>xiii</sup>

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<sup>i</sup> See Figure 30 in Kenney, Michael, Nicholas Janusch, Ingrid Neumann, and Mike Jaske. 2021. California Building Decarbonization Assessment. California Energy Commission. Publication Number: CEC-400-2021-006-CMF. (August 2021), p. 76; see Figure 3 in Achieving Carbon Neutrality in California: PATHWAYS Scenarios Developed for the California Air Resources Board. Energy and Environmental Economics, Inc. (October 2020), p. 25.

<sup>ii</sup> 40 CFR Part 82.

<sup>iii</sup> U.S. EPA, Final Rule: Protection of Stratospheric Ozone: Listing of Substitutes Under the Significant New Alternatives Policy Program, 40 CFR Part 82 [EPA-HQ-OAR-2019-0698; FRL-10020-41- OAR], Published Federal Register: Vol 86, No. 86, May 6, 2021: <https://www.govinfo.gov/content/pkg/FR-2021-05-06/pdf/2021-08968.pdf>.

<sup>iv</sup> 47 H.R. 133 – 116<sup>th</sup> Congress (2019–2020): Consolidated Appropriation Act, 2021. December 27, 2020 (Public Law No: 116-260), American Innovation and Manufacturing Act of 2020: <https://www.congress.gov/bill/116th-congress/house-bill/133/text>; 42 U.S.C.A. § 7675.

<sup>v</sup> See U.S. EPA Proposed Phasedown of Hydrofluorocarbons: Establishing the Allowance Allocation and Trading Program under the American Innovation and Manufacturing Act, 40 CFR Part 82 [EPA-HQ-OAR-2021-0044; FRL-10023-08-OAR], April 30, 2021: [https://www.epa.gov/sites/production/files/2021-05/documents/hfc\\_allocation\\_nprm\\_043021\\_admin.pdf](https://www.epa.gov/sites/production/files/2021-05/documents/hfc_allocation_nprm_043021_admin.pdf).

<sup>vi</sup> See U.S. EPA: Proposed Rule - Phasedown of Hydrofluorocarbons: Establishing the Allowance Allocation and Trading Program under the AIM Act: <https://www.epa.gov/climate-hfcs-reduction/proposed-rule-phasedown-hydrofluorocarbons-establishing-allowance-allocation>.

<sup>vii</sup> Title VI of the Clean Air Act Section 604: 42 U.S.C.A. § 7671c.

<sup>viii</sup> 42 U.S.C.A. § 7671b & d.

<sup>ix</sup> Ibid.

<sup>x</sup> Ibid.

<sup>xi</sup> 42 U.S.C.A. § 7671g.

<sup>xii</sup> 17 C.C.R. §§ 95380–95398.

<sup>xiii</sup> 17 C.C.R. §§ 95371–95377.

per SB 1013 (Lara, Chapter 375, Statutes of 2018), and received final approval for a CARB regulation prohibiting certain HFCs in specified stationary refrigeration, chillers, aerosols-propellants, and foam end-uses and requiring refrigerant recovery, reclaim, and reuse per SB 1383 (2016).<sup>i</sup> Additionally, SB 1013 (2018) directed the CPUC to consider including low-GWP refrigerants in energy efficiency portfolios. On April 16, 2020, CPUC D.20-04-010 adopted policies that affect all distributed energy resources, including energy efficiency, requiring program administrators to account for avoided costs of high-GWP gases in the energy efficiency portfolio, including refrigerant emissions and methane. CPUC D.20-04-010 applies avoided costs to, among other things, fuel substitution measures (e.g., the benefit is lowered methane emissions and costs are refrigerant emissions) and programs that encourage the use of lower-GWP refrigerants than current practice or regulation. CPUC D.21-05-031, adopted May 20, 2021, required the Refrigerant Avoided Cost Calculator from D.20-04-010 to be used by rolling energy efficiency program administrators for portfolio forecasts and filings beginning in 2022. Future changes will be tied to CARB's rulemaking, market development, and program administrator experiences.

## **B.4 Local Authority to Decarbonize the Electricity Supply**

Electricity regulation is divided between state regulation of the distribution system and procurement of supply and federal regulation of bulk-power transmission systems and bulk-power markets. In both instances, reliability requirements preempt local authority over electricity procurement where the procurement impacts either CPUC resource adequacy (RA) requirements<sup>ii</sup> or FERC authority over electric reliability in bulk-power systems.<sup>iii</sup> The following will discuss local authority in light of the state and federal regulation of conventional and renewable electricity supply resources.

### **B.4.1 Conventional and Fossil Fuel Generation**

The Energy Act of 2020 made several amendments to the Energy Policy Act of 2005 to address reducing GHG emissions from fossil generation through funding technological pilots to decrease emissions or fuel use from natural gas and coal turbines, improve carbon capture and storage, develop a carbon utilization programs, and study blue hydrogen, among other things.<sup>iv</sup> There were no new mandates regarding direct regulation of GHG emissions from power plants from this legislation.

In terms of state authority over GHG emissions, California's Cap-and-Trade program regulates covered entities that include cogeneration, self-generation of electricity, stationary combustion, and first deliverers of electricity that emit 25,000 metric tons or more of CO<sub>2</sub>e per data year.<sup>v</sup> State authority also exists over power siting. The CEC is the siting authority for thermal power plants of 50 megawatts or more with authority that preempts local jurisdiction land use authority.<sup>vi</sup> The CEC is prohibited from siting new nuclear power plants unless there is demonstrated technology or disposal site for high-level

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<sup>i</sup> See California Air Resources Board, Prohibitions on Use of Certain Hydrofluorocarbons in Stationary Refrigeration, Chillers, Aerosols-Propellants, and Foam End-Uses Regulation, Last Visited January 5, 2022:

<https://ww2.arb.ca.gov/rulemaking/2020/hfc2020>.

<sup>ii</sup> See Public Utilities Code § 380; see CPUC Resource Adequacy Proceeding [R.19-11-009](#).

<sup>iii</sup> See 14 U.S.C. § 8240.

<sup>iv</sup> 47 H.R. 133 — 116<sup>th</sup> Congress (2019–2020): Consolidated Appropriation Act, 2021. December 27, 2020 (Public Law No: 116-260), Division Z (Energy Act of 2020), Title IV & V: <https://www.congress.gov/bill/116th-congress/house-bill/133/text>.

<sup>v</sup> 17 C.C.R. §§ 95811 (a)–(b) & 95812(c).

<sup>vi</sup> Public Resources Code §§ 25500 et seq.

nuclear waste.<sup>i</sup> The Governor may also preempt local land use authority on a limited basis through an emergency declaration.<sup>ii</sup> Finally, all electric utilities and load-serving entities are prohibited from entering into any baseload power generating commitments of 5 years or more if such projects are not as clean as a combined-cycle gas turbine project.<sup>iii</sup>

In terms of air quality, there is uncertainty as to the extent that a local air district may further regulate GHG emissions in relation to CARB's authority, U.S. EPA authority, and continued uncertainty over power plant GHG regulations due to litigation and presidential administration changes. However, authority exists to create voluntary GHG reduction generation and certification programs in a district.

The U.S. EPA acts with regulatory authority over existing<sup>iv</sup> and new power plant<sup>v</sup> criteria pollutant<sup>vi</sup> and GHG emissions standards under the CAA<sup>vii</sup> with approval authority over local air district rules and regulations for the California SIP. Any state standard must satisfy the requirements of the CAA and U.S. EPA's implementing regulation with U.S. EPA approved SIPs having the force and effect of federal law.<sup>viii</sup> SIPs or parts of SIPs that are approved by a state but not yet approved by U.S. EPA are only enforceable under state law. There is disagreement and uncertainty regarding the authority to regulate GHG emissions directly using California air quality statutes. However, the CAA preserves state authority to adopt stationary emissions standards that are as or more stringent than federal requirements.<sup>ix</sup>

To this end, California adopted its own air quality management statutes, which do not directly call for the regulation of GHGs but instead mirror the federal CAA with certain sections prohibiting the enforcement of federal regulations that are less stringent than those that existed in 2002.<sup>x</sup> Cap-and-Trade also largely negates and may preempt additional regulation of power plant GHG emissions at the local level. Consequently, local authority to adopt more stringent GHG standards is subject to California's Clean Air Act,<sup>xi</sup> California Cap-and-Trade statute, California Air Resources Board authority and review, and U.S. EPA review. It should also be noted that a governor may issue an emergency declaration suspending air quality regulations during specific events or over a limited period of time, which may increase GHG emissions that must be quantified and mitigated or removed to meet state policy.<sup>xii</sup>

The CAA regulatory framework is currently filled with uncertainty because of regulatory changes and litigation at the federal level vacating both Obama and Trump administration GHG emissions regulations

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<sup>i</sup> Public Resources Code § 25524.2.

<sup>ii</sup> See Governor's July 30, 2021 [Proclamation of A State of Emergency](#) to address energy supply and demand issues; see U.S. Const. Amendment X; see California Emergency Services Act: Government Code §§ 8558, 8567, 8571, 8625, & 8627.

<sup>iii</sup> Public Utilities Code §§ 8340–8341.

<sup>iv</sup> 42 U.S.C.A. § 7411 (a) & (d).

<sup>v</sup> 42 U.S.C.A. § 7411(f).

<sup>vi</sup> See 40 CFR Part 60 Subpart Da (Standards of Performance for Electricity Steam Generation Units).

<sup>vii</sup> 42 U.S.C. § 7401 et seq.

<sup>viii</sup> 42 U.S.C.A. §§ 7410 (k) & (a)(5)(A), 7413.

<sup>ix</sup> See 42 U.S.C.A. §§ 7407 & 7416.

<sup>x</sup> See Health and Safety Code § 39000 et seq.

<sup>xi</sup> Health and Safety Code §§ 42500 et seq.

