

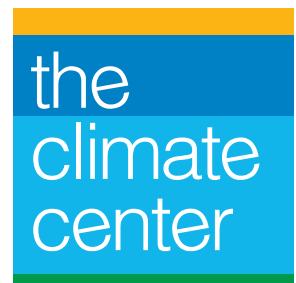


Climate-Safe California: accelerating climate action

The Human & Economic Cost of Climate Inaction *with Senator Lena Gonzalez, Ibrahim AlHusseini, Chris Busch*

Thursday, Nov 18, 2021

Ellie Cohen and team



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Current global climate goals are **inadequate**

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 1.5C warming



UN operates by consensus so goals are conservative and not enough.

We must do more sooner per new science...

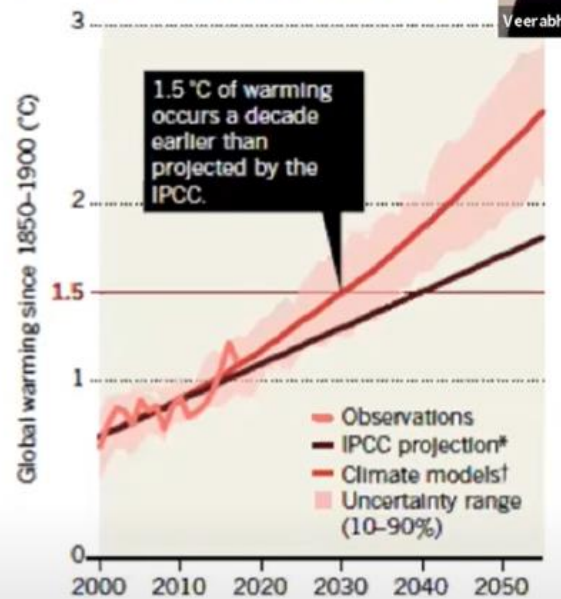
Will pass 1.5°C dangerous warming by 2030 10 years earlier than UN IPCC projected

Global warming will happen faster than we think

Three trends will combine to hasten it, warn Yangyang Xu, Veerabhadran Ramanathan and David G. Victor.

ACCELERATED WARMING

Climate simulations predict that global warming will rise exponentially if emissions go unchecked



Xu, Y., et al, **Global Warming will Happen Faster than We Think**, Nature Dec 2018, 564(7734):30-32

DOI: [10.1038/d41586-018-07586-5](https://doi.org/10.1038/d41586-018-07586-5)

MoveCA Zoomposium, Jan 21 2021, <https://www.youtube.com/watch?v=T3IOX5ru0BI&t=12s> (at 16 min in)

Hébert, R. et al. *Climate Dynamics*, 2020; DOI: [10.1007/s00382-020-05521-x](https://doi.org/10.1007/s00382-020-05521-x)

CA impacts: personal communication with V. Ramanathan, Scripps/UC San Diego

“Code red for humanity....

This report must sound a death knell for coal and fossil fuels, before they destroy our planet.”

*-UN Secretary General António Guterres, Aug 9 2021,
re: United Nation IPCC 6th Assessment Report*



Global climate models do not include regional extreme events we are now experiencing

<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/>

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

- 220+ medical journal simultaneous editorial Sept. 7 2021

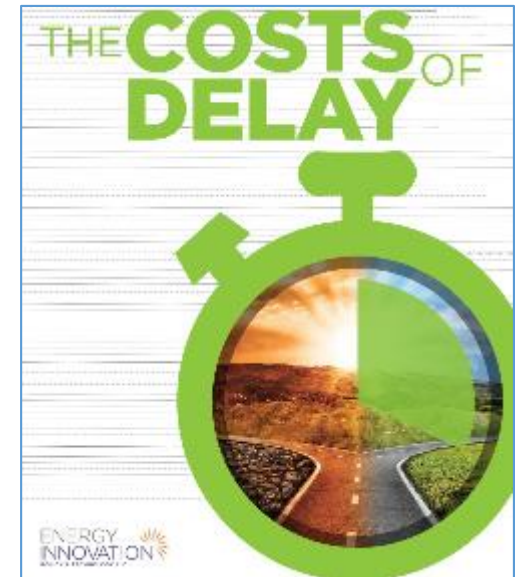


[https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(21\)01915-2/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(21)01915-2/fulltext)

