



# Redwood Coast Energy Authority

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Redwood Coast Energy Authority Office  
633 3<sup>rd</sup> St., Eureka, CA 95501

January 12, 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.

**To listen to the meeting by phone**, call (669) 900-6833 or (253) 215-8782. Enter webinar ID: 848 5559 1017. **To watch the meeting online**, join the Zoom webinar at <https://us02web.zoom.us/j/84855591017>.

**You may submit written public comment** before and during the meeting by email to [PublicComment@redwoodenergy.org](mailto: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 not 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](mailto: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](http://www.redwoodenergy.org).

# COMMUNITY ADVISORY COMMITTEE MEETING AGENDA

Agenda Item	What / Action	When
1. Open	<u>Roll Call:</u> Norman Bell Roger Hess Elizabeth Burks Richard Johnson Jerome Carman Luna Latimer Colin Fiske Dennis Leonardi, Vice Ch. Catherine Gurin Kit Mann Larry Goldberg, Chair Matty Tittmann Pam Halstead Amin Younes Stephen Avis, Board Liaison  <b>Review meeting agenda and goals.</b>	6 - 6:05 (5 min.)
2. Approval of Minutes	<b>Action: Approve minutes of October 13, 2020, CAC meeting.</b>	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 will respond to statements, set requests requiring action to a future agenda, or refer requests to staff.	6:10 – 6:15 (5 min.)
4. 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.	6:15 – 6:30 (15 min.)
5. 2021 Meeting Calendar	<b>Action: Approve a bi-monthly Community Advisory Committee meeting schedule beginning in January 2021, and request that the RCEA Board of Directors amend the Board Operating Guidelines to reflect the revised meeting schedule,</b>  <b>or</b> <b>Approve 2021 Community Advisory Committee quarterly meeting calendar.</b>	6:30 – 6:35 (5 min.)
6. CAC Chair/Vice-Chair Selection	<b>Action: Accept nominations for, and appoint, a Community Advisory Committee chair and vice chair for terms beginning April 12, 2021, and ending April 12, 2022.</b>	6:35 – 6:40 (5 min.)
7. Countywide Climate Action Plan Development Update	<b>Hear update on countywide climate action plan activities</b> (information only).	6:40 – 6:50 (10 min.)

8. Alternative Biomass Uses Subcommittee Draft Report to the RCEA Board	<b>Action: Provide input on and/or approve report for presentation to Board.</b>	6:50 – 7:05 (15 min.)
9. RePower Humboldt Strategic Plan Status Update	<b>Receive twice yearly report to CAC</b> (information only).	7:05 – 7:25 (20 min.)
10. Close & Adjourn	<b>Summarize actions, outcomes, Board communication items, next steps.</b>	7:25 - 7:30 (5 min.)



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## **COMMUNITY ADVISORY COMMITTEE MEETING**

### **DRAFT MINUTES**

**October 13, 2020 - Tuesday, 6 - 7:30 p.m.**

The agenda for this meeting was posted on October 13, 2020. Community Advisory Committee Chair Larry Goldberg called the meeting to order at 6:05 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  
Amin Younes

Roger Hess  
Richard Johnson  
Luna Latimer  
Dennis Leonardi, Vice Chair  
Kit Mann  
Matty Tittmann

Stephen Avis, Board Liaison (non-voting)

#### **Members absent:**

Tom Hofweber

#### **Staff present:**

Richard Engel, Power Resources Director  
Matthew Marshall, Executive Director  
Nancy Stephenson, Community Strategies Manager  
Lori Taketa, Board Clerk

Chair Goldberg welcomed new members Catherine Gurin and Roger Hess to the Community Advisory Committee and thanked original CAC member Kathy Srabian for her service.

#### **Minutes Approval**

Member Norman Bell expressed disappointment that the RCEA Integrated Resource Plan, which proposes different project power portfolios through 2030, was not presented to the Community Advisory Committee for discussion and review prior to its

presentation to the Board of Directors for approval. Other committee members abstained from voting because they were not present at the July meeting.

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

**Motion Carman, Second Johnson: Approve minutes of July 14, 2020, CAC meeting.**

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

**Alternative Biomass Use Presentation**

Power Resources Director Engel reported on the Humboldt State University student capstone presentation on alternative biomass uses. During the spring 2020 semester, the Environmental Engineering seniors assessed alternative forest industry waste uses including as a cleaner combustion fuel, as a raw material for durable or consumer goods and as a soil amendment. Staff Director Engel explained that this research assignment and presentation was arranged due to the presence of biomass in RCEA's portfolio and the energy resource's controversial history due to pollution and carbon neutrality concerns. The students' reports and a video of the presentation can be found online at <https://redwoodenergy.org/community-choice-energy/about-community-choice/power-sources/humboldt-county-biomass/>.

