2021 Clean Energy Implementation Plan

Meeting No. 2 Agenda

Thursday, June 17, 2021

Virtual Meeting- 1:00 PM PST

Topic	Time	Staff
Welcome and Introductions	1:00	Lyons & Christie
Customer Benefit Indicators	1:20	Brandon
Clean Energy Action Plan Targets	1:30	Gall
Break	2:00	
EAG Meeting Feedback	2:05	Lenhart
Breakouts	2:20	All
Share Breakout Room Summary	3:15	All
Adjourn	3:30	

2021 Clean Energy Implementation Plan Introduction

John Lyons, Ph.D.

June 17, 2021

Meeting Guidelines

- Avista CEIP team is still working remotely for a few more months, but is available by email (ceta@avistacorp.com) and phone at 509-495-2255 for questions and comments
- Some processes are taking longer remotely
- Virtual IRP meetings will continue until we are back in the office and able to hold large group meetings
- CEIP information available at my webpage myavista.com/ceta

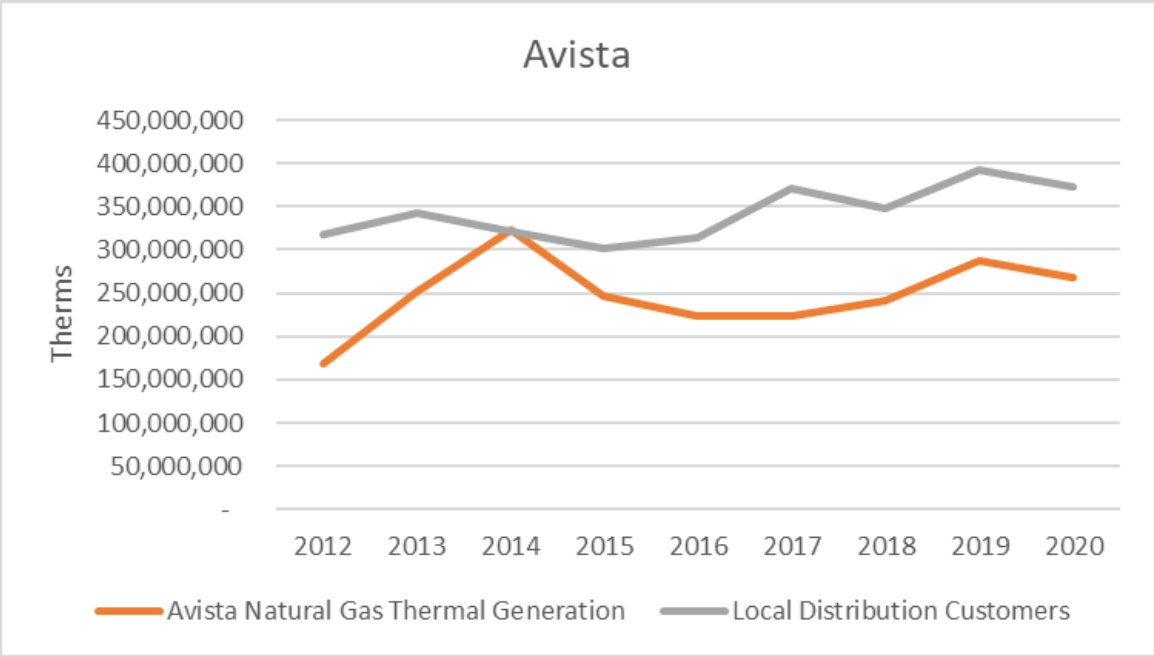
Virtual Meeting Reminders

- Please mute mics unless speaking or asking a question
- Use the Zoom chat box to write questions or comments or let us know you would like to say something
- Respect the pause
- Please try not to speak over the presenter or a speaker who is voicing a question or thought
- Remember to state your name before speaking for the note taker
- This is a public advisory meeting – presentations and comments will be recorded and documented

Follow up from 05/20/21 CEIP Meeting

Q. How much natural gas is used for generation vs. what is delivered?

A: In 2020, Avista's system LDC, or local distribution company, used 37,223,382 Dth of natural gas and Avista's thermal plants used 26,785,934 Dth of natural gas to serve both its system loads for Washington and Idaho. Historic values follow a similar pattern.



2021 CEIP Public Participation Schedule

- **EAG Meetings: Wednesday, June 9, 2021 and Thursday June 10, 2021** – Discussion of benefits of transition to clean energy, burdens/barriers to those benefits

- **Meeting 2: Thursday, June 17, 2021** – Review CEAP targets, customer benefit indicators, breakout groups for Equity Advisory Group and Customer/Advisory Groups

- **Meeting 3: Thursday, July 15, 2021** – Review customer benefit indicators and associated resource mix, customer benefit indicators methodology and measurement, renewable energy credits, resource details, breakout groups for Equity Advisory Group and Customer/Advisory Groups

- **Meeting 4: Tuesday, August 17, 2021** –Correlated customer benefit indicators, resource mix and metrics, Cost-cap calculations, Non-energy impacts, Next steps for CEIP and engagement

- **Public Outreach: Wednesday, September 02, 2021**

- CEIP participation plan meeting agendas, presentations, meeting minutes and files available at: https://myavista.com/about-us/washingtons-clean-energy-future

Today's Agenda

1:00 Welcome and Introductions, Lyons & Christie
1:20 Customer Benefit Indicator Requirements, Brandon
1:30 Clean Energy Action Plan Targets, Gall
2:00 Break
2:05 EAG Meeting Feedback, Lenhart
2:20 Breakouts – Discussion of Customer Benefit Indicators
3:15 Share breakout room summary
3:30 Adjourn

2021 Clean Energy Implementation Plan Customer Benefit Indicator Development

Annette Brandon

June 17, 2021

Benefits of Clean Energy

Utilities must consider input from advisory group members (including equity advisory group), and customers to meet requirement that all customers benefit from the transition to clean energy through:

Equity	• Equitable distribution of energy and nonenergy benefits and reductions of burdens to vulnerable populations and highly impacted communities
Public Health and Environmental	• Long term and short term public health and environmental benefits and reductions of costs and risks; • Such as less air pollution which results in lower asthma rates
Energy Security and Resiliency	• Energy Security – strategic objective to maintain energy services and protecting against disruption • Energy Resiliency – ability to adapt to challenging conditions from disruptions
Meet Planning Standards	• Maintaining and protecting the safety, reliable operation and balancing of the electric system • Lowest reasonable cost including social costs

Equity at the Core

Ensure that all customers are benefitting from the transition to clean energy through:

The equitable distribution of energy and nonenergy benefits and reductions of burdens to vulnerable populations and highly impacted communities.

"Equitable distribution" means a fair and just, but not necessarily equal, allocation intended to mitigate disparities in benefits and burdens, and based on current conditions, including existing legacy and cumulative impacts

Customer Benefit Indicators - How we will measure how we are doing

Customer Benefit Indicators (CBI) is an attribute, either quantitative or qualitative, of resource ore related distribution investment associated with customer benefits described in RCW 19.405.040 (8).

Developed through coordination with Advisory Groups, Equity Advisory Group, Public Participation

Vulnerable populations and highly impacted communities for the creation of or updates to customer benefit indicators and weighting factors for the utility's compliance with WAC 480-100-610 (4)(c)(i); and

Who?	Highly impacted communities and vulnerable populations		
Benefit:	Energy benefits	Nonenergy benefits	Reduction of burdens

All customers, including vulnerable populations and highly impacted communities, for the creation of, or updates to, customer benefit indicators and weighting factors for the utility's compliance with WAC 480-100-610 (4)(c)(ii) and (iii).

