

Leading the Way To Greater 2035 Climate Ambition: A Snapshot of Current State-Level Initiatives

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Overview: States have consistently demonstrated climate leadership, advancing robust climate policies even as the U.S. federal climate agenda has shifted under different administrations. Drawing from *Toward 2035: Forging a High-Ambition U.S. Climate Pathway*, a report published by the Center for Global Sustainability in September 2024, this policy brief provides examples of state policy approaches that seek to reduce greenhouse gas (GHG) emissions across economic sectors. With greater knowledge of local needs, capacities, and economic realities, states are best positioned to set and implement their own climate goals and policies. Furthermore, by implementing robust climate policies across all levels of government and society, the United States can continue to strive toward high climate ambitions and support larger global climate goals.

Considerations: State governments can engage a wide range of stakeholders, including local governments and agencies, nongovernmental organizations, community groups, locally-based businesses and industries, and other state and local entities, in pursuing the following policy levers. States should take into consideration factors such as political and implementation feasibility, cost, impact on communities, and contribution towards overall emission reduction goals when selecting a policy agenda. An ambitious state climate agenda considers each of the following sectors to holistically reach its emission reduction goals.

POWER SECTOR

Overview: As demand for electricity rises, the power sector faces the dual challenge of reducing its carbon intensity and providing greater quantities of clean electricity to end-use sectors. State power sector policies can prioritize the deployment of renewable generation sources like solar and wind, setting goals and standards that increase the share of renewables within a state or regional grid. Given transmission crosses state lines, regional approaches might be called for in some cases to push further decarbonization across the grid.

- **Regional Greenhouse Gas Initiative (RGGI)** - Greater interregional coordination can occur through programs like RGGI, a regional cap on CO₂ emissions from regulated power plants within certain Northeastern and Mid-Atlantic states that declines over time (Figure 1a).
- **California: SB 100** - California's renewable energy standard requires 100% zero-carbon electricity by 2045. Intermediate targets are 90% zero-carbon electricity by 2035 and 95% by 2040 for California end-use customers. Energy for state agencies must be 100% zero-carbon by 2035.
- **Maryland: Offshore Wind Workforce Training & Education Program** - Maryland allocated \$6 million in grant funding for new or existing workforce training centers and academic institutions, in support of offshore wind education, workforce training, and internships.
- **Maryland: OneStop Portal** - This central hub for Maryland State licenses, forms, certificates, permits, applications, and registrations helps streamline the permitting process.
- **Michigan: SB 271** - This bill mandates a statewide energy storage target of 2,500 MW by December 31, 2029. State-regulated electric providers and alternative electric suppliers must have a plan to meet their share of the energy storage target.
- **Minnesota: Carbon-Free Energy Standard** - Minnesota set a 100% clean electricity standard by 2040, including both generation and procurement (Figure 1b). Intermediate targets are 80% carbon-free for public utilities by 2030, 60% for other electric utilities, and 90% for all electric utilities by 2035.
- **PJM Generation Attribute Tracking System (PJM-GATS)** - PJM has offered tradable hourly Renewable Energy Certificates (RECs) since August 2024 (hourly data can be viewed retroactively starting in January 2022). RECs include information about generator location, emissions output, fuel source, date generator went online, as well as the hour and date when energy is produced. Monthly certificates can be converted to hourly certificates upon retirement.
- **Wisconsin: Coal Plant Securitization** - Wisconsin authorized the use of securitization in coal plant retirements, allowing utilities to take out low-interest bonds to pay off remaining coal investments.