<sup>xii</sup> See Governor's July 30, 2021 [Proclamation of A State of Emergency](#) to address energy supply and demand issues; See U.S. Const. Amendment X; See California Emergency Services Act: Government Code §§ 8558, 8567, 8571, 8625, & 8627.



under CAA Section 111(b)<sup>i</sup> for new, modified, and reconstructed power plants and 111(d)<sup>ii</sup> for existing power plants. On January 1, 2021, U.S. EPA finalized a revised rule for new, modified, and reconstructed power plants amending existing requirements that set New Performance Source Performance Standards (NSPS) to limit CO<sub>2</sub> emissions from fossil fuel-fueled power plants.<sup>iii</sup> On March 17, 2021, per President Biden's Executive Order No. 13990, U.S. EPA asked the D.C. Circuit to vacate and remand this final rule, which occurred on April 5, 2021,<sup>iv</sup> leaving U.S. EPA's 2015 Final Rule in place.<sup>v</sup> In January 2021, the D.C. Circuit struck down the Affordable Clean Energy (ACE) rule for emissions from existing power plants,<sup>vi</sup> leaving no effective GHG regulation in place for existing power plants. Emission limits for existing power plants are now under development. However, the U.S. Supreme Court issued a decision on June 30, 2022 that limits U.S. EPA's ability to regulate GHG emissions from new and existing facilities and may further limit U.S. EPA's reliance on CAA delegated authority for regulation that touch other parts of the economy through electricity decarbonization.<sup>vii</sup> What new regulations U.S. EPA will issue for new and existing facilities remains uncertain at this time. The current state of affairs is reflected in SD APCD's Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units,<sup>viii</sup> which implements Title V thresholds for stationary sources of emissions from new or modified steam generation units, integrated coal gasification combined cycle (IGCC), or stationary combustion turbines that commence construction after January 8, 2014 or reconstruction/modification after June 18, 2014.

With U.S. EPA in the process of creating new standards subject to the recent U.S. Supreme Court decision, local authority to enact more stringent requirements is uncertain but may become clearer in the near term. The uncertainty stems from enforcement depending on non-preempted state authority and delegated authority from U.S. EPA through the approval of a local air quality standard in the SIP. Once U.S. EPA issues new standards, California likely will evaluate whether and how to adopt more stringent standards under the CAA. To date, the U.S. EPA has not approved<sup>ix</sup> any of the following GHG related local air districts rules for enforcement under California's SIP:

- Feather River AQMD Rule 10.11<sup>x</sup>;

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<sup>i</sup> 42 U.S.C.A. § 7411(f).

<sup>ii</sup> 42 U.S.C.A. § 7411 (a) & (d).

<sup>iii</sup> Federal Register, 86 FR 2542, 2542-2558 (2021): <https://www.federalregister.gov/documents/2021/01/13/2021-00389/pollutant-specific-significant-contribution-finding-for-greenhouse-gas-emissions-from-new-modified>.

<sup>iv</sup> See *California v. Environmental Protection Agency*, No. 21-1035, order at p. 1, Document # 1893155 (D.C. Cir. Apr. 5, 2021).

<sup>v</sup> See 40 CFR Parts 60, 70, 71, and 98 (2015): <https://www.govinfo.gov/content/pkg/FR-2015-10-23/pdf/2015-22837.pdf>.

<sup>vi</sup> See *American Lung Association v. Environmental Protection Agency*, 985 F.3d 914 (2021).

<sup>vii</sup> *West Virginia v. U.S. EPA*, 597 U.S. \_\_\_ (2022). See also *West Virginia v. U.S. EPA*, Docket No. 20-1530, 142 S. Ct. 420 (2021) (petitions for writs of certiorari in No. 20-1531, No. 20-1778, and No. 20-1780, granted October 29, 2021): [https://www.supremecourt.gov/DocketPDF/20/20-1530/176915/20210429133443663\\_2021.04.29%20-%20West%20Virginia%20v.%20EPA%20Petition.pdf](https://www.supremecourt.gov/DocketPDF/20/20-1530/176915/20210429133443663_2021.04.29%20-%20West%20Virginia%20v.%20EPA%20Petition.pdf).

<sup>viii</sup> See Title 40, Part 60, Subpart TTTT:

<https://www.sdapcd.org/content/dam/sdapcd/documents/rules/appendices/nsps/Subpart-TTTT.pdf>.

<sup>ix</sup> See U.S. EPA Approved Air Quality Implementation Plans in California (last visited January 12, 2022): <https://www.epa.gov/sips-ca>.

<sup>x</sup> See FR AQMD Rule 10.11 (Adopted August 1, 2011):

<https://ww2.arb.ca.gov/sites/default/files/classic/technology-clearinghouse/rules/RuleID993.pdf>.

- Mojave Desert AQMD Rule 1211<sup>i</sup>;
- North Coast Unified AQMD Rule 111<sup>ii</sup>; and
- Tehama County APCD Rule 7:3.<sup>iii</sup>

These rules would be enforced pursuant to authority derived from existing state air quality laws.<sup>iv</sup> It is unclear whether California air quality law authority by itself allows enforcement without U.S. EPA approval, specifically with regards to carbon dioxide emissions (but not other GHGs) from stationary sources subject to Cap-and-Trade.<sup>v</sup>

Additionally, two air quality management districts have used their existing authority<sup>vi</sup> to create voluntary programs that certify voluntary GHG reductions generated by in district activity: South Coast Air Quality Management District (SCAQMD) Rules 2700–2702<sup>vii</sup> and Sacramento Metropolitan AQMD Rule 100 et seq.<sup>viii</sup> Certification of GHG reduction credits may be issued either through use of a third party verifier (e.g., a carbon registry), through a GHG reduction project developed by the district itself, or both. These programs are designed to allow generation ownership, sale, trade, or retirement of the GHG reduction credit. SCAQMD’s program is notable because it allows both third-party certification for reduction projects in its districts under Rule 2700–2701 as well as a program where a fee is paid to the district to implement a GHG reduction project in the district under Rule 2702 using approved protocols.<sup>ix</sup> It is unclear whether these voluntary programs are successful or whether there is authority to create mandatory GHG reduction rules and programs. However, authority appears to exist to create a voluntary GHG reduction program in the SD APCD.

#### **B.4.2 Renewable Energy**

Existing authority allows local jurisdictions to procure electricity supply on behalf of their citizens, to determine the carbon content of this supply, franchise public rights of way for energy infrastructure, and support distributed generation.

At the federal level, Executive Order 14057 directs the federal executive branch on a net-zero emissions path by 2050. Specific to renewable energy at the utility and distributed energy level, the Executive Order, among other things, requires:

- 100 percent carbon pollution-free electricity on a net annual basis by 2030, including 50 percent 24/7 carbon pollution-free electricity;

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<sup>i</sup> See Mojave Desert AQMD Rule 1211 (Adopted February 28, 2011):

<https://ww2.arb.ca.gov/sites/default/files/classic/technology-clearinghouse/rules/RuleID1972.pdf>.

<sup>ii</sup> See North Coast Unified AQMD Rule 111 (July 9, 2015):

<https://ww2.arb.ca.gov/sites/default/files/classic/technology-clearinghouse/rules/RuleID2138.pdf>.

<sup>iii</sup> Tehama County APCD Rule 7:3 (Adopted February 1, 2011):

<https://ww2.arb.ca.gov/sites/default/files/classic/technology-clearinghouse/rules/RuleID3898.pdf>.

<sup>iv</sup> See Health & Safety Codes §§ 40702, 40703, 40704, 40752; See also Health & Safety Code § 42400 et seq.

<sup>v</sup> Health & Safety Code § 38594 (b).

<sup>vi</sup> Health & Safety Code §§ 39000 et seq.; see also Health & Safety Code §§ 40400 et seq. and §§ 40950 et seq.

<sup>vii</sup> South Coast AQMD Rule 2700-2702 (Adopted February 6, 2009; Amended June 4, 2010):

<https://www.aqmd.gov/home/rules-compliance/rules/scaqmd-rule-book/regulation-xxvii>.

<sup>viii</sup> Sacramento Metropolitan Rule 100 et seq. (adopted February 23, 2010):

<https://ww2.arb.ca.gov/sites/default/files/classic/technology-clearinghouse/rules/RuleID3566.pdf>.

<sup>ix</sup> South Coast AQMD Rule 2702 (Adopted February 6, 2009; Amended June 4, 2010), Table 1.



- A net-zero emissions building portfolio by 2045, including a 50 percent emissions reduction by 2032;
- A 65 percent reduction in scope 1 and 2 GHG emissions, as defined by the Federal Greenhouse Gas Accounting and Reporting Guidance, from Federal operations by 2030 from 2008 levels; and
- Net-zero emissions from Federal procurement, including a Buy Clean policy to promote the use of construction materials with lower embodied emissions; and
- Climate resilient infrastructure and operations.<sup>i</sup>

Implementing these orders will impact federal facilities across the San Diego region and may create opportunities to scale and benefit from federal action at the local jurisdiction level.

California's renewable portfolio standard (RPS) requires 60% renewable energy supply by 2030 for all load-serving entities with SB 100 (de León, Chapter 312, Statutes of 2018), further mandating that load-serving entities procure 100% carbon-free electricity by 2045.<sup>ii</sup> The CEC certifies the eligibility of generating resources to participate in the RPS with state law changing eligibility requirements over time (e.g., renewable hydrogen-fueled generation and biomethane).<sup>iii</sup> CPUC regulated load serving entities may be required by the CPUC to exceed the RPS procurement target,<sup>iv</sup> which suggests that local jurisdiction may petition the CPUC to require the local electric corporation to procure higher renewable energy content for their customers. CPUC regulated load serving entity may also voluntarily exceed procurement targets for any year of a three-year compliance period under the RPS for later use in a subsequent compliance period if it meets CPUC requirements.<sup>v</sup> This allows the load serving entity to supply higher renewable energy contents earlier than a target year. SB 350 (2015) also required the CPUC to create an integrated resource planning (IRP) that forms the regulated load serving entities (LSE) component of the ten-year prospective long-term procurement plan to meet state mandates and ensure reliability.<sup>vi</sup> This process sets procurement targets to achieve California GHG reductions for CPUC regulated LSEs with the current proceeding seeking to implement significant energy storage and renewable energy procurement that further decrease GHG emissions.<sup>vii</sup>

California offers limited retail competition options in the form of statutes that authorize both a direct access (DA) program<sup>viii</sup> to serve a statutorily capped number of commercial customers and the creation of community choice aggregators (CCA) to serve all customers. This further complicates decarbonizing electric supply because there may be an IOU, CCA, and/or DA supplying electricity to customers in a

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<sup>i</sup> Presidential Executive Order No. 14057, Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability, 86 Federal Register 70935 (No. 2021-27114), Sec. 102 (December 8, 2021): <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/12/08/executive-order-on-catalyzing-clean-energy-industries-and-jobs-through-federal-sustainability/> & <https://www.federalregister.gov/documents/2021/12/13/2021-27114/catalyzing-clean-energy-industries-and-jobs-through-federal-sustainability>.

