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Redwood Coast Energy Authority Office 633 3rd St., Eureka, CA 95501

July 13, 2021 Tuesday, 6 - 7:30 p.m.

COMMUNITY ADVISORY COMMITTEE MEETING

COVID-19 NOTICE: RCEA OFFICES ARE NOT OPEN TO THE PUBLIC

Pursuant to the Governor's Executive Order N-29-20 of March 17, 2020, and the Humboldt County Health Officer's March 30, 2020, Shelter-in-Place Order, the RCEA Community Advisory Committee meeting will not be convened in a physical location. Committee members will participate in the meeting via an online Zoom video conference.

<u>To listen to the meeting by phone</u>, call (669) 900-6833 or (253) 215-8782. Enter webinar ID: 822 2338 1610. <u>To watch the meeting online</u>, join the Zoom webinar at https://us02web.zoom.us/j/82223381610.

You may submit written public comment before and during the meeting by email to PublicComment@redwoodenergy.org. Please identify the agenda item number in the subject line. Comments received before the agenda item is heard will be read into the record, with a maximum allowance of approximately 500 words per comment. Comments received after the agenda item is heard and before the meeting's end will be included in the meeting record but not read aloud during the meeting.

To make a comment during the public comment periods, raise your hand in the online Zoom webinar, or press star (*) 9 on your phone to raise your hand. You will continue to hear the meeting while you wait. When it is your turn to speak, a staff member will unmute your phone or computer. You will have 3 minutes to comment.

While downloading the Zoom application may provide a better meeting experience, Zoom does <u>not</u> need to be installed on your computer to participate. After clicking the webinar link above, click "start from your browser."

In compliance with the Americans with Disabilities Act, any member of the public needing special accommodation to participate in this meeting or access the meeting materials should email Ltaketa@redwoodenergy.org or call (707) 269-1700 at least 3 business days before the meeting. Advance notification enables RCEA staff to make their best effort to reasonably accommodate access to this meeting and its materials while maintaining public safety.

Pursuant to Government Code section 54957.5, all writings or documents relating to any item on this agenda which have been provided to a majority of the Community Advisory Committee, including those received less than 72 hours prior to the Committee's meeting, will be made available to the public at www.redwoodenergy.org.

1

COMMUNITY ADVISORY COMMITTEE MEETING AGENDA

Ą	genda Item	What / Action	When
1.	Open	Roll Call: Norman Bell Roger Hess Elizabeth Burks Richard Johnson Jerome Carman Luna Latimer Colin Fiske Ethan Lawton Catherine Gurin Dennis Leonardi, Vice Ch. Larry Goldberg, Chair Kit Mann Pam Halstead Chris Curran, Board liaison Review meeting agenda and goals.	6 - 6:05 (5 min.)
2.	Approval of Minutes	Action: Approve minutes of May 11, 2021, CAC meeting.	6:05 - 6:10 (5 min.)
3.	Non-Agenda Item Public Comment	This item is provided for the public to address the Committee on matters not on the agenda. At the end of public comments, the Committee may respond to statements, or refer requests requiring action to the Executive Director or the Board of Directors.	6:10 – 6:15 (5 min.)
4.	HCAOG 2021 Regional Transportation Plan Update	Give input to HCAOG staff regarding the Safe and Sustainable Performance Measures and Targets and other aspects of the VROOM update.	6:15 – 6:40 (25 min.)
5.	Exploring Humboldt County's Renewable Energy Futures	Hear thesis presentation by Amin Younes, HSU Energy Technology and Policy Master's degree program graduate (Information only)	6:40 – 7:05 (25 min.)
6.	Committee-Board Work Coordination	Action: Adopt practice of reporting annually on CAC accomplishments and goals to the RCEA Board of Directors at a regular Board meeting to be determined.	7:05 – 7:15 (10 min.)
7.	Member Reports	This time is provided for Committee members to share information on topics not on the agenda. At the end of member reports, the Executive Director will set requests requiring action to a future agenda or refer requests to staff or the Board.	7:15 – 7:25 (10 min.)
8.	Close & Adjourn	Summarize actions, outcomes, Board communication items, next steps	7:25 - 7:30 (5 min.)

NEXT REGULAR CAC MEETING – Tuesday, September 14, 2021, 6 - 7:30 p.m. Location to be determined.

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COMMUNITY ADVISORY COMMITTEE MEETING DRAFT MINUTES

May 11, 2021 - Tuesday, 6 - 7:30 p.m.

The agenda for this meeting was posted on May 8, 2021. Community Advisory Committee Chair Larry Goldberg called the meeting to order at 6:03 p.m., stating that the meeting was being conducted by teleconference pursuant to Brown Act waivers included in Governor Newsom's COVID-19 State of Emergency Executive Orders and in response to local efforts to reduce the spread of the virus. Chair Goldberg stated that the posted agenda outlined instructions for the public on listening to the meeting and providing comment.

Members present:

Norman Bell
Elizabeth Burks
Jerome Carman
Colin Fiske
Larry Goldberg, Chair
Catherine Gurin
Pam Halstead

Roger Hess
Richard Johnson
Luna Latimer
Dennis Leonardi, Vice Chair
Kit Mann
Amin Younes
Stephen Avis, Alternate Board Liaison
(non-voting)

Staff and others present:

Aisha Cissna, Regulatory & Legislative Policy Manager Richard Engel, Power Resources Director Michael Furniss, RCEA Consultant Matthew Marshall, Executive Director Mahayla Slackerelli, Account Services Manager Nancy Stephenson, Community Strategies Manager Lori Taketa, Board Clerk

Minutes Approval

Chair Goldberg invited comment. There were no comments from CAC members or the public. Chair Goldberg closed the public comment period.

Motion Halstead, Second Johnson: Approve minutes of March 9, 2021, CAC meeting.

The motion passed with a unanimous roll call vote. Ayes: Bell, Fiske, Gurin, Goldberg, Halstead, Hess, Johnson, Latimer, Mann, Younes. Noes: None. Abstain: None. Absent: Burks, Carman, Leonardi.

Chair Goldberg invited public comment on non-agenda items. No member of the public commented. Chair Goldberg closed the public comment period.

Non-Agenda Item Public Comment

Member of the public Suzanne Atiyeh submitted written comment requesting reconsideration of offshore wind over concerns about seabird impacts.

Community member Ken Miller emailed requesting increased support for widespread distributed solar energy and storage. The group discussed how RCEA supports solar energy at all scales and has not focused solely on rooftop solar; how both distributed energy and utility-scale generation are necessary: limiting local energy generation development to fulfil the county's needs does not address more widespread needs; and that developing solar microgrids to fulfil the county's needs would be inequitable, prohibitively expensive and have undesirable environmental effects. Staff was asked to present statistics on dollars RCEA invests per kilowatt by technology type and estimated annual energy production of those sources so the community can compare and see how much of each type is consumed.

Members Burks and Carman and Vice Chair Leonardi arrived during this discussion.

Time of Use Rate Report (information only)

Account Services Manager Slackerelli reported on PG&E and RCEA's rollout of time-ofuse billing, part of a statewide push to reduce electricity usage during the early evening when electricity is the most expensive and the dirtiest. Humboldt County residents are expected to do well on the new rate plans due to low air conditioner use. RCEA is offering bill protection during the transition. Coming changes for business and agricultural customers were outlined.

The committee discussed how RCEA provides large customers with rate plan guidance based on use patterns and is researching automated demand response technology to automatically turn off customers' appliances when power prices are high. Staff will provide an update on the CPUC's Self-Generation Incentive Program (SGIP), which is funding \$40 million in battery installation incentives in the county after the Board approves a behind-the-meter resource adequacy contract with Swell Energy. Many of the local SGIP battery systems will be eligible to participate in the program which will aggregate the batteries into a virtual power plant that can increase resilience.

Vice-Chair Leonardi offered to see if individual consultations or workshops on the rate plan changes by RCEA staff would be helpful for agricultural industry customers.

There was no public comment on this item.

Biomass Alternatives Subcommittee Update

Power Resources Director Richard Engel reported on the recently approved contract extension with Humboldt Sawmill Company (HSC) which will help RCEA meet SB 350

long-term power procurement contract requirements reliably. In response to public comment, the Board directed staff to periodically meet with HSC representatives to review alternative biomass uses. Staff requested input from the CAC for a separate memorandum of understanding (MOU) for this review. The committee suggested that the MOU include an HSC commitment to provide data necessary to assess alternative biomass uses, and to consider non-economic benefits, potentially with quantified carbon market data.

Staff requested reconsideration of the Alternative Biomass Uses Subcommittee's sunset date, and expansion of the group's scope of work to include providing input on the memorandum of understanding. The group expressed support for sunsetting the subcommittee upon formation of a Biomass Technical Advisory Group.

The group discussed community concerns over committing to a 10-year contract for non-renewable, carbon dioxide-creating energy generation; how RCEA procures much more solar than biomass energy; how local biomass energy supporters also voiced their views to the agency and Board; how power purchase decisions should be based on carbon emissions and climate change science; how biomass energy helps address mill waste disposal; and how HSC will still sell biomass-generated power to other entities should RCEA end the contract, exporting biomass energy benefits while retaining negative impacts. Member Bell was invited to participate in Alternative Biomass Uses Subcommittee meetings.

Member of the public Dan Chandler inquired whether RCEA would purchase power from the DG Fairhaven biomass plant's new local owner, and about how RCEA could facilitate alternative biomass use factories in Humboldt County. RCEA has no current plans to purchase power from the new DG Fairhaven owner and is in early-stage conversations with County economic development staff members about developing markets for biomass material.

Bond Subcommittee Report

Regulatory and Legislative Policy Manager Cissna reported on the County's request for RCEA to investigate the viability of potential energy resilience and independence revenue bond projects. The Bond Subcommittee assessment criteria valued projects that could generate revenue, reduce greenhouse gas emissions and increase the county's resiliency. Options selected by the subcommittee were: an ownership stake in a small offshore wind project; a feed-in tariff-style local solar project; and a low-interest customer financing for energy efficiency and distributed generation projects.

The subcommittee developed ideas which would not likely generate substantive revenue such as: a subscription transportation service; an advanced particulate emission technology biomass plant; and unfunded projects identified in regional planning documents such as the Humboldt County Regional Transportation Plan update, the Countywide Climate Action Plan and RCEA's RePower Humboldt strategic plan. Staff pointed to new state and federal infrastructure and stimulus plans and asked whether the subcommittee's scope should be expanded to seeking funding for some of these non-revenue generating projects. The new proposed subcommittee sunset date would be the end of 2022. The group expressed support for this expanded scope.

