Nebraska Climate Pollution Reduction Plan Stakeholder Engagement Notetaking

Date/Time: Wednesday, December 6, 2023
Sector: Buildings/Housing/Communities (Round 1)

Welcome & CPRP Presentation:

- Welcome & Ground Rules
- NCPRP Presentation
- Short Q&A
    - One of the example measures encompasses a home rebate program. Isn't that a given? It was noted that the plan could include things that would go ahead without the grand funding, but we do want to expand to new initiatives as well.
    - Asked about the information on the proposal process. Note that there is a virtual Idea Form in which individuals can upload their ideas.
    - Asked about funding application. Noted that this process is still being determined but will likely be a Nebraska Implementation Grant Application.

Key Question 1: Poll
Of the 4 example measures, how would you prioritize them? Do you have others to propose?

- Thirty-one participants responded to the poll. They ranked the example measures (highest to lowest) as follows:
    - Funding for repairs/upgrades needed for eligibility for weatherization program.
    - Create financing mechanisms for efficiency upgrades for tenants and property owners.
    - Incentives for high-efficiency heat pumps and home appliances for low-income households.
    - Funding for planning urban trees to reduce energy use and reduce heat-island effects.
    - Other
- Other responses included:
    - Support solar on ranching and farming operations.
    - Sale tax incentives and/or state tax credits to supplement federal 25C & D tax credits.
        - There may be people who are interested in fuel switching or solar panels, but their income is too high to qualify for low/medium income. Additional incentives to push them over the threshold to implement those measures
    - Facilitate accessory dwelling units within existing homes or yards
        - It can be a part of an existing structure for a house that is too big for occupants, accessory dwelling units carve out a space for an additional tenant, providing income for the homeowner and better efficiency for utilizing energy
        - Can do the same thing in a yard that is a certain size, 10,000 sq ft or more can but an accessory dwelling unit over a garage or
        - The city has to allow it. People who own these structures or lots don't have the expertise. Should provide expertise, public workshops, help the owners understand, and financing

Breakout Rooms & Stakeholder Proposals:

Residential (Room 1):

Breakout Room Discussion of Proposals:

- Funding for repairs/upgrades needed for eligibility for weatherization program.
    - This initiative will be important in rural and low-income communities, helping save money on energy expenditures.
    - It will give an economic boost from construction.
- Create financing mechanisms for efficiency upgrades for tenants and property owners.
    - In the existing weatherization program, they do rental units, but that is limited by some factors.
        - They do not put in new furnaces, new heaters, ACs, or water heaters for tenants. If landlords meet certain requirements, they can qualify for credits on those.
        - The building has to be at least 66% low-income to qualify for new windows and such.
        - This program already has measurements for how many are installed and how many get turned away, so measuring impact here would be easier.
- Incentives for high-efficiency heat pumps and home appliances for low-income households.
    - This initiative would help with energy bills in low-income households.
    - There are long-term benefits to tenants/owners in addition to the short-term benefits to the owners.
- Are we more focused on raising funds, loosening requirements, or both?
- How would these funds/programs get distributed to the different small programs that dabble in these areas?
    - Focusing on filling gaps. Is it scalable? Is it feasible? Who can we partner with?
    - Each organization has its own regulations. Being comprehensive and hoping to do this isn't only about going through the existing structure. It's also about building structure.
- Funding for planting urban trees to reduce energy use and reduce heat-island effects.
    - Benefits within planting programs and specifically areas with older homes.
- The four big ideas we put out there are great, but they're the tip of the iceberg. We should seek out several dozen ideas to get into a priority list.
    - Battery storage, as a supplement to rooftop solar
- Recycling/Reuse of building materials can reduce emissions. Keep Nebraska Beautiful has a program that can be supported. Lincoln has had an on/off building materials reuse organization that could be supported; this could be extended to other parts of the state.

Residential (Room 2):

Breakout Room Discussion of Proposals:

- Must take a holistic view and integrate the actions of whatever we do
- Incentives of residential lawn/landscapes to 30-50% of native species reduces the need for artificial watering
    - Reduce managed turf areas

    - Use appropriate turf species
    - This would help reduce petroleum-based pesticides and fertilizers
    - Incentivize electric landscaping equipment
- Funding for churches and non-profits as they act as a beacon, particularly in low-income communities
- Community and Multi-family solar programs
- Building orientation: orient buildings so we can capture passive solar heat, there is not a lot of that going on
    - Having to do that through building codes or planning regulations would be a long-term goal.
    - Rehabbing, if there is an opportunity to put in windows on the south side (or west side)
        - Window coverings, awnings, etc.
        - Passive solar is an area that doesn't get nearly as much attention as it needs.
- Redevelop other run-down environments in the community as appropriate while minimizing the destruction of architecture and reducing wasted holes in urban areas.
    - "walkable communities"
    - In field development
    - Perhaps a longer-term goal
- Support residential solar development and pre-weatherization
    - Make homes ready for solar installations in lower-income housing.
    - Landlords get homes solar-ready and pass savings onto tenants.