<sup>ii</sup> See Public Utilities Code §§ 399.11 et seq.

<sup>iii</sup> See California Energy Commission, Commission Guidebook Renewable Portfolio Standard Eligibility, Ninth Revised Edition, CEC-300-2016-006-ED9-CMF-REV (January 2017).

<sup>iv</sup> Public Utilities Code § 399.15 (b)(3).

<sup>v</sup> Public Utilities Code § 399.13 (A)(5)(B).

<sup>vi</sup> See Public Utilities Code §§ 454.51 & 454.52.

<sup>vii</sup> See CPUC Proceeding R.16-02-007, Order Instituting Rulemaking to Develop an Electricity Integrated Resource Planning Framework and to Coordinate and Refine Long-Term Procurement Planning Requirements: [https://apps.cpuc.ca.gov/apex/f?p=401:56:0::NO:RP,57,RIR:P5\\_PROCEEDING\\_SELECT:R1602007](https://apps.cpuc.ca.gov/apex/f?p=401:56:0::NO:RP,57,RIR:P5_PROCEEDING_SELECT:R1602007); see CPUC R.20-05-003, Order Instituting Rulemaking to Continue Electric Integrated Resource Planning and Related Procurement Processes: [https://apps.cpuc.ca.gov/apex/f?p=401:56:0::NO:RP,57,RIR:P5\\_PROCEEDING\\_SELECT:R2005003](https://apps.cpuc.ca.gov/apex/f?p=401:56:0::NO:RP,57,RIR:P5_PROCEEDING_SELECT:R2005003).

<sup>viii</sup> See Public Utilities Code § 365.1.

local jurisdiction. California Constitution Article XI, § 9 also allows local jurisdictions, as municipal corporations, to establish, purchase, and operate public works to furnish light, water, power, heat, and other services to residents. These services may be offered outside of a local government’s boundaries with the consent of the applicable jurisdiction. However, there are no publicly owned electric or natural gas utilities in the San Diego region and the limited retail competition options of DA and CCAs are used in the region with the effect that local jurisdictions do not own the electric and natural gas distribution and transmission systems.

Local jurisdictions also control the public right-of-way needed to deliver electricity, natural gas, or any other molecule like hydrogen to customers. Local jurisdictions operate with long-term or perpetual franchise agreements that set terms for SDG&E to install and operate its infrastructure in the public right-of-way. Franchise agreements provide revenue to local jurisdictions and complicate the removal of infrastructure. However, it may be possible to exercise franchise rights as a way to increase renewable energy fuel, such as renewable hydrogen for power plant consumption, by either repurposing existing infrastructure or building new infrastructure.

Local governments act with the ability to procure their own supply of electricity under a CCA<sup>i</sup> — such as San Diego Community Energy<sup>ii</sup> and Clean Energy Alliance<sup>iii</sup> — subject to requirements like the RPS. CCAs allow local jurisdictions to exceed the RPS targets (e.g., 100% renewable energy) through the procurement authority of the CCA to serve customers. CCAs are subject to reliability requirements under state and federal law, which may complicate achieving a 100% renewable energy supply portfolio or require carbon removal to address carbon emissions from resources that must run for reliability purposes to prevent brown or blackouts. CCAs are opt-in by default, but customers may opt-out to return to the incumbent utility or to a DA electric service provider if there is room under the DA cap. IOUs are also the provider of last resort (POLR) per SB 520 (Hertzberg, Chapter 408, Statutes of 2019), currently being instituted by CPUC decisions under R.21-03-011, further complicating decarbonization of supply portfolios to supply customers that either leave CCAs or DA providers or where a CCA or DA provider fails resulting in customers returning to the incumbent IOU.<sup>iv</sup>

Police power allows local jurisdictions to determine the supply portfolio supplied from a CCA for their citizens and businesses in their jurisdictions pursuant to either a general plan GHG mitigation plan (e.g., climate action plan)<sup>v</sup> or as part of their membership in a CCA. This allows a local government by resolution to procure a high or 100% renewable energy supply as the default offering for all of their municipal accounts and/or all of the CCA customers in that jurisdiction who do not opt-out.<sup>vi</sup>

Local jurisdictions also play an essential role in furthering distributed generation through CCAs, reach codes, and permit streamlining. CCAs can create distributed generation procurement programs in the form of net energy metering or feed-in tariffs (FIT) to increase customer installation of renewable energy generation, including energy storage. Under net energy metering, the CCA credits the customer

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<sup>i</sup> See AB 117 (Migden, Chapter 838, Statutes of 2002).

<sup>ii</sup> Includes Cities of San Diego, Imperial Beach, Encinitas, La Mesa, Chula Vista, and the County of San Diego.

<sup>iii</sup> Includes Cities of Carlsbad, Del Mar, and Solana Beach.

<sup>iv</sup> See *Western Community Energy Chapter 9 Bankruptcy: Western Community Energy*, 6:21-bk-12821-SY (Bankr. C.D. Cal.) (Filed May 24, 2021).

<sup>v</sup> See CEQA Guidelines § 15183 (2021) (14 C.C.R. § 15183).

<sup>vi</sup> See City of Encinitas Regular City Council Meeting, February 24, 2021, [Agenda Item 10B](https://encinitas.granicus.com/MetaViewer.php?view_id=7&clip_id=2347&meta_id=120211): Adopt Resolution 2021-17: [https://encinitas.granicus.com/MetaViewer.php?view\\_id=7&clip\\_id=2347&meta\\_id=120211](https://encinitas.granicus.com/MetaViewer.php?view_id=7&clip_id=2347&meta_id=120211).

for the net generation exported to the grid after the onsite load is served. Under a FIT, the CCA pays the customer for all generation produced by the generating resource with no onsite load served. In terms of reach codes, Title 24 now requires new low-rise residential construction (1–3 stories) to install solar. However, local jurisdiction may require additions and alterations of existing residential and nonresidential buildings to install solar if it is cost-effective pursuant to Public Resource Code § 25402.1 (h)(2) and Title 24, Part 6, Section 10-106. Finally, AB 2188 (Muratsuchi, Chapter 521, Statutes of 2014) requires permit streamlining for small residential rooftop solar systems and AB 45 (Blakeslee, Chapter 404, Statutes of 2009) encourage adoption of county ordinances to reduce permitting obstacles for small wind energy systems. Local jurisdictions act with the authority to further streamline permitting and decrease cost for these types of energy systems or to expand streamlined permit review to more extensive systems or additional types of buildings (e.g., nonresidential for rooftop solar).

## **B.5 Local Authority Related to Natural Climate Solutions and Other Land Use Considerations**

The San Diego region is composed of federal, tribal, state, local, and privately held land. The following will discuss authority over this land, submerged land, water, and coast (land(s)). Authority over the land(s) directly determines its uses, potentially limiting whether the use can support GHG reductions, removal, and/or storage. The following will review federal, tribal, California, and local authority. It concludes with an analysis on agricultural land.

### **B.5.1 Federal Authority Over Natural Climate Solutions and Other Land Use Considerations**

The primary actions local jurisdictions may take related to federal lands is through lobbying Congress, engaging with federal lands management agencies to create government to government agreements (e.g., a memorandum of understanding (MOU)), and working directly with federal lands managers to achieve local objectives across the region.

The U.S. Government owns fee titles in surface land, subsurface mineral rights, less-than-fee in other surface and mineral rights,<sup>i</sup> mineral resources under the outer continental shelf, and living marine resources out to 200 miles offshore.<sup>ii</sup> Federal land in the San Diego region includes national forest, land managed by the Bureau of Land Management, a national monument, wildlife refuge, and land managed by the Department of Defense.

Federal public land law is complex, requiring specific legal and factual analysis that may involve both the Administrative Procedure Act (APA) of 1946<sup>iii</sup> and the National Environmental Policy Act (NEPA) of 1969.<sup>iv</sup> Waters of the United States also include wetlands that are regulated under Section 404 of the Clean Water Act administered by the U.S. Army Corps of Engineers.<sup>v</sup> Specific to geological carbon

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<sup>i</sup> The United States owns severed surface estates, severed mineral estates, easements for access, acquired "wetlands easements" for the benefit of migratory waterfowl, and general conservation or nondevelopment easements.

<sup>ii</sup> Fisheries Conservation and Management Act of 1976, 16 U.S.C.A. §§ 1801–1882.

<sup>iii</sup> 5 U.S.C.A. §§ 551–706.

<sup>iv</sup> 42 U.S.C.A. §§ 4321–4370d.