Who?	All Customers					
Benefit:	Public health	Environ-mental	Cost reduction	Risk reduction	Energy security	Resiliency

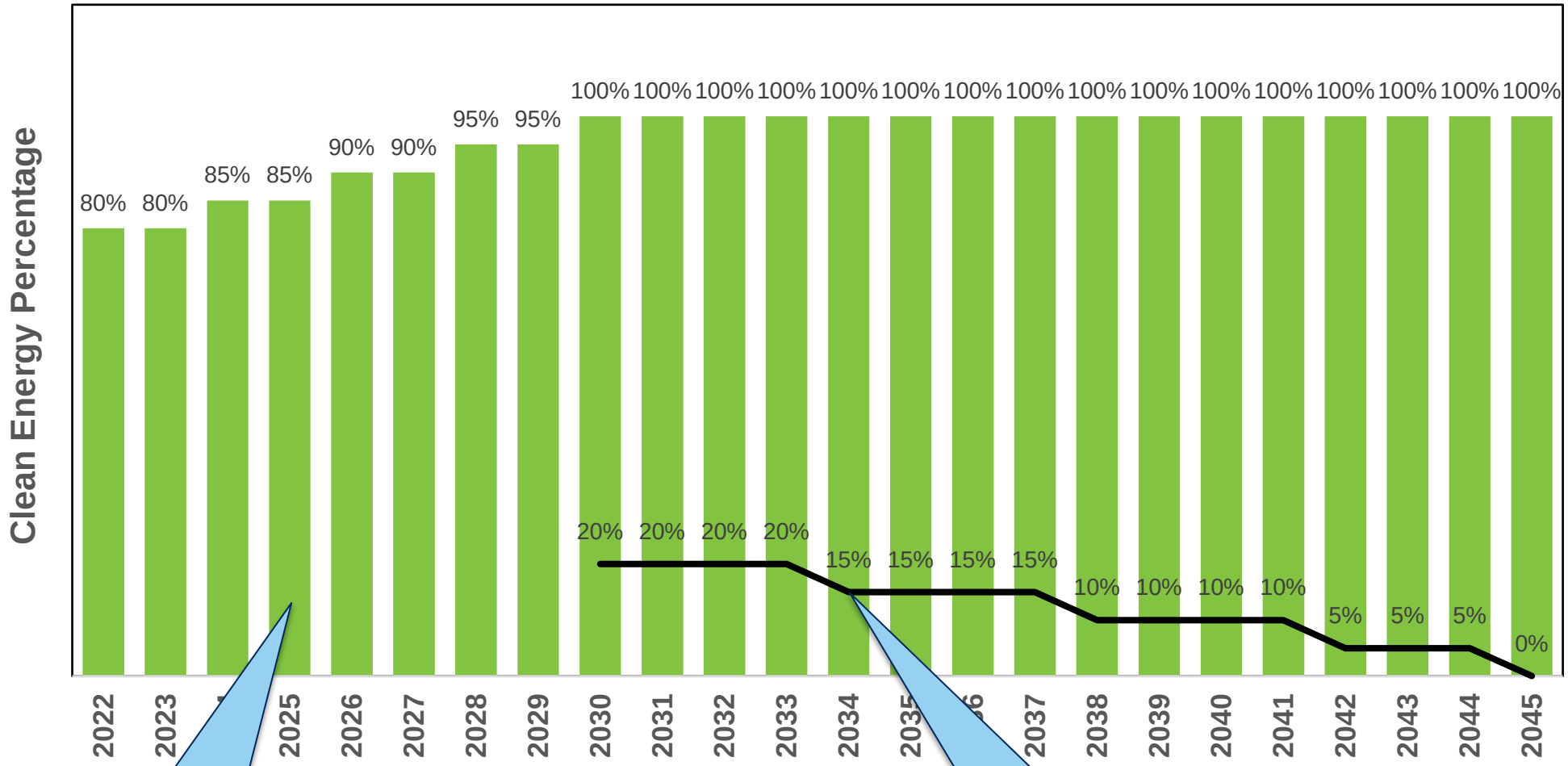
Clean Energy Action Plan

James Gall, IRP Manager
IRP Manager
CEIP Public Meeting, June 17, 2021

Agenda

- Clean Energy Interim Targets
- Retail Electric Load
- Jurisdiction Adjustments
- Clean Energy Action Plan [link]
  - Supply-Side Resource Selection
  - Energy Efficiency
  - Demand Response
  - Resource Adequacy

Clean Energy Interim Target



Proposed Avista Retail Electric Load Adjustments

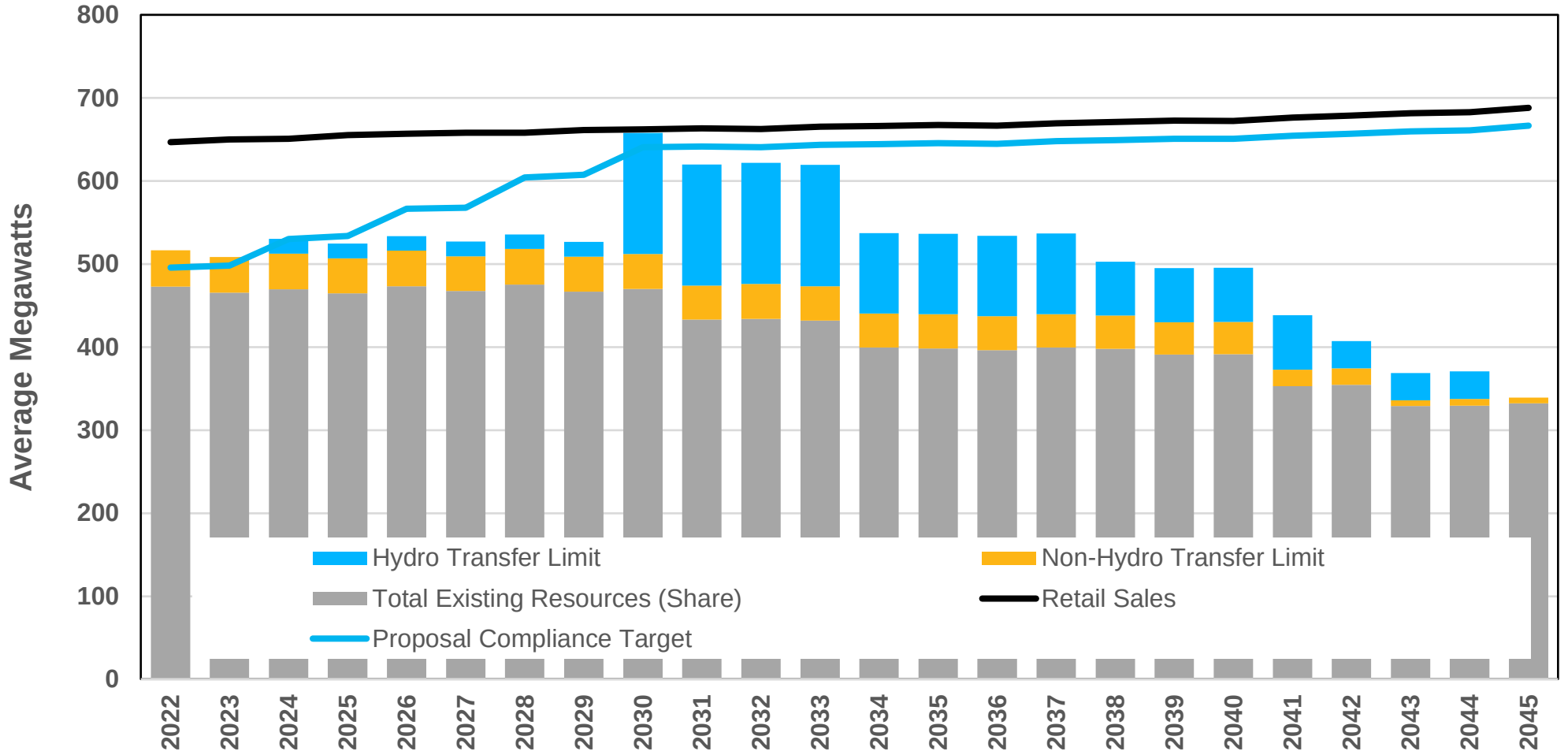
- Retail electric load in 2022: ~647 aMW
- Qualifying Facilities
  - Avista will reduce “Retail Electric Load” for all PURPA projects located in Washington state regardless of generation type.
  - Generation totals approximately 22 aMW.
  - Avista does not have any PURPA resource beginning after the creation of CETA.
- Voluntary Programs
  - Solar Select reduces retail sales (6 aMW).
  - My Clean Energy does not reduce retail sales (5.3 aMW).

