



Positioning California Wines in a Sustainable Future

Climate Action Plan

Wine Institute Board of Directors Meeting | December 7, 2021



Agenda

California Wines **Sustainable Future:**
A Conversation with Dr. John Heckman, Anthesis Group

The **Current Climate State**

Goals for a **Climate Action Initiative**

Discussion/Questions



CA WINES

A Sustainable Future

John Heckman, Anthesis Group

Allison Jordan, VP Environmental Affairs

For A Sustainable Future, We Need:



To **Stabilize** Global Warming to 1.5°C



To **Achieve** Net Zero Emissions



To **Align** CA Wine on the Same Path



California's Goals For 2045

State-wide
Carbon
Neutrality

100% Carbon
Emission-Free
Electricity

Governments, Markets, and Wineries **Are** **Taking Bold** **Action**



GOVERNMENTS



CALIFORNIA

Carbon neutral by 2045

100% carbon-emission free energy by 2045

Reduce emissions to 1990 levels via statewide **cap-and-trade** program through 2030

Reduce **GHG emissions 40% below 1990** levels by 2030

INTERNATIONAL MARKETS

European Union: Green Deal goal Net Zero emissions by 2050

New Zealand: Net Zero by 2050 in law

South Africa: Low Emission Development Strategy; Net Zero by 2050

Governments, Markets, and Wineries **Are** Taking Bold Action



MARKETPLACES



Tesco

First retailer to offer financial incentives to report and reduce emissions.

Systembolaget

Beverage Industry Climate Initiative: fossil-free and 100% renewable energy by 2030