The group discussed possible next steps; a need for RCEA staff direction on continued involvement; a need for further research; the need for stakeholders to be made aware of this research and to be enlisted to develop suggested options; and RCEA's role in developing alternative biomass uses, including non-energy uses; the Committee agreed to form an ad hoc subcommittee to draft a proposal for RCEA's involvement in alternative biomass use options for presentation to the Board for approval. Jerome Carman, Luna Latimer and Kit Mann volunteered to join this ad hoc committee. Staff suggested working with RCEA consultant Michael Furniss, who coordinated a panel discussion and wrote a report on Forests, Energy, and the Environment during RCEA's 2019 strategic plan revision process. Mr. Furniss is currently contracted to implement some of RCEA's strategic plan's biomass initiatives, including assembling a biomass technical advisory working group that will, among other tasks, consider the HSU students' findings.

Chair Goldberg invited public comment. No member of the public made comment. Chair Goldberg closed the public comment period.

**Behind-the-Meter Storage Resource Adequacy (RA) Program**

Executive Director Marshall presented a progress report on the development of a new RCEA program to support grid reliability and meet RCEA's state-required "resource adequacy" obligations using customer ("behind the meter") battery storage systems. In contrast to utility-scale battery storage, through this program RCEA will be contracting with one or more vendors who will work with customers to install batteries which will

then be managed to provide back-up emergency power, help reduce customer energy costs, and provide power-balancing benefits to the broader electricity grid. Mr. Marshall pointed out that this year's rolling blackouts resulted not from a lack of power during peak demand hours, but from a lack of power when the sun set and solar energy was not available to help meet demand. RCEA is helping to pilot this concept of customer battery storage as a way to support the integration of more renewable energy and improve grid reliability.

A state program, the Self-Generation Incentive Program, is making funds available for purchasing battery storage to encourage energy resilience. Humboldt County customers, especially at-risk residential customers relying on medical equipment and critical facilities such as hospitals and water or wastewater treatment facilities, may be eligible for robust incentives resulting in low- or no-cost battery storage systems to pair with solar systems. RCEA has been working with local agencies to apply for this funding and held well-attended workshops educating customers about the program. To date, Humboldt County customers have qualified to receive approximately \$40 million in incentives to install around 10.5 MW of battery storage. Another \$8 million worth of Humboldt County applications are waitlisted should more funding become available or projects fall out of the rebate reservation queue. Humboldt County SGIP-funded customers will have the option to contract through RCEA's new Behind-the-Meter RA program to provide grid reliability through their newly-installed storage systems.

Committee members expressed support for these programs and praised RCEA's outreach efforts. The group discussed another RCEA statewide behind-the-meter resource adequacy provider, Leap, that responds to high energy demand periods by reducing customer electricity use of smart appliances and HVAC systems instead of drawing power from customer batteries. There was a request for more information about behind-the-meter resource adequacy as it becomes available.

Chair Goldberg invited public comment. No member of the public commented. Chair Goldberg closed the public comment period.

### **Upcoming RCEA Workshops**

Community Strategies Manager Nancy Stephenson described RCEA's upcoming public online workshops. Two upcoming workshops will address statewide grid issues and RCEA's role in Humboldt County's energy resiliency. The statewide panel will feature CEC Commissioner Karen Douglas, CalCCA Executive Director Beth Vaughan and a representative from CAISO. The Humboldt County resilience workshop will feature Blue Lake Rancheria's Jana Ganion, Swell Energy Senior Director Jon Fortune, and a representative from Schatz Energy Research Center and an RCEA staff member will facilitate. A November webinar will introduce RCEA's electric vehicle rebate.

Chair Goldberg invited public comment. No member of the public made comment. Chair Goldberg closed the public comment period.

### **CAC Ad Hoc Subcommittees**

Executive Director Marshall described the current CAC ad hoc subcommittees, including the newly-formed Biomass Alternatives Subcommittee, and the work they

have been assigned and gave new and existing members an opportunity to volunteer to serve on them.

The Bond Subcommittee will assist in the County of Humboldt's effort to develop an energy resilience revenue bond concept. The group will hold its first meeting soon to evaluate opportunities. Elizabeth Burks, Colin Fiske, Larry Goldberg, Catherine Gurin, Roger Hess, Richard Johnson and Amin Younes have volunteered to serve on this ad hoc subcommittee. This group will meet soon to begin discussing opportunities.

The Outreach Subcommittee will give input on outreach efforts and help to avoid jargon in messaging. Committee members Catherine Gurin, Kit Mann, and Amin Younes volunteered to work with staff manager Nancy Stephenson on this subcommittee.

Chair Goldberg invited public comment. No member of the public made comment. Chair Goldberg closed the public comment period.

### **Non-Agenda Item Public Comment**

Chair Goldberg invited public comment. No member of the public made comment. Chair Goldberg closed the public comment period.

### **Member Reports**

Member Bell expressed disapproval of the proposed 2030 energy portfolio presented at the July meeting, with similar carbon emissions as RCEA's current portfolio. The CAC was established to address the climate emergency by making Humboldt County a serious climate mitigator, Dr. Bell stated, and RCEA's 2030 portfolio must be much more aggressive in achieving clean, non-greenhouse gas producing, non-polluting energy. Executive Director Marshall explained that RCEA's Integrated Resource Plan will be updated every two years and is required to meet prescribed state targets. While RCEA may not alter these goals, the 2030 portfolio aims to be comprised completely of renewable resources, contains less than half the amount of biomass than is currently in the agency's portfolio and allows for cleaner biomass energy technologies. The majority of RCEA's ambitious 2030 portfolio comes from a proportionally large amount of solar for RCEA's customer size, 230 times more solar energy production than the Blue Lake Rancheria's system, as well as offshore wind and small hydropower. While the offshore wind and small run-of-the-river hydropower sources have not yet been developed, Over 100 MW of new solar energy installations are already under contract and slated for construction in 2021-2022, and a target of 15 MW being sourced locally.

