

Well(p)...How Did We
Get Here?

January 16, 2001

2006 Energy and Climate Legislation

- **AB 32 – California Global Warming Solutions Act (2006)**
- **SB 1368 – Emissions Performance Standard**
- **SB 107 – Renewables Portfolio Standard Increase**
- **SB 1 – Million Solar Roofs Initiative**



The New York Times

Editorial

From California, a Breakthrough

Published: September 1, 2006

California, long a leader on environmental issues, has done it again, approving a pathbreaking bill that would impose the country's broadest and most stringent controls on emissions of carbon dioxide, the main global warming gas. California's action stands in bold and welcome contrast to the federal government's reluctance to take aggressive action on a problem of mounting concern among scientists and the general public. The deal between the state's Democratic leadership and its Republican governor, Arnold Schwarzenegger, would reduce California's carbon dioxide emissions to 1990 levels by 2020. This is by any measure a huge undertaking. It will be up to state agencies, chiefly the California Air Resources Board, to work out the details, but the plan allows for

AB32:

Making Headlines Around the Globe



worldjournal.com
世界新聞網

Le Monde

la Repubblica.it

The New York Times



San Francisco Chronicle
WESTERN CALIFORNIA'S LARGEST NEWSPAPER

AP Associated Press

Los Angeles Times



GLOBAL WARMING THREATENS CALIFORNIA WITH DROUGHTS, WILDFIRES AND HEAT WAVES. WE CAN KEEP CALIFORNIA COOL.

ENVIRONMENTAL DEFENSE
Finding the ways that work.

TAKE ACTION NOW.
WWW.SOLUTIONS.FOR.GLOBAL.WARMING.COM

NRDC
NATIONAL RESOURCES DEFENSE COUNCIL

SINGTAO 加州 CALIFORNIA

成控制溫室氣體協議

聯邦政府立場相左 全國首例

【本報訊】一項全國性的溫室氣體控制協議，加州政府與聯邦政府達成了一項歷史性的協議，雙方同意在2012年之前，將溫室氣體排放量減少到1990年的水平。這項協議是全國性的，也是加州政府與聯邦政府達成的一項歷史性的協議。這項協議將使加州成為全國第一個達成這項協議的州。這項協議將使加州成為全國第一個達成這項協議的州。這項協議將使加州成為全國第一個達成這項協議的州。

加州州長阿諾·施瓦辛格（Arnold Schwarzenegger）與美國環保署長約翰·彼得·約翰遜（John Peter Johnson）在簽署協議後合影。施瓦辛格表示，這項協議是加州在應對全球氣候變化方面邁出的重要一步。約翰遜表示，這項協議是美國在應對全球氣候變化方面邁出的重要一步。

APRIL 3, 2006 www.time.com AOL Keyword: TIME

SPECIAL REPORT GLOBAL WARMING

TIME

BE WORRIED. BE VERY WORRIED.

Climate change isn't some vague future problem—it's already damaging the planet at an alarming pace. Here's how it affects you, your kids and their kids as well.

EARTH AT THE TIPPING POINT
HOW IT THREATENS YOUR HEALTH
HOW CHINA & INDIA CAN HELP
SAVE THE WORLD—OR DESTROY IT
THE CLIMATE CRUSADERS

THE WALL STREET JOURNAL
April 21, 2006

California Pact World Place Cap On Emissions

As Global Warming Threatens U.S. Economy, A Top U.S. Strategy

California, the nation's most populous state, has a long history of environmental leadership. Now, California will become the first state in the U.S. to cap greenhouse gas emissions. The pact will require the state's largest emitters to reduce their emissions by 25% by 2012. The pact will also require the state's largest emitters to reduce their emissions by 25% by 2012.

