



Building power together for accelerated, equitable climate policy in California

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California Climate Policy Summit

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the
climate
center

Current global climate goals

UN IPCC 1.5C Report- Oct 2018

- Cut emissions by 45% by 2030

AND

- remove up to 1000 Gt CO₂e from atmosphere

to achieve **net-zero emissions** by **2050** and **stay under the 1.5C** dangerous warming threshold



Current pledges= 14% increase in emissions!

“Code red for humanity” –UN Sec General António Guterres, Aug 9 2021

“a brief and rapidly closing window of opportunity to secure a liveable and sustainable future for all.”

– IPCC 6th Assessment, WGII, Feb. 28, 2022



“No temperature rise is safe” ...rapidly warming climate is the "greatest threat" to global public health

–220 medical journals globally, Sept. 7 2021

https://report.ipcc.ch/ar6wg2/pdf/IPCC_AR6_WGII_SummaryForPolicymakers.pdf

<https://www.reuters.com/business/environment/un-sounds-clarion-call-over-irreversible-climate-impacts-by-humans-2021-08-09/>

<https://www.theguardian.com/environment/2021/jul/02/canadian-inferno-northern-heat-exceeds-worst-case-climate-models>

<https://grist.org/science/is-climate-change-happening-faster-than-expected-a-climate-scientist-explains/>

<https://www.npr.org/2021/09/07/1034670549/climate-change-is-the-greatest-threat-to-public-health-top-medical-journals-warn>

Western US now in global warming-induced severe megadrought; worst in 1200 years

- Threatens dustbowl & ag economy by as early as 2027 in CA
- 2015 drought cost ~\$2.7 billion and 20k lost ag jobs in California



<https://www.motherjones.com/environment/2014/02/california-drought-matters-more-just-california/>

<https://ramanathan.ucsd.edu/>

Williams et al *Nat. Clim. Chang.* (2022). <https://doi.org/10.1038/s41558-022-01290-z>

<https://www.latimes.com/environment/story/2022-02-14/western-megadrought-driest-in-1200-years>

<https://www.scientificamerican.com/article/drought-takes-2-7-billion-toll-on-california-agriculture/>

Increasing health impacts especially BIPOC and working class communities

Fossil fuel air pollution => 1 in 5 deaths globally

Heatwaves => leading climate related killer

7.3 million Californians live within 1 mi. of oil & gas wells



<https://www.fractracker.org/2020/12/people-and-production/>

<https://www.epa.gov/climate-indicators/climate-change-indicators-heat-related-deaths>

<https://www.seas.harvard.edu/news/2021/02/deaths-fossil-fuel-emissions-higher-previously-thought>

<https://www.latimes.com/california/story/2021-02-01/wildfire-smoke-microbes-in-the-air>

<http://www.who.int/globalchange/en/>; Leleiveld et al., Cardiovascular, March 2020; Hoffman et al. Climate Jan 2020

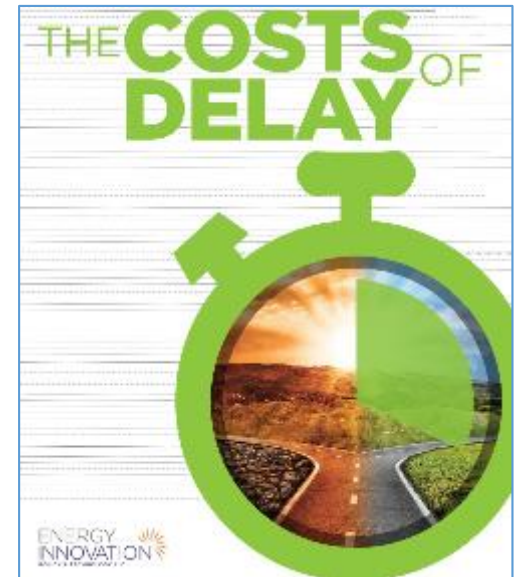
Bekkar et al JAMA June 2020

<https://www.nytimes.com/2020/06/18/climate/climate-change-pregnancy-study.html>

<http://www.g-feed.com/2020/09/indirect-mortality-from-recent.html>

Delayed climate action costs lives and dollars, bankrupting our future

- Eliminating fossil fuel air pollution in bldgs. & transportation in CA = \$44 billion per year in improved health & ~5,000 premature deaths avoided
- Costs much less investing big today rather than waiting until 2030 *(For CA: est. \$47 billion/year now vs. \$110 billion/year starting in 2030 based on CA =14.6% of GDP)*
- \$150 Billion in damages from 2018 CA wildfires *but \$80 Billion invested in California generate ~725,000 jobs*



https://energyinnovation.org/wp-content/uploads/2021/01/Cost_of_Delay.pdf

<https://www.ethree.com/new-e3-reports-quantify-the-health-benefits-of-reducing-fossil-fuel-use-in-california/> Jan 2022

