

AGENDA

CFEE Energy Summit

Negotiating Neutrality: The Future of CO2

April 22-23, 2021

TODAY

- 5th largest economy in the world
- 39.5 million people
- 36 million automobiles, trucks, and motorcycles
- 14 million homes
- 566,900 zero emission vehicles
- 14.3 billion gallons of gasoline used/year
- 4.2 billion gallons of diesel used/year
- 2.2 trillion cubic feet of natural gas used/year
- 277,804 gigawatt-hours of electricity generation/year: ~34% natural gas, ~32% renewables, ~15% large hydro, ~9% nuclear, ~10% other/unspecified

TOMORROW

As the climate changes before our eyes, California's long march to curb greenhouse gas emissions becomes more urgent yet more fraught in the coming years as hard, costly, and necessary decisions await. To sustain our large and prosperous state, we must negotiate our next steps carefully, reconciling the heavy truths of our unrelenting energy demand with the universe of available and affordable energy technologies that can meet our needs today and in the coming years. On this tight rope of decarbonization, what must be done to balance our commitments to climate stewardship and economic prosperity such that California ascends as a livable and affordable state?

Virtual Conference Etiquette and Guidelines

Name: Please input your full name and organization when you join the Zoom line by clicking the three dots in the upper right hand corner. Our guests and other participants appreciate knowing who you are. We also ask, that whenever possible, you activate your video feed to help simulate the sense of attentiveness and respect that permeates our traditional in-person gathering.

Submitting Questions and Comments: You may 1) type your questions into the chat window or 2) use the "raise your hand" function on Zoom to indicate you would like to ask your question directly and you will be called on. We will provide an opportunity for 2-3 questions and comments immediately following each presentation. We will still reserve time after all panelist remarks for our traditional roundtable conversation. Please limit your comments and questions to two minutes.

Chatham House Rule - Cyber Edition: Those of you familiar with CFEE conferences are aware of the time-honored "Chatham House Rule" by which the Foundation operates. This means specific comments are not to be attributed to any one person in the goal of promoting a more candid exchange of knowledge and insights. At this time, video conferencing is an inherently less private forum and confidentiality is not guaranteed; however, we ask that you help us to uphold our long and respected tradition. To that end, this conference will not be recorded, and we ask you not to record the discussions in any fashion or to share specific, attributable remarks. We appreciate you respecting and supporting the Chatham House Rule.

Materials. You have been emailed the final conference agenda, participant list, speaker biographies, and an energy "glossary." You may also access these materials on our website at cfee.net/energy.

THURSDAY, APRIL 22

12:45 – 1:00pm

Welcome and Conference Overview

- Preview of conference themes, format, and goals

Jay Hansen, President & CEO, CFEE

1:00 – 2:20pm

Session 1

The Next Chapter: California Climate Policy in the Coming Decade

Believe it or not, the next decade of climate policy is quickly taking shape as the wheels of implementation and inspiration are already turning. This opening session will look ahead to looming goals and requirements as California lurches onward to carbon neutrality.

- What progress has California made to date in limiting GHG emissions?
- What policies and programs have underpinned our achievements, and which ones are already pushing us to the next tranche of emissions reductions?
- What are the new requirements that will come into effect over the next decade?
- How will the Air Resource Board Scoping Plan change to meet these requirements?
- What help might we expect from the Biden Administration to move climate progress forward?
- Big picture, what is the right approach to reduce GHG's while fostering broad-based economic growth?

Jared Blumenfeld, Secretary, California Environmental Protection Agency
(5-10 min)

David Hochschild, Chair, California Energy Commission (5-10 min)

Marybel Batjer, President, California Public Utilities Commission (5-10 min)

Bree Raum, Vice President, Federal Affairs, American Clean Power Association
(5-10 min)

Roundtable Discussion

2:20 – 2:30pm

Break

2:30 – 4:00pm

Session 2

Less Pain, More Gain: Ensuring an Affordable and Equitable Energy Transition

After investing vast sums of money into the energy transition, trillions of additional dollars are still needed to fashion a resilient, carbon neutral economy. While this means we can expect our cost of living to increase in some ways, there continue

to be opportunities to offset rising expenses through efficiency gains, mitigating climate damages, and embracing new green industry innovations. How can we smartly unlock and share the windfalls of the energy transition while containing and apportioning its hard costs equitably among the public, ratepayers, and workers?

- What is the anticipated fallout from the economic disruption caused by the COVID-19 pandemic?
- Do we have an overarching strategy to manage costs of the energy transition while sharing its benefits equitably?
- What does energy affordability mean? What dynamics are expected to determine energy affordability in the coming years?
- Is it time for Spring Cleaning? With two decades of climate legislation behind us, how might we go about evaluating programs and promoting those that are efficient and eliminating those that are not?
- How should we approach workforce development as we strive for a carbon neutral economy?