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

Climate action delay costs trillions, bankrupting our economy

- **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.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>

Update on COP 26 Glasgow Climate Summit

Good news:

- Agreement to cut **methane**; first reference to **phase down of coal & fossil fuels subsidies**; **Beyond Oil & Gas Alliance (BOGA)**
- Denmark & Costa Rica; **stop deforestation** by 2030
- Increase **financial commitments** to developing countries (BUT still haven't delivered on Paris agreement commitments)

Bad news:

- Not enough
- Kicked the can down the road for serious reduction targets
- Current commitments would mean between 1.8 to 2.4+ C with devastating consequences, especially for frontline communities around the world



**The climate reality
is outpacing
policy.**

**Some leaders are
now stepping up
but....**



“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/>

...California is behind: New International & National Climate Targets....

- ✓ **EUROPEAN UNION:** Cut GHGs by at least 55% by 2030 ... from 1990 levels to reach net zero emissions by 2050
- ✓ **UK:** Cut GHGs 68% by 2030 from 1990 levels; 100% ZEV sales by 2030; 100% clean electricity by 2035
- ✓ **RHODE ISLAND:** 100% GHG free electricity by 2030
- ✓ **PRESIDENT BIDEN**
 - Cut GHGs 50% below 2005 by 2030
 - 100% GHG free electricity by 2035
 - 40% investments to lower-income communities
 - Invest \$2 trillion (= ~\$292 Billion in CA @ 14.6% GDP)

Bold targets work!

As goes California, goes the world

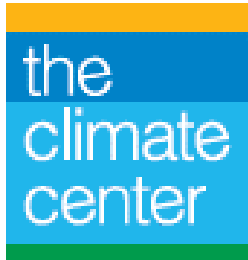
- AB1493 (2002) **tailpipe emissions cuts**
- AB32 (2006) **Global Warming Solutions Act**
- SB100 (2017)- **100% carbon-free electricity** by 2045
- CA launched **Under2 Coalition** (2017); now includes >220 jurisdictions with 1.3 billion people and 50% of the world economy
- Gov. Newsom EO **100% ZEV car sales** by 2035 (Sept 2020) – must be earlier but...
 - GM announces will sell only 100% ZEV cars by 2035 (Jan 2021); Volvo by 2030 (Mar 2021); New York State (Sept 2021)



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



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



Climate-Safe California

Campaign for Rapid Decarbonization

www.theclimatecenter.org

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



CLIMATE-SAFE CALIFORNIA

accelerate existing state goals 15 years...

2045 is too late

- **Net-negative emissions by 2030** (drawdown greater than emissions) (Brown 2018 EO by 2045)
 - **80% below 1990 GHG levels by 2030** (Schwarzenegger 2005 EO by 2050)
 - **Nature-based annual sequestration greater than emissions by 2030**

Definition: net negative emissions is achieved when, as a result of human activities, more greenhouse gases are removed from the atmosphere than are emitted into it. – UN IPCC 1.5C Report <https://www.ipcc.ch/sr15/chapter/glossary/>