<https://www.federalreserve.gov/publications/files/financial-stability-report-20201109.pdf>

<https://www.nytimes.com/2020/09/08/climate/climate-change-financial-markets.html>

Wang, D et al. **Economic footprint of California wildfires in 2018.** *Nature Sustainability*, 2020 DOI: [10.1038/s41893-020-00646-7](https://doi.org/10.1038/s41893-020-00646-7)

<https://www.accuweather.com/en/weather-news/california-wildfires-will-cost-tens-of-billions-accuweather-estimates/612548>

Political Economy Research Institute https://www.peri.umass.edu/images/CA-EconRecProgram-6-12-20_Final.pdf

World Resources Institute <https://www.wri.org/blog/2020/07/economic-benefits-climate-action-us>

RAISING THE ALARM

Evidence that tipping points are under way has mounted in the past decade. Domino effects have also been proposed.



A. Amazon rainforest
Frequent droughts

B. Arctic sea ice
Reduction in area

C. Atlantic circulation
In slowdown since 1950s

D. Boreal forest
Fires and pests changing

F. Coral reefs
Large-scale die-offs

G. Greenland ice sheet
Ice loss accelerating

H. Permafrost
Thawing

I. West Antarctic ice sheet
Ice loss accelerating

J. Wilkes Basin, East Antarctica
Ice loss accelerating

9 of 15 global tipping points underway now... domino effect to uninhabitable 'hothouse' climate if we don't act soon...

Lenton, Rockstrom, Gaffney, Rahmstorf, Richardson, Steffen, Schyellnhuber.
Nature, Nov 27 2019
<https://www.nature.com/articles/d41586-019-03595-0>

<https://www.sciencedaily.com/releases/2019/11/191127161418.htm>

“We have underestimated the risks off **unleashing irreversible changes ...We are seeing strong evidence already for **declaring a state of planetary emergency**...**

The next decade is our window...with consequences for all future generations.”



- Johan Rockström, Director, Potsdam Institute for Climate Impacts Research, 2019

<https://www.sciencedaily.com/releases/2019/11/191127161418.htm>

<https://sverigesradio.se/avsnitt/1425542>

<https://medium.com/@rchrthy/johan-rockstr%C3%B6m-10-point-agenda-for-saving-the-world-unofficial-transcript-431261f885c6>

**The climate reality
is outpacing
policy.**

**Some leaders are
now stepping up**

**But ...California
has fallen behind**

“I don’t at all feel that we [in California] are leading the world anymore.”

– Assembly Speaker Anthony Rendon, COP26, Glasgow



<https://calmatters.org/newsletters/whatmatters/2021/11/california-climate-change-newsom/>

New International & National Climate Targets....

- ✓ **EUROPEAN UNION:** Cut GHGs by at least 55% by 2030 from 1990
- ✓ **UK:** Cut GHGs 68% by 2030 from 1990 levels; 100% ZEV sales by 2030; 100% clean electricity by 2035
- ✓ **DENMARK:** 70% GHG cut below 1990 by 2030; **Copenhagen-** carbon neutral by 2025
- ✓ **RHODE ISLAND:** 100% GHG free electricity by 2030
- ✓ **WASHINGTON STATE:** 100% ZEV car sales by 2030
- ✓ **CITY of LOS ANGELES:** 97% GHG free electricity by 2030, 100% by 2035
- ✓ **PRESIDENT BIDEN**
 - Cut GHGs 50% below 2005 by 2030
 - 100% GHG free electricity by 2035