<sup>v</sup> 33 U.S.C.A § 1344; See generally 33 U.S.C.A. §§ 1251 et seq., U.S. Army Corps of Engineers implementing regulations at 33 C.F.R. §§ 320–330 and U.S. EPA § 404(b)(1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material at 40 C.F.R. §§ 230–233.

sequestration on public lands, the Energy Independence and Security Act of 2007 required the Secretary of the Interior to submit to the House Committee on Natural Resources and Senate Committee on Energy and Natural Resources, in coordination with U.S. EPA, the Secretary of Energy, and heads of other appropriate agencies, a report:

- Recommending criteria for identifying candidate geological sequestration sites in statutorily specified types of geological settings (e.g., oil & gas fields, saline formations, etc.);
- A proposed regulatory framework for the leasing of public land or an interest in public land for the long-term geological sequestration of carbon dioxide, proposed procedures to ensure public review and comment and protection of natural and cultural resources;
- A description of the status of Federal leasehold or Federal mineral estate liability issues related to the geological subsurface trespass of or caused by carbon dioxide stored in public land, including any relevant experience from enhanced oil recovery using carbon dioxide on public land;
- Recommendations for additional legislation that may be required to ensure that public land management and leasing laws are adequate to accommodate the long-term geological sequestration of carbon dioxide;
- An identification of the legal and regulatory issues specific to carbon dioxide sequestration on land in cases in which title to mineral resources is held by the United States but title to the surface estate is not held by the United States;
- An identification of the issues specific to the issuance of pipeline rights-of-way on public land under the Mineral Leasing Act (30 U.S.C. 181 et seq.) or the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.) for natural or anthropogenic carbon dioxide; and
- Recommendations for additional legislation that may be required to clarify the appropriate framework for issuing rights-of-way for carbon dioxide pipelines on public land.<sup>i</sup>

This report is a starting point for sequestration activity on federal lands and should be used in concert with land use authority described below.

Additionally, the Energy Act of 2020 amended the Energy Policy Act of 2005 (42 U.S.C.A § 16291 et seq.) to establish a research, development, and demonstration program to test, validate, or improve technologies and strategies to remove carbon dioxide from the atmosphere on a large scale through activities that include:

- Direct air capture and storage technologies;
- Bioenergy with carbon capture and storage technologies;
- Enhanced geological weathering;
- Agricultural practices;
- Forest management and afforestation; and
- Planned or managed carbon sinks, including natural and artificial.<sup>ii</sup>

There is opportunity at the state and local level to develop and demonstrate or benefit from projects funded by this legislation. Further efforts should be made to investigate this opportunity, particularly with regard to federal land in the region.

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<sup>i</sup> Public Land No. 110-140, § 714(a), 121 Stat. 1492, 1715.

<sup>ii</sup> 47 H.R. 133 — 116<sup>th</sup> Congress (2019–2020): Consolidated Appropriation Act, 2021. December 27, 2020 (Public Law No: 116-260), Division Z (Energy Act of 2020), Title V: <https://www.congress.gov/bill/116th-congress/house-bill/133/text>.

The following will provide a general explanation of the four primary federal public lands and resources agencies. An analysis of the Department of Defense is excluded but the Department of Defense should be included in any regional negotiations and planning. The analysis focuses on opportunities for local governments or the State of California to engage federal lands managers based on federal lands and resources in the San Diego region:

- National Parks Service (NPS): The National Park System Act of 1916<sup>i</sup> is the primary law governing national parks; the Act grants the NPS broad discretion in achieving its main goals of preservation and recreation. The National Parks and Recreation Act of 1978<sup>ii</sup> creates general planning obligations for the NPS. The Antiquities Act of 1906<sup>iii</sup> authorizes the presidential designation of national monuments and the protection of scientific and historical objects. It may be used to preserve additional land in the San Diego region where such land is already federally owned and the designation limited to the smallest area compatible with preservation for “historic or scientific interest,”<sup>iv</sup> with courts often granting deference to presidential discretion. The Cabrillo National Monument is the only NPS land in the San Diego region established by Presidential Proclamation 4319 (September 28, 1974).

The NPS’s discretion in achieving its mission suggests that partnering with local jurisdictions to decrease carbon emissions related to the Cabrillo Monument and increase natural land carbon removal may be feasible. Any action would need to be consistent with the purpose of creating the Cabrillo National Monument.<sup>v</sup> It may also be possible to preserve land through the creation of a national park or additional monument in the San Diego region.

- Fish and Wildlife Service (FWS): FWS mission includes land management of wildlife refuge system units created by statute and presidential executive proclamation, and national regulation for wildlife protection that applies off and on federal lands. Wildlife refuge system units are governed by the National Wildlife Refuge System Administration Act of 1966,<sup>vi</sup> the National Wildlife Refuge System Improvement Act of 1997,<sup>vii</sup> the Refuge Recreation Act of 1962,<sup>viii</sup> and the Refuge Revenue Sharing Act of 1964.<sup>ix</sup> The National Wildlife Refuge Act of 1997 also created three tiers of use: 1) Conservation of wildlife, plants, and their habitats; 2) If human use is allowed, wildlife-dependent recreational uses are entitled to the highest priority; and 3) All other uses with the lowest priority or prohibition of use.<sup>x,xi</sup> There is some level of discretion afforded to FWS officials with regards to uses. Funds to acquire refuge land are authorized by specific appropriation or under multiple existing statutes including: the Land and Water Conservation Fund Act<sup>xii</sup>; the Migratory Bird

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<sup>i</sup> 54 U.S.C.A. §§ 100101–100906.

<sup>ii</sup> 54 U.S.C.A. §§ 100101, 100502, 100507, 100751, 100754, 100901, 100906, 100302, 100702-100703, 100751, 100754, 101301, 10212, 101302, 102701-102702, 104906.

<sup>iii</sup> 54 U.S.C.A. §§ 320301-320303.

<sup>iv</sup> 54 U.S.C.A. § 320301.

<sup>v</sup> See *United States v. City & County of Denver*, 656 P.2d 1 (Colo. 1982).

<sup>vi</sup> 16 U.S.C.A. §§ 668dd–668ee.

<sup>vii</sup> Public Law No. 105-57, 111 Stat.1252.

<sup>viii</sup> 16 U.S.C.A. §§ 460k–460k-4.

<sup>ix</sup> 16 U.S.C.A. § 715s.

<sup>x</sup> 16 U.S.C.A. § 668dd(a)(2).

<sup>xi</sup> See 71 Fed. Reg. 36408 (2006); Final Appropriate Refuge Uses Policy, available at <http://policy.fws.gov/ser600.html>.

<sup>xii</sup> 54 U.S.C.A. §§ 100506, 100904 to 100905, & 200301–200310.

Conservation Act of 1929<sup>i</sup>; and the Water Bank Act of 1970.<sup>ii</sup> FWS acts with exclusive or shared enforcement authority over wildlife affecting federal, state, and private land. These include the: Endangered Species Act (ESA) of 1973<sup>iii</sup>; the Migratory Bird Treaty Act of 1918<sup>iv</sup>; the Bald Eagle Protection Act of 1940<sup>v</sup>; and the Marine Mammal Protection Act of 1972.<sup>vi</sup> FFWS administration includes the San Diego National Wildlife Refuge.

There is some level of discretion afforded to FWS officials with regards to uses that should be further analyzed. Opportunities may include increasing the size of existing refuge and working with FWS officials to exercise their discretion in a way that benefits regional decarbonization goals.

- Bureau of Land Management (BLM): BLM administers federal lands not reserved to parks or refuge under a complex statutory regime that dates back to the founding of the Republic. BLM authority comes from: the Federal Land Policy and Management Act (FLMP) of 1976,<sup>vii</sup> range management authority contained in the Taylor Grazing Act of 1934<sup>viii</sup> and Public Rangelands Improvement Act of 1978,<sup>ix</sup> land manager authority contained in the FLMP,<sup>x</sup> Color of Title Act,<sup>xi</sup> and Desert Lands Act of 1877,<sup>xii</sup> and mineral manager authority under General Mining Law Act of 1872,<sup>xiii</sup> the Mineral Leasing Act of 1920,<sup>xiv</sup> the Acquired Lands Leasing Act of 1947,<sup>xv</sup> and Geothermal Steam Act of 1970.<sup>xvi</sup>

BLM land managers act with broad discretion to plan and manage land and resources. Local BLM managers act with different authorities when compared to U.S. Forest Service officials, who must change already established localized plans developed in compliance with existing broad agency rules that limit discretion. This may provide an opportunity for local jurisdictions to work directly with local BLM land managers on decarbonization efforts in the San Diego region.

- The U.S. Forest Service (U.S.F.S.): The Organic Act of 1897<sup>xvii</sup> grants authority over forest land, defines the purpose of national forest management, and set strict limits on timber harvest. Some management practices, like livestock grazing, administrative wilderness designation, and multi-use management actions were later codified in law. The Organic Act of 1897 originally granted a wide range of management discretion. However, the National Forests are now managed with less discretion because of the Forest and Rangelands Renewable Resources Planning Act (RPA) of

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<sup>i</sup> 16 U.S.C.A. §§ 715–715r.

<sup>ii</sup> 16 U.S.C.A. §§ 1301–1311.

<sup>iii</sup> 16 U.S.C.A. §§ 1531–1543.

<sup>iv</sup> 16 U.S.C.A. §§ 703–711.

<sup>v</sup> 16 U.S.C.A. §§ 668–668d.

<sup>vi</sup> 16 U.S.C.A. §§ 1361–1407.

<sup>vii</sup> 43 U.S.C.A. §§ 1701–1784.

<sup>viii</sup> 43 U.S.C.A. §§ 315–315r.

<sup>ix</sup> 43 U.S.C.A. §§ 1901–1908.

<sup>x</sup> 43 U.S.C.A. §§ 1713–1721.

<sup>xi</sup> 43 U.S.C.A. §§ 1068–1068b.

<sup>xii</sup> 43 U.S.C.A. §§ 321–323.

<sup>xiii</sup> 30 U.S.C.A. §§ 22–47.

<sup>xiv</sup> 30 U.S.C.A. §§ 181–287.

<sup>xv</sup> 30 U.S.C.A. §§ 351–354.

<sup>xvi</sup> 30 U.S.C.A. §§ 1001–1026.

<sup>xvii</sup> 16 U.S.C.A. §§ 473–482 (partially repealed 1976).

1974, as amended by and merged into the National Forest Management Act (NFMA) of 1976,<sup>i</sup> which created an inclusive forest wide planning process for the entire national forest system, including localized planning. This authority grants discretion to U.S.F.S. to create broad, encompassing management regulations but compliance with these regulations limits local manager discretion over local plans. Forest land is also affected by the FLPMA,<sup>ii</sup> wilderness designations,<sup>iii</sup> and the Endangered Species Act of 1973.<sup>iv</sup>

Because there are localized planning requirements and less manager discretion, there is less flexibility with National Forest land than BLM land without amending or creating a new local plan under the NFMA. However, the inclusion of decarbonization actions in U.S.F.S. authority to issue broad rules of applicability to manage forest land does create an opportunity for local jurisdictions to engage in the U.S.F.S. regulatory process that affects local planning in addition to advocating for changes to existing local plans, such as the Cleveland National Forest Land Management Plan.

