

Smart Buildings & Development

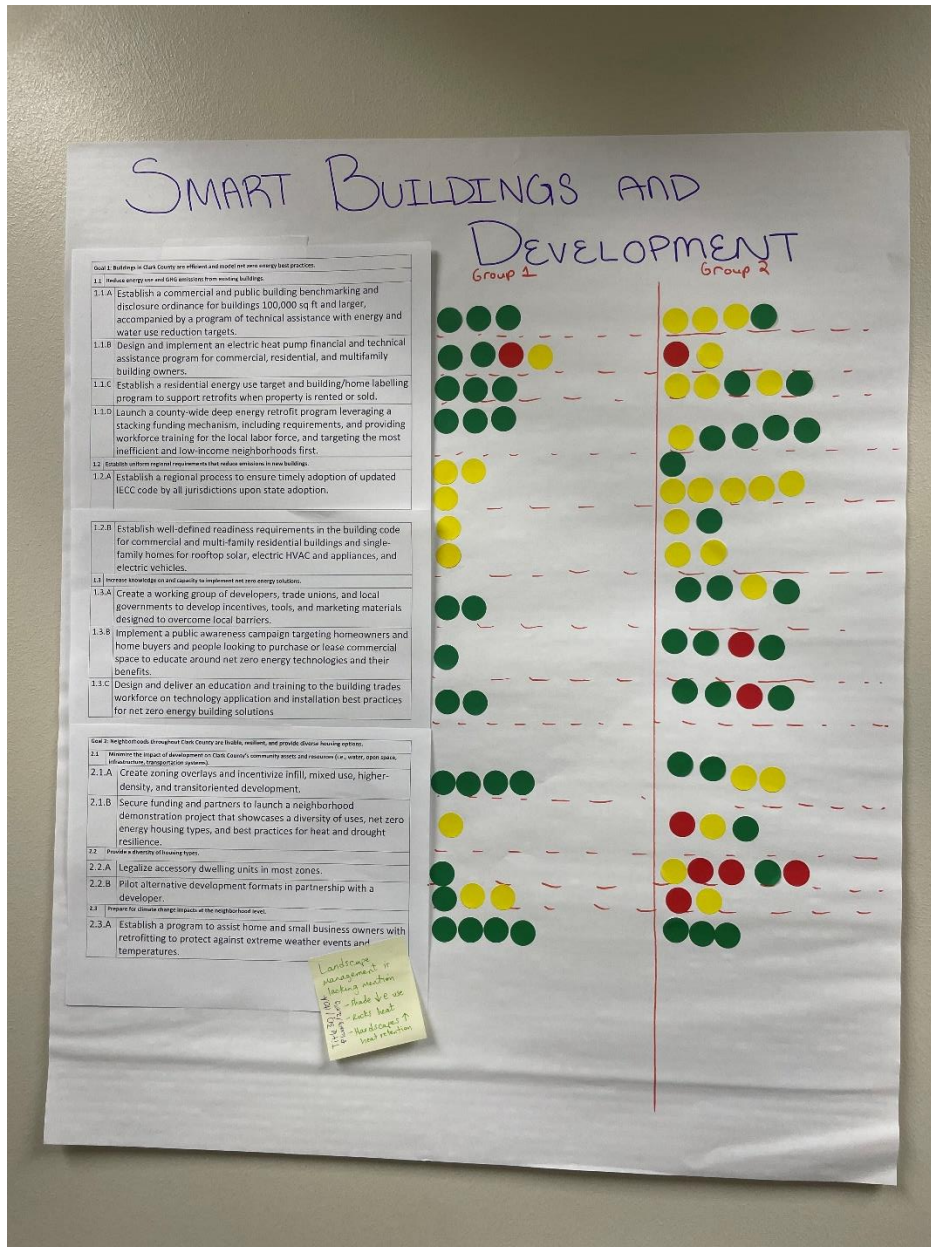
MAIN TAKEAWAYS

- Need workforce training and appealing compensation for builders, developers, local government regulators, and skilled trades.
- Zoning and planning are key tools, need to be uniform across the county.
- Need variety of housing to increase affordability.
- Balance extra installation and operations costs with climate benefits.