<https://www.theguardian.com/environment/2020/dec/03/uk-vows-outdo-other-major-economies-emissions-cuts-by-2030> Dec 3, 2020
<https://www.cbsnews.com/news/uk-ban-new-gasoline-diesel-cars-vehicles-by-2030-boris-johnson-green-industrial-revolution/> Nov 18 2020
<https://www.axios.com/eu-carbon-emissions-target-cut-2030-climate-063fa943-1af8-471f-a798-590bba10c7c4.html> Dec 11, 2020
[https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(20\)32290-X/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)32290-X/fulltext) December 2, 2020
<https://www.utilitydive.com/news/la-approves-100-clean-energy-by-2035-target-a-decade-ahead-of-prior-goal/605980/> Sept 2 2021
<https://joebiden.com/wp-content/uploads/2020/07/UNITY-TASK-FORCE-RECOMMENDATIONS.pdf> July 8, 2020
<https://www.nytimes.com/2020/07/14/us/politics/biden-climate-plan.html> Feb 1, 2021

**The nation and the world are
looking to California to lead
for a climate-safe future**

**As goes California,
goes the world**



Need more aggressive, equitable policies & accelerated timelines in CA now!



Climate-Safe California

Carbon negative, equity positive by 2030

www.climatesafeca.org

GOAL: By 2025, CA will have enacted the bold & equitable policies required by science to dramatically cut emissions, scale up natural drawdown, and secure resilient communities for all by 2030, inspiring greater global action

Guiding principles for Climate-Safe CA targets, policies and programs

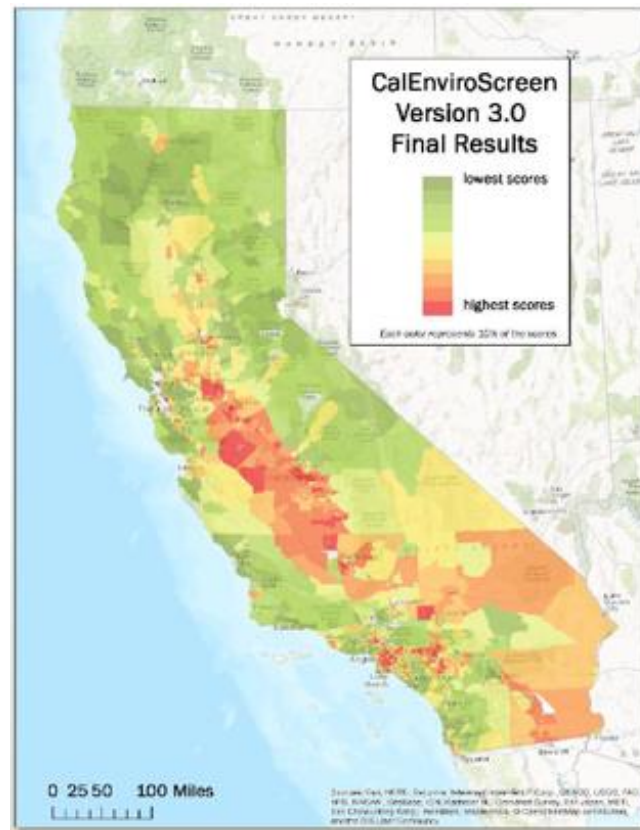
- 1- Based on the **latest science**
- 2- Ensure a **just transition** for fossil fuel workers
- 3- Prioritize **climate justice** and equal access to climate solutions



WE HAVE THE SOLUTIONS, JUST NEED THE POLITICAL WILL TO ACHIEVE CARBON NEGATIVE, EQUITY POSITIVE

1. Accelerate the phase-out of fossil fuel development, production, refinement and use
 - 3x deployment of renewables, including local distributed clean energy and storage
 - electrify transit and buildings
2. Scale-up protection /conservation of nature and nature-based sequestration on natural, working & urban lands
3. Invest in community resilience engaging with communities
4. Fund climate action with \$12-20 billion/year and leverage private sector money

We Must Prioritize Full Engagement with Communities That Suffer Most from Air and Water Pollution, Power Outages and Lack of Access to Climate Solutions



Positive Tipping Points

- UK decarbonizing its electricity faster than any other major economy
- Norway – EVs are 80% of new car sales today