Commercial:

Breakout Room Discussion of Proposals:

- Discussed the background of top-priority
    - Commercial buildings have similar issues to residential on a larger scale.
        - Reduce electrification, heat pump systems instead of burning natural gas, & energy efficiency upgrades. Hopefully, we are already switching to LEDs for energy savings, better insulation, rooftop solar, etc.
- In addition to weatherization & electrification, subsides for parking lot solar to supply electricity to commercial buildings.
    - An example is the energy production sector. Many measures across sectors.
        - Michigan State U added solar canopies above parking lots, supplying 20% of power to the University now.
        - Also considered solar canopies over ag feedlots
    - If you look at the funding path for commercial buildings in the state, it will be very hard. It is hard to argue that commercial buildings serve populations the federal government wants us to attract. It would have to be creative to be cost-effective.
    - Would have to bring in partners like school districts and tribal organizations in the state for rooftop solar. Would need an application with public utilities as a partner. Getting that done in 3 months is a huge challenge.
        - State better off spending what little time they have on other pathways.

        - The application deadline is January 2025, we could have funding ahead of that, but timeline not set.
    - Have to assume Public Power at the table in other sectors. LES is mainly geared toward Peak Demand Reduction. What about leveraging this and broadening and expanding? LES doesn't have demand for what they have, and maybe eligibility isn't expanded enough.
        - Tree planting reduces cooling in the summer. Don't believe they do that now.
        - Eligible for funding.
        - LES is used to incentivize LED lighting. Have we really built that out as we can across the state?
            - Providing CPRG funds to utilities to expand energy efficiency programs. Currently, funding is limited or participation is limited.
    - Some localities are required to benchmark and show energy improvement for certain-sized commercial buildings. Do you know of any incentive programs for high-efficiency, high-production buildings that could be a model?
        - Multiple in other states few in Nebraska. Denver/Chicago/Minneapolis has programs. Many examples, but to copy those, we need to show DOE how we can do it better and how to do it for populations. It will be very competitive with the rest of the country. Have to break the wheel to be better or have a huge impact on pollution.
        - Funding beyond the pollution reduction grant, down the road, can be obtained from other sources.
- What are the targeted or preferred populations for impact?
    - NDEE had a map of the locations of populations. Serve those people in those communities. A large population in North and South Omaha. Population in Lincoln. Lots of land on tribal lands. Should be partnering with them. Suppose we serve those commercial buildings, school buildings, and religious buildings.
        - Hard to argue for office building or manufacturing
            - What about multi-family housing?
                - Probably falls under residential, not commercial.

Large Group Discussion of Proposals:

<u>Residential (Room 1) Summary</u>

- Weatherization upgrades- funding for tenant and property owners
- Heat pump replacements have multiple benefits
    - Short-term for owners and tenants and long-term benefits
- Building partnerships is important. A lot of ideas in this sector have partners in the state working in similar aspects, building off other programs and filling in gaps
- Urban planting has multiple benefits
    - Currently, grant programs out there with that
- Battery storage didn't dive into deeply – in addition to rooftop solar, add battery storage as a backup

Commercial Summary:

- Enthusiasm for solar, specifically parking lot solar
    - Provide incentives and help fund that
- Electrification/weatherization programs for commercial buildings
    - It may be difficult to distinguish/effectively compete for CPRG funding
    - Focus on school districts, tribes, churches, and smaller town retail stores to target eligible low/medium income areas
- Incentives for high-performance commercial buildings new/upgrades
    - May not be likely to be funded by these initial grants
    - Perhaps a long-term goal/other funding
- Expand eligibility for certain programs- e.g., LES sustainable program,
    - Broadening those programs and leveraging existing programs/funding
- Community-level ground source heating/cooling for multiple buildings or business districts
    - Use the temperature of the ground to supplement heat/cooling, geothermal heating/cooling
    - Multi-family and commercial that have made several block-wide geothermal loops

Residential (Room 2) Summary:

- Finding incentives to convert lawn/turf to native specifies
    - Lots of benefits
- City planning: planning for more walkable cities, reducing empty spaces
- Building/home orientation
    - Plan home development for south-facing homes to capture passive solar
- Support solar installations and home-enabling upgrades to prepare homes for solar
- Support churches/non-profits in these initiatives to promote it in communities
    - A beacon of the community, if you do a solar/energy efficiency, it attracts attention in low-income communities
    - The citizen Climate Lobby has a school electrification challenge that has kids approach the school board to go electric. Education is important
- Electric lawn equipment
- LPS is solely ground source heat pumps/electric, starting to have solar on LPS

Other Large Group Discussion:

- Some communities have put in place incentive programs to transition over time from gas to electric lawn equipment. Big health, noise abatement, and GHG reduction potential.
- Make recycling much easier for people to do. There's too much confusion over what can be recycled and where to recycle it. Can we also restore financial incentives to recycling, such as a rebate for recycled glass, aluminum, and plastics?
- Promote financial incentives for the creation of practical light rail and bus networks throughout urban areas, ideally free for riders. The present system is vastly underused.
- Incentivizing low-income solar projects requires the landlord to pass on the savings to the tenant. In addition, Lincoln is working on a low-income energy efficiency program in the South of Downtown that could be a model for more of these kinds of programs.
    - The City of Lincoln, working on a project for low-income properties south of downtown, could be a model for a lot of other communities.
- Citizens Climate Lobby has a Great School Electrification Challenge, which organizes and encourages kids to petition school boards to electrify.