### **B.5.2 Tribal Authority Over Natural Climate Solutions and Other Land Use Considerations**

States and local governments generally act with limited to no authority over tribal land use and activity. Cooperative intergovernmental policies and agreements that support tribal land preservation, land conservation, and decarbonization efforts through mechanisms that include the fee-to-trust process appear to be existing paths to work with tribes in achieving regional decarbonization goals.

There are eighteen federally recognized tribes and seventeen tribal governments (Note: the Barona and Viejas Bands share joint-trust and administrative responsibility for the Capitan Grande Reservation) in the San Diego region.<sup>v</sup> In terms of natural resources, tribal and individual aboriginal titles include exclusive rights to use land and resources unless abrogated by treaty or statute.<sup>vi</sup> On trust and restricted lands, the U.S. holds natural resources in trust for the tribal or individual owner, owing a fiduciary duty to the tribe or allottee. Federal executive authority over Indian Affairs, including trust land, flows from the President to the Secretary of the Interior and through delegation to the Bureau of Indian Affairs (BIA).<sup>vii</sup> BIA regulations include: the process to acquire land in trust status for a tribe or individual Indians (fee-to-trust)<sup>viii</sup>; removing restrictions on the alienation of Indian allotments<sup>ix</sup>; approval and cancellation of leases on tribal and individual trust land<sup>x</sup>; issuance of grazing permits on Indian land<sup>xi</sup>; governing the leasing of mineral resources<sup>xii</sup>; management of timber resources on tribal land<sup>xiii</sup>; regulation of certain

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<sup>i</sup> 16 U.S.C.A. §§ 1600–1616.

<sup>ii</sup> 43 U.S.C.A. §§ 1732(b), 1751–1753, & 1765–1771.

<sup>iii</sup> 16 U.S.C.A. §§ 1131–1136.

<sup>iv</sup> 16 U.S.C.A. §§ 1131–1136.

<sup>v</sup> Note: the San Luis Rey Band of Luiseño Indians and Mount Laguna Band of Luiseño Indians Tribal Governments do not have federally recognized land but are active in the region.

<sup>vi</sup> See, e.g., *United States v. Dann*, 873 F.2d 1189 (9th Cir. 1989), on remand from *United States v. Dann*, 470 U.S. 39 (1985) (individual aboriginal use rights).

<sup>vii</sup> See 25 U.S.C.A. §§ 1, 1s, & 2; 43 U.S.C.A. § 1457.

<sup>viii</sup> 25 C.F.R. part 151.

<sup>ix</sup> 25 C.F.R. part 152.

<sup>x</sup> 25 C.F.R. part 162.

<sup>xi</sup> 25 C.F.R. part 166.

<sup>xii</sup> 25 C.F.R. parts 200, 211, 212, 225.

<sup>xiii</sup> 25 C.F.R. § 163.

fishing activities<sup>i</sup>; regulation of Indian traders<sup>ii</sup>; implementation of portions of the Indian Gaming Regulatory Act<sup>iii</sup>; and regulation of certain water rights and irrigation issues.<sup>iv</sup>

Indian tribes possess the inherent power to govern their territories. While these powers may be limited by federal laws in certain respects, the authority over tribal health and welfare remains substantial, allowing tribes to act to the full limit of their inherent governmental authority.<sup>v</sup> Tribes may enact environmental tribal codes that establish standards, permit requirements, and penalties for violations and provide for enforcement in tribal court and through tribal agency proceedings. Tribes may also exercise environmental law authority delegated by Congress, with tribes assumed to be the primary regulatory authority or to have primacy for administering most federal environmental law programs.<sup>vi</sup> Federal environmental law applies in a tribal territory with either the tribe or the federal agency — generally the U.S. EPA — responsible for administering the environmental statute.<sup>vii</sup>

States and local governments generally act with limited to no authority over tribal land use and activity.<sup>viii</sup> State and local environmental laws do not apply to Sovereign Tribal Nations unless required by the Compact with the State<sup>ix</sup> or through independent agreements between Tribal Governments and local agencies. Local jurisdictions may enact policies that affect tribal land expansion through the existing fee-to-trust applications process, which transfers purchased land to the BIA as trustee.<sup>x</sup> Per SB 712 (Hueso, Chapter 291, Statutes of 2021), local jurisdictions are now encouraged to work cooperatively with tribes in a tribe's nongaming fee-to-trust application and prohibited from adopting or enforcing a resolution or ordinance that prevents the local government from conducting a fair evolution of the application based on its merits. The County of San Diego recently acted before this law was signed by the Governor by voiding Resolution Nos. 94-115, which created a blanket policy of opposition to fee-to-trust applications in 1994, and 01-162, which set strict criteria for liquor licenses, in May of 2021. The County of San Diego will be compliant with SB 713 (2021) as it takes effect on January 1, 2022, creating a cooperative intergovernmental policy that can support tribal land preservation, land conservation, and decarbonization efforts through the fee-to-trust process.

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<sup>i</sup> 25 C.F.R. parts 241, 242, 247–249.

<sup>ii</sup> 25 C.F.R. part 140.

<sup>iii</sup> 25 C.F.R. parts 290 and 291.

<sup>iv</sup> 25 C.F.R. parts 159, 171–173.

<sup>v</sup> See *Backcountry Against Dumps v. EPA*, 100 F.3d 147, 151 (D.C. Cir. 1996).

<sup>vi</sup> See 1 Cohen's Handbook of Federal Indian Law § 10.01 (2021).

<sup>vii</sup> See *Donovan v. Coeur d' Alene Tribal Farm*, 751 F.2d 1113, 1116 (9th Cir. 1985) (quoting *United States v. Farris*, 624 F.2d 890, 893–894 (9th Cir. 1980)).

<sup>viii</sup> See *Worcester v. Georgia*, 31 U.S. 515 (1832).

<sup>ix</sup> See Indian Gaming Regulatory Act of 1988 (Public Law 100-497; 18 U.S.C.A. §§ 1166 et seq. & 25 U.S.C.A §§ 2701 et seq.).

<sup>x</sup> See County of San Diego Resolution No. 94-115 (1994) creating policy to oppose all tribal fee-to-trust applications and Resolution No. 01-162 (2001) adopting strict criteria for tribal liquor licensing for their facilities (both resolutions voided by a 4-1 vote on May 5, 2021 of the County of San Diego Board of Supervisor- Land Use, Regular Meeting, Agenda Item No. 9: "FRAMEWORK FOR OUR FUTURE: COOPERATIVE APPROACH TO TRIBAL GOVERNMENTS AND FEE TO TRUST PROPOSALS":

<https://bosagenda.sandiegocounty.gov/cob/cosd/cob/doc?id=0901127e80cfcf57>;

<https://bosagenda.sandiegocounty.gov/cob/cosd/cob/doc?id=0901127e80cfd81>).



## B.5.3 State of California Authority Over Natural Climate Solutions and Other Land Use Considerations

### B.5.3.1 General Authority

State ownership and authority over state and private natural and working lands are inextricably tied to federal public lands and statutes. Federal lands are often geographically contiguous with state land or surrounds state land acquired from a federal government grant or state acquisition of federal land. For example, the equal footing doctrine and Submerged Lands Act of 1953<sup>i</sup> presumes that states own title to submerged lands beneath inland navigable waters and beneath territorial waters within three nautical miles of the state's coast. Additionally, federal land grants are often restricted, limiting state discretion as to the use and disposition of the land.<sup>ii</sup>

Beyond state land with a federal nexus, California actively manages natural and working lands through various agencies with a wide range of authority and missions. State authority and specific agency authority to preempt local police power over zoning is narrow and limited<sup>iii</sup> to specific statewide objects. These objectives include housing requirements that determine the number of residential units to be zoned, including affordable housing, but not where the units should be zoned.<sup>iv</sup> They also include specific areas, such as the coastal zone or under the Subdivision Map Act,<sup>v</sup> which allows specified local supplementary regulation.<sup>vi</sup> State preemption over charter city municipal affairs is expressly limited by California Constitution Article XI, §§ 3 and 5. Additionally, CEQA applies to a broad range of projects, as defined, on natural and working lands and is a major consideration when analyzing land and resource uses. The California Endangered Species Act may also affect use of habitat and would need to be specifically analyzed.<sup>vii</sup> The following discusses both state policy and relevant laws and agencies.

AB 32 (2006) and SB 32 (Pavley, Chapter 249, Statutes of 2016) authorized programs — such as Cap-and-Trade — do not directly regulate land use. However, SB 1386 (Wolk, Chapter 545, Statutes of 2016) established protecting and managing natural and working lands as state policy to be considered by all parts of the state government, that this policy is important to achieving California's GHG reduction goals, and that state policy includes the intent to promote cooperation of owners of natural and working lands. In addition, the carbon neutrality by 2045 target required by 2018 Executive Order B-55-18's incorporates working lands, including agriculture, in the 2022 AB 32 Scoping Plan update that is in draft form and expected to be approved by the end of 2022. CARB completed several technical working groups on natural and working lands as part of the Scoping Plan update, with the most recent on December 2, 2021. In addition, CARB is developing methods to model business-as-usual and several alternatives that will inform statewide goals in the 2022 Scoping Plan for five natural and working land categories: 1) forest, shrubland, and grasslands; 2) agriculture; 3) settlements (e.g., urban forests, wildland urban interface, and rural intermix and influence forests); 4) wetlands; 5) deserts and other

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<sup>i</sup> Submerged Lands Act, 43 U.S.C.A. §§ 1301–1315: The 1953 Act gave coastal states title to the offshore lands three miles seaward from the coastline; See also *United States v. Alaska*, 521 U.S. 1 (1997) (ANWR Ownership).

<sup>ii</sup> George Cameron Coggins and Robert L. Glicksman, *Public Natural Resources Law*, § 1:7 (2nd Ed., October 2021 Update).