SAQ

Selection criteria includes supplier commitments to reducing GHG emissions



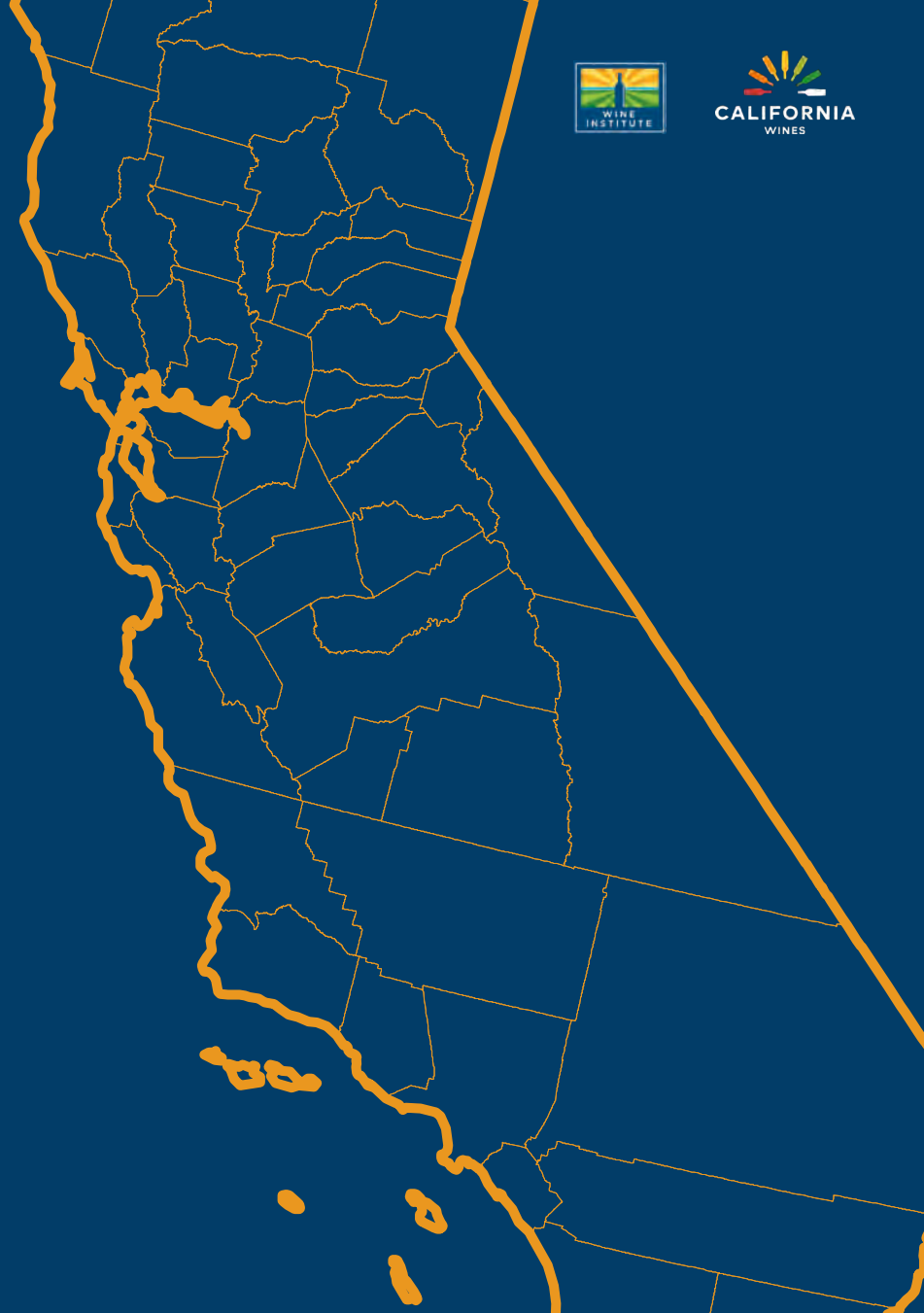


“

Food and Ag is Big and Complex. We have to get out of our silos and collaborate together ... to help us all be successful.