USA TODAY
April 21, 2006

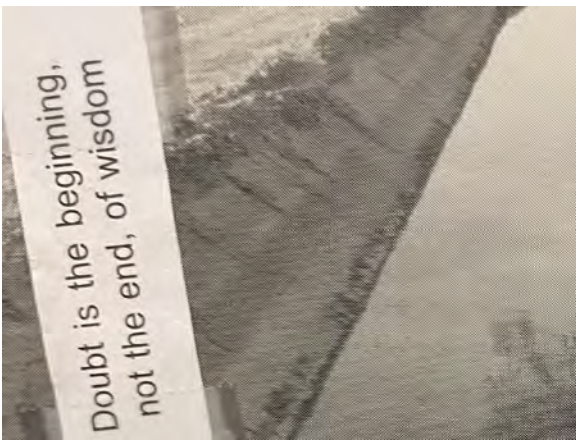
Calif. poised to act on its own on global warming

John Rutter

SEN FRANCISCO — California has set the course for major environmental laws, and the state is now poised to act on its own on global warming. California's Legislature will vote on a bill to cap greenhouse gas emissions by 2012. The bill would require the state's largest emitters to reduce their emissions by 25% by 2012.



October 2006 — February 2008



February 2008 – February 2011

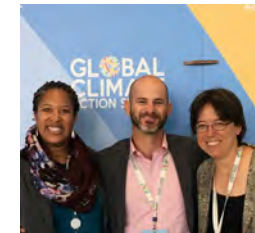


- Energy Action Plan III (February 2008)
- Final Opinion on Greenhouse Gas Regulatory Strategies (October 2008)
- CEC workshop on GHG review in power plant licensing (October 2008)
- EO S-14-08 (November 2008)
- First visit to Fallen Leaf Lake
- ARRA (February 2009)
- RETI Phase II Final Report (August 2009)
- EO S-21-09 (September 2009)
- CEC adopts TV efficiency standards (November 2009)
- CEC approves 9 large scale solar thermal projects and allocates ARRA funding (by December 2010)



2011-2018

- 20,000 MW by 2020 (8,000 and 12,000)
- SB X1-2 (April 2011)
- REAT / REPG / DRECP Continued
- San Onofre shuts down (January 2012)
- So Cal Summer Reliability workshops
- CAISO Rolls out the Duck Curve (2013)
- Scoping Plan Update (May 2014)
- SB 350 (September 2015)
- RETI 2.0 starts (September 2015)
- Aliso Canyon (October 2015)
- SB 32 (September 2016)
- PG&E suspends Diablo Canyon relicensing process (2016)
- AB 32 Goal met 4 years early (2016)
- Regionalization
- SB 100 (2018)





2019-2023

- California Reaches million solar roofs milestone (2019)
- Peak shift
- Bankruptcy, Wildfires, PSPS,
- Pandemic
- 2020 Rotating Outages
- 2021 Bootleg Fire
- First day of summer, 2022
- Lithium and Geothermal
- AB 205 and AB 209
- Strategic Reliability Reserve
- SB 846 // SB 1020 // Climate Package
- September Heat Event
- Commodity Price Spikes
- Rates
- December 2022 Scoping Plan Update
- BOEM completes first Pacific OSW Lease Sale
- CEC/PUC/ISO MOU
- NEM 3.0
- ISO issues draft 2022-23 TPP based on new IRP Scenarios
- AB 1373
- And much, much more





SESSION 4

Putting the pieces of the Western puzzle together

Moderator: Elliot Mainzer, President & CEO, California ISO

Karen Douglas, Senior Advisor for Energy, Office of California Governor Gavin Newsom