<sup>iii</sup> See Government Code § 65000 et seq.; See *Scrutton v. County of Sacramento*, 275 Cal. App. 2d 412, 417 (1978).

<sup>iv</sup> See Government Code §§ 65913.1(a), 65863.5, 65583(a)(3), 65584, & 65584.01.

<sup>v</sup> Government Code §§ 66410 et seq.

<sup>vi</sup> See Government Code §§ 66411, 66421, 66477, 66478, 66479, 66483, & 66484; see also *Friends of Lake Arrowhead v. Board of Supervisors*, 38 Cal. App. 3d 497, 505, (1974).

<sup>vii</sup> Fish and Game Code § 2050 et seq.

lands.<sup>i</sup>

Executive Order B-55-18 was furthered in 2020 by Executive Order N-82-20's language regarding biodiversity, 30% land and coastal water conservation, acceleration of natural carbon sequestration and climate resiliency on natural and working lands, and creation of the Natural and Working Lands Climate Smart Strategy, including setting a statewide target to meet the 2045 carbon neutrality goal. The legislature codified part of Executive Order N-82-20 under SB 27 (Skinner, Chapter 237, Statutes of 2021) regarding establishing a Natural and Working Land Climate Smart Strategy that includes developing a framework to achieve California's climate goals and mandates CARB to set CO<sub>2</sub> removal targets for 2030 and beyond under its Scoping Plan for all emission sectors including those in this framework. Finally, SB 27 (2021) requires the Natural Resources Agency to create a carbon removal and sequestration registry to identify, list, fund projects by state agencies and private entities, and retire projects in the state that drive climate action on the state's natural and working lands.

Previously, the 2017 AB 32 Scoping Plan, guided by SB 1386 (2016), sought to address GHG emissions from natural and working lands, including forests, rangelands, agriculture, wetlands, and soils. The 2017 Scoping Plan sought to maintain natural and working "land as carbon sinks (i.e., net zero or negative GHG emissions) and, where appropriate, minimize the net GHG and black carbon associated with management, biomass utilization, and wildfire events"<sup>ii</sup> out to 2030 as it predated the 2018 executive order for carbon neutrality. It set a target of sequestering and avoiding emissions in this sector by at least 15–20 million metric tons by 2030.

The 2022 Draft AB 32 Scoping Plan takes a different track after modeling projected carbon stock losses on natural and working lands that increase over time.<sup>iii</sup> It instead seeks to mitigate emissions from natural and working lands through active climate smart land management. Strategies from the 2022 Draft AB 32 Scoping Plan specific to natural and working lands (excluding agriculture discussed below), include but are not limited to:

- Increasing forest, shrubland, and grassland management to at least 2.3 million acres a year;
- Increasing annual investment in urban trees in developed lands by at least 20 percent above historic levels and establishing defensible space on all parcels;
- Restoring at least 60,000 acres, or approximately 15 percent of all Sacramento–San Joaquin River Delta (Delta) wetlands, by 2045; and
- Cutting land conversion of deserts and sparsely vegetated landscapes by at least 50 percent annually from current levels.<sup>iv</sup>

CARB and related agencies completed a Natural and Working Lands Climate Change Implementation Plan (NWL Implementation Plan) in April 2019. The NWL Implementation Plan was informed by SB 859 (Committee on Budget and Fiscal Review, Chapter 368, Statutes of 2016) Natural and Working Land Inventory that quantitatively estimated the existing state of ecosystem carbon stored in the State's land base and excluded GHG emissions associated from direct human activity quantified in CARB's annual

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<sup>i</sup> See 2022 Scoping Plan Update Modeling and Scenario Workshop, Natural and Working lands, December 2, 2021: [https://ww2.arb.ca.gov/sites/default/files/2021-12/NWLPublicWorkshopSlides\\_Dec2\\_PublicDistribution.pdf](https://ww2.arb.ca.gov/sites/default/files/2021-12/NWLPublicWorkshopSlides_Dec2_PublicDistribution.pdf).

<sup>ii</sup> CARB California's 2017 Climate Change Scoping Plan (November 2017), p. 81: [https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/scoping\\_plan\\_2017.pdf](https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/scoping_plan_2017.pdf).

<sup>iii</sup> CARB Draft 2022 Scoping Plan Update, May 10, 2022, pp. 200-201: <https://ww2.arb.ca.gov/sites/default/files/2022-05/2022-draft-sp.pdf>.

<sup>iv</sup> CARB Draft 2022 Scoping Plan Update, May 10, 2022, p. 201: <https://ww2.arb.ca.gov/sites/default/files/2022-05/2022-draft-sp.pdf>.

statewide GHG inventory.<sup>i</sup> The NWL Implementation Plan sets targets out to 2030 and pathways to at least double the pace and scale of state-funded restoration and management activities, including: 1) increasing the acreage in soil conservation practices for cultivated land and rangelands by five times to change agricultural land from a net emitter to a sink by 2030; 2) doubling the pace and scale of forest managed or restored; 3) tripling the pace of restoration of oak savannas and riparian areas; and 4) doubling the rate of wetland seagrass restoration.<sup>ii</sup> The Draft 2022 AB 32 Scoping Plan calls for a ten times increase to forest, shrublands, and grassland management and a five times increase in healthy soil practices.<sup>iii</sup> The NWL Implementation Plan also calls for a wide range of activities and acreage goals based across activities and land types.<sup>iv</sup>

### B.5.3.2 Specific Statutes and Agencies Applicable in San Diego Region

The following discusses specific statutes and agencies that regulate natural and working lands in the San Diego region. It is non-exhaustive.

The California Coastal Act of 1976<sup>v</sup> created the California Coastal Commission that administers planning and permitting regulatory schemes over California's coastal land and territorial waters (including wetlands in the coastal zone<sup>vi</sup>) to balance uses with protecting coastal natural resources. The coastal zone is as defined in identified maps by the legislature. Local jurisdictions, including ports through certification of port master plans, play a primary role in implementing the Coastal Act by developing local coastal plans (LCPs) for certification by the Coastal Commission that determine use and density. LCPs are subject to CEQA and congruent with the local jurisdiction's GP<sup>vii</sup> and become part of the GP once adopted.<sup>viii</sup> Once certified, the California Coastal Commission delegates authority to issue coastal development permits to the local jurisdiction or port. The Coastal Commission retains jurisdictions over tidelands, submerged land, public trust lands, any state university or college within the coastal zone,<sup>ix</sup> where an LCP is not certified, and on appeal of certain types of developments.<sup>x</sup> The Coastal Commission is also designated as a planning and management agency under the Federal Coastal Zone Management Act of 1972. It determines consistency with California's federally approved coastal management program with regards to proposed federal activity or federal permitted activity within the coastal zone.<sup>xi</sup>

The Public Trust Doctrine, enshrined in California Constitution Articles I, § 25, Article X §§ 3–4, and Article XVI, § 6, creates the basis for stewardship of lands, waterways, and resources entrusted to the

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<sup>i</sup> See CARB California Natural and Working Land Inventory (2018), pp. 7 & 15: <https://ww2.arb.ca.gov/nwl-inventory>.

<sup>ii</sup> See January 2019 Draft California 2030 Natural and Working Lands Climate Change Implementation Plan (Updated January 2019), p. 13–14: <https://ww2.arb.ca.gov/sites/default/files/2020-10/draft-nwl-ip-040419.pdf>.

<sup>iii</sup> CARB Draft 2022 Scoping Plan Update, May 10, 2022, p, 55, 201:

<https://ww2.arb.ca.gov/sites/default/files/2022-05/2022-draft-sp.pdf>.

<sup>iv</sup> See January 2019 Draft California 2030 Natural and Working Lands Climate Change Implementation Plan (Updated January 2019), p. 14–20: <https://ww2.arb.ca.gov/sites/default/files/2020-10/draft-nwl-ip-040419.pdf>.

<sup>v</sup> See Government Code § 30000 et seq.

<sup>vi</sup> See California Coastal Commission Procedural Guidance for the Review of Wetland Projects in California's Coastal Zone, Chapter 3: <https://www.coastal.ca.gov/wetrev/wettc.html>.

<sup>vii</sup> Public Resources Code §§ 301085 & 30108.6.

<sup>viii</sup> *Citizens of Goleta Valley v. Board of Supervisors*, 52 Cal. 3d 553, 571 (1990).

<sup>ix</sup> Public Resources Code § 30519(b).

<sup>x</sup> Public Resources Code §§ 30519, 30603(a), & 30604.

<sup>xi</sup> Public Resources Code § 30330; 16 U.S.C.A. § 1456(c).

state. Accordingly, the State Lands Act created the California State Lands Commission to manage tide and submerged lands and the beds of naturally navigable rivers, streams, lakes, bays, estuaries, inlets, and straits.<sup>i</sup> This includes classifying any or all state lands for their different possible uses and leasing and sale of state land (including oil and gas leases in the California Coastal Sanctuary<sup>ii</sup>).

The California Department of Fish and Wildlife acts with authority over wetland resources associated with rivers, streams, and lakes which is broader than U.S. Army Corps of Engineer authority under Clean Water Act Section 404 because it includes streamside habitats.<sup>iii</sup> This authority allows the regulation of work that: substantially diverts, obstructs, or changes the natural flow of a river, stream, or lake; substantially changes the bed, channel, or bank of a river, stream, or lake; uses material from a streambed; or deposits or disposes of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake, including a broad range of activities such as gravel mining and timber harvesting.<sup>iv</sup>

The State Water Resources Control Board acts with authority over “waters of the state” under the Porter-Cologne Water Quality Act that are not under federal jurisdiction.<sup>v</sup> The State Water Resources Control Board regulates projects filling wetlands through General Orders that local Regional Water Quality Boards implement. In addition, the San Diego Regional Water Quality Control Board acts with regulatory authority over wetlands through Waste Discharge Requirements and Clean Water Act Section 401 certificates of state water quality standards compliance for fill projects in wetlands and other State waters.<sup>vi</sup>

Timber harvests on private and state-owned forest lands are regulated by the Z’berg-Nejedly Forest Practice Act of 1973<sup>vii</sup> and CEQA.<sup>viii</sup> The Board of Forestry adopts regulations under this authority, and CAL Fire administers the rules that address productivity of timberland and sustained production of timber that considers sequestration of carbon dioxide,<sup>ix</sup> recreation, watershed, wildlife, range and forage, fisheries, regional economic vitality, employment, and aesthetic enjoyment. Adopted rules must protect the environment,<sup>x</sup> and more recently, legislation was adopted to address sequestration of carbon dioxide in forests through the Forest Practice Act of 2010,<sup>xi</sup> the Working Forest Management Plan,<sup>xii</sup> and Programmatic Timberland Environmental Impact Report for Carbon Sequestration and Fuel

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<sup>i</sup> Public Resources Code § 6001 et seq.