-Secretary Karen Ross

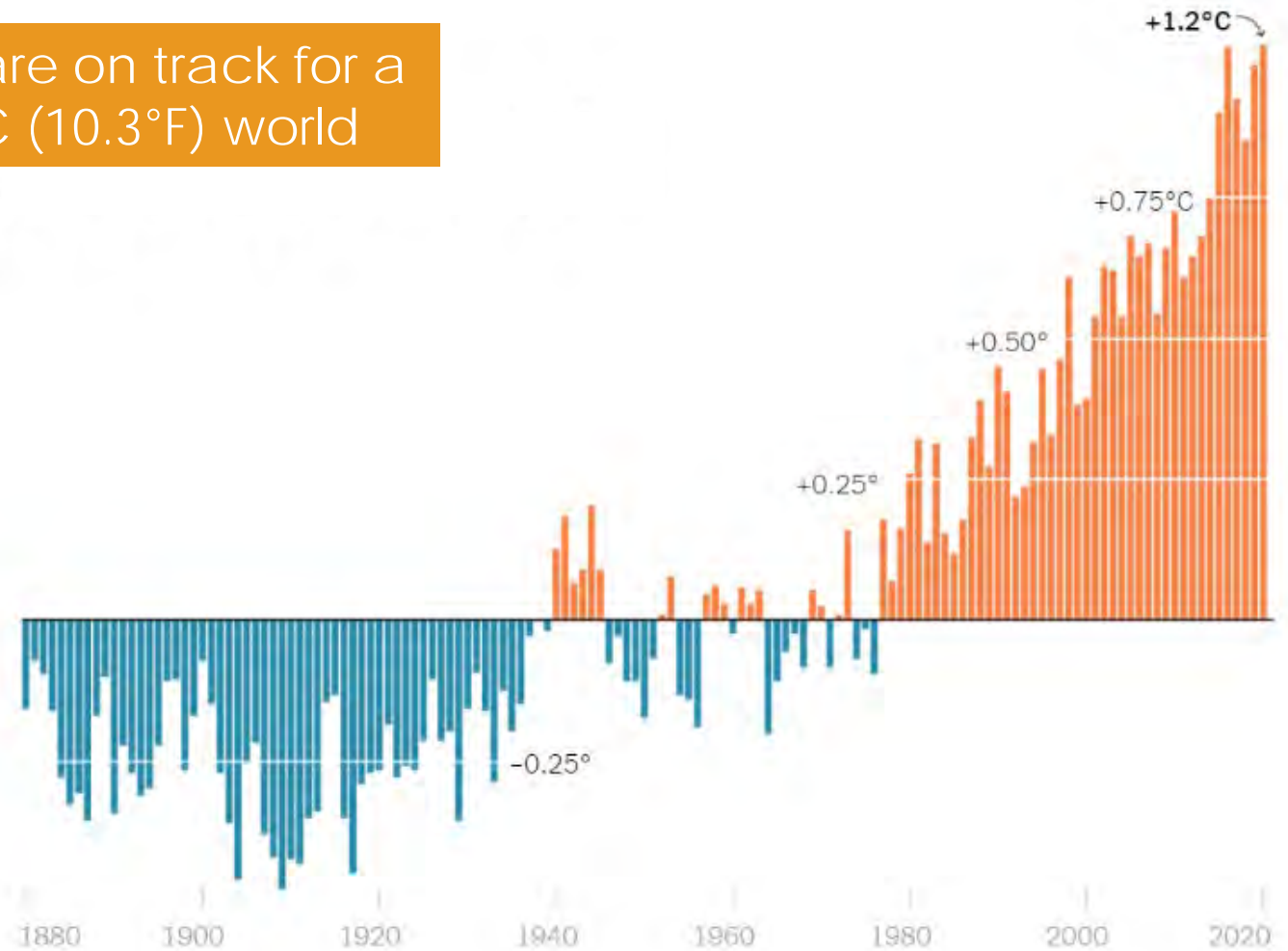
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To avoid the worst impacts of climate change, **We Need to Limit Global Temperature Rise To 1.5°C**