Members Mann and Younes left the meeting at 7:33 p.m. There was no public comment on this item.

Member Reports

- Member Gurin reported the draft Countywide Climate Action Plan will be ready for public review in June.
- Member Fiske stated that the Nordic Aquafarms project CEQA comment period is open. The project's peak electrical load is expected to be 21 MW.
- Vice-Chair Leonardi inquired about plans to install solar energy to offset the Nordic Aquafarm project's average load which is comparable to that of Arcata. Staff responded that conversations have begun on integrating the load and the increased greenhouse gas emissions into the CCE program's renewable energy portfolio.
- Member Hess stated that the aquafarms project would reduce greenhouse gas intensive shipping of salmon from the East to West Coast.
- Member Carman requested that Member Younes present his master's thesis
 project findings on potential Humboldt County renewable energy development.
 He also reported that Humboldt County Association of Governments' early
 Regional Transportation Plan Update drafts showed exciting performance
 metrics relating to RCEA's RePower Humboldt transportation goals.
- Member Burks reported that different chapters of the Regional Transportation Plan will be available and that she will present the update at the next meeting.

Summarize actions, outcomes, Board communication items, next steps.

- CAC will provide input on Community Choice Energy program decision-making priorities at a future meeting.
- Staff will present statistics on dollars RCEA invests per kilowatt by technology type and estimated annual energy production so the community can see how RCEA considers economics in energy procurement decisions.
- Staff will report on the Self-Generation Incentive Program after the Swell contract approval.
- Vice-Chair Leonardi will reach out to agriculture industry colleagues to see if workshops or individual consultations are needed to work with billing changes.
- A workshop or video to educate small- and medium-size businesses on loadreduction, promoted through local chambers of commerce, was requested.
- Humboldt Sawmill Company will be asked to provide data necessary to investigate alternative biomass uses.
- Member Bell will participate in Alternative Biomass Uses Subcommittee meetings.
- The Alternative Biomass Subcommittee will remain active until a Biomass Technical Advisory Committee is formed.

Chair Goldberg adjourned the meeting at 7:42 p.m.

Lori Taketa Board Clerk



COMMUNITY ADVISORY COMMITTEE STAFF REPORT Agenda Item # 4

AGENDA DATE:	July 13, 2021
TO:	RCEA Community Advisory Committee
PREPARED BY:	Elizabeth Burks, HCAOG Executive Director and CAC member
SUBJECT:	HCAOG 2021 Regional Transportation Plan Update

SUMMARY

The Humboldt County Association of Governments (HCAOG) is currently updating the Regional Transportation Plan, *Variety in Rural Options of Mobility (VROOM)*. *VROOM* is a document with a 20-year planning horizon, updated every four years. The current update is scheduled to be adopted by December 2021. As general plans do for cities and the unincorporated county, the Regional Transportation Plan for HCAOG sets goals, objectives, and policies for future transportation demand and investments.

The current *VROOM* (2017) overall goals and objectives are attached. HCAOG staff is currently in the process of preparing draft update chapters and engaging with the public and HCAOG Board and Committees to get feedback on changes to be incorporated for the update. A flier detailing how to participate in a survey and engagement opportunities is attached.

For the 2021 update, staff has recommended reorganizing and adding new chapters to:

- (a) bring to the fore strategies for meaningfully addressing (reducing) the transportation sectors' levels of greenhouse gas emissions;
- (b) bring to the fore the opportunities for a better quality of place when land use and transportation are made safer, more equitable, and more integrated; and
- (c) integrate goals, policies, and actions committing to racial equity, justice, and inclusion in transportation.

For the first time *VROOM* will include Safe and Sustainable Performance Measures and Targets (attached). Last year, the HCAOG Policy Advisory Committee formed Greenhouse Gas (GHG) Targets Ad Hoc Committee. The Committee members were HCAOG Chair Mike Johnson, Eureka Mayor Susan Seaman, Arcata Mayor Michael Winkler (until December 2020), and Caltrans Planning North Chief Kevin Tucker (until March 5, 2021).

The Ad Hoc Committee opened their meetings for public attendance and open dialogue. Community members who attended more than once included staff or representatives of Redwood Coast Energy Authority (RCEA), Humboldt County Planning & Building Department, Coalition for

Responsible Transportation Priorities (CRTP), Climate 911, Environmental Indicator Accounting Services, and non-affiliated community members.

In March 2021 the HCAOG Board accepted the Ad-Hoc Committee's recommendations and approved them for public release as part of updating VROOM.

STAFF RECOMMENDATION

Give input to HCAOG staff regarding the Safe and Sustainable Performance Measures and Targets and other aspects of the *VROOM* update.

ATTACHMENTS

VROOM 2017 Overall Goals and Objectives RTP VROOM Update public engagement flier Safe and Sustainable Performance Measures and Targets

VROOM - Regional Transportation Plan (2017)

A **goal** is a vision to try to attain.

An **objective** is a more clearly defined target, or direction, to achieve a goal. **Policies** define an organization's approved course of action to achieve specific objectives.

VROOM OVERALL GOAL: HCAOG's goal is for Humboldt County to have a comprehensive, coordinated, sustainable, and balanced multi-modal transportation system, so that people in the region can travel and move goods safely and efficiently by the modes that best suit the individual or business/industry, and society at large.

OVERALL OBJECTIVES: Program all transportation funds based on multi-modal transportation goals and objectives, and needs and priorities as established in the Regional Transportation Plan. HCAOG will pursue **six main objectives/planning priorities**. The objectives support one another and will apply to each transportation mode, framing each mode's policies. In alphabetical order, the objectives are

- ❖ Balanced Mode Share/Complete Streets Increase multi-modal mobility, balanced mode shares, and/or access. Mobility means having travel choices (for people and goods) with predictable trip times. A balanced mode share means all transportation modes are available in proportion to their efficiency and short-term and long-term costs and benefits. Increased access means more options for people to reach the goods, services, and activities they need.
- ❖ Economic Vitality Support the local or regional economy by improving goods movement and transportation access, efficiency, and cost-effectiveness; by enhancing economic attractors (e.g. via walkable streets, multiuse trails, transit service, freight access, shared mobility services); and by indirectly cutting health care costs due to more active transportation or less transportation-related pollution, and by reducing consumption of foreign oil.
- ❖ Efficient & Viable Transportation System Make the transportation system operate more efficiently, such as by increasing multimodal connectivity, increasing opportunities for short trips made via walking or biking, reducing traffic congestion, and using Intelligent Transportation System (ITS) management (e.g. Greater Eureka Area Travel Demand Model, Street Saver, GPS tracking on transit buses, other management programs). Make the system more financially and operationally viable such as by prioritizing cost-effective investments, including climate-change and sea-level-rise adaptation and resiliency in planning and design, pursuing stable funding, and preserving transportation assets to maximize resources and future use.
- ❖ Environmental Stewardship & Climate Protection Enhance the performance of the transportation system while protecting and enhancing the natural environment. Strive to achieve goals of California Global Warming Solutions Act of 2006 (AB 32) and Sustainable Communities and Climate Protection Act of 2008 (SB 375), protect and improve air, water, and land quality, help reduce transportation-related fuel and energy use, help reduce single-occupancy-vehicle (SOV) trips and motorized vehicle miles traveled (VMT), etc.
- ❖ Equitable & Sustainable Use of Resources Advocate for costs and benefits (financial, environmental, health, and social) to be shared fairly. Prioritize projects based on cost effectiveness as well as need and equity for underserved populations. Coordinate transportation systems with land use for efficient, sustainable use of resources and minimize the consumption and use of finite resources such as fossil fuels.
- ❖ <u>Safety</u> − Increase safety for users (one or more modes). Reduce transportation-related fatalities and serious injuries.

COMPLETE STREETS GOAL: Throughout Humboldt County, the streets, roads, and highway system meet the transportation and safety needs of all users, including pedestrians, transit users, bicyclists, motorists, the elderly, youth, and the disabled. The region's jurisdictions have the resources to preserve, enhance, and maintain the roadway network to support bicycle, bus, pedestrian, automobile, and truck travel.

COMMUTER TRAILS GOAL: Humboldt's trail network is regionally and locally connected and gives people options countywide for safe, active transportation. The California Coastal Trail within Humboldt County is a continuous public right-of-way along the coastline and a contiguous trail for non-motorized travel. The CCT fosters appreciation and stewardship of the scenic and natural resources of the North Coast.

TRIBAL TRANSPORTATION: The North Coast Tribal Transportation Commission's mission statement is: To promote safe and efficient modes of transportation, and to improve transportation, identify transportation needs, and advocate for transportation issues of tribal communities; to collaborate on issues between all of the Native American Tribes; and, to solve problems concerning transportation issues among the tribes.

PUBLIC TRANSPORTATION GOAL: Achieve an integrated and sustainable multimodal transportation system that provides public transportation options for all users traveling in Humboldt County. Transit and paratransit users have options for affordable, reliable and efficient transit service that effectively meets their local and regional mobility needs.

AVIATION GOAL: The regional aviation system has safe and efficient facilities and services. It is part of a strong multimodal transportation system and is adequately linked to the national aviation network for freight and passenger service. Humboldt's public-use airports and adjacent land uses and circulation patterns are compatible.

GOODS MOVEMENT GOAL: Goods move in and out of Humboldt County efficiently and cost-effectively. The region's maritime, aviation, road, and rail facilities are integrated into an intermodal transport system. The system moves passengers and goods in a manner that is economically sustainable and environmentally compatible.

EMERGENCY EVACUATION GOAL: Humboldt County has a transportation system that will successfully serve its population in the event of a major disaster, hazard, or emergency, thereby mitigating the potential medical, financial, and emotional traumas to the community.

GLOBAL CLIMATE CRISIS GOALS: Reduce greenhouse gas emissions contributed by transportation while building and maintaining a transportation system that is truly multimodal and equitable. Minimize the negative health, social, economic, and environmental impacts caused by global climate change and sea-level rise.











Humboldt County Regional Transportation Plan Update

We Need Your Input!

Humboldt County Association of Governments (HCAOG), our Regional Transportation Planning Agency, is seeking public feedback to keep Humboldt County's transportation networks safe, convenient, connected and equitable. Be a part of shaping transportation programs and strategies that support mobility, environmental health, social equity, and improve quality of life standards for all residents.

