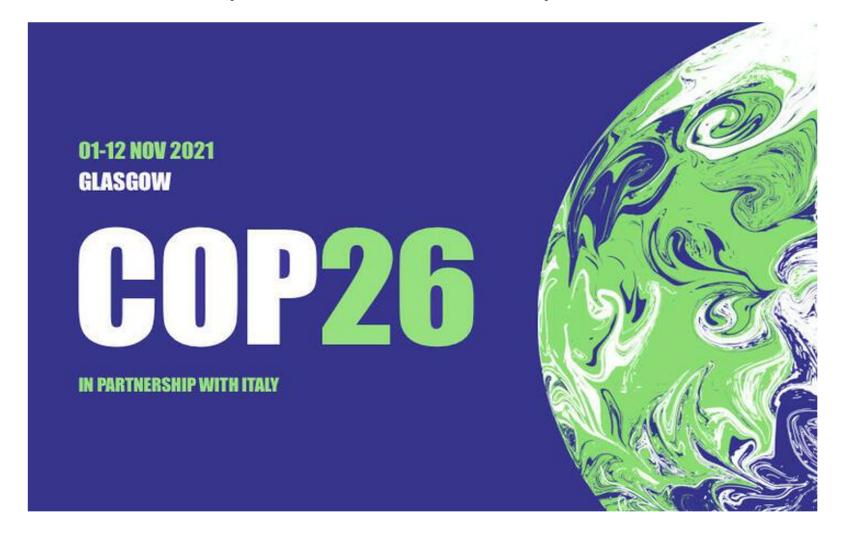
### Content, Observations, & Themes





Beth Beloff, Gary Payton, Randall Ryti, CSCNM

### Agenda

- Overview of COP26 Content Gary
- On the ground Observations Beth and Randall
- Key Themes Beth
- Snapshot of Some City/State Applications Beth and Randall
- Applications to Los Alamos Randall
- Sharing Details Gary
- Q&A

# The "Nesting Dolls" of Climate Action

- International
- National
- State/Province
- City/County
- Business/NGOs
- Individual



### "Glasgow Climate Pact"

#### The Pluses

- Call for phase down of "unabated coal" & "inefficient fossil fuel subsidies.
  - Weakened language, but still the first ever reference
- Brought enhanced GHG emission pledges to COP27, November 2022
- Nature became important for first time and Forest Funding
- Call for doubling of finances for adaptation by 2025
- Global carbon trading system agreed to
- 1.5 C/2.7 F limit v 2.0 C/3.6 F from Paris COP21

#### **The Minuses**

- Pledges will take globe to 2.4 C/4.3 F, not 1.5 C/2.7F by 2100, if implemented
- More dialogue, not a fund, for Loss & Damage (Developing States)
- Coal and Oil/Gas not successfully curtailed
- No enforcement mechanisms

### The Major "Side Agreements"

- **Deforestation:** 130 countries, halt/reverse by 2030, 90% of world's forests. Significant funding pledges.
- Methane: 100 countries, cut by 30% by 2030
- Coal: Powering Past Coal Alliance, 25 countries (and NM), phase out coal power, end public financing of coal power by end of 2021
- Zero Emission Cars/Vans by 2035/2040: 38 countries, 6 major manufacturers
- US China Agreement on Climate Cooperation
- Net Zero Pledges: 450 banks, insurers, pension funds managing
   \$130 trillion commit to Net Zero by 2050
- . Ocean Sanctuary: 200,000 sq mile Marine Protected Area; Ecuador, Costa Rica, Columbia, Panama



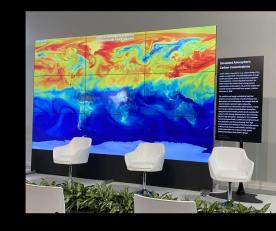
#### U.S. CENT



















#### Observations

- Optimism came from the levels of engagement at all levels
- The US is back
  - All Agencies represented
  - US legislators
  - Governors and their Secretaries
- Indigenous peoples
- The youth presence
- Business was all in
- Nasa's Hyper Board
- Green Hydrogen
- Huge peaceful protests
- Importance of local community action, cities and states