Project	Size (MW)
Upriver	14.5
Waste to Energy	22.7
Waste-water Digester	0.26
Deep Creek	0.41
Big Sheep Hydro	1.4
Meyers Falls	1.3
Phillips Ranch	0.02

Jurisdiction Adjustments

- All resources are allocated using “PT ratio” ~65% to Washington and ~35% to Idaho.
- Avista will plan for Idaho’s share of Palouse Wind, Rattlesnake Wind, Kettle Falls, and the new 5% Chelan slice to be transferrable to Washington for a fee.
- Avista will not plan to use Idaho’s share other hydro resources toward meeting interim targets.
- Beginning in 2030 plans to limit Idaho hydro transfers to 20 percent; other resources will continue to be transferred.
- Avista may need to revise these assumptions dependent on future commission rules.

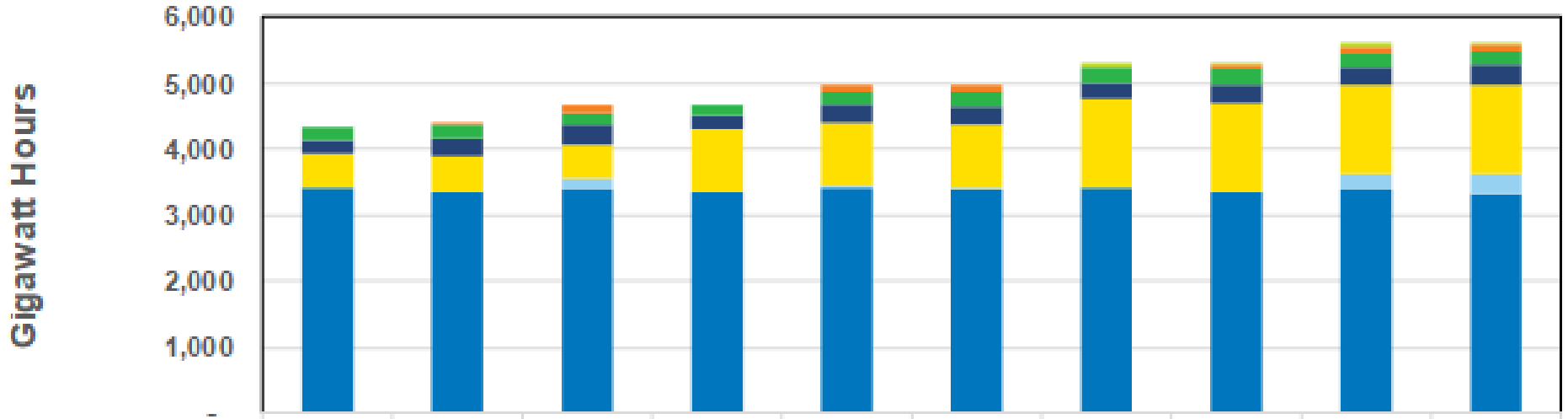
Clean Energy Position Forecast



Clean Energy Actions

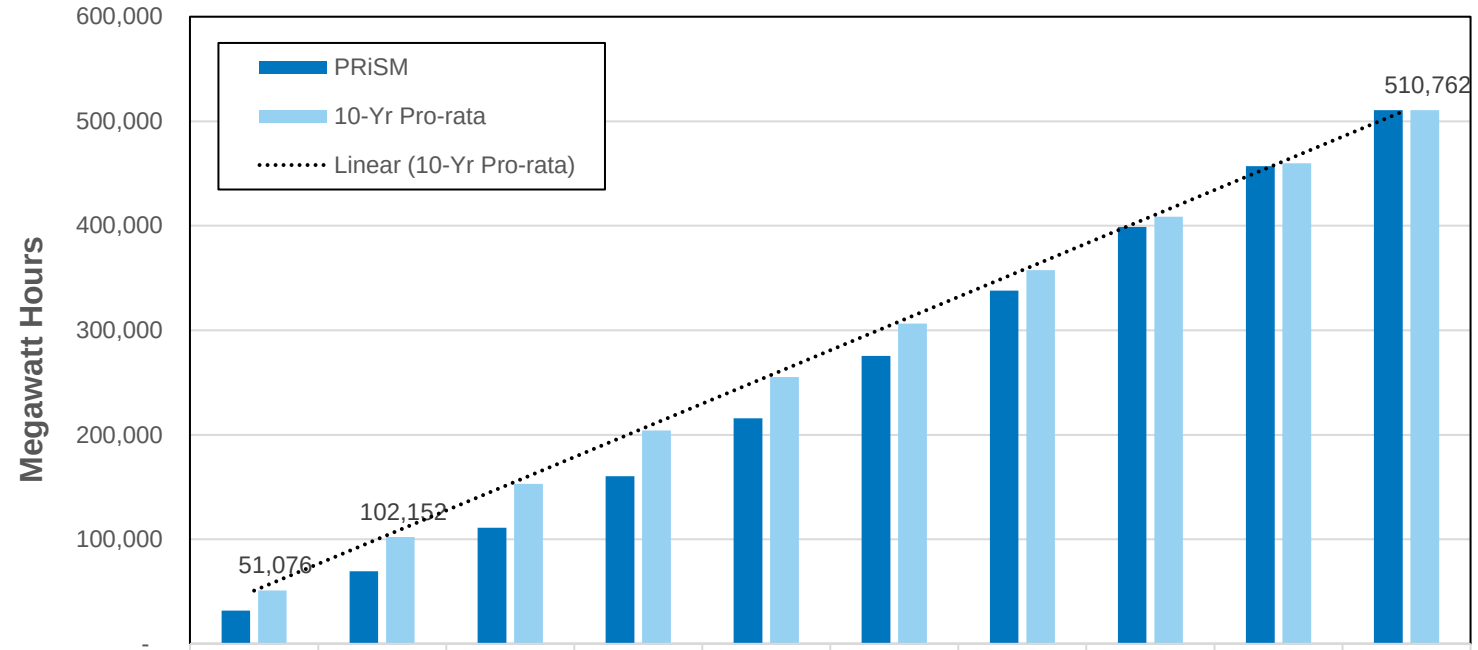
- Actions within CEIP four-year period
  - 2025: 48 aMW Clean Energy (Montana wind as proxy)
  - Begin modernization /upgrade of Post Falls (2026 return; ~4 aMW)
  - Begin modernization/upgrade of Kettle Falls (2027 completion; 6+ aMW)
- Prior to 2031 Actions
  - 2028: 48 aMW Clean Energy (Montana wind as proxy)
  - 2031: 31 aMW Mid-Columbia Hydro