Robbie Hunter, President, State Building & Construction Trades Council of California (7 min)

Lance Hastings, President and CEO, California Manufacturers and Technology Association (7 min)

Severin Borenstein, Professor and Researcher, Energy Institute at Haas (7 min)

Mark Toney, Executive Director, TURN - The Utility Reform Network (7 min)

Laura Lewis, Chief Legal Officer and General Counsel, Sacramento Municipal Utility District (7 min)

Roundtable Discussion

4:00 – 4:15pm	Break
4:15 – 5:30pm	<u>Session 3</u> Bumpy Road Ahead? The Drive to Net Zero – Transportation and Beyond

The evolution of the transportation sector continues apace as market and policy forces push our fuel mix, infrastructure needs, and mobility patterns in new directions. And beyond transforming our vehicle fleet, what other options must we examine if we are to successfully reduce California emissions in the transportation sector and beyond.

- What progress has been achieved to date in developing new technologies and GHG reductions?
- How is industry responding to the Governor’s executive order to ban the sale of new internal combustion vehicles beginning in 2035?

- What air quality, public health, and economic benefits are we already seeing from deploying more ZEV's and hybrid vehicles?
- How do we incorporate equity into widespread ZEV deployment, particularly for vehicle purchases and charging infrastructure for lower income households?
- What have we learned in the early trials of ZEV and hybrid deployment as we scale up and our infrastructure needs grow?
- Beyond ZEV's, what are the innovative technologies that can help to reduce our GHG's?
- Is it time for carbon capture sequestration to be embraced as a necessary climate mitigation measure?

Curt Augustine, Senior Director of Policy & Government Affairs, Alliance for Automotive Innovation (5-10 min)

Stephen Konig, Director Government and Public Affairs, West Region, Marathon Petroleum (5-10 min)

Darnell Grisby, Executive Director, TransForm and Commissioner, California Transportation Commission (5-10 min)

Sally Benson, Director, Global Climate and Energy Project, and Professor, Energy Resources Engineering, Stanford University (5-10 min)

Roundtable Discussion

FRIDAY, APRIL 23

8:30 – 10:00am

Session 4

The Long Goodbye: What Does a Soft Landing for Natural Gas Look Like?

Once embraced as a versatile and abundant fuel, natural gas now finds itself on a steady decline as renewable energy resources take its place and policymakers seek ever more carbon reduction triumphs. Yet the transition away from natural gas poses real reliability and cost-sharing issues that remain unanswered. What should the strategic winddown of natural gas look like?

- What regulations do we already have in place to reduce reliance on natural gas?
- Should we ban natural gas in homes & buildings, new and old? Could this exacerbate the state's ongoing housing affordability crisis?
- What room is there for renewable natural gas & hydrogen in a world of declining natural gas?

- What are the real costs involved if California phases out natural gas? How do we maintain affordability if all end uses are electrified?
- What do we do with the remaining customers (and infrastructure) who continue to use and choose natural gas?

Maryam Brown, President, Southern California Gas Company (5-10 min)

Merrian Borgeson, Senior Scientist, Climate & Clean Energy Program, Natural Resources Defense Council (5-10 min)

Martin Adams, General Manager & Chief Engineer, Los Angeles Department of Water and Power (5-10 min)

Chris Rogers, Mayor, City of Santa Rosa (5-10 min)

Roundtable Discussion

10:00 – 10:10am	Break
<u>Session 5</u> Alone in the Dark...What Will It Take to Avert Future Blackouts?	

Short on energy supply as consumer demand soared, California endured a series of blackouts and close calls this past summer that left communities and the state's electric grid reeling. As renewable resources increase, baseload plants retire, and our western neighbors act in their own interests, what steps must be taken in the short and long term to avoid future disruptions and maintain system reliability?

10:10 – 11:00am

Part I: Diagnosis of 2020 Blackouts and Readiness for Summer 2021

- What key factors contributed to the critical energy shortages that left millions of Californians without power?
- What actions were taken by the grid operator, energy companies, and consumers to forestall more severe outages?
- What is being done to prevent a repeat scenario this year?

Elliot Mainzer, President and Chief Executive Officer, California Independent System Operator (10 min)

11:00 – 12:15pm

Part II: How Are We Planning for Future Reliability and Resiliency of our Energy Supply?

- What is the planning process for the electric system? Are there critical flaws in our current planning procedures or underlying assumptions of resource needs?
- Are we procuring sufficient resources to account for the evolving nature of the energy grid?

- As the world of energy procurers disaggregates and diversifies, will our resource adequacy suffer as a result? Should the state of California assume backup responsibility?
- How can interstate energy system coordination fit into reliability planning?
- How can customers play a more deliberate role in shaping demand? Do we have programs to incent and leverage, at scale, desired consumption patterns?

Ed Randolph, Deputy Executive Director for Energy and Climate Policy,
California Public Utilities Commission (5-10 min)

Beth Vaughan, Executive Director, CalCCA (5-10 min)

Travis Kavulla, Vice President of Regulatory Affairs, NRG Energy (5-10 min)

Hunter Stern, Assistant Business Manager, IBEW Local Union 1245 (5-10 min)

Roundtable Discussion

12:15 – 12:30pm

Closing Thoughts and What Comes Next

The Honorable Chris Holden, Chair of the Assembly Committee on Utilities and Energy will offer closing remarks, reflecting on the two days of conference dialogue and contemplate what must come next to accomplish our energy goals.

Chris Holden, Chair, Assembly Committee on Utilities and Energy

12:30pm

Adjourn

Jay Hansen, President & CEO, CFE