Visit the project website at: http://bit.ly/HumboldtRTP2021

Take the survey and stay tuned for more public outreach events including a community meeting this fall.



http://bit.ly/RTP2021 Survey



http://bit.ly/RTPEncuesta

Informational Pop-Up Events

Blue Lake Annie & Mary Days
Sunday July 11 11am to 2pm

Fortuna Farmers Market
Tuesday July 13 3pm to 6pm

Willlow Creek
Community Health Center
Wednesday July 21 10am to 1pm

Garberville Farmers Market Friday July 23 11am to 3pm

Downtown HoopaWednesday July 28 10am to 1pm

Arcata Farmers Market
Saturday August 7 10am to 2pm

McKinleyville Farmers Market
Thursday August 26 3pm to 6pm

Bayshore Mall (near Ross/DMV) Saturday August 28 11am to 2pm

Regional Transportation Plan (RTP) Update

VROOM Update: Safe & Sustainable Transportation Targets

	PERFORMANCE	REGIONAL TARGET	METRIC	AVAILABLE DATA SOURCES	DATA
	Reduce GHG emissions in Air District (NCUAQMD)	I. Reduce on-road transportation-related fossil fuel consumption in Humboldt County.	~ Transportation fuel sales (gasoline/diesel sales in gallons).	(">" sources are available now) > CA Energy Commission, CA Annual Retail Fuel Outlet Report Results (CEC-A15: by county).	Every 4 years
E	Percent Mode Shift (Refers to "Mode Shift" in project tables)	I. Increase the percentage of all trips, combined, made by walking, biking, micromobility/matched rides, and transit to at least 30% by 2030 and 40% by 2050.	~ # of miles of protected bikeways and sidewalks, & % of good intersections on arterials and collectors, and spacing/gaps between those intersections. ~ % of all road miles that are connection nodes at Level of Traffic Stress (LTS) levels 1 or 2. ~ # of barriers [TBD] to low-stress bike/ped transportation between major residential areas and major destinations (identified by network analysis)	> Potential data source: www.bts.gov/browse-statistical-products-and-data/trips-distance/explore-us-mobility-during-covid-19-pandemic ~ Conduct an LTS Network and Connectivity Analysis > Bikeable App (on Google Play) > Data from People for Bikes > Local count data	Every 4 years
		II. Double transit trips by 2025, and again by 2030, and again by 2040.	~ # of transit boardings ~ # of transit trips	> Transit operators' ridership data > U.S. Census	Annually Every 4-5 years
		III. Complete a level-of-traffic-stress (LTS) and connectivity analysis of the bike and ped network in the	Yes/No (completed or not)	~ Conduct an LTS Network and Connectivity Analysis	Every 4 years

	PERFORMANCE MEASURE-OBJECTIVE	REGIONAL TARGET	METRIC	AVAILABLE DATA SOURCES (">" sources are available now)	DATA SCHEDULE
		Greater Humboldt Bay Area by FY 2023/24, and countywide by 2026.		(* Sources are available now)	
C	Reduce Vehicle Miles Travelled (VMT) by Car¹ (Refers to "Lowers VMT" in project tables)	I. Reduce VMT per capita by at least 25% by 2030, and 40% by 2050. (VMT includes zero-emission trips)	~ VMT/population ~ VMT/ #households > Ratio between the number of light vehicles registered to residents of Humboldt County vs. the number of households or licensed drivers.	> State DOT data, e.g. California Public Road Data (PRD), derive statistical information from Caltrans' Highway Performance Monitoring System (HPMS). ² ~ Apply a correction factor for Humboldt County (TBD). > Registration data from Department of Motor Vehicles (DMV).	4 years
D	Zero-Emission Vehicle Infrastructure (Refers to "EV Charging" in project tables)	I. ZEV Charging Sites Evaluation Plan: By 2025 evaluate priority of feasible public-charging spaces throughout region. Priority will value equity. Study may be multi-phased, first at community or TAZ/census block level, and second at neighborhood and station location level.	(I) ~ Completion of charging- sites evaluation plan.	(I) Presence/absence of completed plan.	(I) Target year
		II. 80% of jurisdictions adopt pro-EVCS and electrical upgrade policies and building codes by 2022, and 100% by 2025.	(II) ~ Number of jurisdictions with building codes that require installing "EV-ready" electrical wiring or EVCS in new development and major remodels. ~ ~ Number of jurisdictions with building codes that require electrical panel	(II) > Agencies' adopted policies, building codes.> Agencies' annual budgets.	(II) Annually

PERFORMANCE MEASURE-OBJECTIVE	REGIONAL TARGET	METRIC	AVAILABLE DATA SOURCES (">" sources are available now)	DATA SCHEDULE
		upgrades for residential alteration permits, and 200A utility panel ratings for all new residential units.		
		~ Amount of funding dispensed to subsidize and incentives EVCS.		
Zero-Emission Vehicle Infrastructure	III. EV Charging Infrastructure: a) Electric vehicle charging stations serving, by 2025, at least 25% of public, and commercial, industrial, and multi-family residential private parking spaces that accommodate parking for more than 4 hours, and by 2050 serving 50% of such parking spaces. (*Adjustments to be calculated for oversized parking lots/excess parking. Note: target % can be met by reducing total parking spaces and by adding EV-charging spaces.) b) Increase number of chargers per population. c) 100% of households	(III) ~ Number of AC/DC chargers per household at the transportation analysis zone (TAZ) or census block level. Related metrics as possible: ~ Number of chargers per household without off-street parking ~ Public AC chargers/population (or per registered vehicles) ~ Public DC chargers/population (or per registered vehicles) at (TAZ) or census block level. ~ Coverage of fast chargers located in (1) high density areas and (2) adjacent to	(III) > Building permits > Alternative Fueling Station Locator (by National Renewable Energy Laboratory) — public and private non-residential alternative fueling stations. https://developer.nrel.gov/docs/transportation/alt-fuel-stations-v1/ https://afdc.energy.gov/stations/#/find/nearest > Plugshare.com app. (Count the number of stations) ~ Manual counts; surveys.	(III) 4 or 5 years
	without off-street parking have access to public fast-chargers within ¼ mile of their home by 2035.	corridors with high traffic volumes (e.g., coverage of chargers per acre or linear ½-mile).		

PERFORMANCE MEASURE-OBJECTIVE	REGIONAL TARGET	METRIC	AVAILABLE DATA SOURCES (">" sources are available now)	DATA SCHEDULE
	 d) Equity performance measure: EVCS are equitably installed in MF residential areas and higher density/lower income areas. e) For employee parking lots and MF residential parking of spaces* (or more), 25% of spaces have electric vehicle charging stations by 2025, 35% by 2035, and 50% by 2050. 	~ Counts by jurisdiction: # of electric vehicle charging stations at qualifying work sites and MF residences. *For parking lots with excess capacity, use average utilization of spaces.		
Zero-Emission Vehicle Infrastructure	 IV. Hydrogen Fueling: a) In Humboldt County, by 2024 hydrogen fuel is available for public transit and long-haul commercial fleet vehicles, with green hydrogen fuel available as much and as soon as possible. b) In Humboldt County, by 2030 there is sufficient hydrogen fueling infrastructure and green hydrogen fuel available to enable inter-county travel of medium and heavy-duty fuel-cell EVs 	~ Coverage of hydrogen fueling infrastructure countywide.		

	PERFORMANCE MEASURE-OBJECTIVE	REGIONAL TARGET	METRIC	AVAILABLE DATA SOURCES (">" sources are available now)	DATA SCHEDULE
E	Zero-Emission School Buses & Public Fleet Vehicles	I. 100% of public buses and school buses are zero- emission by 2030. (See Innovative Clean Transit Rules)	(I) ~ Survey the fleet inventory of public transit vehicles and school buses.	 Develop a baseline of vehicle fleets in local area. Follow reporting from transit agencies to State. 	Every 2 to 4 years, and target years.
	(Refers to "ZEV Purchase" in Public Transportation project table)	 II. Each governmental agency starts converting fleet vehicles to zero-emission by 2022, with interim targets to meet the State's year-2035 goals: 25% of public fleet passenger cars, SUVs, and forklifts are zero-emission by 2025, and 50% by 2030. 30% of public fleet medium-duty and pick-up trucks are zero-emission by 2030. III. 100% of public fleet work vehicles are zero emission by 2036 (with government incentives and technology available and subsidized). 	(II, III) ~ Survey the fleet inventory of each jurisdiction (local, regional, state, Native American governments).	> Transit Development Plan	
F	Efficiency & Practicality in Locating New Housing (Refers to "Housing" in Land Use project table)	I. By 2021/22, start identifying top locations to survey/track for their access to essential destinations (i.e. study trip origindestinations).	I) Presence of start-up/initial progress.	I) ~ Survey/report from HCAOG II) > Travel time API (application programming interface), combined with General Plan Housing Elements.	Every 2 to 4 years

	PERFORMANCE MEASURE-OBJECTIVE	REGIONAL TARGET	METRIC	AVAILABLE DATA SOURCES (">" sources are available now)	DATA SCHEDULE
	Efficiency & Practicality in Locating New Housing	II. By 2023 have baseline "connectivity scores" for 40% or more of cities' and county's buildable parcels, including infill development.	II) Percentage of buildable parcels with baseline "connectivity scores." Track outcomes for underserved communities to gage success in investment equity.	> Apps such as "15-Minute Neighborhood" ³ (if needed, overlay maps with data from apps that score local roads for non-driver safety (e.g. Walkscore, Bikescore). (Open-source apps and data will only increase from now to 2035.)	
		III. Starting by 2022, 80% of all new permitted housing units are in places with safe, comfortable, and convenient access to employment, shopping, and recreation by walking, biking, rolling, or transit.	III) Walkscore, Bikescore, and transit score within ¼ or ½ mile radius of new housing. Track outcomes for underserved communities to gage success in investment equity.	III) Same as above (ii).	
		IV. Starting by 2022, all new housing contributes to a countywide reduction in per capita VMT from cars. V. By 2023/24, all jurisdictions have adopted GP/zoning incentives for building in "highly connected" areas and for other climate-friendly housing-development.	IV) Estimated VMT per capita from new housing. V) Number of jurisdictions with adopted General Plan/zoning incentives for GHG-friendly building/development (aligned with Climate Action Plan policies and measures).	IV) ~ Survey local jurisdictions' housing permits: VMT analyses from CEQA assessments, Climate Action Plans, VMT models, and other sources. V) ~ Survey of adopted plans, codes.	
G	Convenient Access to Destinations (Refers to "Access" in project tables)	I. By 2035, 60% of the county's population—equitably distributed regionwide—live in homes/apartments/dorms where they can safely,	• Within urbanized clusters, the range of essential destinations that people can get to, in 25 minutes or less, by biking, walking, or transit. Track outcomes for	> Travel time API (application programming interface)	Every 5- years