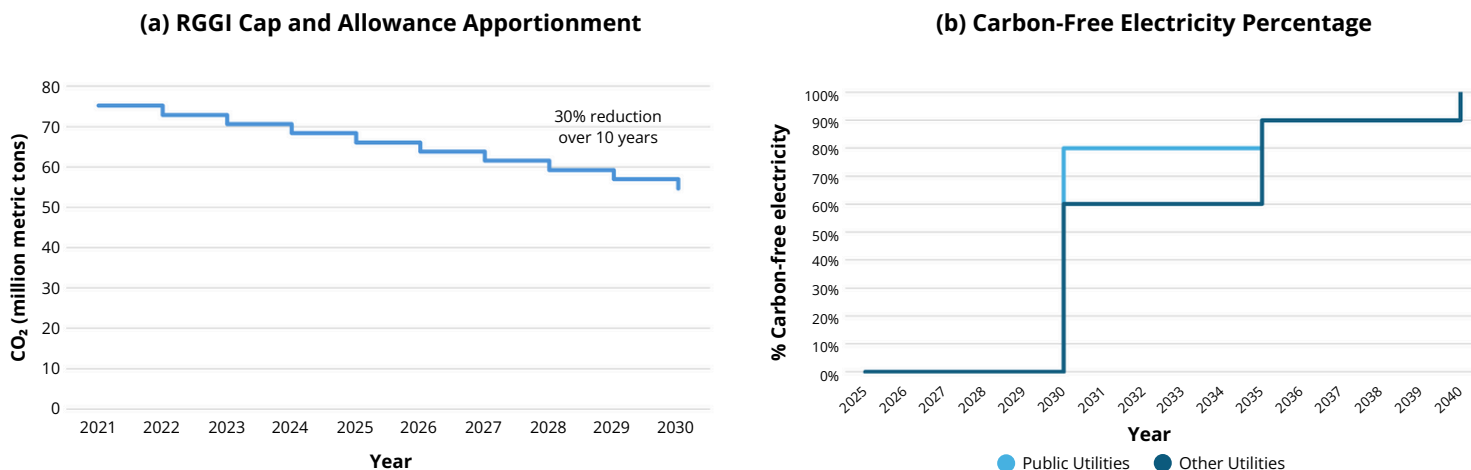


Figure 1. a) Timeline of allowed emissions under the Regional Greenhouse Gas Initiative Cap. b) Timeline for carbon-free electricity generation or procurement under Minnesota's Carbon-free Energy Standard.

TRANSPORTATION SECTOR

Overview: Results from *Toward 2035: Forging a High-Ambition U.S. Climate Pathway* show that the transportation sector has the largest opportunity for electrification and can be a key source of emissions reductions. State climate policies can support a shift to electric vehicles and fuels with lower carbon content, while also promoting mode shifting and development strategies that require less carbon-intensive transportation.

- **California:** Advanced Clean Cars II - This regulatory standard requires that 100% of new passenger cars and trucks sold in California be zero-emission vehicles by 2035, with a phase-in schedule shown in Figure 2a. Under the Clean Air Act, using the California EPA Waiver, other states may adopt this standard or choose to follow EPA regulations.
- **California:** Advanced Clean Trucks - California also has a regulatory standard that increases the percentage of zero-emission truck sales, with a phase-in schedule shown in Figure 2b. Other states may also adopt this standard.
- **California:** Electric Vehicle Infrastructure Project - California has invested in infrastructure that supports charger installations, with \$29.8 million for low-income and disadvantaged communities.
- **Colorado:** Clean Transit Enterprise - Colorado's clean transit retail delivery fee and oil and gas production fee are used to support planning, facility upgrades, infrastructure, and electrification of transit systems. Transit that promotes mode shifting and denser development is prioritized.
- **Colorado:** Highway Expansion Rule - Under this rule, Colorado requires emissions reduction considerations for new highway projects.
- **Connecticut:** Zero-Emission School Bus Requirements - Connecticut requires 100% of all school buses to be zero-emission by 2040, with an earlier 2030 requirement for 100% of school buses in environmental justice communities.
- **Maryland:** Non-Monetary Incentives - Maryland drivers receive non-monetary benefits, such as exemptions from emissions testing and access to carpool lanes, for low-emission vehicles.
- **Michigan:** Expansion of Public Transit Programs - Michigan deployed zero- and low-emission transit buses and related infrastructure to offer high-quality, affordable transportation alternatives.
- **Minnesota:** Vehicle Miles Traveled (VMT) Reduction Goal - Minnesota is targeting a per capita reduction of vehicle miles traveled: 14% by 2040 and 20% by 2050.
- **Rhode Island:** E-bike rebate program - Rhode Island provides \$350 or a 30% rebate (whichever is less) toward the purchase of an electric bicycle, encouraging active transportation modes. Rebates are higher for low-income residents.
- **Washington:** Clean Fuel Standard - This regulatory standard requires transportation fuel suppliers to reduce the carbon intensity of fuels 20% (2017 levels as reference) by 2034, according to the timeline shown in Figure 2c.
- **Washington:** EV Rebate Program - This program provides an instant rebate of up to \$5,000 at the point-of-sale for low-income drivers.