Source: [NY Times](#)

We are on track for a 5.7°C (10.3°F) world



Governments, Markets, and Wineries **Are** **Taking Bold** **Action**



WINERIES



Jackson Family Wines (JFW)

50% emissions reduction by 2030 &
Climate Positive by 2050 without
buying carbon offsets

Torres Family + JFW

Co-created the IWCA to take a
collective stance to decarbonize the
industry

Fetzer Vineyards

B Corp certified; Net Zero by 2030

New Zealand Wine

All New Zealand wine will be Net
Zero by 2050

Treasury Wine Estates



Net Zero emissions by 2030, 100%
renewable electricity by 2024

Taylor's Wines

50% emissions reduction by 2030,
Net Zero by 2050



To Reduce GHG Emissions Do More of Some and Less of Others

 More	Pillars	 Less
<p>100% renewable energy Electrify everything & renewable energy</p>	ENERGY	<p>Zero fossil energy Energy efficiency and GHG reduction</p>
<p>Net Zero value chain Reduce, reuse, recycle -renewable materials</p>	VALUE CHAIN	<p>Zero fossil energy in value chain Reduce, reuse, recycle</p>
<p>Sustainable agriculture Accelerate sustainable practices</p>	AGRICULTURE	<p>Zero degradation to natural systems Restore balance to nitrogen & methane cycles</p>



CA Wine Is Leading The Way Towards **A Sustainable Future**

Amplify California Wines'
Collective Position

Show Progress Without
Duplicating Efforts

Build Our Future Together



How Can We Amplify Our Position?



VISION

For CA Wine to prosper in a Net Zero future



GOAL

Be powered by 100% renewable **energy by 2045**

Enable a Net Zero **value chain** for wine

Lead in sustainable **agricultural** practices on our vineyards



STRATEGY

Identify actions across pillars

Track and report progress

Communicate ambition





MEASURE

Establish KPIs to measure collective progress

Capitalize on previous and ongoing work

We Will Build a Framework to Show Progress and Inspire Action

 More	Pillars	 Less
100% renewable energy Electrify everything & renewable energy	ENERGY	Zero fossil energy Energy efficiency and GHG reduction
Net Zero value chain Reduce, reuse, recycle -renewable materials	VALUE CHAIN	Zero fossil energy in value chain Reduce, reuse, recycle
Sustainable agriculture Accelerate sustainable practices	AGRICULTURE	Zero degradation to natural systems Restore balance to nitrogen & methane cycles

Wine Institute and partners **will** **support the CA** **wine community** **through...**



Advocacy and
Public Policy



Tools and
Education



Communications



Funding and
Technical
Support



Compliance

Actions to Date

Established Global Benchmarks

Built Sustainable Future Discussion Deck

Gathered Winery Stakeholder Input

Shared with CSWA Board and EH&S Committee

Established Advisory Committee

What We Heard From Stakeholder Interviews

“

This conversation is long overdue

Broad support for CA Wine committing to a 2045 Net Zero goal that doesn't create complications

Support for 'simpler' approach, focusing on getting things done, working together

Consider interconnectedness of climate change – include adaptation, water, and diversity/inclusion

Concern that 'Only Net Zero by 2045' is not enough to be considered a leader

”



Advisory Committee Members To Date

Bronco Wine Company

Paul Huckaba

Constellation Brands, Inc.