Simon Sharpe, Timothy M. Lenton. **Upward-scaling tipping cascades to meet climate goals: plausible grounds for hope.** *Climate Policy*, 2021; 1 DOI: [10.1080/14693062.2020.1870097](https://doi.org/10.1080/14693062.2020.1870097)

<https://www.reuters.com/business/autos-transportation/tesla-pushes-norways-ev-sales-new-record-2021-10-01/>

Growing Enviro Justice and Youth Movements



LA City Council voted unanimously to advance phasing out oil & gas extraction across the city

January 26, 2022

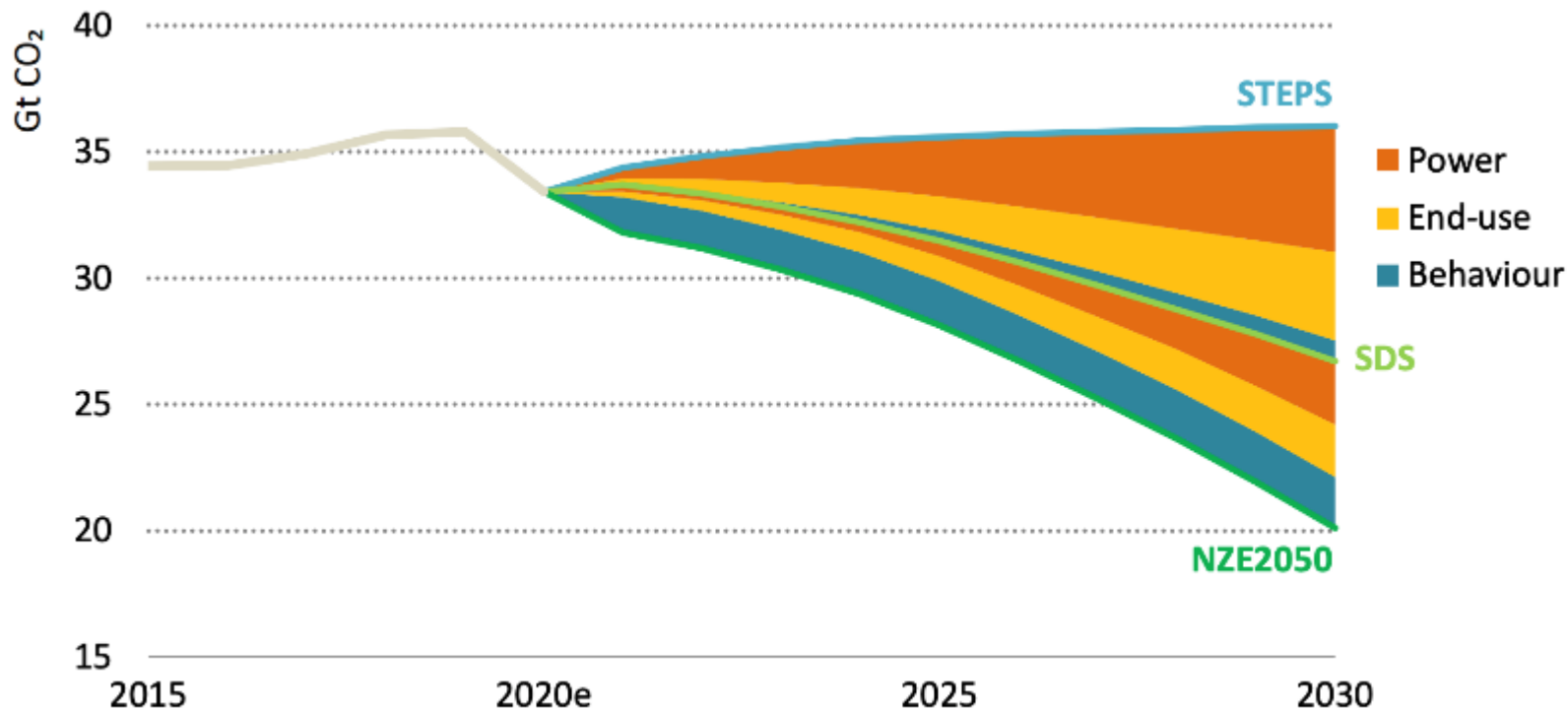


STAND-LA:

