



# I-WEST

Intermountain West Energy Sustainability & Transitions  
**On the road to carbon neutrality in the Intermountain West**

## Welcome to the I-WEST Workshop on “The Role for Policies in the Energy Transition”



- I-WEST is focused on delivering a place-based technology roadmap to transition the Intermountain West to carbon-neutral energy economies:
  - Supply & demand for captured CO<sub>2</sub>
  - Supply & demand for low-carbon (zero-carbon) hydrogen
  - Supply & demand for low-carbon electricity
  - Supply & demand for biofuels & biofeedstocks
- Funded by the U.S. Department of Energy, I-WEST is taking a place-based approach, which uses the needs and characteristics across the region to elucidate appropriate technology pathways for achieving an equitable transition to carbon neutrality.

*Send inquiries to [iwest@lanl.gov](mailto:iwest@lanl.gov)*



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## Topical Workshops

- CO<sub>2</sub> capture from point sources—30 Nov 2021
- CO<sub>2</sub> capture from the air—19 Jan 2022
- CO<sub>2</sub> storage & utilization—7 Dec 2021
- Hydrogen generation—11 Jan 2022
- Hydrogen utilization—18 Jan 2022
- Bioenergy—25 Jan 2022
- **Policy landscape—15 Mar 2022**
- Economics of transition—17 Mar 2022
- Electricity generation—24 Mar 2022
- Water considerations—(TBD)

## Seminar Series

- ***Gigaton Needs, Gigaton Challenges***  
Melanie Kenderdine (9/30/21)
- ***Western States and Tribal Nations Natural Gas Initiative***  
Jason Sandel (11/18/21)
- ***National Energy Modeling System***  
José Benitez (12/20/21)
- ***Projecting Regional Climate Change and its Impacts in the Western U.S.***  
Ruby Leung (2/3/2022)
- ***Synthetic Biology Meets Energy Transition—  
Reimagining the Heavy Industries for the Net-Zero Economy***  
Moji Karimi (3/17/2022)—stay tuned for details

**Go to the “Events” tab at [www.iwest.org](http://www.iwest.org) for output from workshops and archived seminars.**

# Logistics for Today

- **Chatham House Rule**— “participants are free to use the information received, but neither the identity nor the affiliation of the speaker(s), nor that of any other participant, may be revealed”
- **Input will be used by I-WEST to build roadmap**—once we’ve synthesized input, we will share with this group for comment; we will also confirm we can reference your participation as a stakeholder in our final report
- **Session will be recorded**—for use in synthesis only (i.e., will not be made available outside of the I-WEST team)
- **Engagement is important to I-WEST**—great interest has resulted in a large group; hence, we recognize this workshop may be insufficient to capture all input
  - *Use the Chat box*
  - *Email [iwest@lanl.gov](mailto:iwest@lanl.gov)*
  - *We will reach out with follow-up for individual input*
- **Mute by default**—be sure to unmute when you want to speak
- **Raise (and lower) hand &/or use Chat**



# The Role for Policies in the Energy Transition

I-WEST Stakeholder Workshop Series

Alan Krupnick, Senior Fellow and Team Leader

March 15, 2022



# The I-WEST Policy Landscape

- Assessing the policy readiness of the I-WEST region for decarbonization
- Investigation of legislative, regulatory, and other government actions that are fostering or impeding decarbonization
- Policy jurisdictions included the six states in the I-WEST region, sovereign nations, and federal government policies
- Primary focus is currently implemented policy, though some promised and in process policy are included. But TODAY, focus is on future policy needed.



# Key Questions for today

- What are the most important policy gaps/new policies needed?
- How can I-WEST governments work together to promote decarbonization?
- What are the most important current/planned policies to promote decarbonization?
- What are the most important policies hindering the transition?



# Policy Classification

- Top-level topics are:
  - Cross-Cutting (CCUS, DAC, multi-sectoral policies, RD&D),
  - Fuels (fossil, hydrogen, bioenergy).
  - Electricity,
  - Transportation,
  - Industrial,
  - Infrastructure fits anywhere, as does Tribal issues (focus today is in cross-cutting session)

Run of show: 3 panelists give policy suggestions, then further discussions; then audience questions.



Cross Sectoral Policies	RD&D Policies	Fossil Fuel Policies	Fuels	Electricity Sector Policies	Transportation Sector Policies	Industrial Sector Policies
CCUS	Low Interest Loans	Subsidies to Oil and Gas	Hydrogen hubs	Renewable Portfolio Standards (RPS)	Vehicle Standards	Performance Standards
Climate Action Planning – roadmaps	Loan Guarantees	Transition assistance	Joining CA markets	Tax Incentives for Renewables	Vehicle Purchase Incentives	Green Procurement
Direct Air Capture	Grants	Decommissioning Mines/Wells	Pipeline policies	Grid integration	Fuel Standards and Subsidies	Tax Breaks/Tax Credits
Permitting Policies	Demand Pull	Royalty payments	Tax credits	CE Standards	EV Charging and Alt. Fuel	Fast tracking

<b>Electricity Sector Policies</b>	<b>AZ</b>	<b>CO</b>	<b>MT</b>	<b>NM</b>	<b>UT</b>	<b>WY</b>	<b>Tribes</b>
<b>RPS</b>	Yes	Yes	Yes	Yes	Voluntary (if cost-effective)	None	
<b>Target/goal</b>	<b>15% renewable by 2025</b>	<b>100% zero carbon by 2050; IOUs 30% by 2020</b>	<b>15% renewable by 2015</b>	<b>IOUs 50% by 2030, 100% zero carbon by 2045</b>	<b>Renewables 20% of sales by 2025</b>	<b>N/A</b>	None identified
Applies to	IOUs	IOUs, munis, Co-ops	IOUs	IOUs, Co-ops	IOUs, munis, Co-ops	N/A	N/A
Carbon Pricing Policies	None	None	None	None	None	None	None
Tax Incentives for Renewable Electricity Generation							
Utility scale	80% property tax exemption	100% state sales tax exemptions, limited property tax incentives	Eligible for reduced property taxes if approved by local governments	100% exemption from state gross receipts tax up to \$60M, biomass equipment exempt from state use taxes	100% sales tax exemption for RE and other "alternatives", 75% corporate income tax credit on RE (includes hydro)	None	Complicated due to tax treatment status of tribes, tribal corporations, tribal members, and associated property.

# Broad Thoughts

- The federal government can't do it all. Too big a task and involves areas that are states' purview.
- Some states are further down the decarbonizing policy path than others – lots of heterogeneity
- States outside the I-WEST are doing more – NY and CA stand out but 20 jurisdictions adopted or are considering carbon markets (Pam Kiely, EDF).
- Industry stakeholders generally want states working together or federal pre-emption to reduce regulatory costs
- Feds have stepped up in major way to support RDD to decarbonize



# Goals for the Workshop

- Engage regional experts and decision-makers in the policy assessment
- Identify gaps in current policy; promising new directions
- Highlight key positive and negative policies relevant to the I-WEST region's transition to carbon neutrality
- Understand the contrast in policies across I-WEST states and potential areas for inter-state cooperation





# Thank you.

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