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# Climate-Safe California: accelerating climate action

Investing in Sustainable Mobility

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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 CO<sub>2</sub>e 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...**

# “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 6<sup>th</sup> Assessment Report*



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

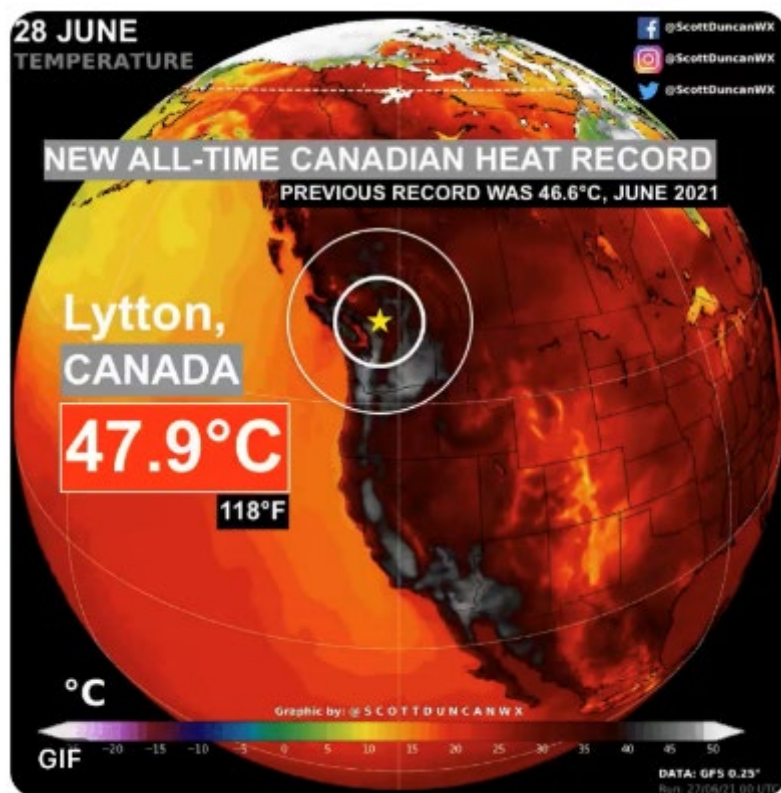
<https://www.reuters.com/business/environment/un-sounds-clarion-call-over-irreversible-climate-impacts-by-humans-2021-08-09/>

<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 editorials 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>

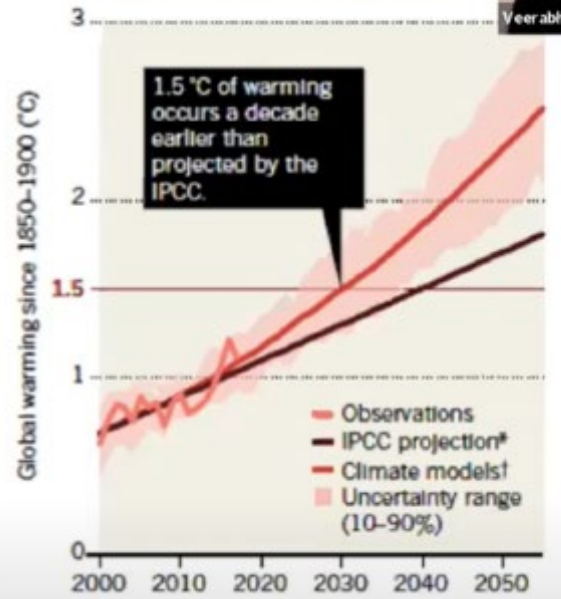
# Will pass 1.5°C dangerous warming by 2030 10 years earlier than UN IPCC projected

## 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



# Climate inaction/delay is bankrupting our economy

- **Fed Reserve:** banks must consider climate risks
- **Threatens** insurance & mortgage markets, pension funds, and other financial institutions
- **\$150 Billion in damages from 2018 CA wildfires**; \$80 Billion in 2019
- **\$80 billion invested in California will generate ~725,000 jobs**
- Investments in **clean energy** generate more than **2x the jobs as in fossil fuels**



<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](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>

# 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](http://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/>



# 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 ensure lower-income/BIPOC communities are no longer disproportionately harmed by fossil fuels & equal access to climate solutions



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

1. Accelerate the phase-out of fossil fuel production, electrify transportation and buildings
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

[www.climatesafeca.org](http://www.climatesafeca.org)

# Rapidly Transition to Sustainable Mobility

- **Begin phase out of fossil fuel powered vehicles--cars, trucks, buses, ships immediately- eg, cash for clunkers, EVs**
- **No new gas powered vehicle registrations by 2030**
- **Flip priorities: invest 80%+ of Caltrans \$ in non-GHG producing sustainable modes of transportation by 2025**
- **Invest in affordable housing near jobs**
- **Invest in clean mass transit**
- **Get more people out of cars!**





# Innovate: Scale up mobile power storage- solve multiple challenges with same investment

CA's school bus fleet = 24,200

If all-electric, could store & provide  $\sim\frac{1}{4}$  of 4-9pm electricity use surge, help clean the air, power thru outages



150 kW battery packs per bus; 24,200 times 150 kW = 3600 MW, i.e. about  $\frac{1}{4}$  of the evening duck curve ramp

# Governor Newsom heard us: ordered Air Resources Board to evaluate pathways to carbon neutral by 2035, 10 years ahead of current policy- **but still need more**

July 9, 2021



<https://www.gov.ca.gov/2021/07/09/governor-newsom-holds-virtual-discussion-with-leading-climate-scientists-on-states-progress-toward-carbon-neutrality/>

Also asked CPUC to establish a more ambitious greenhouse gas emissions target for electricity procurement by 2030



# Endorse Climate-Safe California today!

[www.climatesafeca.org](http://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](http://www.climatesafeca.org)

the  
climate  
center

# New Report on Setting Bold Carbon Sequestration Goals for CA Working Lands by 2030

see [www.theclimatecenter.org](http://www.theclimatecenter.org)