# Key Themes

- This is the Decade of Delivery; the time is now
- All-of-the-above approach, with action at all levels; no silver bullet
- America is all in; all-of-government approach
- Partnerships/coalitions; we CAN succeed only if we all work together
- Importance of local governments and other sub-nationals' actions laboratories of policies and actions
- Why cities matter? Globally account for 55% of population, 70% of carbon emissions, 75% energy usage, only 3% of landmass, 75% of natural resource consumption, and 80% of GDP.
- **Equity**: no one left behind, enviro justice/fair transition, those who cause the damage help those who are impacted adapt
  - Climate Justice: Global North vs Global South, with North paying for loss, damage, adaptation

# Key Themes (cont)

- Youth and Indigenous people: they have the most to lose; leaders must listen and include them
- **Nature and Culture:** inseparable, especially to indigenous people; must protect and restore; LEAF Coalition; first time natural world in the agreement
- Carbon pricing is key; Fully Valuing Natural Sinks
- Business and Investment changes: driven by convergence of political and consumer pressures
   (30% greater demand for sustainable products); Wall Street views are shifting
- **Technologies:** emphasis on use of green H2 in fuel cells in transportation for heavy vehicles; use in industries using high heat (steel, cement, etc)
- Fossil Fuels need to stay in the ground if we are to stay below 1.5 degrees C
- **Accountability/Peer pressure/Advocacy**: the world is watching; as Obama said to the younger generation: *stay angry and stay engaged; this is your future*

# Snapshot of Some City/State Applications

- Many Climate Cities initiatives: eg. WWF One Planet Cities Challenge, Cities Race to Zero, ICLEI (Local Governments for Sustainability, C40 Cities' cities committing to 100% RE by 2030 / net zero by 2050
- Inclusion in Decision-making: Youth Councils, Env Justice Communities, Indigenous Peoples
- Climate Accountability: green dashboards showing progress toward 1.5 degrees (Blackrock \$400B Fund)
- Communications and Verification: Use of Satellite imagery: real-time to help with communications, drive actions, identifying pollution sources, fires, ag needs (NASA et al)
- Working Lands: reduce methane, support carbon sinks, more regenerative management practices
- Engagement/Immersion in Nature: connect youth to nature, Climate Youth Corp, urban tree planting, engagement through tree planting (Belfast: engaged public with map/pins to ID where to plant trees)
- Consumer Education: promote purchase of sustainable brands, labeling, lifecycle impacts of consumables...
- Eliminate Financial Incentives for fossil fuel development and fund a just transition
- Climate Justice: reduce the cost burdens for adaptation to those most vulnerable

# City/State Applications (cont)

- **Transportation:** Incentivize ZEVs: delivery zones, rebates new **and** used, phase out gasoline vehicles
  - **Electrify light/heavy vehicles**, electric school buses as purchased to place on the grid when not in use (Beverly, MA; Lifecycle impact evaluation of purchases; phase out gasoline engines
- Power Sector: Fossil Fuels phase out, no more coal, (Powering Past Coal Alliance); RE, Battery Storage
- **Buildings**: Move quickly to all electric buildings; Phase out natural gas; holistic design and consider impacts of occupants (Scope 3); **Include Carbon evaluat**
- **Government Procurement**: green purchasing teams at state and local levels, statewide green purchasing agreements (solar panels, charging stations, broadband, energy storage, EV heavy vehicles/buses,)
- New Business Opportunities: lithium battery recycling (Freyr), climate solutions incubators
- Putting a Price on Carbon:
  - Carbon Tax to change behavior
  - Carbon credits, put a value on nature

## Applications to Los Alamos

- Near term goals: city alliances, youth engagement, regional approach, purchasing options
- Solar and storage for LAPS buildings and buses, community solar, policy for lifecycle cost evaluation, total
  cost of ownership of eV
- Business perspective looking at near term; clean tech incubator
- Transportation options
- Power Options and Power Purchase Agreements
- **Equity Issues**: Justice 40
- Full Federal government response [coordination with LANL]
- Glasgow [general observations] interest in the COP with placards, billboards, information, EV chargers

