ENERGY-CLIMATE COMMITTEE (ECC), of the SIERRA CLUB CALIFORNIA (SCC)
CALIFORNIA CONSERVATION COMMITTEE (CCC)
Committee Goals and Actions for 2020 – as of June 20, 2020

Overview

The Energy-Climate Committee includes 160 Sierra Club members from most SCC chapters statewide, meeting by phone every Monday (except holidays) from 12 noon to 1 pm.

See https://www.sierraclub.org/california/cnrcc/energy-climate-committee

ECC’s mission: Help California reduce energy use and greenhouse gas emissions by the most effective, timely, affordable, efficient, least polluting, socially just, and community-based means possible. Join us -- support any of our campaigns below or send an email to join our listserv:

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1. Reduce CA GHG Emissions (includes items not included elsewhere)
2. Reduce Natural Gas Consumption
3. Support Renewable Energy
4. Increase Energy Efficiency in Buildings
5. Reduce Petroleum Use
6. Increase Carbon Sequestration
7. Support Community Choice Energy
8. Support Emergency Action and Sustainable Communities
9. Increase Climate Literacy
10. Monitor National Sierra Club Policies and Programs
11. Support Environmental Justice

1. Reduce CA GHG Emissions (includes items not included elsewhere)

State law by 2030: GHG Emissions at least 40% below 1990 levels. In 2020: Work with national and Sacramento staff and local activists to:

a. Support implementation of SB 32 which requires 40% below 1990 levels by 2030.
b. Support implementation of SB 100 which requires 60% renewable electricity by 2030, and sets a goal of 100% zero carbon electricity by 2045.
c. Support implementation of SB 350 which requires doubling energy efficiency by 2030.
d. Support implementation of Executive Order B-55-18 to achieve California carbon neutrality by 2045.
e. Expand action to transportation & industry--two largest GHG sectors in California, contributing a majority of emissions.
f. Support large reductions in short-lived climate pollutants, especially methane, black carbon and hydrofluorocarbons (HFCs), demand complete re-capture of refrigerants).
g. Support local action to apply the CA Buy Clean resolution in municipalities and counties.
h. Support efforts to reduce GHG in agriculture and consumer food waste.
i. Support reduction of conventional air pollutants and other co-benefits of GHG reductions.
j. Work for Climate Action Plans (CAPs) and, in cooperation with the Transportation Committee, Regional Transportation Plans (RTPs) that are composed of enforceable measures that work with state-level measures to achieve state policy and climate-stabilizing requirements
k. Reduce methane emissions from landfills by requiring that all organic and green waste be composted and not be allowed to go to landfills, by the control of methane emissions from livestock operations and the gradual elimination of oil and natural gas production in the region, hence eliminating methane leakage from such operations.
2. Reduce Natural Gas Consumption
Support state law by 2030: 40% reduction in natural gas use for buildings, including both electricity and on-site fuel. In 2020: Work with national and Sacramento staff and local activists to:

a. Reduce use of natural gas for electric generation—the largest consumer of natural gas in California—by increasing conservation, efficiency, and renewable energy generation.

b. Stop new major natural gas electricity plants.

c. Promote SB 350 doubling efficiency of domestic gas consumption in existing buildings; with measures including high efficiency windows, building insulation, water efficient appliances, insulate hot water pipes, heat recovery, etc.

d. Promote solar hot water—support goal of at least 1 million solar thermal roofs by 2030, and market transformation to reduce cost.

e. Promote high efficiency electric heat pumps and earth thermal systems for heating and cooling, implemented together with retrofits to improve building thermal envelopes.

f. Avoid use of natural gas in buildings, where feasible and appropriate. Program design should include 1) increasing the Title 24 on-site solar requirement to also offset electrification load, 2) higher efficiency standard than code, 3) high efficiency, and low GWP refrigerants, for electric heat pumps, 4) demand response, 5) energy storage, and 6) clean, non-electric renewable and efficiency technologies (such as solar, geothermal, and heat recovery) where feasible and cost effective, 7) ensure energy security and environmental justice for building heat needs.

g. Begin replacing natural gas power plants with Solar PV plus Battery power plants, with the ultimate aim of replacing all natural gas power plants by 2050, except those that may be required for evening, night and early morning demand. The accompanying principles that should guide this replacement are those of Just Transition (for the Natural Gas power plant workers), and the principles of Energy Democracy, so that greater benefits go to local people and communities. This can mean many smaller Solar PV plus Battery power stations located closer to the communities that use the energy—hence also minimizing transmission costs.