Clean Energy Action Plan Summary



	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Solar	-	-	-	-	-	-	49	49	49	49
ID Biomass Transfer	-	11	105	-	103	96	-	67	95	89
Biomass	211	200	201	184	197	233	239	226	228	216
ID Wind Transfer	200	274	275	184	274	275	243	274	273	273
Wind	526	525	526	943	945	945	1,369	1,366	1,362	1,364
ID Hydro Transfer	-	-	150	-	20	38	-	-	238	304
Hydro	3,405	3,354	3,398	3,365	3,422	3,387	3,410	3,340	3,367	3,325

Energy Efficiency



	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
PRiSM	31,775	69,362	111,267	160,440	215,839	275,626	337,955	398,856	457,197	510,762
10-Yr Pro-rata	51,076	102,152	153,229	204,305	255,381	306,457	357,534	408,610	459,686	510,762

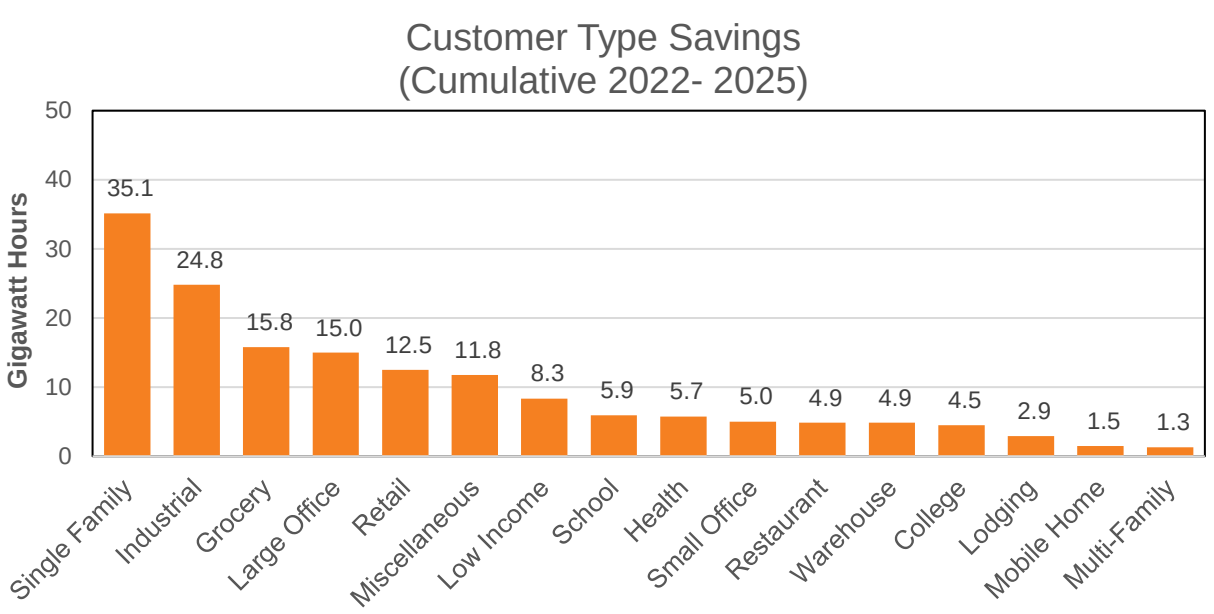
2022-2023 Biennial Conservation Target (MWh)	
CPA Pro-Rata Share	101,566
Distribution and Street Light Efficiency	219
EIA Target	**101,785**
Decoupling Threshold	5,119
Total Utility Conservation Goal	**106,904**
Excluded Programs (NEEA)	-12,896
Utility Specific Conservation Goal	**94,008**
Decoupling Threshold	-5,119
EIA Penalty Threshold	**88,889**