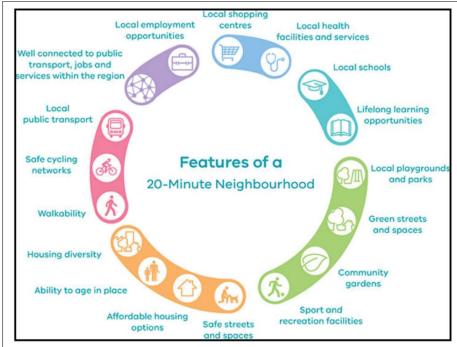
	PERFORMANCE	REGIONAL TARGET	METRIC	AVAILABLE DATA SOURCES	DATA
	MEASURE-OBJECTIVE	comfortably, and	underserved communities to	(">" sources are available now)	SCHEDULE
		conveniently travel to	gage success in investment		
	Convenient Access to	everyday destinations by	equity.		
	Destinations	1	equity.		
		walking, biking, rolling, or	- A!1-1-!!/ £ 4 !/ 4!		
		transit/micro-transit, and	• Availability of transit trips		
		80% do by 2050. "Safe, comfortable and convenient	within 150% of driving time.		
			Track outcomes for		
		travel" means people are able to travel:	underserved communities to		
			gage success in investment		
		• from home to work within	equity.		
		20 minutes in urbanized	(•)7		
		areas or within 35 minutes	{ ❖ Note: Meeting these		
		outside urban areas, without	targets may require meeting		
		riding in a private car;	higher targets under Percent		
		• from home to essential	Mode Shift (e.g., public		
		non-work destinations (e.g.,	transit trip frequency and		
		school, local shopping,	coverage).TBD.}		
		transit connections) within			
		15 minutes in urbanized			
		areas or within 30 minutes			
		outside urban areas, without			
		riding in a private car.			
Н	Vision Zero	I. Maintain zero pedestrian	I, II) Number of people	> Statewide Integrated Traffic Records	Annually
		fatalities per year, or	walking or bicycling who are	System (SWITRS)	
	("Vision Zero" in projects	decrease the number of	killed in collisions. Track		
	tables)	pedestrian and bicyclist	outcomes for underserved	> Transportation Injury Mapping System	
		fatalities in the cities and	communities to gage success	(TIMS)	
		unincorporated county by	in investment equity.		
		50% each year until		> StreetStory	
		achieved.			
			III) Number of people		
		II. Maintain zero bicyclist	walking or bicycling who are		
		fatalities per year, or	seriously injured in		
			collisions. Track outcomes		

	PERFORMANCE	REGIONAL TARGET	METRIC	AVAILABLE DATA SOURCES	DATA
	MEASURE-OBJECTIVE	,		(">" sources are available now)	SCHEDULE
	Vision Zero	decrease the number of bicyclist fatalities in the cities and unincorporated county by 50% each year until achieved. II. Decrease by 25% each year the number of people seriously injured in bicycle and pedestrian collisions in the cities and unincorporated county.	for underserved communities to gage success in investment equity. *Map crash, injury, fatality hotspots—priority safety spots; include intersections/facilities with designs that are hotspot-prone. Careful with noise in data.		
1	Active Transportation Education ("AT Ed" in projects table)	I. Five more of school classrooms get multi-modal education by 2023, and 10% more by 2025. II. Increase the number of programs that actively promote and incentivize multi-modal travel, targeted to employers with over 20 employees, and government agencies. Expand the reach of such programs each year.	I) Percentage of classrooms receiving multi-modal transportation safety education. (Later data may indicate number of lessons, hours, or days.)* II) Number of entities engaged.*	~ School surveys (and/or data from grant reporting)	(I)Target years. (II) Biannual
		III. Increase active- transportation marketing and education campaigns for the general public. Reach at least two new communities biannually.	III) Number of communities engaged. * *Track outcomes for underserved communities to gage success in investment equity.		(III) Bi- annual

	PERFORMANCE MEASURE-OBJECTIVE	REGIONAL TARGET	METRIC	AVAILABLE DATA SOURCES (">" sources are available now)	DATA SCHEDULE
J	Invest in Complete	I. Increase by 10% by 2023,	I) Percentage of regional	> HCAOG funding budget	Bi-
	Streets, Active	and by 25% by 2028,	discretionary funding. Track		annual
	Transportation	regional discretionary	outcomes for underserved		
		funding set aside for	communities to gage success in		
	("AT Funding" in projects	permanent infrastructure,	investment equity.		
	table)	pop-ups, pilots, or other			
		projects for active			
		transportation.			
			II) Presence/absence of grant	> Survey of regional and local jurisdictions	
		II. Secure new funding	awards or new funding		
		sources at the regional level	mechanisms (e.g. bonds,		
		and/or the city/county level	transportation sales tax, user		
		to benefit active	fees, mitigation funds).		
		transportation and transit.			

- → "Work with other local public entities to <u>reduce</u> <u>vehicle miles traveled</u> in Humboldt County by at least 25% by 2030."
- → "By 2030 reduce GHG emissions from transportation by over 65% through reductions in VMT, improved vehicle efficiency, the adoption of electric vehicles, and, where determined to be an effective emissions-reduction strategy, the use of biofuels as a bridge to a full transition to zero-emissions vehicles."
- ★ "Accelerate the adoption of <u>electric vehicles</u>, with a target of over 6,000 electric vehicles on the road in Humboldt County by 2025 and 22,000 vehicles by 2030."
- → "Develop public, workplace, and residential <u>EV charging</u>
 <u>infrastructure</u> necessary to support these county-wide electric vehicle
 targets."
- → "Maintain a trajectory of emissions reduction to eliminate the use of fossil fuels by 2050." (Redwood Coast Energy Authority, December 2019. Link: RePower Humboldt/CAPE 2019 Plan Update.)
- ² HPMS Data: Contracts collect local traffic (traffic counts) data triennially, statewide. The data are collected on different locations to reflect characteristics of the road segments. Caltrans estimates/ projects traffic volumes on all road segments based on past and newly collected data. Data includes traffic volumes on State Highways; some locations are permanent and continuous.
- ³ Mapping your "15-Minute Neighborhood" on your web browser.

 https://app.developer.here.com/15-min-city-map/ Right: Example from City of Melbourne, Australia.



The City of Melbourne, Australia adopted a 20-minute radius for their decentralized city—and included safe transportation options as a necessity. Source: Beesmart City

https://usa.streetsblog.org/2020/10/21/can-this-app-tell-you-if-you-live-in-a-15-minute-neighborhood/

¹ Consistent with RCEA's *Repower Humboldt* goals:



COMMUNITY ADVISORY COMMITTEE STAFF REPORT Agenda Item # 5

AGENDA DATE:	July 13, 2021
TO:	RCEA Community Advisory Committee
PREPARED BY:	Matthew Marshall, RCEA Executive Director
SUBJECT:	Humboldt County's Renewable Energy Future Presentation

SUMMARY

Former Community Advisory Committee member Amin Younes was awarded a Master of Science degree with a major in Environmental Systems (Energy, Technology, and Policy) from Humboldt State University this spring. His master's thesis entitled, "Exploring renewable energy futures in Humboldt County consistent with the goals of California's renewable portfolio standard," is viewable online at https://digitalcommons.humboldt.edu/etd/463/.

Mr. Younes will describe his research and present his findings at the July Community Advisory Committee meeting.

STAFF RECOMMENDATION

N/A – Information only.

ATTACHMENTS

Exploring renewable energy futures in Humboldt County consistent with the goals of California's renewable portfolio standard presentation slides.

Exploring Energy Futures in Humboldt County Consistent With the Goals of California's Renewable Portfolio Standard

Amin Younes

HSU Masters Thesis: Presentation to RCEA's CAC May 2021

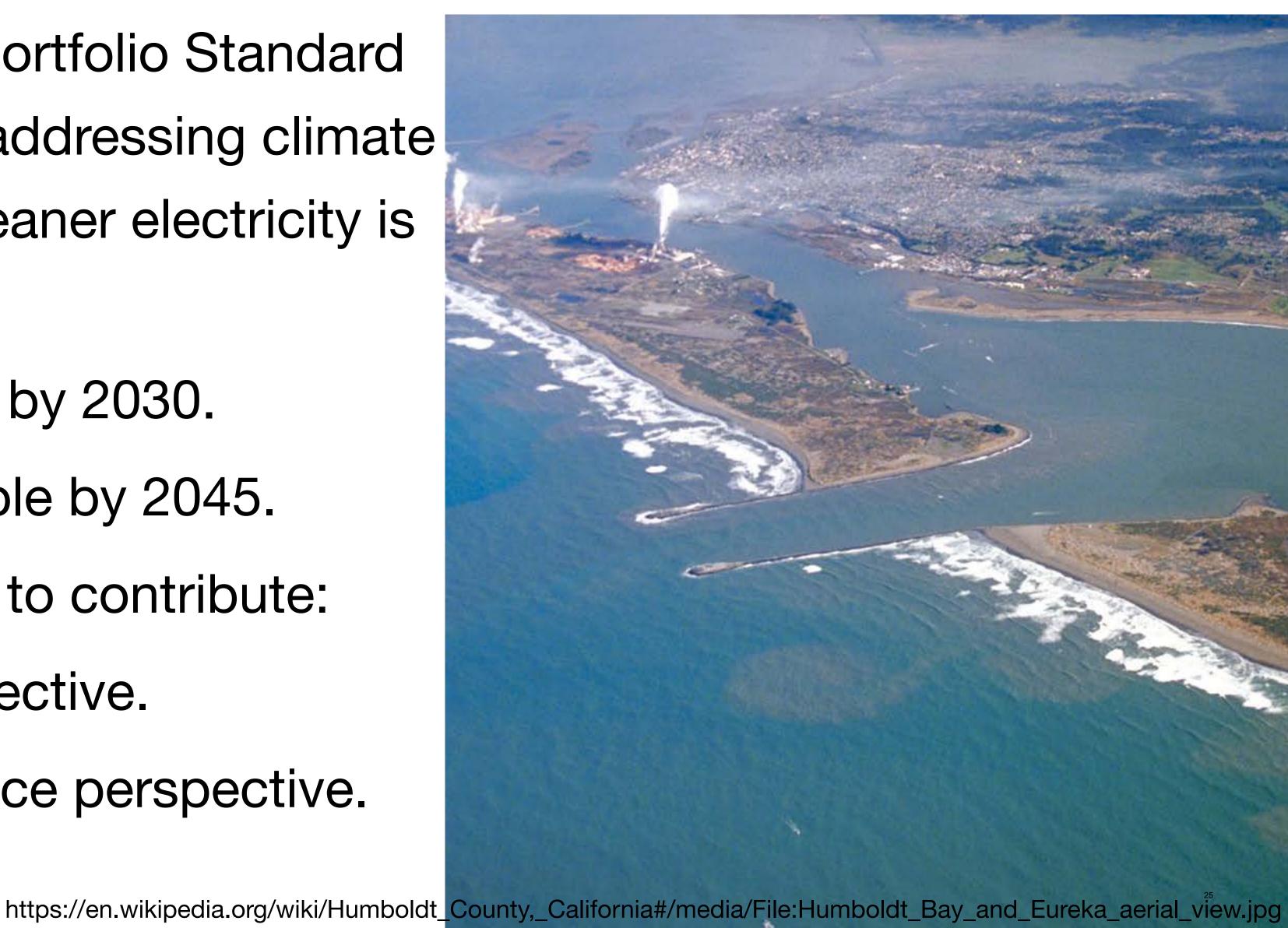
https://innovationorigins.com/increasingly-larger-wind-turbines-are-conquering-the-north-sea/ https://upload.wikimedia.org/wikipedia/commons/b/b8/SoSie%2BSoSchiff_Ansicht.jpg https://upload.wikimedia.org/wikipedia/commons/6/6a/Renewable_Energy_Development_in_the_California_Desert_006.jpg

