Welcome to the 2021 JISEA Annual Meeting!

Keynote: Energy Equity

14 April 2021

Introduction: Jill Engel-Cox, JISEA Director
Moderator: Liz Doris NREL/JISEA

www.jisea.org
**Housekeeping and WebEx Tips**

**To find or switch audio options:**
1. Select carrot next to Mute/Unmute button
2. Select Switch Audio
3. WebEx will display your current audio option at the top
4. Other audio options displayed under “Switch audio”

**To change view options:**
1. Select layout button
2. Change to:
   - **Grid** – All videos shown
   - **Stage** – Speaker highlighted, other videos below
   - **Focus** – Only speaker video shown

*Message Isabel McCan if any technical problems.*
**Housekeeping and WebEx Tips**

**Engage!**
- Answer polls
- Comment in the chat
- Ask questions

**During the presentation(s):**
- Stay muted
- Camera off
- If you have a question:
  - Raise your hand, or,
  - Type it in the chat box to Everyone

**Asking questions:**
- Unmute
- Camera on
Overall Agenda: All Sessions 8:30-9:45 am MT

Monday, April 12: Industrial Clean Energy

At 1:00 pm MT: Interactive virtual campus tour

Tuesday, April 13: Energy, Climate, and Air Pollution

Wednesday, April 14: Keynote Discussion: Energy Equity

Thursday, April 15: Sustainable Communities

Friday, April 16: Topic “Tables” Discussion with Experts

All sessions include ~45-minute presentations and ~30-minute open questions & discussion.
Clean energy is growing

U.S. primary energy production by major sources, 1950-2017

Note: NGPL is natural gas plant liquids.
Source: U.S. Energy Information Administration, Monthly Energy Review, Table 1.2, April 2018
...but not for everyone

- Black-majority census tracts installed 69% less rooftop PV than no-majority tracts of same household income
- Less than half of U.S. community solar projects include low-income households
- Nearly 60% of all new solar capacity in 2018 was utility-scale PV, expanding access. However, benefits such as lower costs are rarely transferred directly to customers

- Since 2006, 90% of electric vehicle income credits were received by the top income quintile.
- Renters and those living in multi-family housing often lack access to home charging locations, where 80% of electric vehicle charging occurs.
- 37% of rental housing units have a garage or carport compared to 78% of owner-occupied housing.

- The least affluent 20% of households spend a 3x greater share of income on transportation than the most affluent 20%
- 70% of American households live in neighborhoods where combined housing and transportation costs are not affordable
- 30%-45% of urban populations exposed to poor air quality near busy roads
- ≈10% of people with multiple disabilities have no access to paratransit because they live in paratransit deserts

The success of a traditional technology-centric approach is limited by socioeconomic factors.
Expand local empowerment to meet national goals

Equity-centered technology research and development

Expanded co-development and design of demonstration and deployment
Readily scalable program with vulnerable communities

**Community priorities**
Remote, island, and islanded community energy and infrastructure challenges, values, and goals

**Partnership approach**
Deep energy-sector experience, expertise of the national labs + local, trusted stakeholder organizations

**Energy assessment and planning**
Provide resources and on-the-ground support

**Resilient energy systems**
Knowledge sharing → lessons learned, use cases → identified responsive technology needs
“Trickle-down” clean energy is an outcome of RD&D that does not center energy justice.

We must re-imagine research, development, and demonstration to reverse the trend of clean energy solutions that increase inequities.
Centering energy justice starts with metrics

- Develop appropriate energy justice metrics for technology research and innovation cycle
- Integrate metrics and human-centered characteristics into analysis resources and technology innovation
Thank you!

NREL/PR- 6A50-79727

www.jisea.org

@JISEA