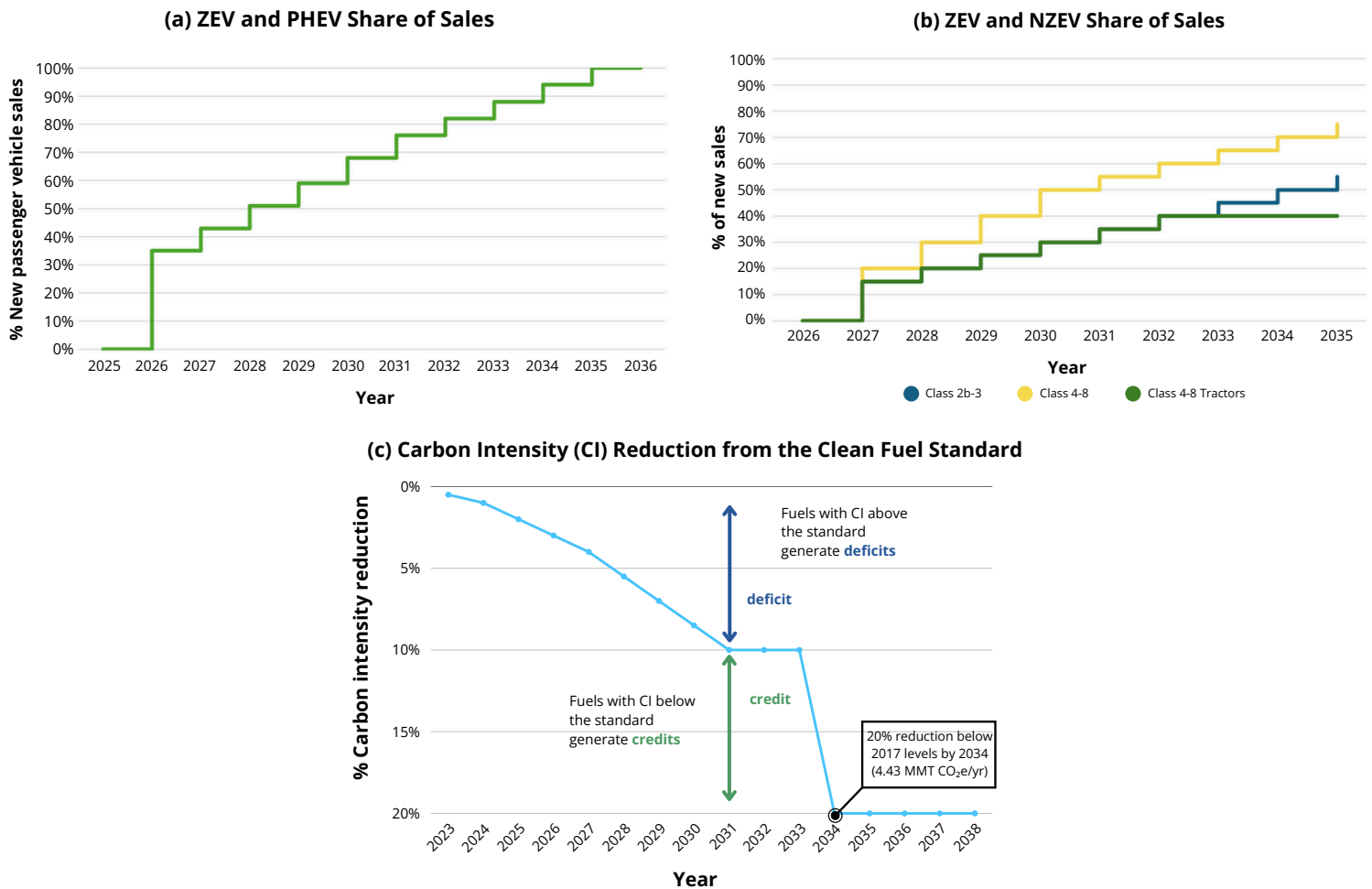


Figure 2. Policy timelines for the transportation sector under a) California's Advanced Clean Cars II rule, b) Maryland's Advanced Clean Trucks rule, and c) Washington's Clean Fuel standard. Figure 2c data from the [Washington Department of Ecology](#).

BUILDING SECTOR

Overview: Greater emissions reductions in the building sector can be achieved through several policy levers, commonly through electrifying the current and new building stock and enhancing energy efficiency measures. Strong building sector climate policies electrify energy services, including hot water, construction, and space heating and cooling. States often tailor their building sector policies by building types, including residential and commercial.