Overview

- Motivation: What are the technically and socially feasible ways to develop renewables in Humboldt County?
- Methods: Interviews + Techno-economic assessment.
- **Results**: Offshore wind, biomass, and solar could all do the job; opinions & quantitative results vary.
- **Conclusions**: Distributive and procedural justice are unanimously valued; specific energy sources are not.

Why Develop Renewables in Humboldt

- California's Renewable Portfolio Standard takes one step towards addressing climate change by mandating cleaner electricity is sold on the grid:
 - 60% renewable energy by 2030.
 - 100% clean or renewable by 2045.
- Humboldt County needs to contribute:
 - From a technical perspective.
 - From a distributive justice perspective.



Why Use Mixed Methods?

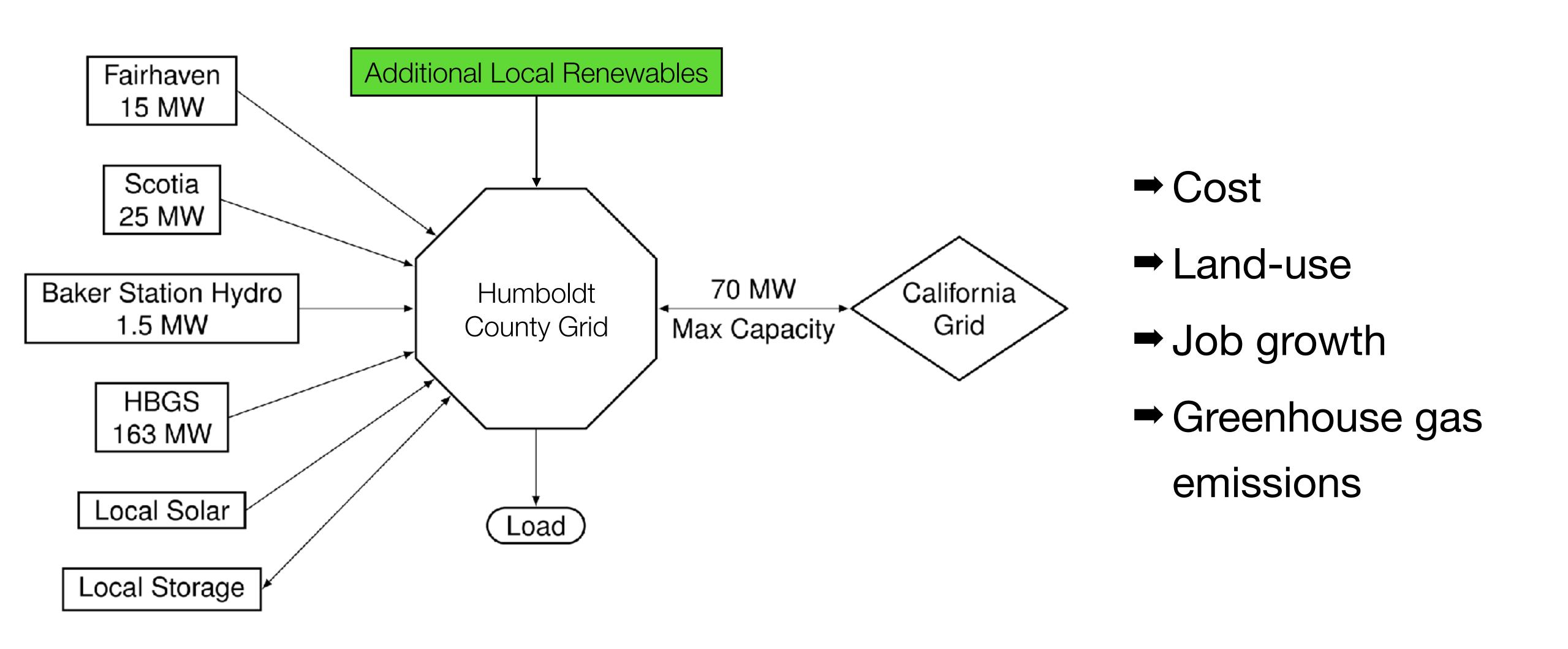


Qualitative Methods

- I interviewed ten Humboldt County residents who were active in energy discussions, representing as broad a set of perspectives as possible.
- Interviews were semistructured, composed of open-ended questions about preferences and concerns relating to energy.
- After qualitative and quantitative analyses, I circled back, shared results, and asked for reflections.
- I also gathered data from articles and opinion editorials written about the proposed onshore wind project.



Quantitative Methods



Qualitative Interview Data

Who will benefit, who will be harmed, and who decides what we do?

We should prioritize offshore wind.

I'm concerned about emissions from biomass.

Renewable electricity can help mitigate climate change and other ecosystem harms.

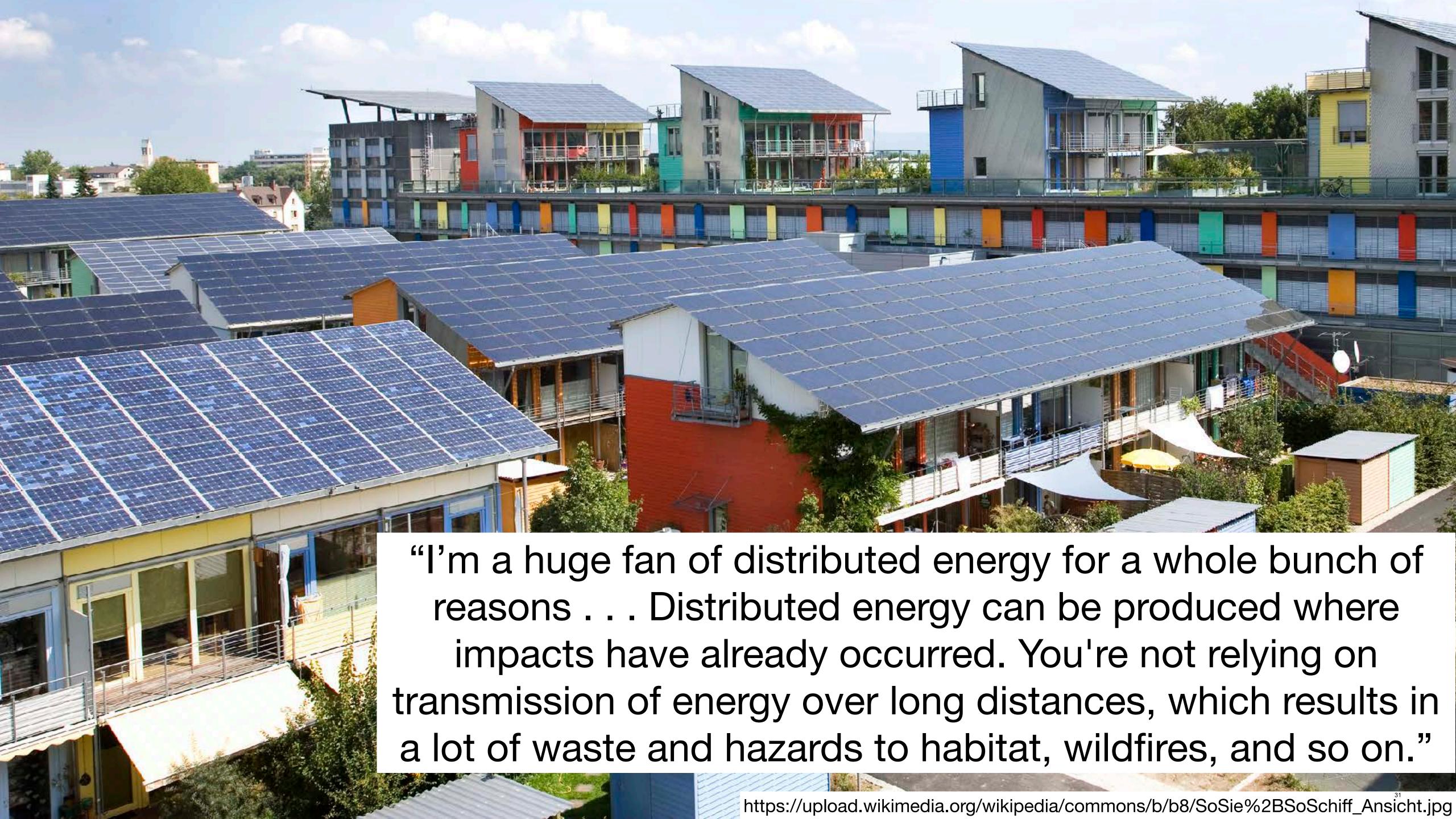
Job creation is the #1co-benefit.

Biomass is our best resource.

Distributed solar is the least ecologically harmful.

Divergent Normative Conceptions of Humboldt

- Residents had differing views on what the future should hold, and what was possible.
- The most notable split I observed was between supporters of centralized electricity and supporters of distributed resources.