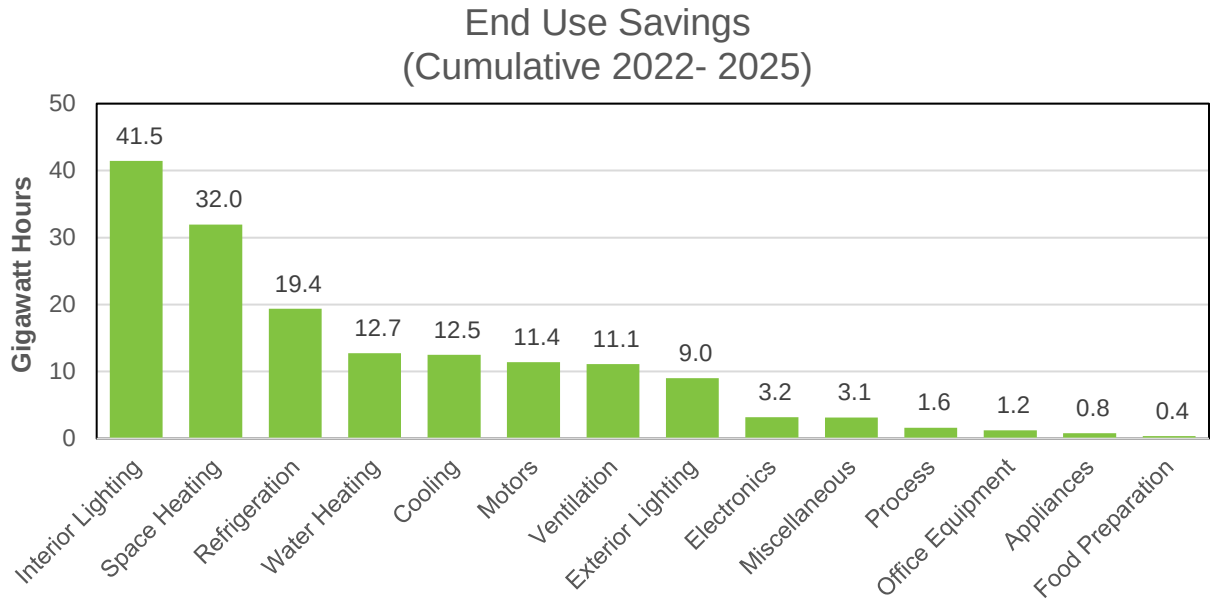
2025 WA Peak Savings Ratio

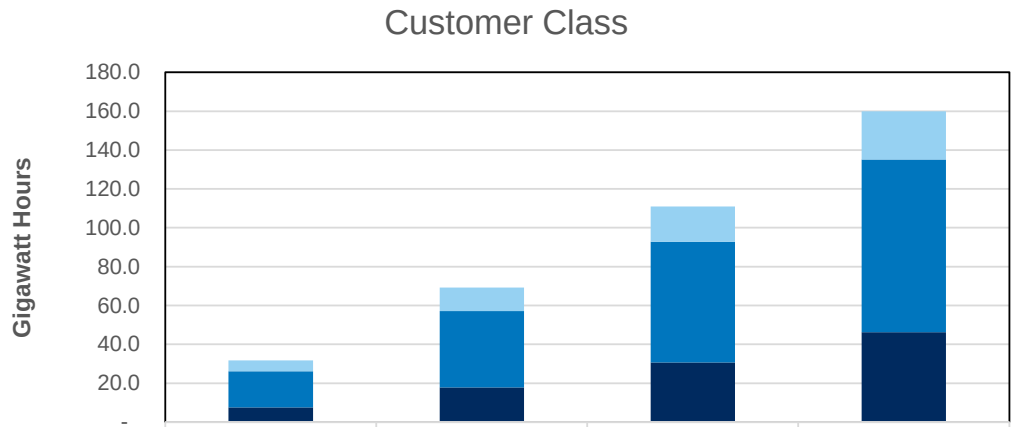
Winter Peak: 100%

Summer Peak: 117%

Energy Efficiency Selection (2022-2025)







	2022	2023	2024	2025
Industrial	5.6	12.0	18.2	24.8
Commercial	18.5	39.3	62.2	88.8
Residential	7.6	17.9	30.6	46.3

Demand Response (DR)

- The 2022-2025 time period within the CEAP has limited demand response due to no capacity need
  - Critical peak pricing begins in 2025 (estimated first year savings 1 MW)
  - Time of Use and Large Commercial & Industrial (C & I) programs are expected later
- Avista will begin several “pilot” and voluntary DR programs
  - Pilots
    - Electric Vehicle Charging (1-3 MW)
    - East Central Smart Grid (placeholder)
    - Time of Use/Peak Time Rebate for Residential
  - Voluntary
    - Large Industrial

Resource Adequacy

- Avista does not require new “capacity” resources within the CEIP four-year period
- Avista requires capacity in by November 2026 to replace the Lancaster contract.
- By 2030, Washington’s share of the capacity shortfall is
  - Winter: 171 MW
  - Summer: 92 MW
- 2021 IRP identifies in addition to the clean energy resources; Washington customers need additional capacity
  - 2021 IRP identifies 84 MW natural gas peaker to fill need
  - Actual resource will be identified in upcoming RFP.

2021 Clean Energy Implementation Plan Equity Advisory Group Meeting Feedback

Amber Lenhart, MPH

June 17, 2021

EAG Goals

To help Avista ensure customers are benefiting from the transition to clean energy through the:

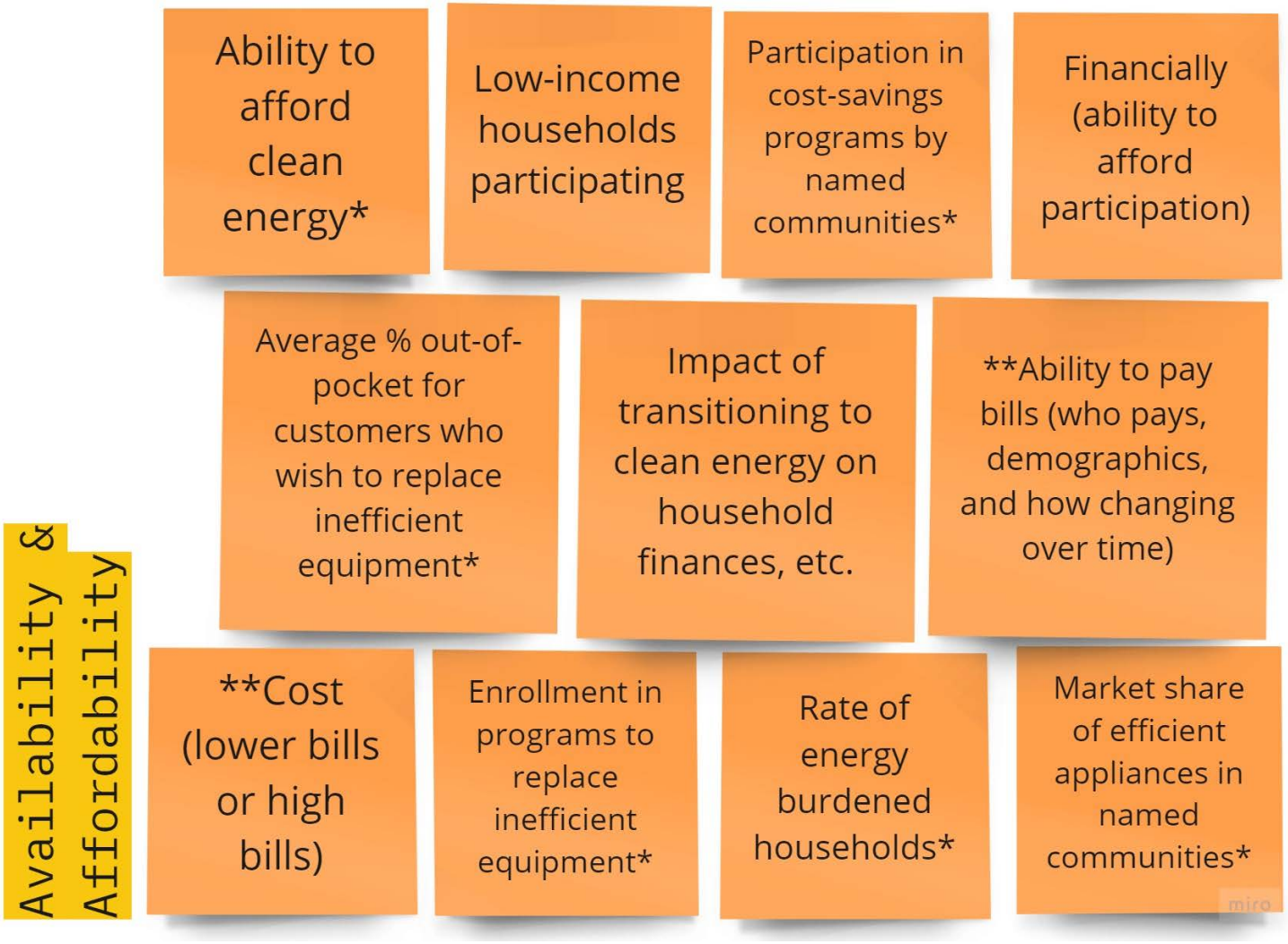
- ✓ Equitable distribution of energy and non-energy benefits and reductions of burdens to vulnerable populations and highly impacted communities
- ✓ Long-term and short-term public health and environmental benefits
- ✓ Reductions of costs and risks
- ✓ Energy security and resiliency

Equity Advisory Group

- Spokane, Airway Heights, Colville, Tekoa, Othello, Whitman County, and beyond
- Low-income and Asset Limited, Income Constrained, Employed (ALICE) households
- People of all abilities
- Veterans
- LGBTQ+
- Age diverse
- Clean energy, clean air, service and assistance providers, education, affordable housing, business, transportation, veterans health, and social and environmental justice