<sup>ii</sup> See Public Resource Code §§ 6240–6245.

<sup>iii</sup> Fish & Game Code §§ 1600–1616.

<sup>iv</sup> Fish & Game § 1602.

<sup>v</sup> See January 25, 2001, Memorandum from SWRCB Chief Counsel to State Board Members and Regional Board Executive Officers, Effect of SWANCC v. United States on the 401 Certification Program, available at [https://www.waterboards.ca.gov/rwqcb8/water\\_issues/programs/401\\_certification/docs/swancc.pdf](https://www.waterboards.ca.gov/rwqcb8/water_issues/programs/401_certification/docs/swancc.pdf).

<sup>vi</sup> See, e.g., Memo from SWRCB Executive Director to Regional Board Executive Officers, Guidance for Regulation of Discharges to “Isolated” Waters (June 25, 2004), p. 15 of link, available at [https://www.waterboards.ca.gov/water\\_issues/programs/cwa401/docs/wrapp/comments/jennifer\\_west.pdf](https://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/wrapp/comments/jennifer_west.pdf); see 33 U.S.C.A. § 1342; 33 C.F.R. § 325.2(b)(1); 40 C.F.R. § 230.10(b)(1).

<sup>vii</sup> Public Resources Code § 4511 et seq.

<sup>viii</sup> Public Resources Code § 21000 et seq.

<sup>ix</sup> See Public Resources Code §§ 4512.5(a) & (e).

<sup>x</sup> See Public Resources Code § 4551.

<sup>xi</sup> AB 1504 (Skinner, Chapter 534, Statutes of 2010); See Public Resources Code § 4512(c); see also AB 1023 (Wagner, Chapter 296, Statutes of 2011); See Public Resources Code § 4512.5(a) & (d).

<sup>xii</sup> AB 904 (Chesbro, Chapter 648, Statutes of 2013); See Public Resources Code § 4597 et seq.

Reduction Program<sup>i</sup> with action taken in tandem with CARB’s Scoping Plan. Executive Order B-52-18 ordered the creation of a California Forest Carbon Plan (2018), and the 2021 Wildfire and Forest Resilience Action Plan is part of its implementation. To date, there has been limited regulatory activity related to the statutory mandates at the Board of Forestry, but this will likely change with the adoption of the 2022 Scoping Plan that will directly address forest management through regionally specific management strategies to maintain healthy forest through treatment activity and preventing land conversion.<sup>ii</sup> It is unclear how this will impact the San Diego region. Additionally, the Forest Practice Act preempts counties from regulating the activity of timber operators.<sup>iii</sup> However, the County of San Diego lacks zoned timber production zones and actively regulates land uses with timber and/or designated as open space.

#### **B.5.4 Local Authority Over Natural Climate Solutions and Other Land Use Considerations**

Cities and counties often use planning and land use control authorities to protect or regulate natural and working lands. In this regard, the full extent of this authority requires further research and development to determine what is feasible at the local level to regulate, preserve, and augment natural and working lands for GHG regulations and any removal or storage activities in the region. Additionally, local jurisdictions act with authority to lobby Congress, the California Legislatures, and negotiate with federal, tribal, and state agencies and lands managers to further these aims. Local jurisdictions may also act with existing authority to create pilots or programs in this regard. Local jurisdiction act with existing authority to fund local science to accurately identify and quantify local natural and working lands carbon stock and sequestration potential to inform local decisions and investment. Further research is needed to develop and vet these and other actions on natural and working lands.

Known local government tools that can be used to regulate and protect natural and working lands include GPs, specific plans, CAPS, LCPs, zoning, special use permits, subdivision maps, and development agreements. Policies that support easements (e.g., conservation<sup>iv</sup> — including California Forest Legacy Program Act easements<sup>v</sup> — and open-space<sup>vi</sup>), as well as incentives largely based on easements to preserve land, are additional tools available to local jurisdictions to preserve and manage natural and working lands. This includes, but is not limited to:

- Purchase of Agricultural Conservation Easements;<sup>vii</sup>
- Transfer development credits/transfer of development rights;
- Lease or lease-purchase;
- Fee simple acquisitions;
- Mitigation banking;
- Project specific development agreements;
- City-county agreements and revenue sharing regarding urban growth;
- Greenbelt buffers, cluster development;

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<sup>i</sup> SB 862 (Committee of Budget and Fiscal Review, Chapter 36, Statutes of 2014); See Public Resources Code § 4598 et seq.

<sup>ii</sup> CARB Draft 2022 Scoping Plan Update, May 10, 2022, p. 64: <https://ww2.arb.ca.gov/sites/default/files/2022-05/2022-draft-sp.pdf>.

<sup>iii</sup> Public Resources Code § 4516.5(d).

<sup>iv</sup> Civil Code §§ 815.1, 815.3, 815.2(a)-(b).

<sup>v</sup> Public Resources Code § 12200 et seq.

<sup>vi</sup> Government Code § 51070 (The Open-Space Easement Act of 1974).

<sup>vii</sup> Civil Code § 815 et seq.; See County of San Diego PACE Program Guidelines (March 3, 2021).

- Agricultural enterprise zones;
- Agricultural Protection Planning Grant Program;<sup>i</sup> and
- Development of an agricultural land component as part of an open-space element or agricultural land element.<sup>ii</sup>

Finally, local jurisdictions can also apply for state programs like the Urban & Community Forestry Program under the Urban Forestry Act<sup>iii</sup> to support local urban forestry efforts that are included in GPs or CAPs. The Draft 2022 SB 32 Scoping Plan calls for 20% increase in urban tree investment above historical levels to further support this effort.<sup>iv</sup>

#### B.5.4.1 Agriculture

Local jurisdiction’s authority over agricultural land stems from police power over land use and zoning. Agriculture emissions or GHG mitigation actions also may be part of a local jurisdiction’s CAP. For example, the Oceanside Carbon Farming Program is a CAP measure with a goal to establish up to 50 acres of demonstration carbon farms by 2025 utilizing alternative management practices that result in increased carbon sequestration. Such practices include, but are not limited to, synthetic nitrogen fertilization reductions, compost application, anaerobic digestion of waste, silvopasture, reduced tillage, cover cropping, conservation crop rotation, range planting, and improved nutrient management.<sup>v</sup> It is unclear how and to what extent a local jurisdiction may use its police power to regulate agriculture activities that cause GHG emissions directly. Some potential opportunity are dependent on whether and how CARB regulates certain activities.

Federal authority over agriculture land use and practices is limited with certain land use requirements for leased federal land for farming or animal production but no specific regulation of GHG emissions.

In California, SB 1386 (Wolk, Chapter 545, Statutes of 2016) established protecting and managing natural and working lands as state policy to be considered by all parts of the state government, that this policy is important to achieving California’s GHG reduction goals, and that state policy includes the intent to promote cooperation of owners of natural and working lands. SB 1386 (2016) also defined farming land as working land under Public Resources Code § 9001.5(d)(1). SB 1383 (Lara, Chapter 395, Statutes of 2016) mandated that CARB achieve a 40% reduction in methane emissions below 2014 levels by 2030, including reducing emissions from livestock manure management operations and dairy manure management operations the creation and implementation of a Short-Lived Climate Pollutant Strategy. SB 1383 (2016) sets the date of on or after January 1, 2024, as the effective date to implement regulation of these emissions with ongoing investments and incentives to achieve the reductions. SB 1383 (2016) also limits regulation of enteric fermentation to incentive-based mechanisms until CARB and the Department of Food and Agriculture determine that a cost-effective and scientifically proven method of reducing enteric emissions is available adoption of which would not damage animal health, public health, or consumer acceptance. A June 2021 Draft Analysis on the Progress Toward Achieving

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<sup>i</sup> Public Resources Code § 10280 et seq.

<sup>ii</sup> See Government Code §§ 65565, 65570, 66565, 66565.1; see also Public Resources Code § 10281.5.

<sup>iii</sup> Public Utilities Code § 4799.06–4799.12.

<sup>iv</sup> CARB Draft 2022 Scoping Plan Update, May 10, 2022, p. 201: <https://ww2.arb.ca.gov/sites/default/files/2022-05/2022-draft-sp.pdf>.

<sup>v</sup> City of Oceanside, Oceanside Climate Action Plan, 2019, p. 3-41: <https://www.ci.oceanside.ca.us/civicax/filebank/blobdload.aspx?blobid=48919>.



the 2030 Dairy and Livestock Sector Methane Emissions Target projected that current activities will achieve slightly over half of the annual methane emission reductions required by SB 1383 (2016) due to market, technical, and other barriers signifying the need for significant investment to almost double emission reduction projects by 2030.<sup>i</sup> It remains unclear whether CARB will enact regulations in 2024 to achieve these reductions. CARB regulation will likely preempt local authority action but the current state offers an opportunity for local regulation unless, and until, CARB acts.