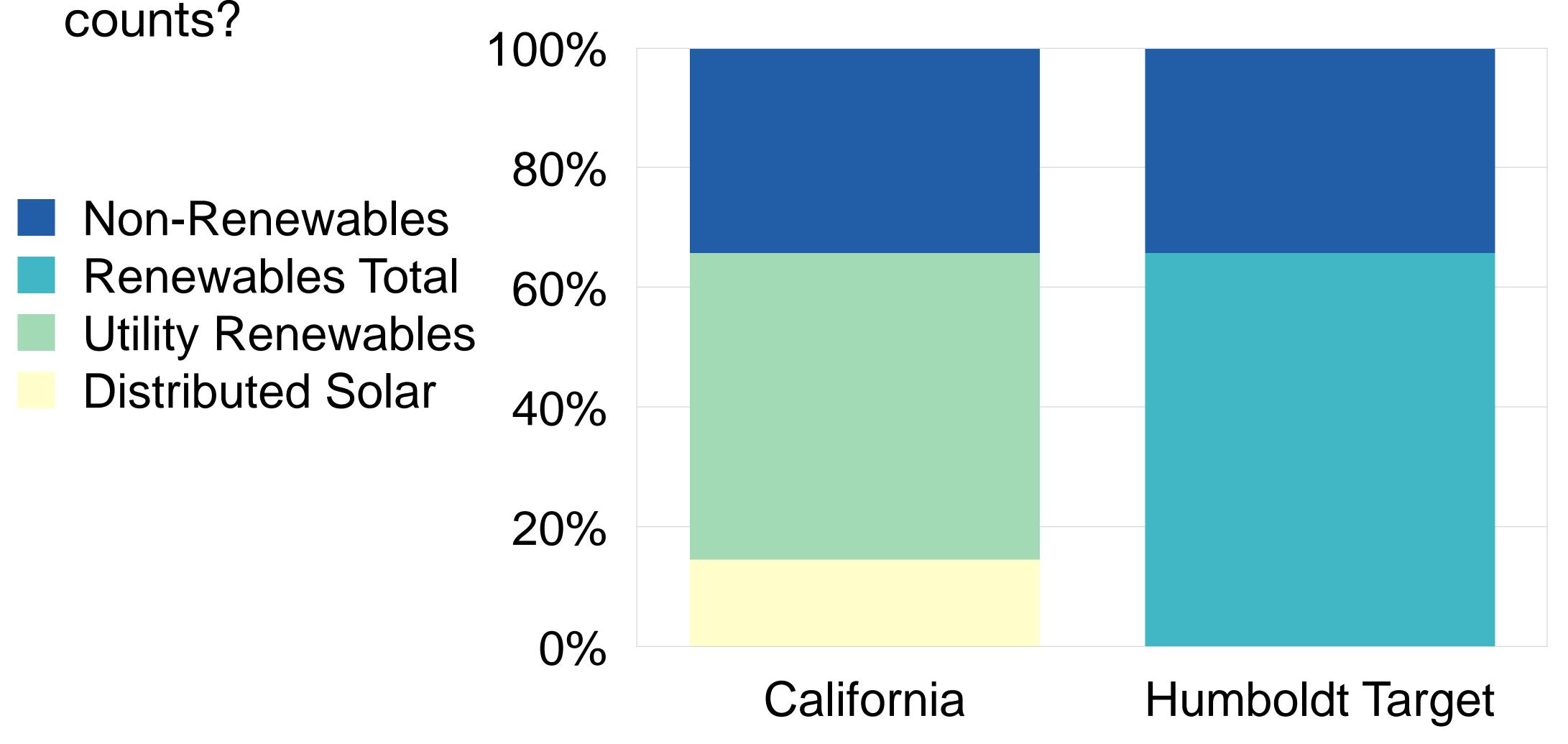


Divergent Normative Conceptions of Humboldt

- Residents held differing views on what the future should hold, and what was possible.
- The most notable split I observed was between supporters of centralized electricity and supporters of distributed resources.
- Some believed that distributed solar was not economically feasible and couldn't meet the county's electricity demand alone.
- Others thought that minimizing damage to the undisturbed environment was paramount, and therefore rooftop solar was the best technology.
- Agreements and disagreements set the stage for quantitative analysis.

Humboldt's Renewable Electricity Target

How much renewable electricity should Humboldt generate, and what



Electricity Generation Scenarios

Sol-300D: BAU + 300 MW of distributed-scale solar, balanced with 410 MWh of distributed battery storage.



Electricity Generation Scenarios

• Sol-240U: BAU + 240 MW of utility-scale solar, balanced with 352 MWh of utility-scale battery storage.



https://cleantechnica.com/files/2013/09/perovo-solar-farm-16.jpg?width=1200&enable=upscale

Electricity Generation Scenarios

 Sol-410U: BAU + 410 MW of utility-scale solar, 720 MWh of utility-scale storage, and closure of existing biomass power facilities.



https://cleantechnica.com/files/2013/09/perovo-solar-farm-16.jpg?width=1200&enable=upscale

Electricity Generation Scenarios

• OSW-144: BAU + 144 MW of offshore wind.