Identifying impacts of transitioning to clean energy

- How could the transition to clean energy benefit(or unintentionally harm) customers?
  - Through **availability?**
  - Through **access to clean energy?**
  - Through **changes to the environment?**
  - Through **energy security, reliability, and resilience?**
  - Through **community and economic development?**


Availability & Affordability
Ability to afford clean energy*
Low-income households participating
Participation in cost-savings programs by named communities*
Financially (ability to afford participation)
Average % out-of-pocket for customers who wish to replace inefficient equipment*
Impact of transitioning to clean energy on household finances, etc.
**Ability to pay bills (who pays, demographics, and how changing over time)
**Cost (lower bills or high bills)
Enrollment in programs to replace inefficient equipment*
Rate of energy burdened households*
Market share of efficient appliances in named communities*
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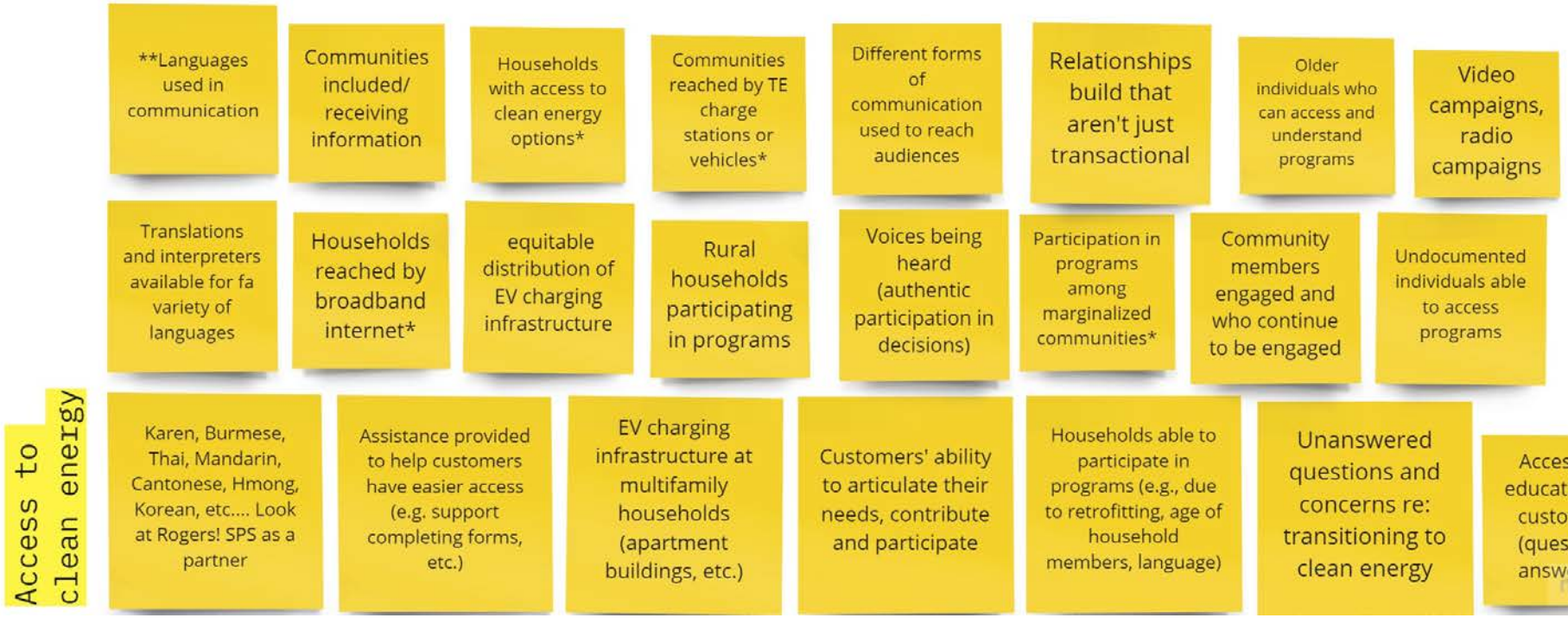
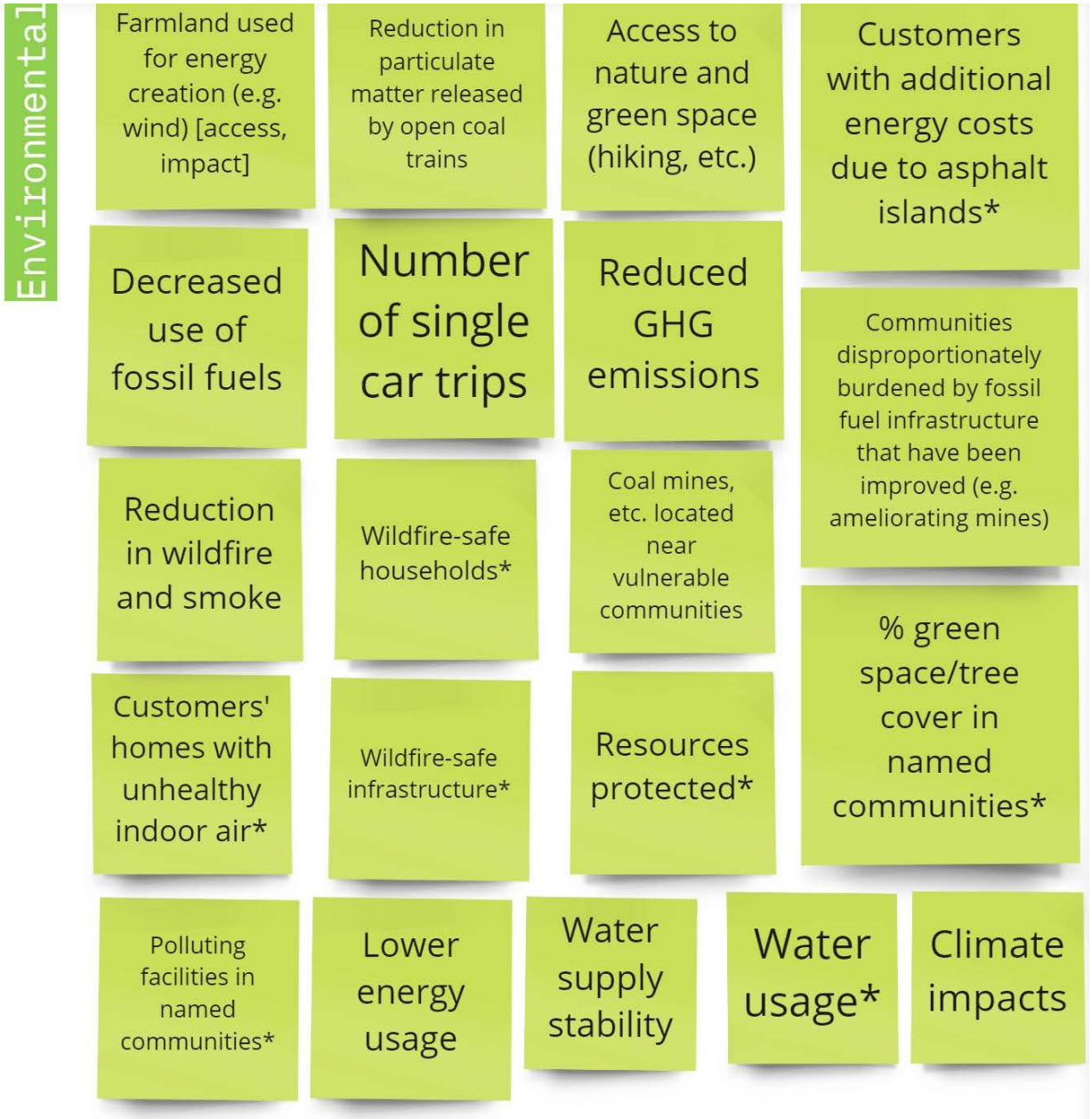
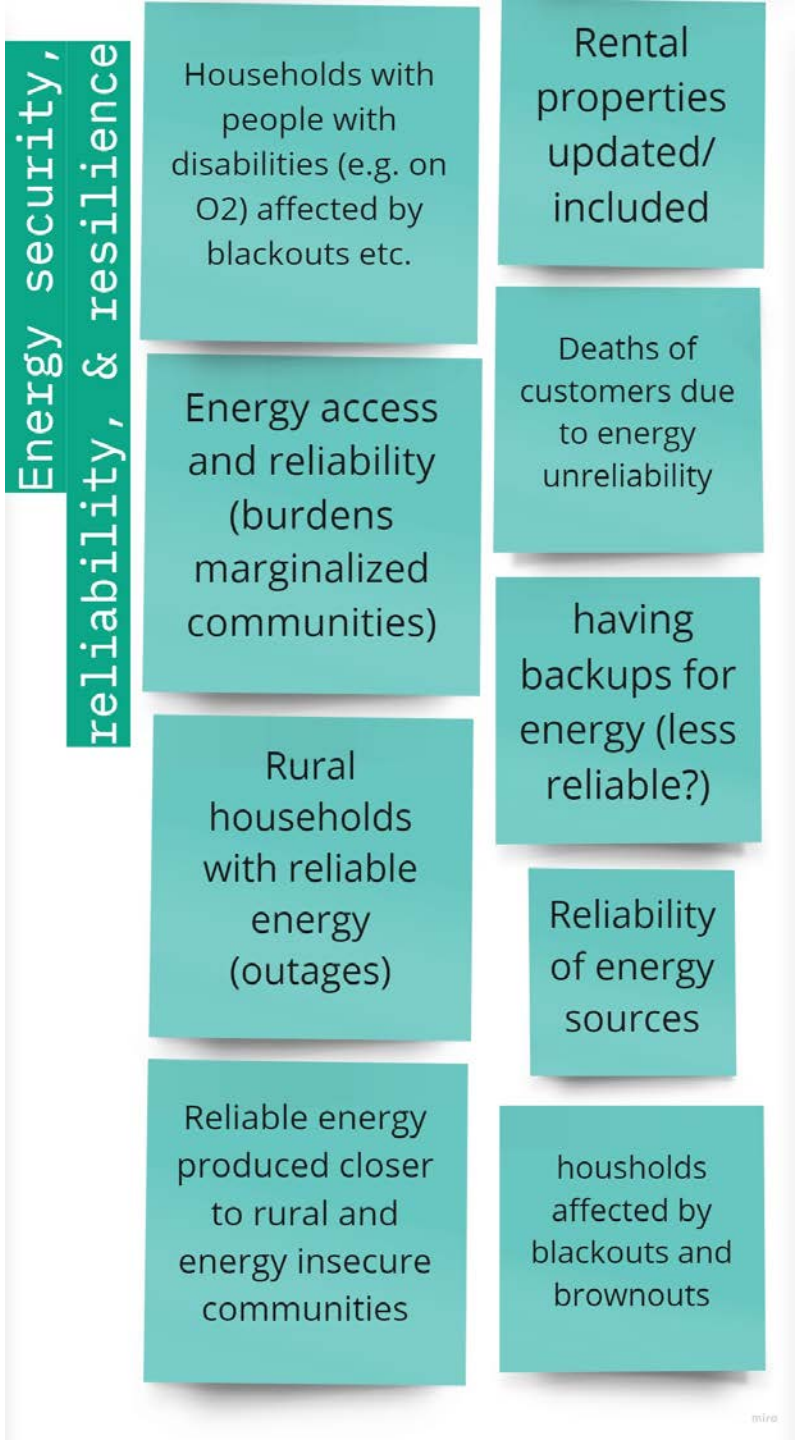
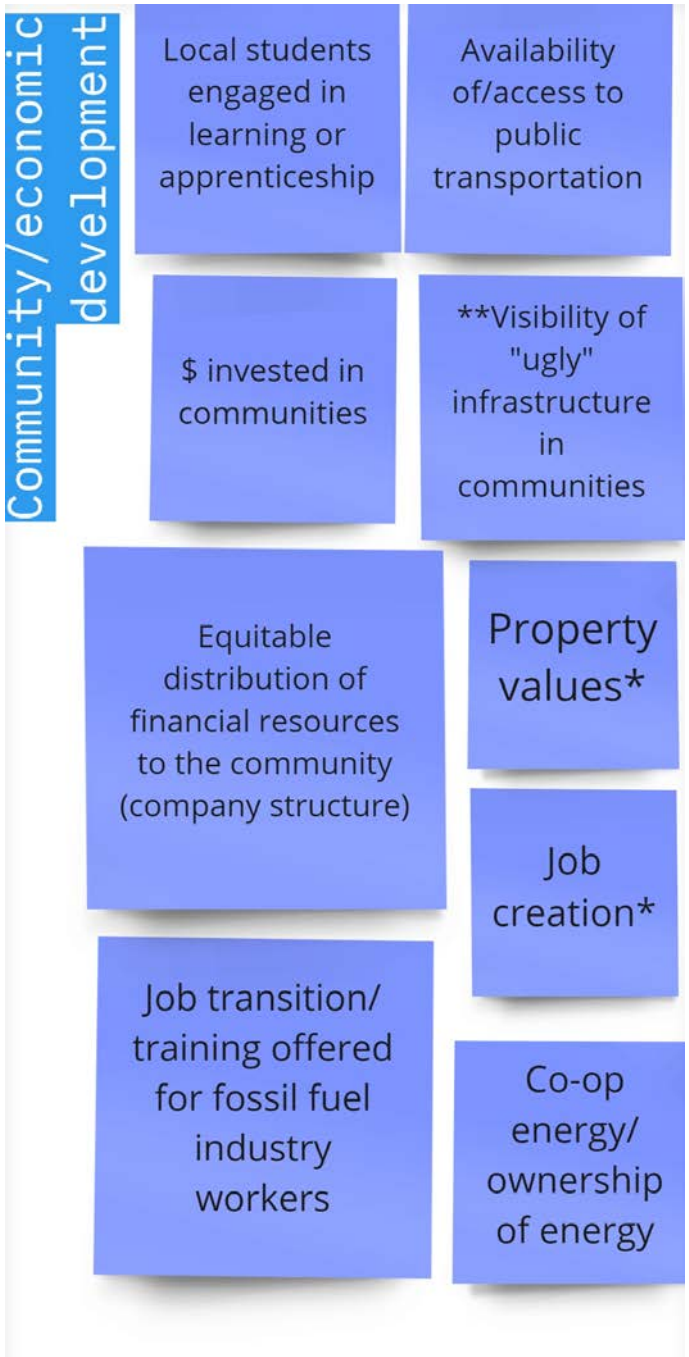
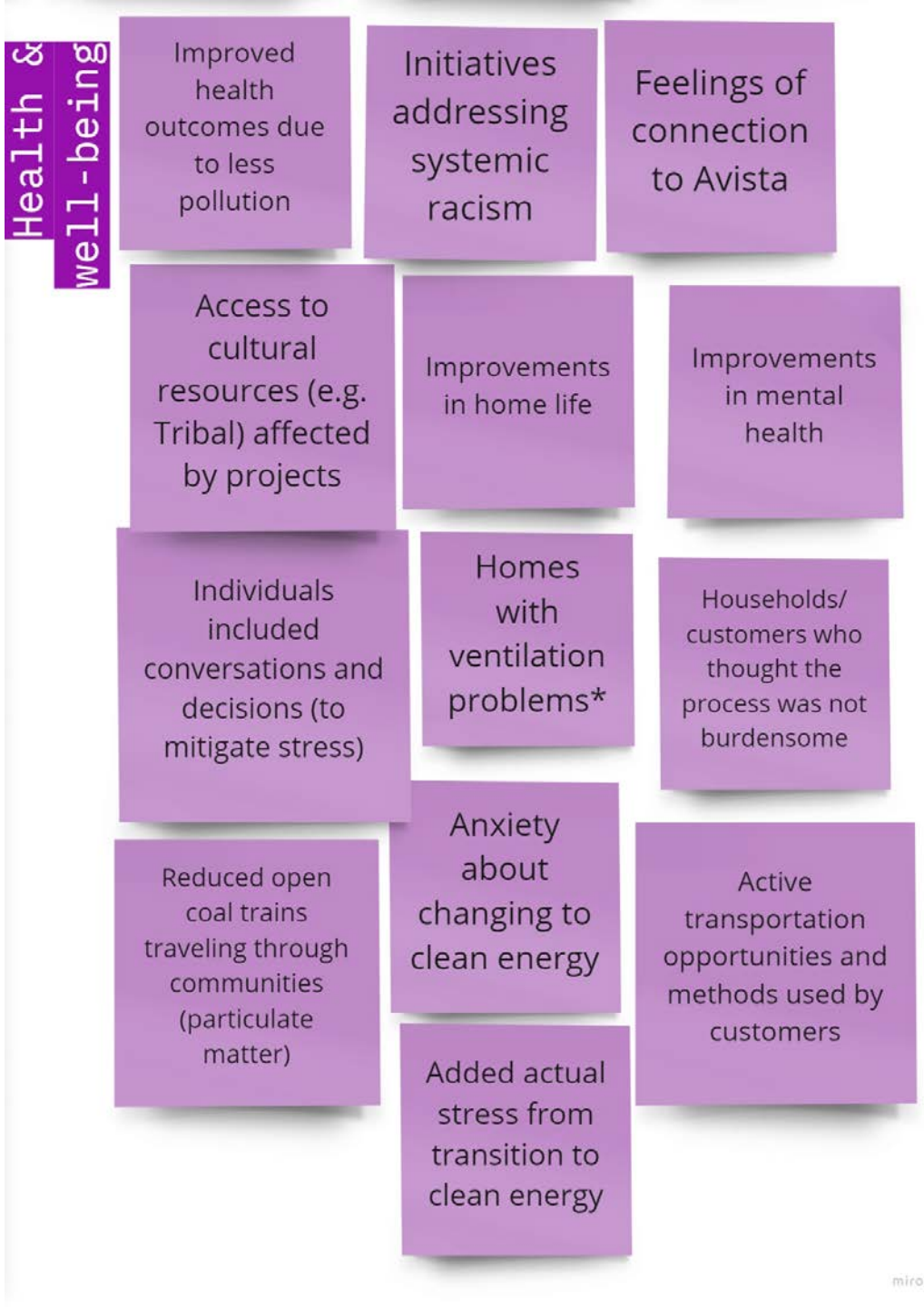