POTENTIAL NEXT STEPS

- Some actions to recommend to other plan elements
- Catalog implementation considerations from the discussion
- Coordinate among jurisdictions for support

RESULTS OF VOTING ACTIVITY



DISCUSSION SUMMARY & FEEDBACK

Session 1 Notes

Action 1.1B Heat Pump Program

- How impactful is this?
- High costs both new + existing
- How to prioritize from general fund
- Funding sources? Don't pirate general funds
- Workforce- is PV training a good example? Excitement re: new tech
- ICC Training for Building Officials
- Predictable, transparent, grandfather existing projects

- Access to homeownership (increasing total costs)
- Workforce is not a shortage → wage shortage → Piece-work wage stream impacts ability for complex
 - It's possible that the labor issues being encountered in construction are not due to a worker shortage, but are due instead to a wage shortage.
 - Is it possible to incentivize training by offering training bonuses?

Action 1.2.A-IECC Process

- Training building inspectors (GOE + Local colleges)
- Software lagging/tools lagging
- Is a 3-year code cycle too fast?
- How can we be sure perform as designed?
- Local code region "50 NV Regional Amendments"
 - Climate zones
 - ACH
 - Conflict with state adoption
- Optional performance-based target
- The IECC already goes through a regional process when amendments for certain climate areas, for example Mt. Charleston, are needed
 - The IECC should offer optional performance-based evaluations

Action: 1.2.b Readiness Requirements

- Retrofits?
- Cost impacts to the panel with electric-dependent readiness
- Peak load management
- Impact on Building agencies of new requirements
- CSN workers comp program to retrain

Action 2.1.B Demonstration Program

- How impactful/high priority?
- Targeting funders + electeds
- NAHB- International Building show- net zero show home
- We need to get electeds into demos
 - Ask conferences to do that outreach

Action 2.2.B

- Changes in law have helped but localities do not know how to balance priorities (electeds + cities)- Power of zoning and planning
- "Zoning and Planning are the answers to all our problems"

Action 2.3.A

- Title 30/ HOA Planning/Zoning
- Landscape management is lacking mention
 - Shade brings down energy use
 - Rocks heat
 - Hardscapes increase heat retention

Bike Rack

- NIMBY
- Silos, challenges with local governments' different levels of governance, different priorities.
- Buildings exist in an environment.

Missing Actions

- [?] New NG Connections
- Energy Efficiency hub as a contractor of checking plans (to support buildings department)
- Define a timeline/expedited permit
- Solar/Appraisal Institute reform at a federal level
- Tree protection
- Timing of when developer buys parcel vs. when policies are implemented
- Conduct energy audits upon sale
 - o Question that I didn't get to ask: how come energy audits aren't done during an inspection? Wouldn't it be better for people to know how much energy a home uses before the sale?
- We need to get electeds into demos
 - o Ask conferences to do that outreach
- Is it possible to contract out plans reviewer positions to avoid overload, and require a timeline for approval? Maybe expedite plans that incorporate electrification efforts?
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Group 2 Notes

Action 2.2.A and Action 2.1.A

- ADU may work in CA, but densities in Southern Nevada make it so that they are not even buildable in vast majority of newly developed areas of the communities. Could potentially happen- conversion of garages into ADUs, but it is limited to building code restrictions. Conversions of garages with something that would be equivalent of ADU. Across the board.
- Voted that he loved this action, want to increase density. Felt it could change how they improve.
- Want to increase density but it requires balance with quality of life. Think there is a quality-of-life issue when packing in single family homes. The way they build and created single family homes would prevent quality of life. HOAs might cause issues. Not in places where they find an HOA. Planned unit developments have taken space, governed by HOA. Already backwards state of mind. R1 zoning in Las Vegas different than AZ < CA, etc.
- Infill and redevelopment— agree these are the density tactics that work with quality of life. Some examples:
 - o Symphony Park (city of Las Vegas)
 - o Watermark
 - o agree anything in downtown Las Vegas.
 - o could be more, small sample set, but growing.
- feels circular economy points were broad, but this one is almost too specific. ADUs too specific.

