

## **Chair Randall Ryti Report to Council**

### **COP26 Attendance Nov 8-12, 2021**

It was an honor for me to attend COP26 (conference of the parties) in Glasgow, Scotland as an observer for the Coalition of Sustainable Communities New Mexico. This opportunity arose shortly after Los Alamos County joined the Coalition on July 1, 2021. At the annual meeting on August 13, I had heard that the Coalition had applied for Observer status with one attendee confirmed and others expressing interest. Council discussed attending energy sustainability conferences at the August 24 meeting and approved such expenses. I added my name to those expressing interest and updated the Council at our August 31 meeting. After one interested party dropped out and the option to attend for one of the two weeks was identified, I continued to explore the benefits to the County of my in-person attendance as well as logistical requirements for travel. I made my decision to travel shortly before my announcement to Council on October 5.

Here are some of the highlights of the conference as related to Los Alamos County:

1. There were tangible examples of actions the County might consider and have been implemented elsewhere for greater energy efficiency and resiliency. Joining one or more additional organizations beyond the Coalition of Sustainable Communities New Mexico would be worthwhile to understand these options.
2. The Mayor of Beverley MA highlighted an initiative to purchase electric school buses and have them on the grid for storage when not in use or being charged.
3. Global cities discussed approaches for encouraging active transport (walking or cycling) to improve transportation efficiency, improve health, and improve economic conditions.
4. Public transit ridership has suffered internationally as a result of the COVID-19 global pandemic and this creates an opportunity to reevaluate systems and make sure that they are efficient and inviting option with maximum connectivity between fixed routes and alternate transport options (e.g., bike shares). When making changes, it is important to ensure that all populations are served (e.g., mobility challenged).
5. Effective engagement is vital to having successful efforts to increase efficiency and sustainability. One example was an international youth panel and the diverse responses to questions posed to this panel. The conclusion is that active engagement is needed and not just checking the box.
6. An architecture panel indicated carbon could be included in an evaluation of reuse, remodel, or rebuild options. Carbon use could be included as part of any capital purchases.
7. The conference included many scientific presentations. One notable presentation was "What's causing recent climate trends?" by Dr. Gavin Schmidt NASA. This NASA hyperwall presentation showed model results and data (when available) from 1858 to 2018. A notable departure over the last 30 years tracking with human inputs was evident in these trends.

8. The conference also included panels of business leaders. CEOs of Acciona, Unilever, Ikea, DSM. One key point was the Unilever CEO indicated ecolabel products outperforming traditional brands.

Overall, the conference was worthwhile for the information presented and opportunities to meet other attendees and talk to presenters. I have provided some additional notes on some of the panels I attended and exhibits I viewed.

### **Cities and Subnational Organizations and Efforts**

It was recommended that I review sustainability plans for Sacramento CA and Burlington VT. Also look to the Regulatory Assistance Project (<https://www.raponline.org/>) and Electric Power Research Institute (<https://www.epri.com/>) for guidance. Consider joining one or more national/international organizations sharing information on sustainable communities. Here are some examples:

**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](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/>

## **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.”

<https://www.nrel.gov/innovate/networks.html>

## **NASA hyperwall presentations**

What’s causing recent climate trends? Dr Gavin Schmidt showed an animation of data and model results from 1858-2018. The last 30 years showed a dramatic change in data and model results trending with human inputs. This indicates we have control of these trends going forward.

<https://www.youtube.com/watch?v=9VVqJGQE5gQ>

Connections Between Fire, Weather, and Climate. Dr. Amber Soja NASA discussed connections between aerosols and fires. Climate induced fire regimes and vegetation change is here and now, not in the distant future.

<https://www.youtube.com/watch?v=VKAxDc4JBbI>

## **Bolin Center for Cryosphere Research**

Pavillion with many technical presentations showing the impact of high, medium, and low changes to global emissions on ocean acidity, sea levels, and more.

“This new Report, reviewed and supported by nearly 50 leading cryosphere scientists, over half of them IPCC authors; details how a combination of melting polar ice sheets, vanishing glaciers, and thawing permafrost will have rapid, irreversible, and disastrous effects on the Earth’s population. The State of the Cryosphere Report will become an annual effort taking the pulse of the cryosphere, the name given to Earth’s snow and ice regions, ranging from ice sheets, glaciers and permafrost to sea ice and the polar oceans — which are acidifying far more rapidly than warmer waters.”