- **Colorado:** Clean Heat Plans - Colorado's Clean Heat Plans are a regulatory requirement for gas distribution utilities to reduce GHG emissions relative to 2015 levels by 4% in 2025 and 22% by 2030. Utilities provide clean heat plans detailing supply and demand side actions.
- **New York:** All Electric Buildings Act - This New York law bans all fossil fuel hookups in new residential and commercial buildings beginning in 2026, expanding beyond heating to include cooling, cooking, clothes dryers, and other uses. The law exempts some commercial buildings that are more difficult to fully decarbonize, such as hospitals and restaurants.
- **Rhode Island:** Heating Oil Blending - This Rhode Island law increases the blending of biodiesel or renewable hydrocarbon diesel into home heating oil from the current 5% requirement to 10% in 2023, 20% in 2025, and 50% in 2030.

Residential Buildings:

- **Massachusetts:** LMI Housing Decarbonization Grant Program - This \$50 million grant program provides funds for energy efficiency or decarbonization measures for low and middle-income (LMI) housing. Funding has helped decarbonize over 1,300 units through two award rounds.

Commercial Buildings:

- **Maryland:** Building Energy Performance Standards (BEPS) - This Maryland regulatory standard requires covered buildings (most buildings > 35,000 sq ft) to achieve net zero direct GHG emissions by 2040. There are annual reporting requirements and interim targets beginning in 2030 (see “Chapter 3 Performance Standards” for emissions standards).
- **Washington:** Clean Buildings Performance Standards - This Washington State regulatory standard requires benchmarking of energy use and implementation of energy management plans for covered buildings (Tier 1 > 50,000 sq ft, Tier 2 > 20,000 sq ft) with different compliance dates based on the size of the building. Early adoption incentives are available at \$0.85 per sq ft and \$0.30 per sq ft for Tier 1 and Tier 2, respectively.

INDUSTRY SECTOR

Overview: As an energy-intensive sector, key strategies to reduce industrial sector emissions include energy efficiency improvements and promoting the usage of low-carbon fuels, feedstocks, and energy sources (LCFFES). Industrial sector policies may target specific sectors, such as cement and steel, and may use tradable credit systems to push decarbonization.

- **Alabama:** Industrial Energy Efficiency Program - Alabama provides education and training on the use of alternative energy sources to help promote energy efficiency opportunities for small and medium-sized manufacturers.
- **California:** Buy Clean California Act - This act establishes a global warming potential limit for state government purchases of structural steel, concrete reinforcing steel, flat glass, and mineral wool board insulation, with the goal of creating greater demand in the state for low-carbon products.
- **California:** Net-Zero Strategy for Cement Sector (in development) - California is developing a regulation that would require lowered GHG emission intensity of cement used in the state, decreasing by 40% below 2019 levels by the end of 2035 and to net zero emissions by 2045. See Figure 3.
- **Colorado:** GEMM 1 and 2 - Colorado requires 20% emissions reduction, compared to 2015 levels, by 2030 for the manufacturing and industrial sector through a credit-based system. Energy and emissions audits are required for manufacturing facilities that emit >25,000 metric tons of GHGs per year, with a goal to reduce emissions intensity 5% per year beginning in 2025.
- **Kentucky:** Industrial Revenue Bonds - Kentucky provides state and local government-issued bonds to industrial buildings to cover the cost of energy efficiency projects.
- **Massachusetts:** 2050 Sector Goals - This initiative seeks to reduce industrial sector emissions by 76% by 2050 relative to 1990 levels. Included are industrial processes, industrial energy, natural gas pipeline systems, and waste disposal.
- **New Jersey:** Environmental Justice Law - This New Jersey law develops a detailed environmental justice-focused process for polluting facilities to receive regulatory permits. It includes thorough public engagement and allows the state to deny a permit if cumulative impacts on overburdened communities are not adequately mitigated or if public benefits are not sufficient.