h. With increasing electrification of transportation, homes, buildings, industry, and agriculture, and transitions to renewable energy electricity or non-carbon fuels such as hydrogen, minimize the need for transmission grid expansion by locating solar PV plus battery power plants, and other forms of clean energy resources either in or close to consuming centers, thus limiting transmission costs.

i. Realign grid charges to reflect actual use of infrastructure, such as reducing or eliminating the TAC for distributed energy resources.

j. Support local energy democracy, economic benefits, and security through development of local resources that are owned and operated by local democratically controlled organizations.

k. All electrification needs a coherent plan for limiting growth of electricity demand growth with conservation and efficiency improvement, and use of non-electric technology options where feasible.

3. Support Renewable Energy
Goal By 2030: Existing law requires 60% of electricity retail sales to be from renewable sources by 2030, Club should support increasing this to 70%. In 2020: Work with national and Sacramento staff and local activists to:

a. Advocate at CARB to support 38 MMT electric sector GHG emissions limit for 2030, to be incorporated in 2021 in the CPUC IRP proceeding; longer term goal (3 to 5 years) should be to reduce this again in future IRP cycles to 30 MMT

b. Diversify renewable energy portfolio beyond just solar and wind; e.g. develop Imperial County geothermal potential; set target of at least 1000 to 2000 MW new geothermal by 2030.

c. Expand distributed generation by protecting net metering, and expanding feed-in tariffs.

d. Expand grid and distributed energy storage. Existing policy for near term procurement includes 1325
megawatts (MW) of new storage from IOUs, plus 500 megawatts IOU local storage program, about 200 MW of CCA storage (1% of peak usage). We need to set a higher target for 2030, of at least 10,000 MW new installed storage in CA, including pumped storage.

e. Protect California's RPS policies from federal pre-emption, such as CAISO regionalization, and mechanisms that discriminate against clean energy.

f. Support safer storage of nuclear waste and closing Diablo Canyon nuclear plant as soon as possible. Existing policy should replace the energy with efficiency and renewables, the capacity should be replaced with 2,000 MW of energy storage to avoid need for gas plants.

g. Support CCC Desert Committee and Chapters to reduce habitat damage from energy projects.

h. In combination with solar PV and battery power plants, expand geothermal and Wind (which can provide energy when solar does not) in order to supply power evening through morning – to replace the remaining natural gas power plants. The accompanying principles that should guide this replacement are those of Just Transition (for the Natural Gas power plant workers), and the principles of Energy Democracy, so that greater benefits go to local people and communities.

4. Increase Energy Efficiency in Buildings
Goal By 2030: Ensure state meets SB 350 goal to double energy efficiency in buildings; protect integrity of goals and funding, so "fuel switching" programs always support efficiency first. In 2020:

a. CEC – Work with Lauren Cullum and Rachel Golden to push aggressive plans at the CEC.

b. CPUC – Help improve effectiveness of $1 billion/year currently spent by IOUs on energy efficiency.

c. Support parking policies and other methods to reduce buildings’ total carbon footprints.

d. Promote passive solar design for new and retrofit buildings.

e. when buildings have car parking, require that the parking be value-priced, shared, and automated, with the earnings going to those losing money because the parking is being provided, such as employees, for the case of employee parking (Note that this parking system was official California Democratic Party policy from 2016 to 2020 and is at the center of a Sierra Club lawsuit challenging the San Diego County Climate Action Plan.)

f. Promote buildings be totally electrified by 2045, and be able to provide all of their total electrical energy by onsite roof top solar PV, combined with onsite battery storage.

5. Reduce Petroleum Use
Goal By 2030: Ensure policies in place to at least meet California’s goal of 50% reduction in oil use
In 2020: Work with national and Sacramento staff, the Transportation Committee, and local activists to:

a. develop, identify, or work to ensure that California develops or identifies, a plan consisting of a set of enforceable measures to ensure that light-duty vehicles have the overall fleet-efficiency and the state has the per-capita driving (per-capita VMT) sufficient so that, taken together, they achieve a 2030 climate-stabilizing-target.

b. Expand charging stations, including charging facilities in multi-family buildings.

c. Find adequate funding for electric vehicles, estimated need at about $500 million /yr.