One pathway to Net Negative Emissions by 2030: *by sector*

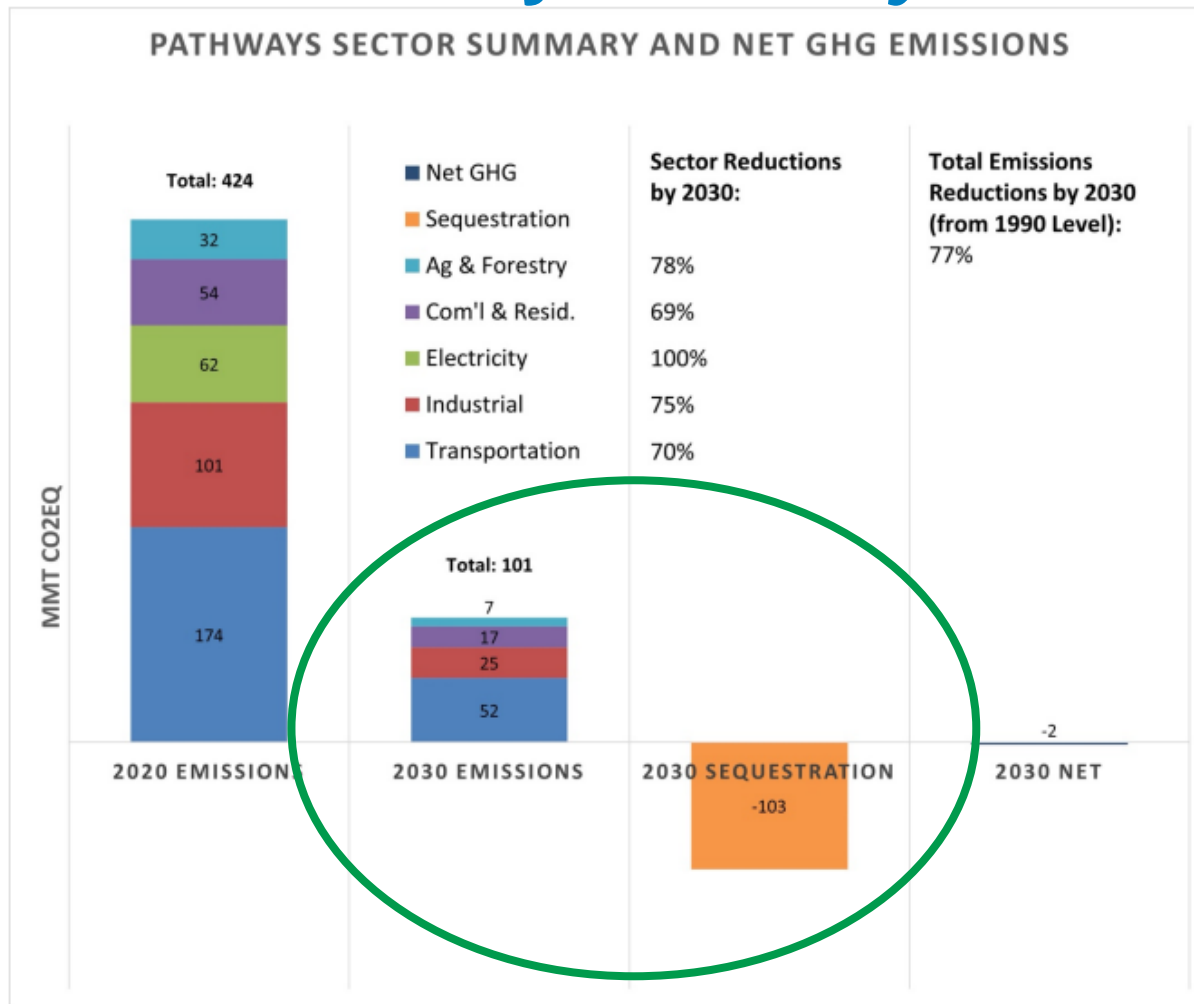


Figure 2. Pathway of emissions reductions by sector that result in net-negative emissions by 2030. Analysis using The Climate Center GHG Accounting Tool.

<https://theclimatecenter.org/our-open-source-pathways-model-offers-climate-action-blueprint/>
<https://arxiv.org/abs/2103.07801>

TYPES OF POLICIES REQUIRED BY SCIENCE TO REACH CARBON NEGATIVE BY 2030

1. Accelerate the phase-out of fossil fuel development, production and use
2. Scale-up nature-based sequestration to 100 MMT/year by 2030 on natural & working lands
3. Invest in community resilience, including clean energy microgrids & storage
4. Fund climate action with \$12-20 billion/year and leverage private sector money

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 and impacted communities
- 3- Prioritize **climate justice** and ensure lower-income/BIPOC communities are no longer disproportionately harmed by fossil fuels & equal access to climate solutions



Endorse Climate-Safe California today!

www.climatesafeca.org



**California can remove
more climate pollution
than we emit by 2030**

Learn more about our campaign
for a healthy, hopeful & equitable
future at www.climatesafeca.org

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