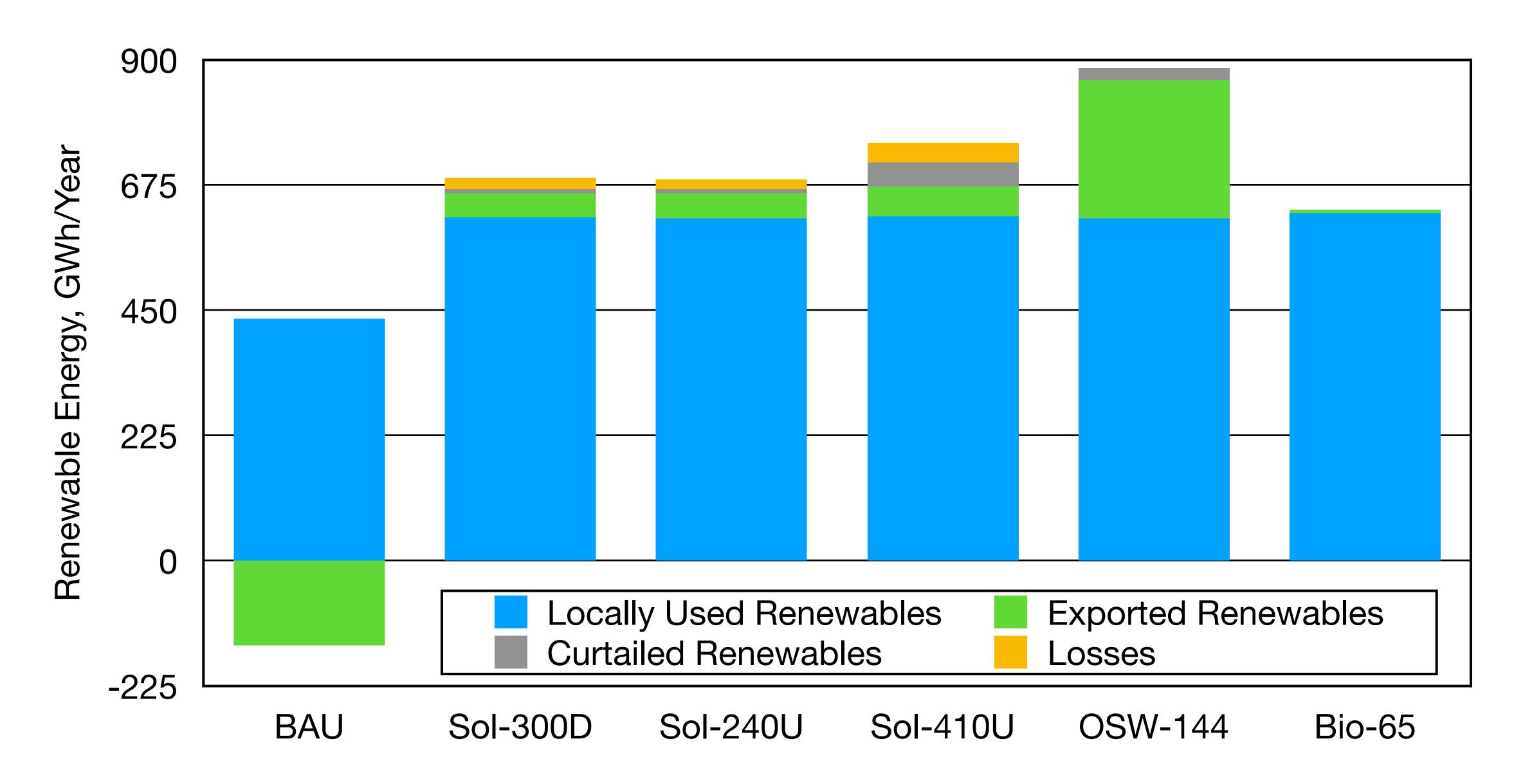


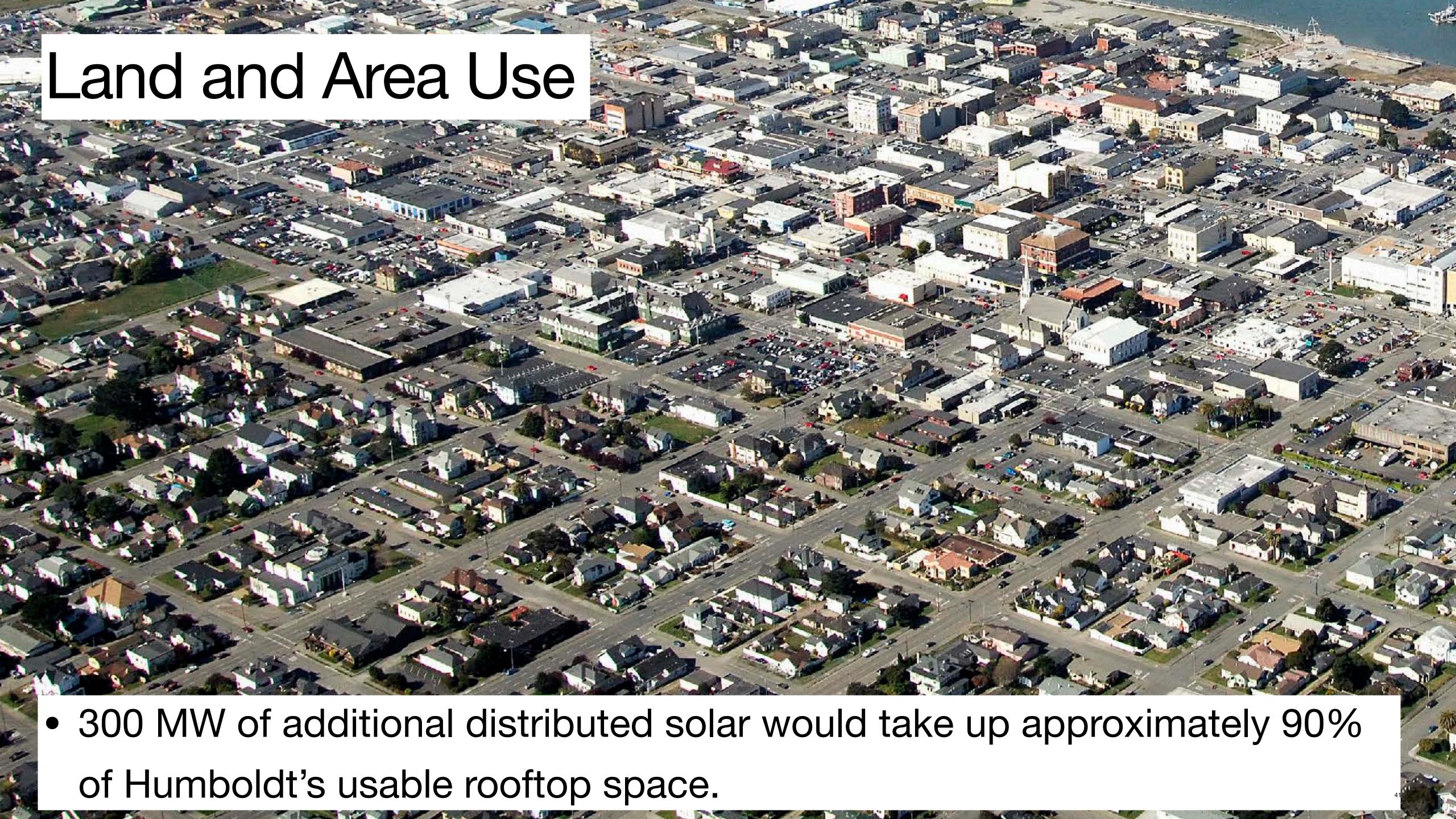
Electricity Generation Scenarios

• Bio-65: BAU + 65 MW of biomass power.