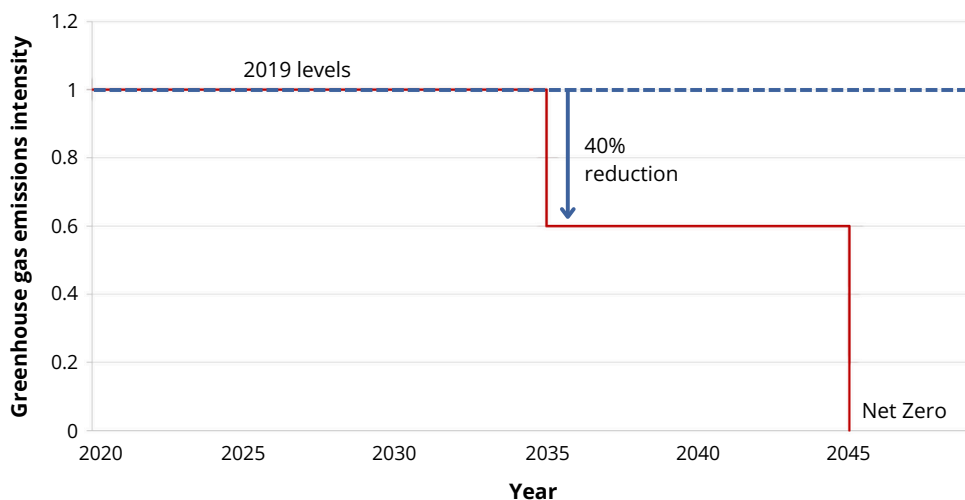


Figure 3. California regulatory goals for greenhouse gas emission intensity of cement.

NATURAL AND WORKING LANDS SECTOR

Overview: While natural lands such as forests often act as carbon sinks, absorbing carbon from the atmosphere, agricultural lands can be net emitters. State-level land policies promote strategies to bolster forests and minimize agricultural land emissions, protecting and bolstering their carbon sinks through wildfire mitigation, conservation, and reforestation and afforestation policies. On the agricultural side, climate-smart agricultural practices that can reduce emissions include land conservation, efficient land use, crop production policies, and livestock management policies.

- **California:** Alternative Manure Management Program (AMMP) - California provides financial assistance for the implementation of non-digester manure management practices on dairy and livestock operations that reduce methane emissions. Eligible practices include composting, dry scrape, advanced solids separation, conversion, and expansion of pasture-based systems.
- **California:** Tribal Wildfire Resilience Grants - California funds projects for cultural burns, fuel breaks, native vegetation planting, biodiversity, traditional food access, and fire and forestry workforce training.
- **Colorado:** Agricultural Stewardship Tax Credit (*currently in the rulemaking process*) - Colorado has created a refundable tax credit intended to encourage stewardship on farms and ranches, including practices that increase soil health, improve water efficiency, and create diverse and beneficial ecosystems while maintaining the productivity of the farm or ranch.
- **Colorado:** Updates to State Forest Service Tree Nursery Act - Colorado requires and provides funding to the Colorado State Forest Service to improve its seedling tree nursery for state reforestation efforts.
- **Colorado:** Wildfire Mitigation and Recovery - Colorado requires the state forest service to develop a carbon accounting framework that yields carbon stock and flux estimates for ecosystems by county, forest cover type, and wood products. The state also requires the Forest Service to develop a forest carbon co-benefit framework for forest management practices, like wildfire mitigation and improved carbon sequestration.
- **Maryland:** 5 Million Trees Initiative - This legislative directive mandates the planting of 5 million native trees on public and private lands by 2031. Of that total, 500,000 trees (10% of the total) must be planted in underserved urban areas.
- **Minnesota:** Climate-Smart Food Systems Project - This \$200 million project aims to reduce food system emissions by restoring 10,000 acres of peatlands to absorb and store carbon, expanding farmer support through water quality certification and soil health programs, and adopting innovative technologies at waste processing sites.
- **Minnesota:** Soil Health Programs - These Minnesota programs provide incentives, grants, and technical assistance to support the establishment of soil health best practices, like cover crops and crop diversification. It includes a Soil Health Financial Assistance Program, Soil Health Delivery Grants, Cover Crop Demonstration Grants, and Soil Health Practices Program.
- **New York:** Regenerate New York Forestry Cost Share Grant Program - In this New York reimbursement program, landowners can apply for funding for projects promoting afforestation/reforestation, forest stand regeneration, competing vegetation control, and/or deer exclosures.
- **Vermont:** 30x30 Initiative (Community Resilience and Biodiversity Protection Act) - This act sets a goal to conserve 30% of Vermont's land by 2030 and 50% by 2050, and requires concrete action plans. Land must include a mix of ecological reserve areas, biodiversity conservation areas, and natural resource management areas (Figure 4).