Sarah Edmonds, President & CEO, Western Power Pool

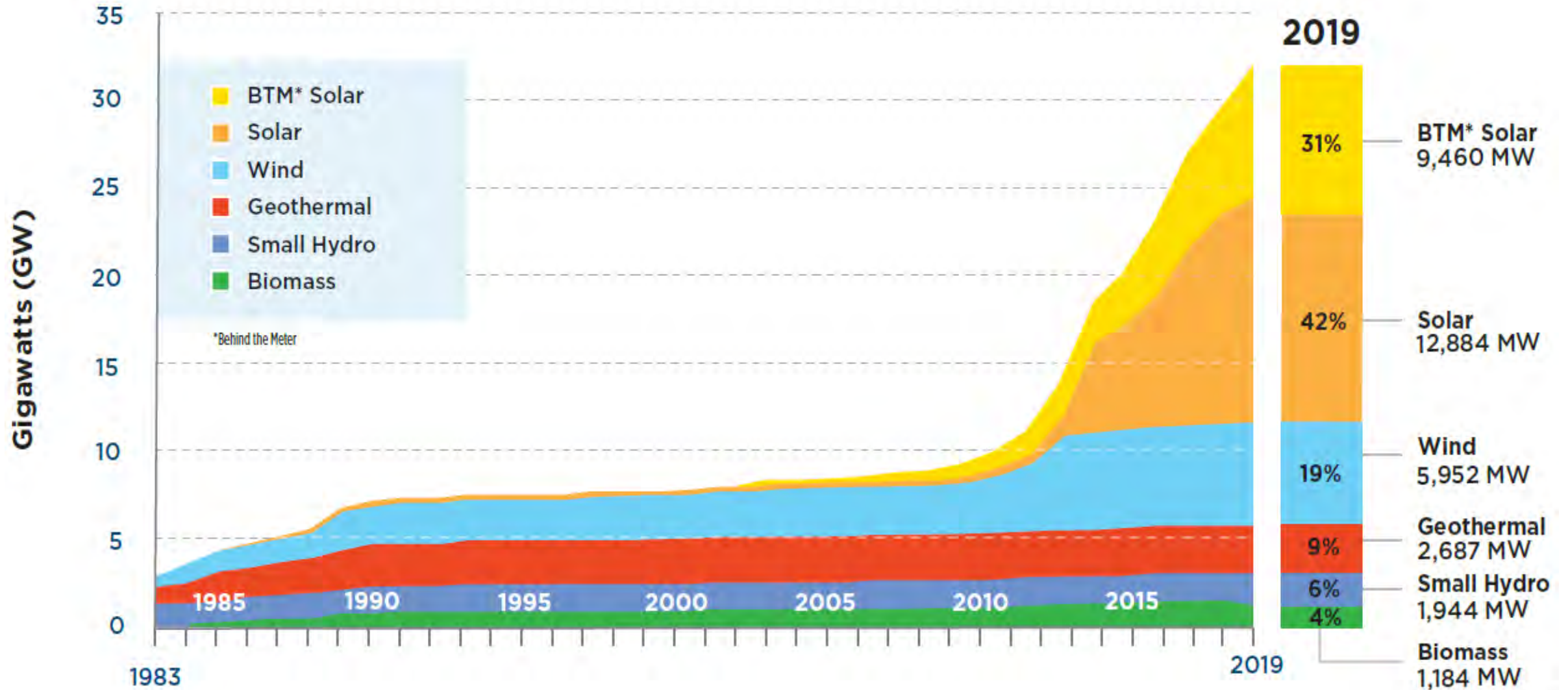
John Hairston, Administrator & CEO, Bonneville Power Administration