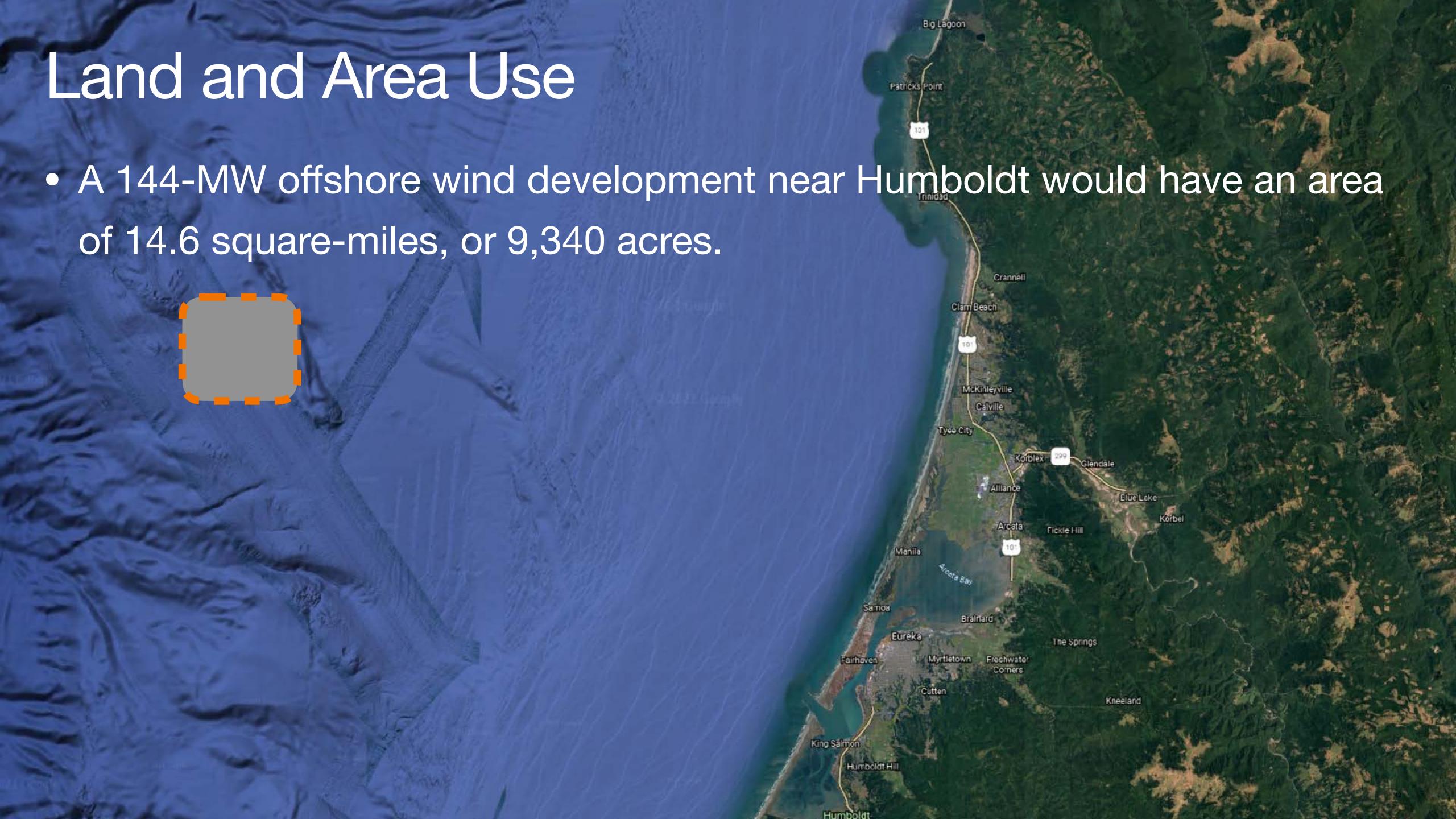


Electricity Generation and Usage



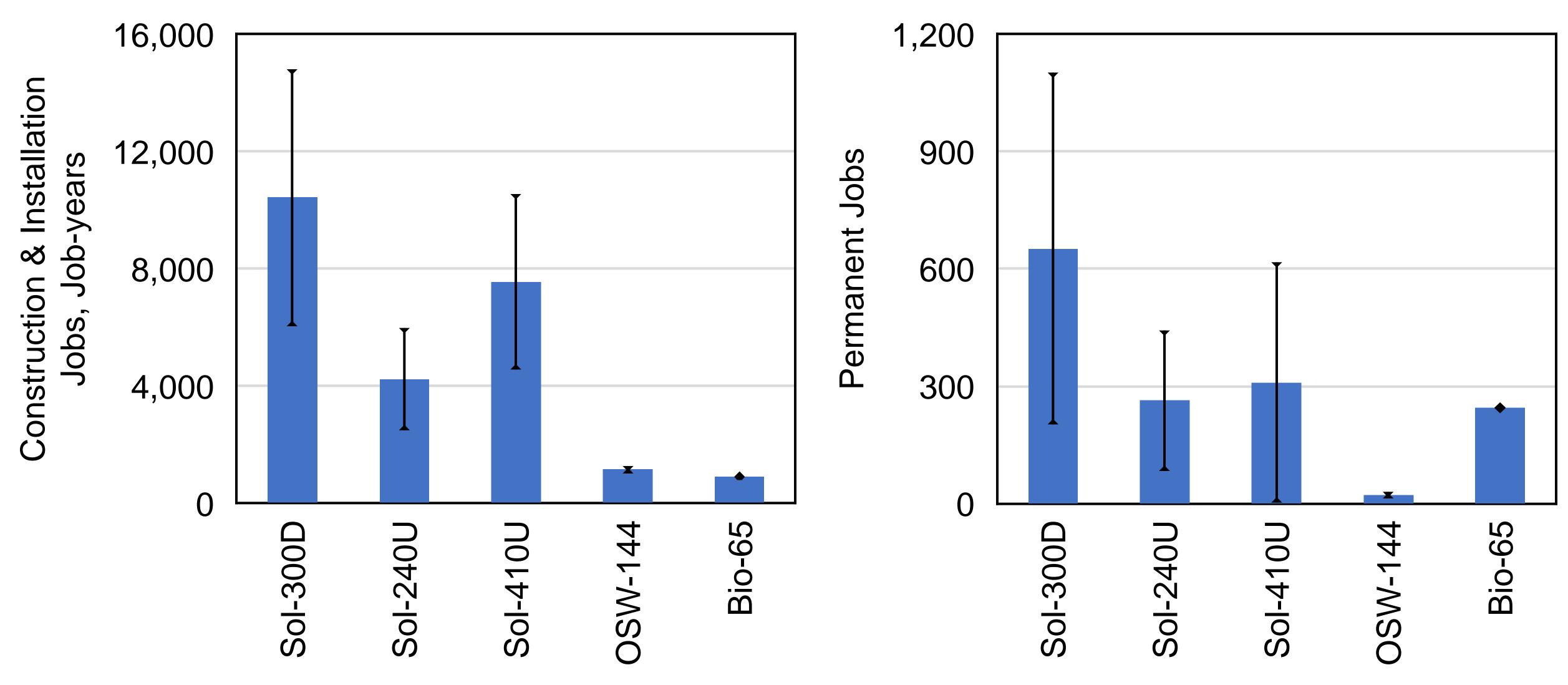




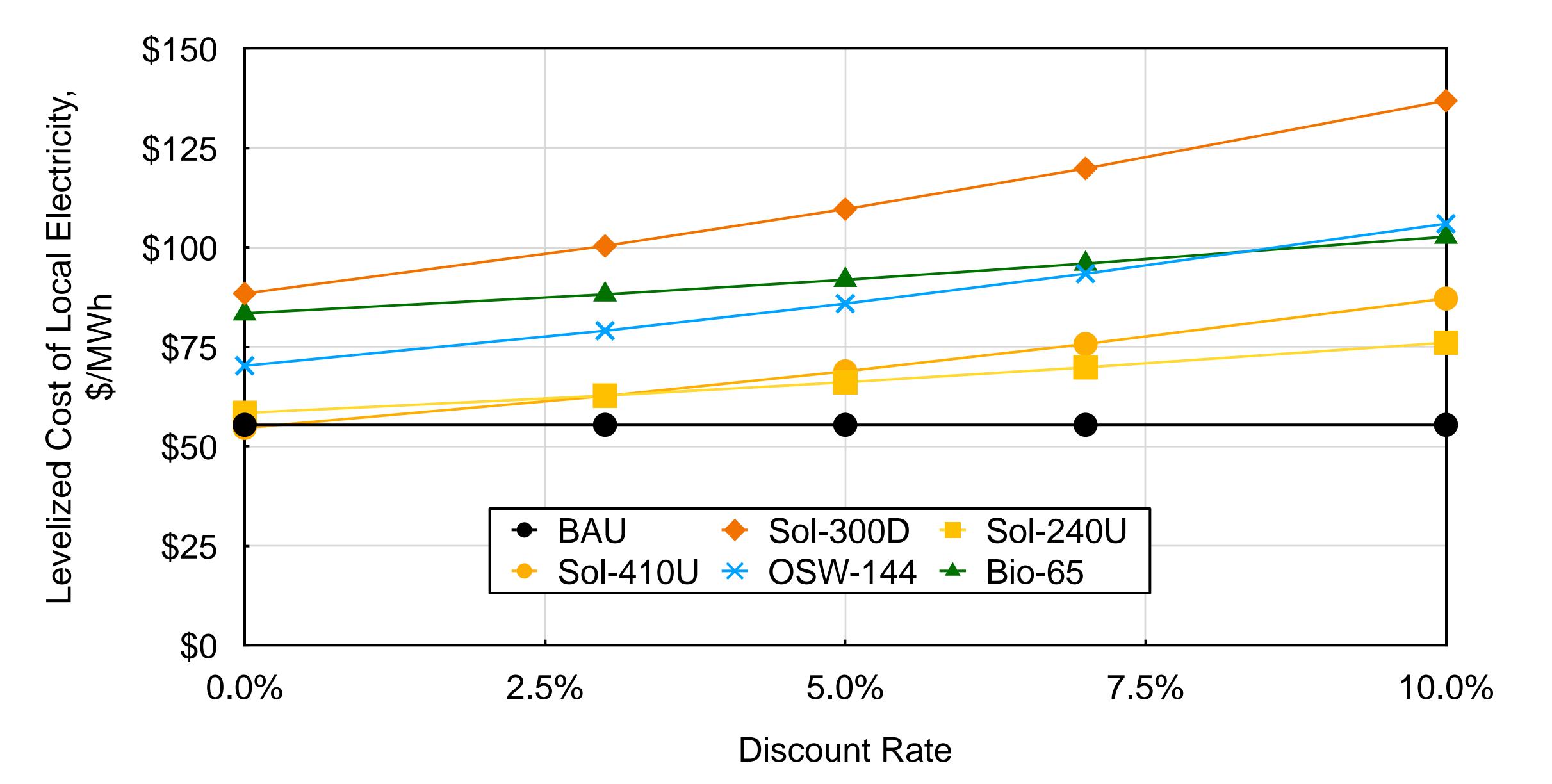




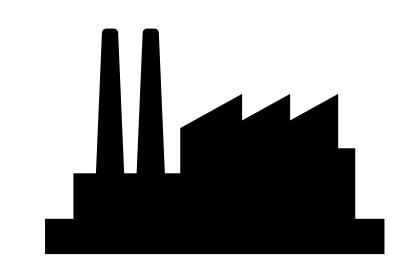
Job Growth



Levelized Cost of Local Electricity

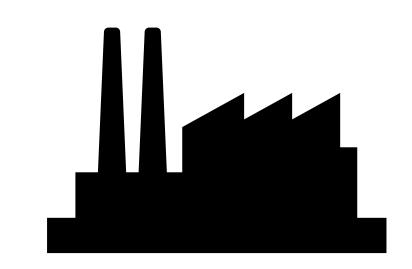


Considering the Cost of Carbon



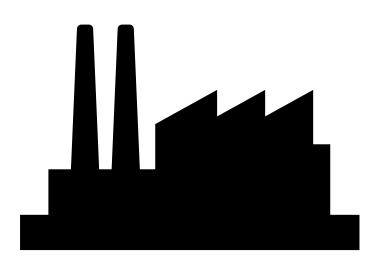
Scenario	Emissions, MT CO ₂ e	
BAU	218,000	
Sol-300D	166,000	
Sol-240U	166,000	
Sol-410U	172,000	
OSW-144	133,000	
Bio-65	157,000	

Considering the Cost of Carbon



Scenario	Emissions, MT CO ₂ e	Annual carbon cost at \$10/ton CO ₂ e
BAU	218,000	\$2,200,000
Sol-300D	166,000	\$1,700,000
Sol-240U	166,000	\$1,700,000
Sol-410U	172,000	\$1,700,000
OSW-144	133,000	\$1,300,000
Bio-65	157,000	\$1,600,000

Considering the Cost of Carbon



Scenario	Emissions, MT CO ₂ e	Annual carbon cost at \$10/ton CO ₂ e	Annual carbon cost at \$1,000/ ton CO ₂ e
BAU	218,000	\$2,200,000	\$220,000,000
Sol-300D	166,000	\$1,700,000	\$170,000,000
Sol-240U	166,000	\$1,700,000	\$170,000,000
Sol-410U	172,000	\$1,700,000	\$170,000,000
OSW-144	133,000	\$1,300,000	\$130,000,000
Bio-65	157,000	\$1,600,000	\$160,000,000

Conclusions and Next Steps

- Humboldt County has a variety of technically feasible resources.
- Residents have divergent views about what development should entail.
- Distributive and procedural justice are core concerns of Humboldt residents. Proposals must account for the distribution of burdens and benefits and must follow a fair and transparent process.
- It will be important to create an environment where sustained, democratic, multi-party discourses about future projects can thrive.



Backup - Scenario Details

Scenario	Capital Cost, \$M	Net Annual Expenses, \$M	Emissions, MT CO ₂ -eq	Renewables Share
BAU	\$0	\$50.0	218,000	46.6%
Sol-300D	\$589	\$45.5	166,000	66.0%
Sol-240U	\$222	\$39.8	166,000	65.9%
Sol-410U	\$403	\$26.0	172,000	66.1%
OSW-144	\$501	\$37.8	133,000	65.9%
Bio-65	\$270	\$61.1	157,000	66.9%



COMMUNITY ADVISORY COMMITTEE STAFF REPORT Agenda Item # 6

AGENDA DATE:	July 13, 2021
TO:	RCEA Community Advisory Committee
PREPARED BY:	Matthew Marshall, RCEA Executive Director
SUBJECT:	CAC-Board Coordination

SUMMARY

The RCEA Board approved the creation of a Citizen's Advisory Committee in 2016 to assist with public engagement as the Community Choice Energy program was launched. The CAC took an active role in facilitating public meetings where residents discussed energy goals and concerns.

After the CCE program was launched, the Board agreed that a Community Advisory Committee should continue as a liaison between the Board, staff and community. The CAC Charter describes the committee's role as being to support RCEA public engagement efforts and to provide decision-making support and input to the RCEA Board.

To aide in CAC-Board communication and work coordination, staff proposes a public agency best practice where the committee outlines its past-year accomplishments and coming-year goals for presentation to the Board in an annual report. Benefits of this practice would be:

- To increase Board awareness of the Community Advisory Committee's work and priorities, and
- To apply the committee's resources in a focused, considered way to support Board decision-making and agency public engagement efforts.

STAFF RECOMMENDATION

Adopt the practice of reporting annually on CAC accomplishments and goals to the RCEA Board of Directors at a regular Board meeting to be determined.

ATTACHMENTS

<u>City of Arcata Energy Committee Annual Report to the City Council Presented July 2020</u> (sample annual committee report)

City of Arcata Energy Committee Annual Report to the City Council Presented July 2020

The Energy Committee meets on the third Monday of odd-numbered months and serves in an advisory capacity to the City Council, City Manager and City staff in energy matters related to policies, management and projects. The Committee held three meetings during 2020, due to the COVID-19 pandemic.

2020 Committee members include:

George Williamson, Chair Gwelen Paliaga Mahayla Slackerelli, Vice Chair Andrea Alstone Scott Coss (January - September) Mike Kowalski Jim Zoellick

Committee Staff

Julie Neander, Staff Liaison Emily Benvie, Staff Liaison

I. ACCOMPLISHMENTS

The Energy Committee was involved in the following activities in 2020:

George Williamson was re-elected to serve as Chair and Mahayla Slackerelli was re-elected to serve as Vice Chair. The Committee confirmed their meeting schedule, in which they hold regular meetings on odd-numbered months only.

<u>Arcata All Electric Initiative</u> – Continued work to develop a 15-year plan to phase out Natural Gas City-wide including looking at strategies to require and/or incentivize private development to utilize all electric construction, electrification reach codes, and natural gas prohibition for new construction. The Energy Committee's overall strategy for developing recommendations for the 15-year plan for electrification includes:

- 1) Review new construction electrification options to consider and recommend
- 2) Review options for retrofitting existing buildings to reduce dependence on natural gas and promote electrification (ongoing energy efficiency upgrade options as well as reach codes or other code modifications for existing buildings)
- 3) Review options for gas appliance replacement to electric opportunities to encourage/require electric appliances
- 4) Consider equity issues related to the above as upfront and ongoing financial costs can be higher
- 5) Consider the need for resiliency in power sources as evidenced by recent Public Safety Power Shutdown events

<u>City Facilities</u> –. The Committee received reports from staff about electric vehicles charging stations within the City as well as battery storage grant opportunities for the Wastewater Treatment Plant, pump stations, City Hall, and Community Center.

<u>Collaboration with Local Agencies</u> – The Committee continues to consult and work collaboratively with Redwood Coast Energy Authority (RCEA) and other Humboldt County municipalities on numerous energy and climate-related issues.

<u>Reach Codes</u> — Reach Code Subcommittee researched Reach Codes and natural gas moratoriums for improving building energy efficiency/reducing Greenhous gases. This includes exploring all electric options for new construction and remodels.

<u>Redwood Coast Energy Authority (RCEA)</u> – This past year, the committee received regular reports from RCEA on potential new local renewable energy sources such as offshore wind and local microgrids, power storage and long-term resiliency, and other RCEA initiatives.

<u>Transportation Mode Shift</u> - This area has been incorporated into the analysis options for the Regional Climate Action Plan.

II. GOALS FOR COMING YEAR

At their 3/15/2021 meeting, the Energy Committee approved the following Goals for the 21/22 Fiscal Year.

- 1) Arcata Greenhouse Gas Reduction Plan/Climate Action Plan Continue to work with the County to develop a regional plan and update the City's current plan with consideration of adopting thresholds of significance for Arcata.
- 2) **Transportation Mode Shift** Consistent with the Climate Action Plan continue work related to shifting transportation toward walking, biking, public transportation and electric modes of transport including outreach projects on walking/biking maps, walkability.
- 3) **Arcata All Electric Initiative** Continue work to decarbonize and electrify buildings using a range of options, and investigate options to increase equity and affordability of electrification.
- 4) **Explore low carbon options for community resiliency** Explore the benefit of solar with battery backup options.