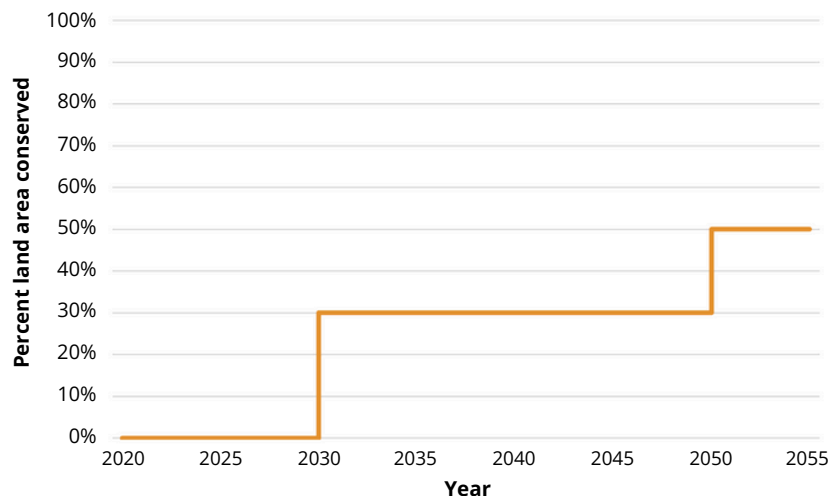


Figure 4. Phase-in timeline for Vermont's Community Resilience and Biodiversity Protection Act conservation goals.

ECONOMY-WIDE POLICIES

Overview: States can implement economy-wide climate policies to address cross-sectoral greenhouse gas emissions. Policies such as “cap and trade” or “cap and invest” put an upper limit on emissions and allow covered entities to sell and trade allowances to emit. This can help balance emission reductions across sectors while pushing covered entities, such as electricity and natural gas utilities, to decarbonize. Trading emissions credits and subsequently generating revenue can help states fund other emission reduction policies.

- **California: Cap-and-Trade** - California’s Cap-and-Trade Program is currently linked with the Cap-and-Trade System of Québec. Covered entities include electricity producers, importers of electricity, natural gas distributors, transportation fuel, and some industrial activities (see Figure 5a for allocation timeline). Revenues go to the Greenhouse Gas Reduction Fund to help finance further emission reduction efforts.
- **Washington: Cap-and-Invest** - Covered businesses, which account for more than 25,000 tons of GHG emissions annually, have to purchase allowances that cover 30% of their 2023 emissions beginning in November 2024, with rising requirements through 2050 (Figure 5b). Covered entities include electric and natural gas utility companies, fuel suppliers, waste-to-energy facilities, and railroads.