*Physicians for Social Responsibility-LA
Communities for a Better Environment
Black Women for Wellness
Esperanza Community Housing Corporation
Redeemer Community Partnership
Holman United Methodist Church
Strategic Concepts in Organizing & Policy- LA
Liberty Hill*

SOLAR NOW CHEAPEST ELECTRICITY GLOBALLY

CO₂ emissions from coal-fired power stations
projected to decline by 75% between 2019 and 2030



<https://www.carbonbrief.org/solar-is-now-cheapest-electricity-in-history-confirms-iea> Oct 13 2020

[U.S. renewable energy consumption surpasses coal for the first time in over 130 years](https://www.eia.gov/electricity/monthly/epm_table_grapher.php?t=epmt_es1a) May 28 2020

<https://pvbuzz.com/renewables-produce-more-electricity-than-coal/> Apr 27 2020

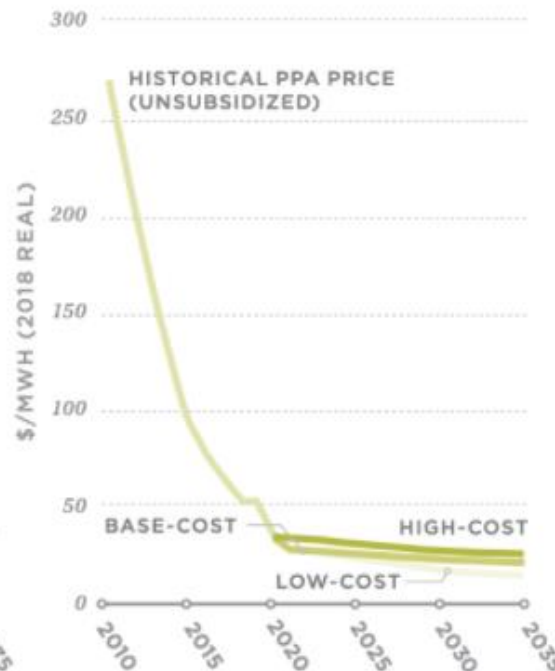
https://www.eia.gov/electricity/monthly/epm_table_grapher.php?t=epmt_es1a

Cheaper to build renewables than to operate fossil fuel power plants

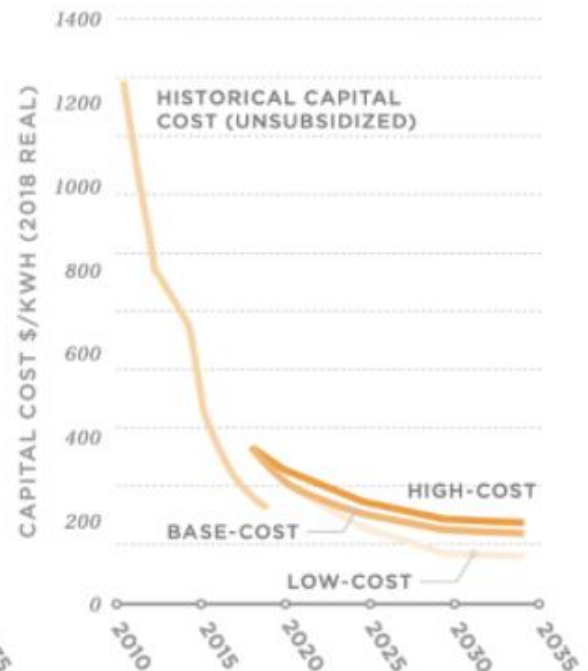
WIND LCOE



SOLAR LCOE



BATTERY STORAGE CAPITAL COST



Now cheaper to build renewables than to operate fossil fuel power plants

CHALLENGE: Bold, Equitable Climate Legislation Stymied in Sacramento

<https://theclimatecenter.org/our-work/legislation/>



<https://capitalandmain.com/california-oil-industry-continues-to-thwart-climate-related-bills>

**Governments & policymakers
are like sailboats. They go nowhere without
wind. We are the wind in their sails!**



TODAY'S FOCUS: come together as allies, frankly discuss strategy and tactics for 2022 legislation & regulation

- 1. Community Energy Resilience**
- 2. Phase out fossil fuels and sustainable mobility**
- 3. Natural Carbon Sequestration**
- 4. Finance, accountability and carbon capture and storage**

**Building power together for a
climate-safe future for all**