Matt McGuinness

Delicato Family Wines

Lindsay Moorehead

E. & J. Gallo Winery

Chris Savage

Fetzer Vineyards

Jessica Baum

Honig Vineyard & Winery

Ashley Egelhoff

J. Lohr Vineyards & Wines

Steve Lohr

Jackson Family Wines

Julien Gervreau

Treasury Wine Estates

Will Drayton

Trinchero Family Estates

Ted Wells

The Wine Group

Kyle Schmidt, Joey Giordano

What's Next?

Advisory Committee to
develop Action Plan
and KPIs for collective
progress towards goal of
Net Zero by 2045

Present Action Plan &
KPIs to Board in **March
2022**



Questions?

GET IN TOUCH

Dr. John Heckman
Anthesis Group

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VP Environmental Affairs

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VP International Marketing

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Appendix – Background Materials



We're Experiencing The Direct Impacts Of Climate Change **NOW**

More frequent extreme weather events

Increased prevalence of disease

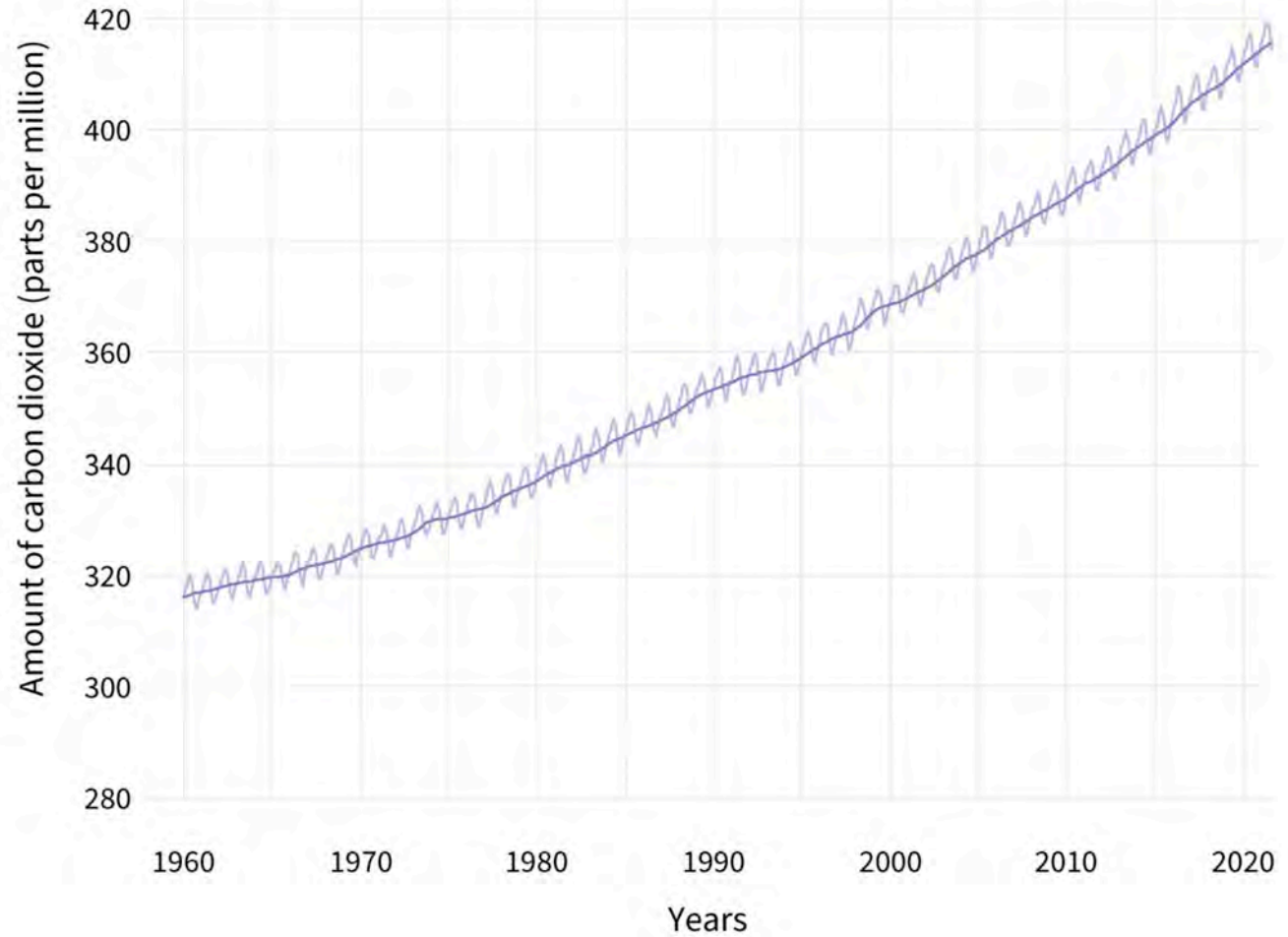
Less cool nights

Increased frequency and severity of wildfires

Shift in growing seasons

Variability in rainfall patterns

Our CO₂ concentration in the atmosphere continues to increase

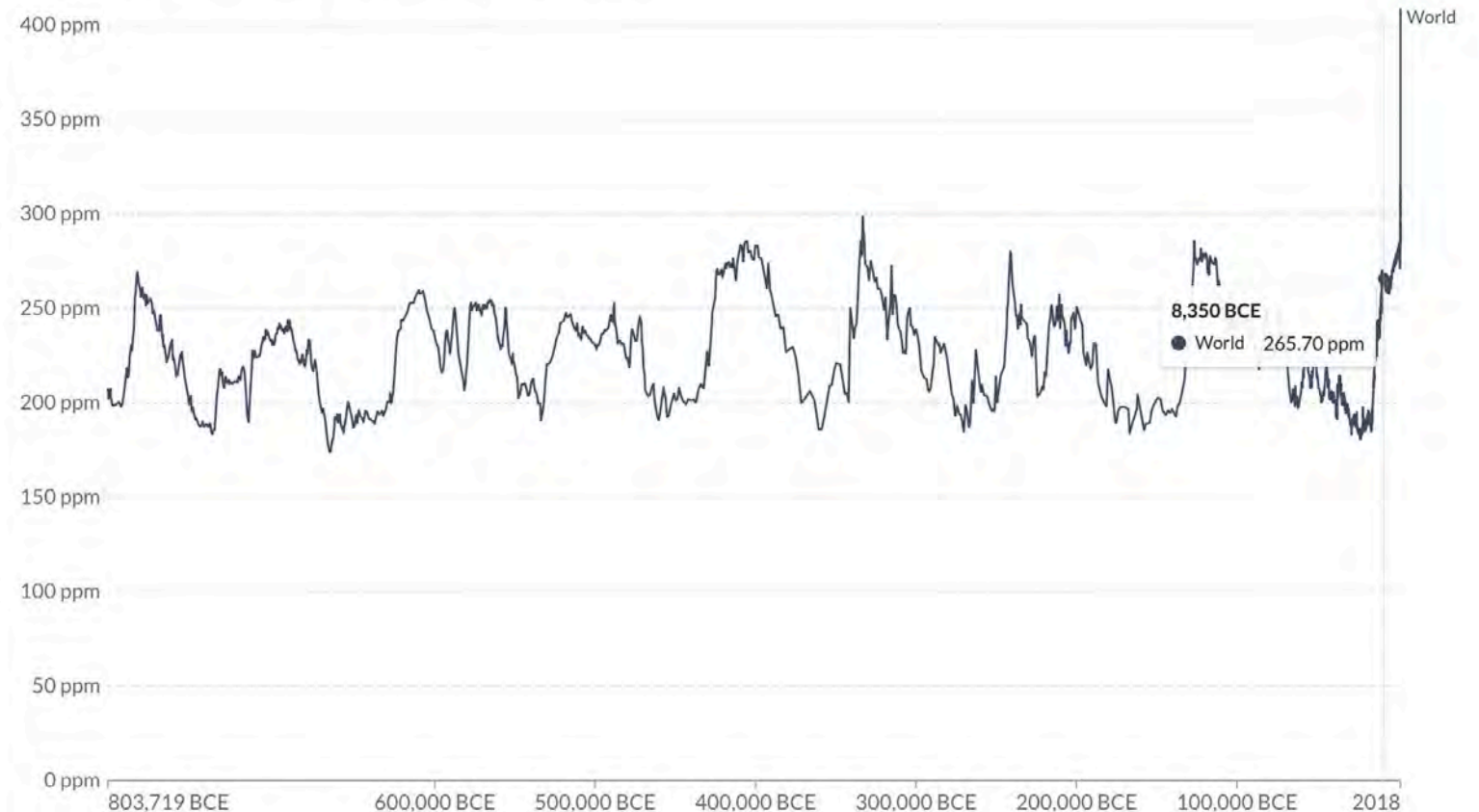


The increases
can't be
explained by
historical
cycles

Atmospheric CO₂ concentration

Global average long-term atmospheric concentration of carbon dioxide (CO₂), measured in parts per million (ppm). Long-term trends in CO₂ concentrations can be measured at high-resolution using preserved air samples from ice cores.

Our World
in Data



Source: EPICA Dome C CO₂ record (2015) & NOAA (2018)