d. Support continued funding for deployment of fuel cell electric power for heavy duty vehicles with long duty cycles.

e. Expand rebates for people with low income to buy an electric car.

f. Oppose oil by rail.

g. Support zero and low carbon emissions goods movement.
h. Support Transportation Committee’s efforts to reduce vehicle miles traveled (including expanded & more efficient transit; biking; walking; complete streets; pricing incentives; parking policies; distributed work/telecommuting; working with state, regional and municipal planning agencies; etc.).
i. Support limits and/or reductions of emissions from refineries.
j. Support the establishment of solar PV plus battery-powered electric vehicle charging stations throughout the state, some of which are refueling sites for hydrogen fuel cell vehicles.
k. Expand the goal 5 million battery electric vehicles by 2030, to begin replacing all fossil fuel vehicles with a “Cash for Clunkers” type program, where these vehicles are replaced by electric and fuel cell vehicles, so that all of these vehicles are off the road by 2050 (replace about 1 million vehicles every year, and recycle materials from these vehicles). To support that, cease all light duty fossil fuel vehicle sales by 2030. A parallel program for medium and heavy duty vehicles and trucks.
l. Support the transition of California refineries from refining oil to the green production of hydrogen, mainly through the use of renewable energy.
m. Support dense, transit-located, housing, including affordable units.
n. Promote tools, programs and models to accelerate behavior change in communities to mitigate and increase resilience to climate change.
o. Support the substitution of high carbon emissions Aviation jet fuel by substituting Aviation travel by High Speed Rail along the entire coast of California and cooperate with the western states so there is high speed rail all the way from San Diego to Seattle, and use it as a way to reduce airline travel with increasing and high carbon emissions.
p. Support the development of a statewide transportation policy that aims at transitioning to low carbon transportation, that is integrated and cross-linked, with pedways and bikeways (human powered and small scale electric vehicles – bikes, trikes and quad bikes) linked to bus and mass transit, that is linked to local train travel, which in turn are linked to airports, high speed rail terminals, and car parking garages with solar-electric vehicle charging stations.

6. Increase Carbon Sequestration, through biological and other means. In 2020: Work with local activists to:
a. Support CARB’s 2030 Implementation Plan for Natural and Working Lands by encouraging grant applications that build knowledge, maximize return on investments, expand goals, and make goals more specific and measurable in cooperation with CCC Forest Committee.
b. Expand at twice CARB’s pace and scale of forests managed and restored in cooperation with CCC Forest Committee.
c. Expand at five times CARB proposal the number of acres in soil conservation practices especially through ambitious participation in the Healthy Soils Initiative.
d. Expand at twice CARB’s proposed rate of wetland and seagrass restoration in ways that hold GHG in the ecosystem.
e. Expand at three times CARB’s pace of reforestation of oak savannahs, riparian areas, chaparral, and other ecosystems through planting appropriate native plants and increasing deep-rooted perennial vegetation in urban forestry and landscapes.
f. Advocate for county goals and targets for carbon sequestration on natural and working lands using mapping tools to establish baseline carbon sinks and track carbon flux in various land types.
g. Advocate for farming, landscape and park management practices that sequester carbon.
h. Support ecologically sound and safe other methods of carbon sequestration.
i. Expand the reforestation goals with added afforestation of 2 million hectares (about 5 million acres) for California, with all such efforts accompanied by forest layout design with fire breaks so that forest wildfires are easy to control and contain. The accompanying principles that should guide this are the features in design that have wildlife crossings and that local communities have more democratic
control and are able to generate added livelihoods by extracting products from the forests based on the principles of sustainable forestry.
j. Expand the wetlands initiatives so as to develop and expand coastal ecosystems along the entire California Coast, consisting mainly of one of the three ecosystems – mangroves, salt marshes and seagrass. The accompanying principles that should guide this are the development of habitats for all ocean life in the region and supporting the rejuvenation of fisheries in cooperation with fisherman communities.
k. Evaluate options for sustainable carbon sequestration in oceans.