Action 2.1.B

Other actions that get at the same strategy—what are favorite ways of creative diversity of housing types.

- Suggestion: Updates to code.
- Do they want diverse housing types of a reason? More about affordable housing.
- Clark county has 2 flavors of housing, multifamily for apartments, single family. Not enough diversity in housing stock.

2.2.B

- Difficult to find a developer willing to take a risk
- Ex: Redeveloping a golf course. Had RFP go out with diversity in housing go out, 2 responses. Tough proposition even with the backing of an exclusive negotiating agreement with the city. infill, 100 acres (huge), don't know why it didn't go well. Didn't put a bunch of strings attached. It closed.
- Challenge in Henderson for an opportunity site. Not ready for it in this market.
- Lower profit margins by that much.
- Housing Investment Trust, looking to enter this market and they have funding.

2.2.B

- Attendee wanted clarification.
- Villa Trieste- all 215 Charleston Blvd.

Missing/Modified Actions

Density

- Vegas like Phoenix, developers don't like to get out of comfort zone, always conversations. KBHomes, builds certain type of product in Southern Nevada. Won energy star partner of the year. How do they incentivize developers who do these products, but not in Nevada!! Why have they not tapped into this market here? Found formula that works for them and need to venture out to do different things.

Building Codes

- Clark County only has jurisdiction over unincorporate Clark County, developers building, get mad because they have to change depending on what happens.
- Localities Need to be in it together.

Action 1.2.A

- No issues with the content in it, but it has to be everyone.
- Requires certain amount of political capital.

Missing Actions and Considerations

- Maybe slightly from circular economy, but balance of economic development efforts that may not align with sustainability efforts. Natural gas is a challenge—manufacturing and new manufacturing, requires use of natural gas. Not alignment with trying to reduce alignment with natural gas vs. Creating new type of economy that does not require use of natural gas.
- Reach out to mesquite, losing on economic development opportunities to St. George when they did not have natural gas. Timeline—how quickly do we try to change fuel when we don't know what impact is? Using natural gas in smartest paces where we cannot use anything else.
- Each manufacturing process is unique. Less imperative.

- Soda bottling place—impetus behind code changes for Henderson because this was a huge economic loss. Henderson is very industrial and has gone through huge economic transition.
- SNWA stepped in, need large water users policy to attract jobs that will apply best bang for buck.
- Went through point of sale energy audits—along the lines of benchmarking, part of home inspection. Why not try? Realtors pushed back considerably. When you buy a car, get whole EPA sticker of efficiency
- Construction equipment - actions around using electric bulldozers? Sustainability things they can do when they are building or using equipment that is more energy efficient.
- good point to look at EVs or alt fuels
- sustainable materials, but process of installing them? Things in the development lifecycle that will be more efficient.
- likes benchmarking the commercial buildings 1.1A
- Way for us to drill down. Well known? How much signage can be dimmed? How much can be less flashy? Leaky faucets and people turning down air conditioning.
- Homes—just information, need to back it up with resources.
- Missing opportunity of building design? Would like to see more there with how they are designing buildings to be more resilient. Like moving buildings to be closer to shade. Work into existing codes—need code analysis and different types of code for that. Priorities and it is hard to balance them all.

Action 1.1.B- Heat Pump Program

- More strain on grid, using more natural gas. Concerns about 1.1B. One carbon impact to another.
- even though it says financial and technical assistance, heat pumps are expensive to run. Never had a gas bill higher than her electric bill. Not cheaper to run heat pump vs. Gas. Does not know what goes into the calculation, but for her it is always a cost issue.
- Concern about grid assistance
- Concern about cost to run