OurWorldInData.org/co2-and-other-greenhouse-gas-emissions • CC BY

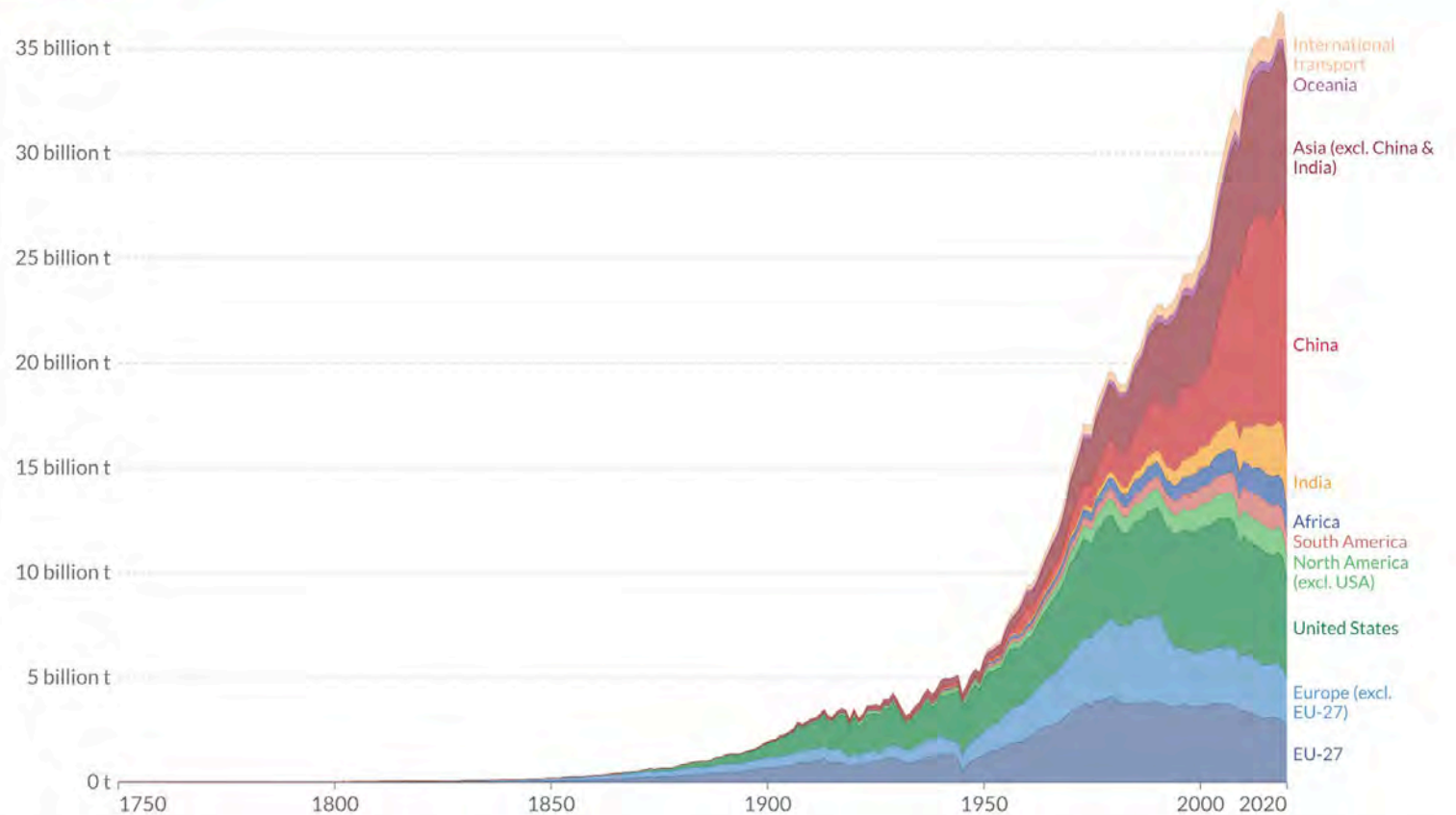
▶ 803,719 BCE ◯ 2018

But it can be explained by the CO₂ we're adding from fossil fuel emissions

Annual CO₂ emissions from fossil fuels, by world region

Our World in Data

+ Add region Relative



Source: Global Carbon Project

Note: This measures CO₂ emissions from fossil fuels and cement production only – land use change is not included. 'Statistical differences' (included in the GCP dataset) are not included here.

OurWorldInData.org/co2-and-other-greenhouse-gas-emissions • CC BY

To avoid the worst impacts of climate change, we need to limit global temperature rise To 1.5°C

Source: [NY Times](#)

Global greenhouse gas emissions and warming scenarios Our World in Data

- Each pathway comes with uncertainty, marked by the shading from low to high emissions under each scenario.
- Warming refers to the expected global temperature rise by 2100, relative to pre-industrial temperatures.

Annual global greenhouse gas emissions in gigatonnes of carbon dioxide-equivalents

150 Gt

100 Gt

50 Gt

Greenhouse gas emissions up to the present

0

1990 2000 2010 2020 2030 2040 2050 2060 2070 2080 2090 2100

No climate policies

4.1 – 4.8 °C

→ expected emissions in a baseline scenario if countries had not implemented climate reduction policies.

Current policies

2.7 – 3.1 °C

→ emissions with current climate policies in place result in warming of 2.7 to 3.1°C by 2100.

Pledges & targets (2.4 °C)

→ emissions if all countries delivered on reduction pledges result in warming of 2.4°C by 2100.