Access to clean energy
**Languages used in communication
Communities included/ receiving information
Households with access to clean energy options*
Communities reached by TE charge stations or vehicles*
Different forms of communication used to reach audiences
Relationships build that aren't just transactional
Older individuals who can access and understand programs
Video campaigns, radio campaigns
Translations and interpreters available for fa variety of languages
Households reached by broadband internet*
equitable distribution of EV charging infrastructure
Rural households participating in programs
Voices being heard (authentic participation in decisions)
Participation in programs among marginalized communities*
Community members engaged and who continue to be engaged
Undocumented individuals able to access programs
Karen, Burmese, Thai, Mandarin, Cantonese, Hmong, Korean, etc.... Look at Rogers! SPS as a partner
Assistance provided to help customers have easier access (e.g. support completing forms, etc.)
EV charging infrastructure at multifamily households (apartment buildings, etc.)
Customers' ability to articulate their needs, contribute and participate
Households able to participate in programs (e.g., due to retrofitting, age of household members, language)
Unanswered questions and concerns re: transitioning to clean energy
Accessible education for customers (questions answered)


Environmental
Farmland used for energy creation (e.g. wind) [access, impact]
Reduction in particulate matter released by open coal trains
Access to nature and green space (hiking, etc.)
Customers with additional energy costs due to asphalt islands*
Decreased use of fossil fuels
Number of single car trips
Reduced GHG emissions
Communities disproportionately burdened by fossil fuel infrastructure that have been improved (e.g. ameliorating mines)
Reduction in wildfire and smoke
Wildfire-safe households*
Coal mines, etc. located near vulnerable communities
% green space/tree cover in named communities*
Customers' homes with unhealthy indoor air*
Wildfire-safe infrastructure*
Resources protected*
Polluting facilities in named communities*
Lower energy usage
Water supply stability
Water usage*
Climate impacts


Energy security, reliability, & resilience
Households with people with disabilities (e.g. on O2) affected by blackouts etc.
Rental properties updated/ included
Deaths of customers due to energy unreliability
Energy access and reliability (burdens marginalized communities)
having backups for energy (less reliable?)
Rural households with reliable energy (outages)
Reliability of energy sources
Reliable energy produced closer to rural and energy insecure communities
housholds affected by blackouts and brownouts


Community/economic development
Local students engaged in learning or apprenticeship
Availability of/access to public transportation
$ invested in communities
**Visibility of "ugly" infrastructure in communities
Equitable distribution of financial resources to the community (company structure)
Property values*
Job creation*
Job transition/ training offered for fossil fuel industry workers
Co-op energy/ ownership of energy


Health & well-being
Improved health outcomes due to less pollution
Initiatives addressing systemic racism
Feelings of connection to Avista
Access to cultural resources (e.g. Tribal) affected by projects
Improvements in home life
Improvements in mental health
Individuals included conversations and decisions (to mitigate stress)
Homes with ventilation problems*
Households/ customers who thought the process was not burdensome
Reduced open coal trains traveling through communities (particulate matter)
Anxiety about changing to clean energy
Active transportation opportunities and methods used by customers
Added actual stress from transition to clean energy
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Questions and Discussion

- Clarifying questions?
- What stands out?
- What feels like it might be missing?

Next Steps

- Prioritizing benefit indicators
  - Which, if any, are completely outside of Avista's ability to change?
  - Of those remaining, which have the strongest:
    - Communication Power
    - Proxy Power
    - Data Power

Communication Power

To what extent is the indicator easily understandable by a broad audience?

Proxy Power

Which are critically tied to the everyone benefitting equitably from the transition to clean energy?

Data Power

For which do we have data available? Which are able to be tracked, measured, and counted?