### Sharing Details

#### Official Observer Status for Your Organization?

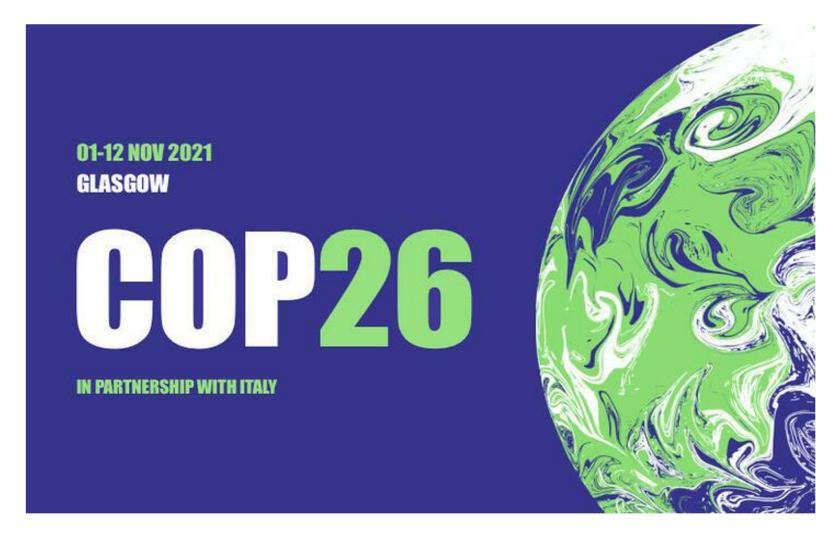
- August 31, 2022 application deadline for 2023 COP 28 in the United Arab Emirates
- Google "UNFCCC How to Obtain Observer status"
- Lengthy process: mission, accomplishments, financial records, etc.
- Worth the effort!

#### **Contact Information**

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#### Questions?





Many thanks, Beth, Gary, Randy

### Appendix

#### Example: Cities and Subnational Organizations and Efforts

**Cities Race to Zero**. Delivering a green and just recovery to the COVID-19 crisis; creating strong, fair economies that serve everyone; and cutting greenhouse gas emissions quickly enough to limit global heating to the 1.5°C target of the Paris Agreement are one and the same thing. None are possible without the others. Success in all is the only way to prevent a catastrophic crisis. This conviction underpins the Cities Race to Zero effort, with the goal of recruiting 1,000 cities to the Cities Race to Zero, in support of the COP26 Roadmap of Local Governments and Municipal Authorities (LGMA) Constituency to the UNFCCC.

https://www.c40knowledgehub.org/s/cities-race-to-zero?language=en\_US

The **One Planet City Challenge** (OPCC) is WWF's invitation to cities to join us on our ongoing mission: the creation of cities that enable people to thrive in balance with nature now and in the future. In this friendly competition, we celebrate national and global frontrunners. We review cities' climate actions and ambitions and assess whether they align with the goals set forth in the Paris Agreement. WWF supports cities in accelerating their climate transformation and showcases participants' best practices.

https://wwf.panda.org/projects/one\_planet\_cities/one\_planet\_city\_challenge/

**ICLEI**. Local Governments for Sustainability is a global network of more than 2500 local and regional governments committed to sustainable urban development. Active in 125+ countries, we influence sustainability policy and drive local action for low emission, nature- based, equitable, resilient and circular development. Our Members and team of experts work together through peer exchange, partnerships and capacity building to create systemic change for urban sustainability. https://www.iclei.org/

# Appendix

#### **Innovation and Entrepreneurship Center**

NREL was on a panel discussing The Innovation and Entrepreneurship Center (IEC) that is at the center of a cleantech ecosystem. "From our unique position as a national lab-based entity with influential industry partners and motivated investors, we have built a network that can bring cleantech innovation to market, where it will make real impact. We manage technology incubation programs for Shell and Wells Fargo; partner with industry and Department of Energy (DOE) labs and facilities; convene a robust network of more than 150 cleantech investors, including the NREL Investor Advisory Board; and manage a network of more than 60 leading incubators, accelerators, and universities that refer and assist our startup companies." <a href="https://www.nrel.gov/innovate/networks.html">https://www.nrel.gov/innovate/networks.html</a>

#### **U.S.** Center

Climate and Environmental Justice: Youth Leading the Way in the U.S. and Beyond. Panel of seven youth leaders from around the world addressing questions related to environmental justice and climate. Make sure all communities are engaged and people have a voice in actions. One of panelists cited a passage from French author Christian Bobin and translated as "I like to put my hand on a tree that I am passing by not to convince myself of the trees existence of that I have no doubt but my own", when responding to what moment inspired you. https://www.youtube.com/watch?v=AqfR3zA4f0Y

The Role of Cities in Driving an Ambitious Climate Agenda. Panelists included the Mayors of San Diego CA and Beverly MA, Council Member from Maui, and Sec Fudge of HUD. When asked about local community solar and EV – one answer was that housing policy is climate policy.