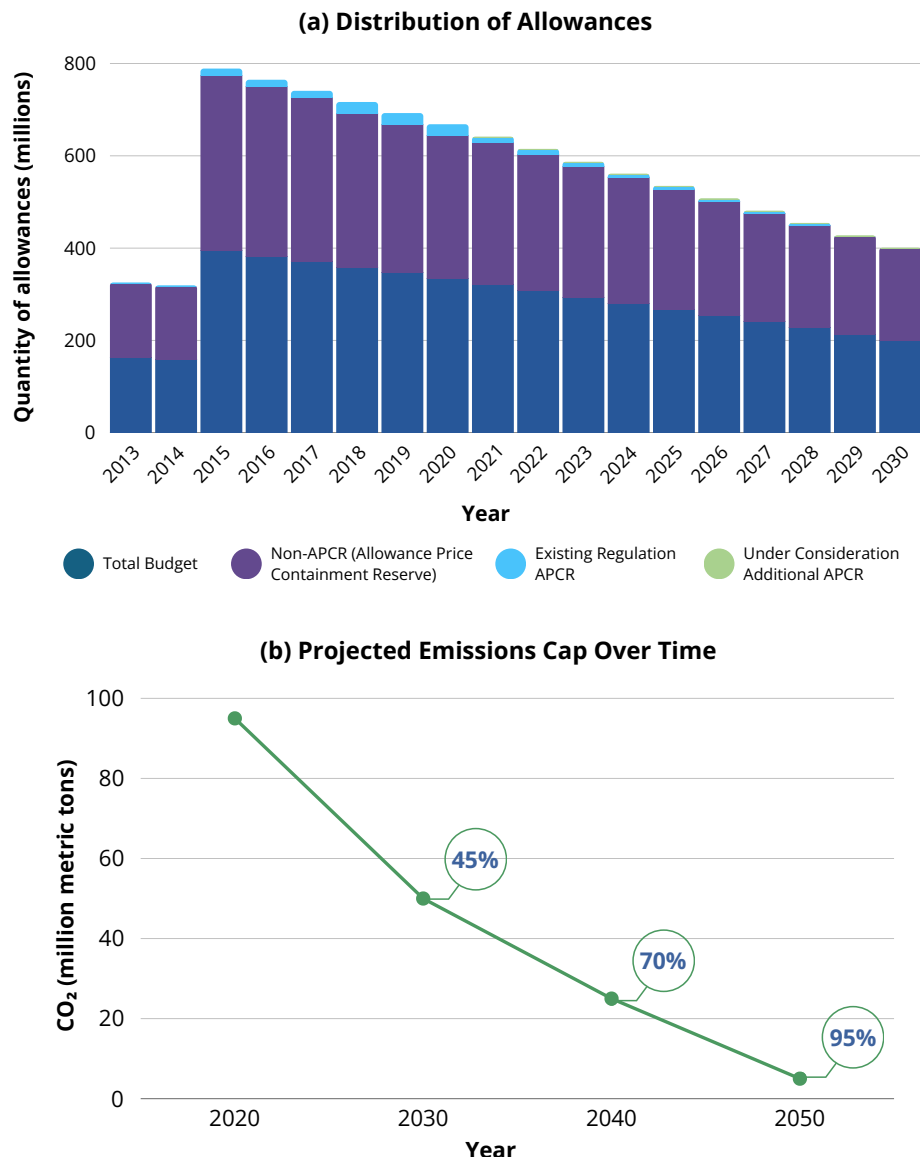


Figure 5. a) California’s cap and trade program annual allowance distribution for 2013 through 2030, data from [California’s Air Resources Board](#) and b) Timeline for Washington’s cap and invest program, data from the [Washington Department of Ecology](#).

CARBON CAPTURE AND STORAGE (CCS) POLICIES

Overview: For hard-to-decarbonize sectors, states can deploy Carbon Capture and Storage (CCS) policies to achieve emissions reductions that cannot be achieved through other measures. To deploy this emerging technology with the appropriate infrastructure, states can implement policies that allow emitters to deploy CCS while ensuring there is monitoring and verification of sequestered carbon. Often, a fee system is used to fund regulatory and monitoring activities in which states are directly involved.

- **Colorado:** [HB 24-1346](#) - Under this law, Colorado allows CCS operators to combine ownership interests across parcels (with the approval of 75% of pore space owners), provides owner compensation, adopts a management plan for injection, approves a fee on CCS operators to fund regulatory oversight, establishes state primacy for permitting, and provides technical assistance to local governments for siting.
- **Illinois:** [Safe CCS Act](#) - This act establishes funds for monitoring and remediation by placing fees on CCS operators. It also requires air and soil monitoring to demonstrate no increase in NAAQS pollutants and requires CCS projects to provide post-injection site care for at least 30 years.
- **North Dakota:** [Clean Sustainable Energy Authority \(CSEA\) Fund](#) - This fund provides grants and loans for projects that advance the commercialization of low-emissions technologies, including carbon capture and storage projects.
- **Pennsylvania:** [Carbon Dioxide Geologic Sequestration Primacy Act](#) - This act creates a fee to support long-term monitoring of CCS sites, requires seismic monitoring, and allows for transferring site ownership to the state 50 years after injection.

METHANE SECTOR

Overview: Methane has a critical role to play in slowing near-term warming, and states play a critical role in addressing their high global warming impact. States have implemented policies that increase methane mitigation across a wide range of sectors, including the energy, agriculture, and waste sectors. In the energy sector, more stringent monitoring for leaks in oil and natural gas systems and prevention of venting and flaring have the potential to save money and drive down emissions.

- **Colorado:** [Colorado Natural Gas Flaring and Venting Rules](#) - These rules ban routine flaring and venting and the release of raw gas except during disruption, maintenance, and production evaluation. Routine flaring and venting are controlled processes used by oil field operators to manage the gas that accompanies oil production by releasing it into the atmosphere.
- **Ohio:** [Orphan Well Program](#) - To address pollution and leaks from wells, Ohio's program was established to plug orphaned and abandoned oil and natural gas wells. The Ohio Department of Natural Resources is tasked with identifying, locating, and plugging wells and is funded by a portion of the state tax on oil and gas production in Ohio.