7. Support Community Choice Energy
Goal By 2030: Over 50% of state electricity demand in CCAs or municipal energy with clean energy programs meeting Sierra Club standards
In 2020: Work with national and Sacramento staff and local activists to:
a. Lobby CPUC and legislature to reduce the PCIA exit fees increase and other unfair burdens on Community Choice to ensure customer fairness.
b. Lobby local officials to set up and join CCAs that incorporate community input and align with Sierra Club-supported goals.
c. Lobby existing and new CCAs to prioritize and implement distributed energy resources, including conservation, energy efficiency, local renewable energy, and local flexibility and reliability (such as storage, smart grid, and demand response); for example, implement or exceed the CPUC mandate that CCAs meet 1% of peak demand with storage.
d. Protect the low carbon policies of CCAs by pushing back discriminatory state practices.
e. Provide financing and incentives to CCAs so that it includes electrification, not only in charging stations for electric vehicles, but also in the electrification of homes, buildings and industry, and offset the increased demand with local clean energy resources (conservation, efficiency, and local renewable energy) to reduce the need for wholesale market purchases of electricity.

8. Support Emergency Action and Sustainable Communities
Goal By 2030: All state’s cities and counties adopt comprehensive, sustainable Climate Action Plans to achieve citywide GHG reductions to the equivalent of 40% below 1990 levels by 2030, and a plan for net zero emissions by 2045.
In 2020: Work with Chapters and the CCC Transportation Committee to:
a. Support Climate Emergency resolutions and strong immediate implementation steps.

https://www.sierraclub.org/california/cnrccc/ecc-support-climate-emergency-actions
b. Support effective, science-based city and county climate action plans, including sustainable general land use plans, transportation plans and other long-range plans that support the statewide 2030 GHG emissions reduction goal and 2045 carbon neutrality, and rapidly implement these plans with regular measurements and reporting of progress (using detailed goals in other sections).

9. Increase climate literacy in California schools with a focus on high schools
Goal by 2030: All school districts providing some climate education to high school students, with some providing extensive curricula and school assemblies so students know (1) causes of climate change; (2) its potential for harm; (3) what is required to avoid climate destabilization; (4) actions needed to ensure a livable future; and (5) the key people and institutions involved in implementing those actions. In 2020: Work with local activists to:
a. Advocate for strong climate literacy standards for California high schools
b. Persuade district boards of education to go on record supporting climate literacy.
c. Support teachers and staff to implement climate literacy in classrooms and assemblies.
d. Encourage students to be involved in promoting and taking action on climate literacy, with special attention to students of color.

e. Develop a strong Climate Science curriculum that not only helps students understand the problem of climate change, but also equips them with an understanding of climate change solutions in the areas of conservation, efficiency, the various renewable energies, biomass and bioenergy related areas, and in establishing and managing carbon sinks in forests (and land ecosystems), coastal ecosystems and a transformed agriculture. The curriculum must prepare the students for the massive transition that is to come in energy production, electrification, bioenergy, and in all of the disciplines involved with carbon sinks. The students should also be taught Disaster Risk Reduction, which in the case of California is mainly that of wildfire disasters that will be more frequent even with only a 1.5°C global average temperature rise. The curriculum should help the students explore careers in these areas of the future,

10. Monitor National Sierra Club policies and programs
Goal by 2030: Continue to monitor and comment on National Club policies and programs as needed. In 2020: Work with Committee experts to prepare comments and resolutions if needed.

11. Support Environmental Justice in All Our Work
Goal: In addition to including environmental justice in all the programs above, also by 2030: Substantially reduce pollution and other negative environmental impacts on disadvantaged communities. In 2020: Work with Sacramento staff and local activists to:

a. Expand solar, fuel cells, energy storage, efficiency (to also help lower bills), and electric vehicles in disadvantaged communities

b. Expand active transportation (walkable, bike-able and transit-oriented development in disadvantaged communities)

c. Expand other renewables and efficiency programs in disadvantaged communities to fill in the gaps of AB 693 Multifamily Affordable Housing Solar Roofs Program.

d. Support hiring of local people from disadvantaged communities to implement programs, including training and good paying family-sustainable jobs.

e. Ensure all GHG expenditures for disadvantaged communities (DACs) from cap-and-trade funds, and other sources of funding, actually help reduce both GHG and conventional pollution from agriculture, transportation, energy, and industry to benefit DACs.

f. Support expansion of low-income energy programs, such as the low-income weatherization program.

g. Form partnerships and work with statewide and local EJ groups.

h. Support EJ training and consciousness raising among Sierra Club members.

i. Support climate literacy efforts that recognize the needs and interests of students of color, while

j. Support programs in Just Transition that help fossil fuels workers find alternative employment, and implement the principles of Energy Democracy to fund more locally controlled and owned energy and other businesses involved in various aspects of climate change.