AB 32 (2006) and SB 32 (2016) authorized programs do not directly regulate agricultural land use, onsite agriculture GHG emission (excluding off-road emissions<sup>ii</sup>), require carbon sequestration, or require carbon removal on working agricultural lands. However, Executive Order B-55-18's incorporates agricultural working lands in the draft 2022 AB 32 Scoping Plan update to address the carbon neutrality by 2045 target. Executive Order N-82-20's language regarding biodiversity, 30% land and coastal water conservation, acceleration of natural carbon sequestration and climate resiliency on natural and working lands, and creation of the Natural and Working Lands Climate Smart Strategy — including setting a statewide target to meet the 2045 carbon neutrality goal — will further focus efforts on agricultural land. SB 27 (2021), where the legislature codified part of Executive Order N-82-20, mandates a Natural and Working Land Climate Smart Strategy to achieve California's climate goals. It also requires CARB to set CO<sub>2</sub> removal targets for 2030 and beyond under its Scoping Plan for all emission sectors, including agriculture. Finally, SB 27 (2021) mandates will drive climate action on agriculture land through the creation of a carbon removal and sequestration registry to identify, list, fund projects by state agencies and private entities, and retire projects.

These efforts will further support existing agriculture preservation statutes in the coastal zone,<sup>iii</sup> the long-term productivity of soil,<sup>iv</sup> and under the Williamson Act (California's primary agricultural preservation statute that grants property tax reductions for preserving agricultural and open-space uses for farming and ranching).<sup>v</sup> It will also likely affect CEQA analysis on land conversion and agricultural land preservation mitigation.

Previously, the 2017 AB 32 Scoping Plan sought to address GHG emissions from agriculture from energy use, methane, and N<sub>2</sub>O<sup>vi</sup> with the objective of maintaining agriculture "land as carbon sinks (i.e., net zero or negative GHG emissions) and, where appropriate, minimize the net GHG and black carbon associated with management, biomass utilization, and wildfire events"<sup>vii</sup> out to 2030 as it predated the 2018 executive order for carbon neutrality. The 2022 AB 32 Draft Scoping Plan seeks to support climate

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<sup>i</sup> CARB, Draft Analysis on the Progress Toward achieving the 2030 Dairy and Livestock Sector Methane Emissions Target (June 2021), p. ES-2 & 8: <https://ww2.arb.ca.gov/sites/default/files/2021-06/draft-2030-dairy-livestock-ch4-analysis.pdf>.

<sup>ii</sup> See CARB Funding Agricultural Replacement Measures for Emission Reductions: <https://ww2.arb.ca.gov/our-work/programs/farmer-program>.

<sup>iii</sup> See Public Resources Code § 30000 et seq. (Coastal Act) & § 31000 et seq. (State Coastal Conservancy); Public Resources Code §§ 31050, 31051, 30241, 30114, 30243, 30108.6, 30500(c), 30200(a), 30514, 30241.5, 30241, 30250, 30610.1, 30242, 31054, 31104.1, 31150, 31151, 31152, 31156.

<sup>iv</sup> Public Resources Code § 30243.

<sup>v</sup> Government Code § 51201(c); see Government Code § 51200 et seq.

<sup>vi</sup> Note: the Irrigated Land Regulatory Program requires nitrogen fertilizer management to protect water quality through nitrogen management plans, which decrease N<sub>2</sub>O use on farmland and may be used to coordinate further reductions. Additional water management and water irrigation efficiency are also contributing to N<sub>2</sub>O reductions.

<sup>vii</sup> CARB California's 2017 Climate Change Scoping Plan (November 2017), p. 81: [https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/scoping\\_plan\\_2017.pdf](https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/scoping_plan_2017.pdf).

smart actions around food security, reduce GHGs, increase carbon storage in soil, and reduce public health impacts by reducing synthetic fertilizer and pesticide use. Strategies from the 2022 Draft AB 32 Scoping Plan specific to agriculture included:

- Accelerate the pace and scale of healthy soils practices to 50,000 acres annually by 2025, annually conserve at least 6,000 acres of annual crops, and increase organic agriculture to 20 percent of all cultivated acres by 2045;
- Deploy additional climate smart agricultural strategies for croplands identified in the Climate Smart Strategy (e.g., improved nitrogen use efficiency, whole-orchard recycling, riparian restoration, on-farm energy generation, and others) and utilize the recommendations included in CDFA’s Farmer and Rancher-Led Climate Change Solutions report to accelerate deployment of healthy soils practices, organic farming, and other climate smart agriculture practices;
- Establish or expand financial mechanisms that support ongoing deployment of healthy soils practices and organic agriculture;
- Implement California Department of Pesticide Regulation’s (DPR) Sustainable Pest Management Work Group recommendations to accelerate a systemwide transition to safer, more sustainable pest management;
- Support strategies that achieve co-benefits of safer, more sustainable pest management practices and the health and preservation of ecosystems;
- Conduct research on the intersection of pesticides, soil health, GHGs, and pest resiliency via a multiagency effort with DPR, California Department of Food and Agriculture (CDFA, and CARB);
- Conduct outreach and education to develop and facilitate the increased adoption of safer, more sustainable pest management practices and tools, reduce the use of harmful pesticides, promote healthy soils, improve water and air quality, and reduce public health impacts;
- In collaboration with state and local agencies, accelerate the deployment of alternatives to agricultural burning that increase long-term carbon storage from waste agricultural biomass, including storage in durable wood products, underground reservoirs, soil amendments, and other mediums;
- Work across state agencies to reduce regulatory and permitting barriers around some healthy soils practices (e.g., composting), where appropriate; and
- Utilize innovative agriculture energy use and carbon monitoring and planning tools to reduce on-farm GHG emissions from energy and fertilizer application or increase carbon storage, as well as to promote on-farm energy production opportunities.<sup>i</sup>

The April 2019 CARB NWL Implementation Plan, informed by SB 859’s (2016) Natural and Working Land Inventory’s quantitative estimate of the existing state of ecosystem carbon stored in the State’s land base (excluding GHG emissions associated from direct human activity quantified in CARB’s annual statewide GHG inventory),<sup>ii</sup> sets targets out to 2030 and pathways to scale needed implementation. Specific to agriculture, these include increasing the acreage in soil conservation practices for cultivated land and rangelands by five times to change agricultural land from a net emitter to a sink by 2030.<sup>iii</sup> The NWL Implementation Plan also calls for increases in compost application, agroforestry, grazing land and grassland management, and cropland management to decrease emissions and increase carbon

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<sup>i</sup> CARB Draft 2022 Scoping Plan Update, May 10, 2022, p. 208: <https://ww2.arb.ca.gov/sites/default/files/2022-05/2022-draft-sp.pdf>.

<sup>ii</sup> See CARB California Natural and Working Land Inventory (2018), p. 7 & 15: <https://ww2.arb.ca.gov/nwl-inventory>.

<sup>iii</sup> See January 2019 Draft California 2030 Natural and Working Lands Climate Change Implementation Plan (Updated January 2019), p. 13: <https://ww2.arb.ca.gov/sites/default/files/2020-10/draft-nwl-ip-040419.pdf>.

sequestration.<sup>i</sup>

SB 859 (2016) established the Department of Food and Agriculture Healthy Soil Program (HSP) to provide incentives (including loans, grants, and research), technical assistance, and education research to farmers whose practices contribute to healthy soils, as defined, and result in net long-term on-farm GHG benefits with GHG reductions quantified using CARB methodologies. The HSP is also authorized to pilot demonstration projects to further its goals. To date, the Program received \$40.1 million in California Climate Investment (CCI) (e.g., cap-and-trade proceeds) from 2016–2019, \$10 million from SB 5 (de León, Chapter 852, Statutes of 2017) California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access For All Act of 2018, and was accepting applications for 2021 with \$50 million from the State General Fund and \$25 million from the California Climate Investments for the Healthy Soils Program per SB 170 (Skinner, Chapter 240, Statutes of 2021) authorized by the Budget Act of 2021.<sup>ii</sup>

Additional funding with impacts on GHG emissions include:

- \$100 million through Fiscal Year 2022–2023 for the State Water Efficiency Enhancement Program (SWEEP);
- \$160 million through Fiscal Year 2022–2023 for the Healthy Soil Program (HSP);
- \$80 million through Fiscal Year 2022–2023 for the Dairy Digestor Research & Development Program (DDRDP) & Alternative Manure Management Program (AMMP);
- \$39 million through Fiscal Year 2022–2023 for the Conservation Agriculture Planning Grant Program; and
- \$5 million through Fiscal Year 2021–2022 for the Water Efficiency Technical Assistance Grant.<sup>iii</sup>

Two other CEC operate programs fund GHG reduction activities on agricultural land. The Food Production Investment Program provides grants through the CCI to help food processors save energy and money while reducing GHG emissions through energy efficiency and renewable energy technology.<sup>iv</sup> The Renewable Energy for Agriculture Program (REAP)<sup>v</sup> offers grants that encourage the installation of renewable energy technology to reduce GHG emissions from agriculture operations, including solar PV systems, wind turbines, biomass-to-energy generation, or other commercially viable renewable energy technology.<sup>vi</sup> It is unclear whether there is additional funding for these programs.

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<sup>i</sup> See January 2019 Draft California 2030 Natural and Working Lands Climate Change Implementation Plan (Updated January 2019), p. 17: <https://ww2.arb.ca.gov/sites/default/files/2020-10/draft-nwl-ip-040419.pdf>.

<sup>ii</sup> See Department of Food and Agriculture, The Office of Environmental Farming and Innovation, Healthy Soil Program (last visited November 30, 2021): <https://www.cdfa.ca.gov/oefi/healthysoils/>.

<sup>iii</sup> See California Department of Food and Agriculture, The Office of Environmental Farming and Innovation (last visited on November 30, 2021): <https://www.cdfa.ca.gov/oefi/>.

<sup>iv</sup> See CEC Food Production Investment Program (last visited November 30, 2021): <https://www.energy.ca.gov/programs-and-topics/programs/food-production-program>.

<sup>v</sup> See CEC Renewable Energy For Agriculture Program (last visited on November 30, 2021): <https://www.energy.ca.gov/programs-and-topics/programs/renewable-energy-agriculture-program>.

<sup>vi</sup> The program was authorized with the passage of AB 109 (Ting, Budget Act of 2017, Chapter 249, Statutes of 2017) and SB 856 (Budget and Fiscal Review Committee, Chapter 30, Statutes of 2018). The program is receiving \$10 million from the Greenhouse Gas Reduction Fund.