Jan Smutny-Jones, CEO, Independent Energy Producers Association



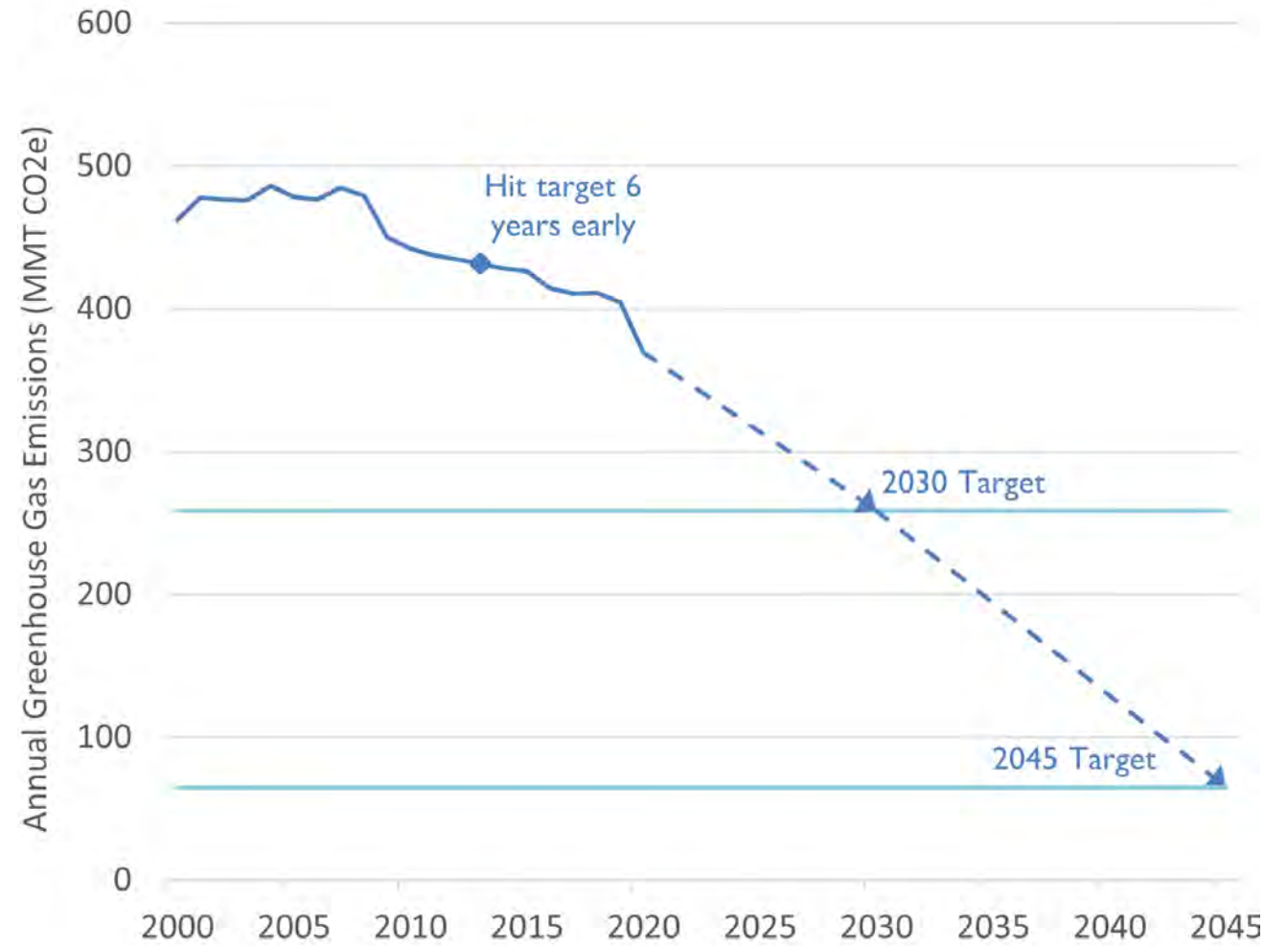
CAISO 2022 Stakeholder Symposium

CA's Utility-Scale Renewable Growth (per CEC)



