Strategies for Advancing Sustainability and Resilience in Public Schools Facility Planning (60 minutes)
***Expert Panel***

**Summary**
As temperatures increase and climate tipping points loom, the challenge remains for public institutions to plan for a changing future and implement facility management practices that address shifting energy uses and reduce carbon emissions from buildings, school buses, vehicle fleets, etc. This session will discuss a framework for developing a "best practices playbook" for sustainability and resilience planning within the context of public institutions (specifically Pre-K – 12 public education facilities), with a focus on creating equitable outcomes using policies and processes that integrate the most recent technologies and innovations to advance sustainability and energy conservation. Panelists include a public facility manager from the 35th largest public school district in the country (Albuquerque Public Schools), a senior project director of a national non-profit Clean Energy coalition (Clean Energy States Alliance), an executive of a large public utility company (PNM), and the energy services director of a large, public university (New Mexico State University).

**Panel details:**
5 Minutes **– Introduction Context & Panelists**
The changing institutional footprint (carbon/utilities and energy use of public facilities and impacts on climate change).

a. NM & Albuquerque **(Karen Alarid)**
    i. This panel will look at the issues of climate change & energy transition (institutionally) from the lens of public schools, Public utilities, and universities vis-à-vis a global perspective (federal/national). The panel will also discuss Energy Policy within a planning Concurrency framework.
    ii. Bringing major players to the table (including public utility) to engage in creating policy and impacting outcomes
    iii. Agreements/rebates with power and water companies.
b. Global energy crisis and climate change are an impetus for shifts in facility management. **(Rachel Hertzman Moore)**
    Public facilities have an oversized energy footprint in every community, and this is directly translated into utility bills thus giving major economic incentives to conserve. Everything from Policy to curriculum (schools/colleges) comes into play. However, geographic variability also determines types of approaches to sustainable practices e.g. greening of schoolyards in the mid-west versus xeriscaping of schoolyards in the Southwest, vis-à-vis varying water supply and tenure realities
        - Introduce Panelists

**40 minutes - Panel**

i. **Tony Sparks** (10 minutes), Albuquerque Public Schools, Project Manager - Large School District strategy for sustainability/savings through policy and multi-institutional concurrency and collaboration
    a. Brief bio and role at/of institution

b. Large school system perspective
c. WECC, coalition and consensus building across institutions and industries (various energy footprints)
d. Briefly describe WECC, who is involved, role in shaping operational and capital infrastructure (highlights and projects). Initial goals and revised goals. 4 M SF of SV panels, philosophy how this was cemented in place by the adoption of policy by the institution.
e. Best Practices in Resilience: How is APS working to create policies and multidisciplinary processes that integrate planning principles with the best current science, engineering, and innovation, leading to transformation and equitable outcomes?

ii. **Alaric Babej** (10 minutes), Public Utility Corporation of NM (PNM), Principal, Customer Energy Solutions, Public Utility Perspective
a. Brief bio and role at/of institution as well as the benefits of participating at WECC.
b. Public utilities, incentives
c. What PNM, other utilities, and municipal agencies are doing to address our climate predicament and energy supply limitations (how it fits into public utility scheme)
d. Other challenges faced such as how much PNM can raise rates, incentives, etc…
e. The biggest challenge facing PNM in its role as a public utility
f. Best Practices in Resilience: How is PNM working to create policies and multidisciplinary processes that integrate planning principles with the best current science, engineering, and innovation, leading to transformation and equitable outcomes?

iii. **Raghu Raghavan** (10 minutes), Associate Vice President - Facilities and Services & Chief Facilities Officer, Other large institution/University Campus perspective
a. Brief bio and role at/of institution as well as the benefits of participating in WECC.
b. What resiliency, efficiency, and energy savings perspective relates to a large public university (challenges, wins, experiential wisdom, way forward)
c. Project and Program funding
d. Research component ($2 M in rebates, demand response, energy efficiency, etc…)
e. What are the main or unique challenges of energy management at a large, public university?
f. Is the role of the university as a research institution leveraged when it comes to finding innovative ways of managing energy use and climate resiliency?
g. Best Practices in Resilience: How is NMSU working to create policies and multidisciplinary processes that integrate planning principles with the best current science, engineering, and innovation, leading to transformation and equitable outcomes?

ii. **Todd Olinsky-Paul** (10 minutes), Clean Energy States Alliance/Clean Energy Group, Senior Project DirectorBrief bio and role at/of institution
a. The way forward necessitates shifting from reliance on grants to integrating future markets that will reduce demand charges through state programs, etc…)
b. Global/federal perspective of energy crisis, overall policy perspective (promoting resiliency and energy efficiency)
    i. Facilitating action via policy-making
c. Opportunities for resilient power at schools and universities.

i. Cannot be advanced through grants, need markets, to bridge the gap between current and future markets, need state programs (demand charge management) currently a number of federal programs offering grant funding, arduous to apply for and comply with (spend not too much time on this), grants will not advance the market
ii. NREL survey of demand charge rates across the country (map with areas country-wide with schools, universities, and commercial operators paying
    1. Can use battery storage behind the meter to reduce charges
    2. Policy perspective demand/response, incentives, and efficiency program (state-run) need to come together to create a market where these policies will succeed (Bridge the gap until the markets arrive),

d. Energy storage policies and programs at the state level
e. Schools as an opportunity
f. How has the nature of reacting to the energy crisis changed from the application of specific technologies to a more global perspective of operating either institutionally or individually
g. What are the biggest policy challenges for CESA's goal of a zero-carbon environment by 2050?
h. Best Practices in Resilience: How is CESA working to create policies and multidisciplinary processes that integrate planning principles with the best current science, engineering, and innovation, leading to transformation and equitable outcomes?

**Questions and Answers (Rachel Hertzman):**

i. **15 minutes** - Moderated Question/answer