<http://iccinet.org/statecryo21/>

## **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>

*H2 Twin Cities-Connecting Communities Around the World to Deploy Clean Hydrogen.* Panelists from Netherlands, Australia, Japan, and Saudi Arabia discussed their H2 initiatives. Netherlands is developing a H2 valley and is using the natural gas infrastructure. Australia is looking to use ultralow cost solar to produce H2. Japan is producing liquid H2 for shipping. Saudi Arabia panelist discussed the NEOM project.

<https://www.youtube.com/watch?v=oOMR2byvOcs>

*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 HD. Were asked about local community solar and eV – one answer was that housing policy is climate policy. Beverley MA wrote the first climate action plan during COVID, have first eV school bus and is selling electricity back to the grid. Solar arrays with two way distribution and grid need upgrades for this to happen.

## **Business pavilion**

*The Next Frontier: Positive impact beyond Net-Zero.* CEOs of Acciona, Unilever, Ikea, DSM

One key point, Unilever indicated ecolabel products outperforming traditional brands. These companies have climate action plans and goals for the next 2-3 years.

[https://www.acciona.com/updates/news/cop-26-jose-manuel-entrecanales-ceo-chairman-acciona/?\\_adin=02021864894](https://www.acciona.com/updates/news/cop-26-jose-manuel-entrecanales-ceo-chairman-acciona/?_adin=02021864894)

<https://vimeo.com/showcase/8982541/video/643448727>

*Electric utilities: accelerating the transition (hosted by CERES and ERM).* Three public traded utilities (National Grid US, So Cal Edison, Peco Energy) discussed measures being taken and current obstacles. Include solar plus storage in affordable housing projects (So Cal). Transmission capacity is lagging where there is renewable production. Electric vehicles need to look at the true cost of ownership or TRO. Buildings are more difficult. Potential for lower cost H2.

<https://vimeo.com/showcase/8982541/video/643942621>

*Delivering Net Zero Carbon in Buildings In Cities.* Panelists provided example projects that addressed net zero for construction and operation.

<https://vimeo.com/showcase/8982541/video/644452416>

## **UK pavilion**

Living streets initiative on “active travel” walking or cycling. Targeting those ~50% of in town trips for 15-20 minute duration. Need to address rural areas and those with mobility challenges. There is a societal benefit for people being out and about. Need to make active travel the more attractive option. It was important to get public support for these initiatives. Bike shares were mentioned as an option for the “last mile” in more rural areas.

*JetZERO.* Panel presented on current state of reducing carbon and ultimately eliminating carbon from aviation. Reduced carbon fuel mixtures are currently available but there would have to be standardization and availability at all airports. Ultimately, the solution will be technology-based.

*Recharging Rail.* Panelists discussed the importance of transportation (20% overall) to greenhouse gas emissions. Also discussed the impact of the pandemic on mass transit usage (it declined). So how to increase use and efficiency with a goal of further decarbonizing rail. Emphasized connections and in particular the last mile for rural areas and discussed that no one should be left behind (mobility challenged).

## **Other links**

Recording of IPCC panels from the COP

<https://apps.ipcc.ch/outreach/viewevent.php?e=1>

NASA at COP26

<https://www.nasa.gov/feature/nasa-at-the-un-climate-change-conference/>

US Center Events

<https://www.state.gov/cop-26/schedule-and-events/>

SERVIR connects space to village

<https://servirglobal.net/>

We Mean Business Coalition

<https://www.wemeanbusinesscoalition.org/cop26/>

Green zone program (public area)

<https://ukcop26.org/the-conference/green-zone-programme-of-events/>

COP26 program

<https://unfccc-cop26.streamworld.de/program>

Electric cars, what happens to the dead batteries

<https://www.bbc.co.uk/news/business-56574779>

Recycling lithium ion batteries

<https://batteriesnews.com/comstock-linico-recycle-lithium-ion-batteries/>

British Airways sustainable fuel flight

<https://www.businesstraveller.com/business-travel/2021/09/16/british-airways-operates-first-sustainable-aviation-fuel-saf-flight/>

Local Climate Adaptive Living (LoCAL) Facility of the UN Capital Development Fund

<https://www.unCDF.org/local/homepage>

Fukushima 10 years later

<http://shiteihaiki.env.go.jp/cop26/>

Methane moment program

<https://www.methanemoment.org/events/>