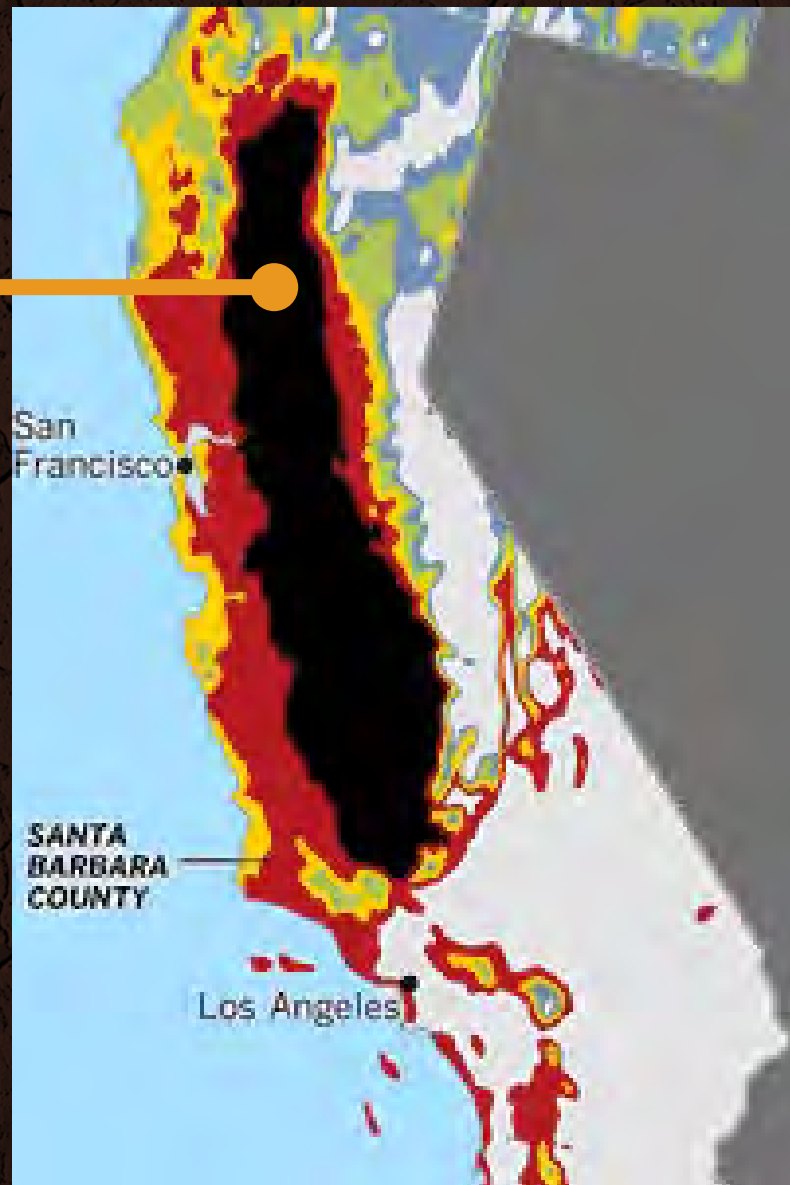
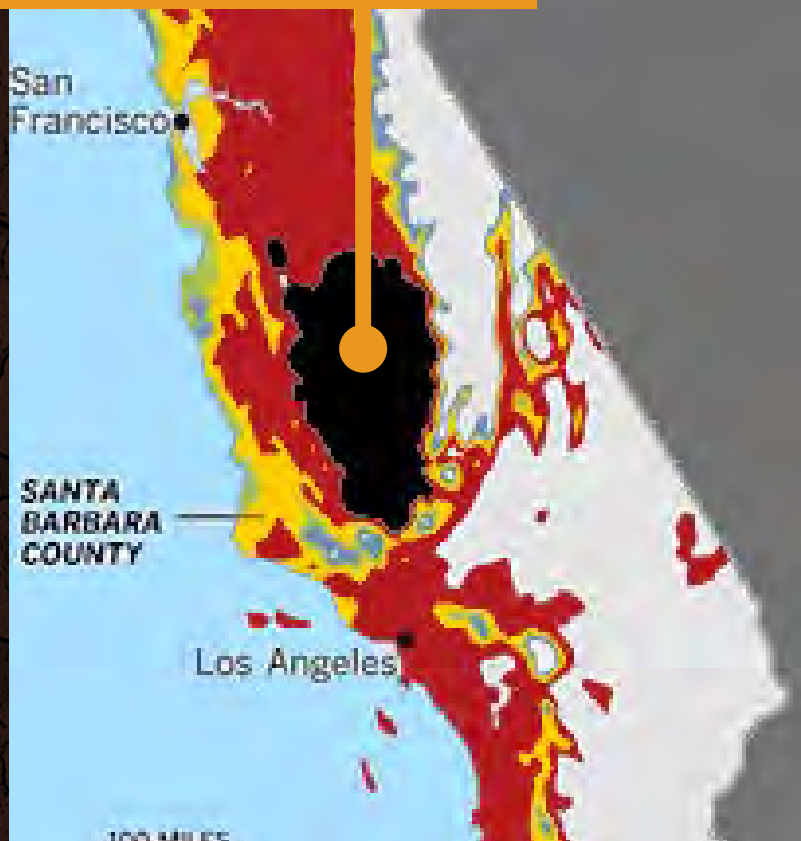
2°C pathways

1.5°C pathways

Data source: Climate Action Tracker (based on national policies and pledges as of May 2021).
OurWorldinData.org - Research and data to make progress against the world's largest problems.

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Expansion of
NON-VIABLE
growing regions



Some
projections
show California
is expected to
lose up to
**50% of wine
growing
regions by
2050**

Source: [Gregory V. Jones, Southern Oregon University](#)