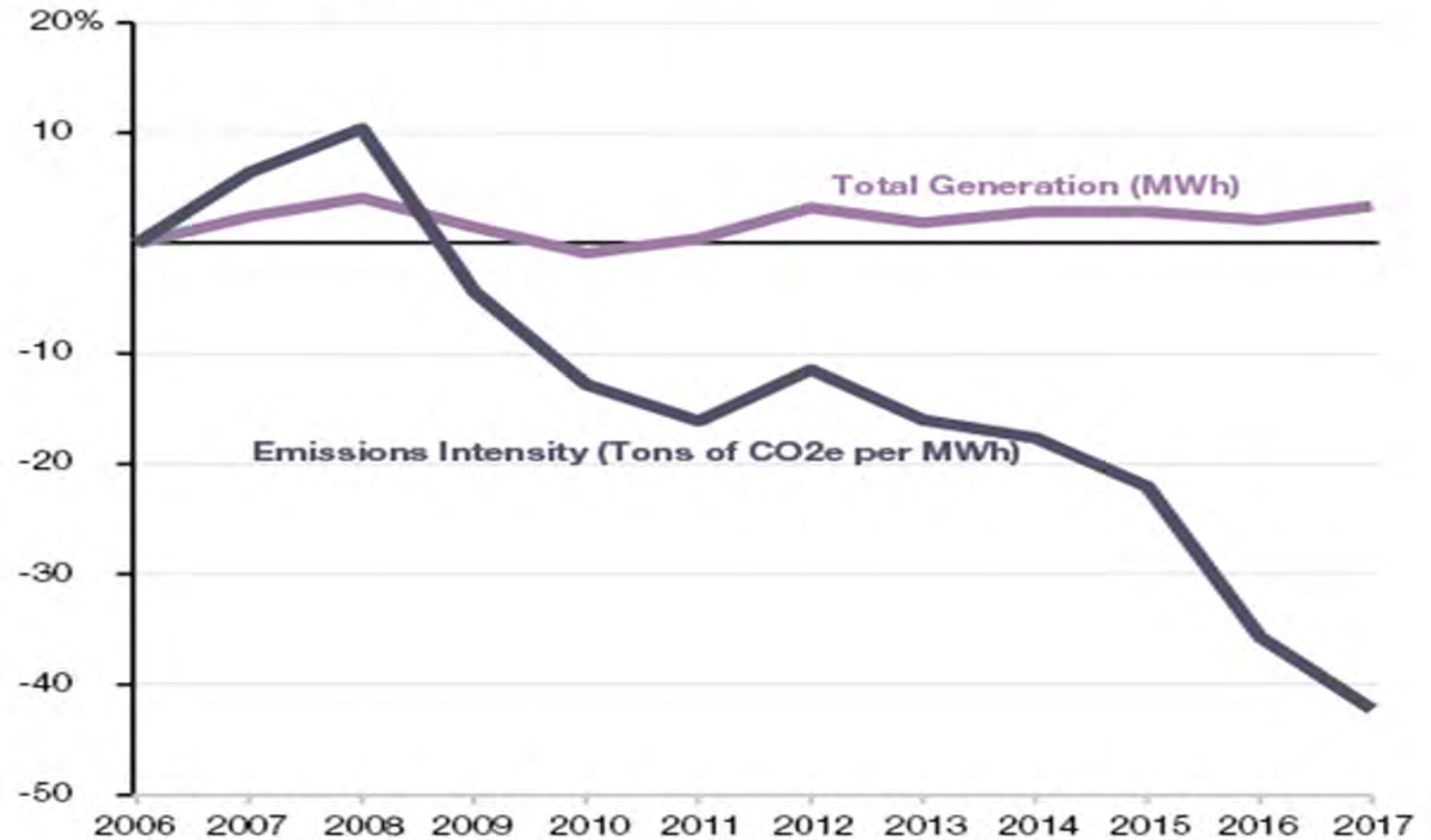
Actual and Projected Greenhouse Gas Emissions

From CalEPA.ca.gov



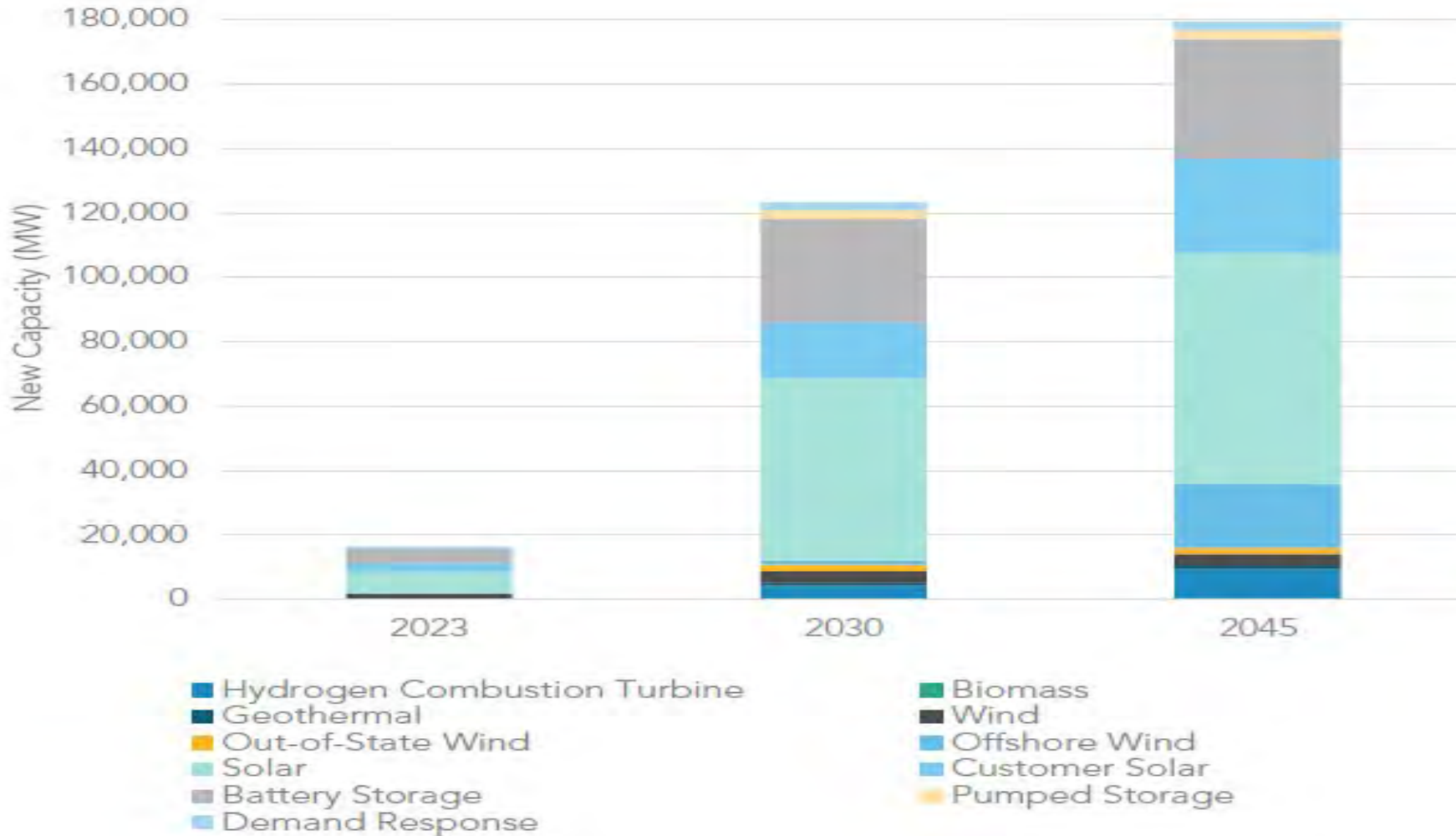
The Carbon Intensity of CA's Grid is Steadily Dropping

Electricity Generation Has Been Relatively Steady, but Emissions Intensity Has Declined Substantially
Percent Change Relative to 2006



MWh = megawatt hour and CO2e = carbon dioxide equivalent.

ARB 2022 Scoping Plan Clean Electricity Build Out





The End

Just Kidding