Member Carman requested an update at the next meeting on the County's multi-jurisdiction climate action plan efforts.

Member Fiske reported that the Humboldt County Association of Governments Board formed an ad hoc committee to set targets for reducing vehicle miles traveled and transportation greenhouse gas emissions in preparation for next year's Regional Transportation Plan.

Member Gurin stated that HSU graduate student Chih-Wei Hsu wrote his thesis on the topic of income and race disparities in electric vehicle public charging deployment and

EV ownership that included recommendations for making EV programs more equitable. Staff requested a copy of this thesis.

The following action items and agenda item requests were summarized:

- Creation of an ad hoc subcommittee to propose RCEA's role in alternative biomass use development for Board approval,
- Request to hear more about the behind-the-meter resource adequacy and SGIP programs, and
- Request for an update on the countywide climate action plan.

Chair Goldberg adjourned the meeting at 7:38 p.m.

Lori Taketa  
Board Clerk

DRAFT





**COMMUNITY ADVISORY COMMITTEE  
STAFF REPORT  
Agenda Item # 5**

AGENDA DATE:	January 12, 2021
TO:	RCEA Community Advisory Committee
FROM:	Matthew Marshall, Executive Director
PREPARED BY:	Lori Taketa, Clerk of the Board
SUBJECT:	Annual CAC Meeting Calendar

**SUMMARY**

The RCEA Board's Operating Guidelines established the Community Advisory Committee and states that regular CAC meetings will be held quarterly at a regular date and time that will be established annually by the CAC. At the April 10, 2018 meeting, the Community Advisory Committee agreed to meet from 6-7:30 p.m. on the second Tuesday of the first month of each quarter, and as needed for study sessions and special meetings.

In the past months, staff have noted that the current meeting schedule has been insufficient to accommodate requested agenda items and expressed committee member desire to address RCEA work and issues in more detail. Slightly more CAC members responding to an informal email poll preferred more frequent meetings to longer quarterly meetings.

Staff recommends the Committee approve one of the proposed meeting schedule options described below. Meeting lengths would be kept as close to 90 minutes as possible.

Option 1 – Bi-Monthly Meetings (Approx. 6 meetings annually)

January 12, 2021	July 13, 2021
March 9, 2021	September 14, 2021
May 11, 2021	November 9, 2021

This option requires that the Board approve an Operating Guideline amendment. Meetings may be cancelled if there are no pressing agenda items.

Option 2 – Add Four Special Meetings to Quarterly Schedule (Approx. 8 meetings annually)

January 12, 2021	July 13, 2021
February 9, 2021 – special meeting	August 10, 2021 – special meeting
April 13, 2021	October 12, 2021
May 11, 2021 – special meeting	November 9, 2021 – special meeting

No Board Operating Guideline amendment would be required for this option. CAC members would approve a quarterly meeting calendar and reserve four additional special meeting times on their calendars which would be cancelled if there are no pressing agenda items. Special meeting notifications would be posted for the public as needed.

## **RECOMMENDED ACTION**

Approve a bi-monthly Community Advisory Committee meeting schedule beginning in January 2021, and request that the RCEA Board of Directors amend the Board Operating Guidelines to reflect the revised meeting schedule,

or

Approve 2021 Community Advisory Committee quarterly meeting calendar.



# REDWOOD COAST Energy Authority

## COMMUNITY ADVISORY COMMITTEE STAFF REPORT Agenda Item # 6

AGENDA DATE:	January 12, 2021
TO:	RCEA Community Advisory Committee
FROM:	Lori Taketa, Clerk of the Board
SUBJECT:	Selection of CAC Chair and Vice Chair

### BACKGROUND

Following procedure outlined in the Community Advisory Committee Charter, the chair and vice chair are to be selected during the first quarter of each calendar year. The term for each role shall be one year, beginning in April and ending the following April. According to the Charter, no member will serve as chair or vice chair for more than two consecutive terms.

Current Chair Larry Goldberg has served as vice chair for two consecutive years in 2018 and 2019, and as chair in 2020. Current Vice Chair Dennis Leonardi served in this capacity in 2020.

The duty of the chair is to:

- Facilitate meetings, or request staff assistance to facilitate meetings
- On an as-needed basis, call special meetings between regularly scheduled meetings
- Encourage participation and help create a civil, collaborative environment
- Make sure each committee members' thoughts and ideas are heard and that input and feedback from the public is fairly considered for each discussion item
- Help group stay focused on task and build agreements.

The vice chair fulfills these roles when the chair is unavailable.

The CAC membership term expiration dates are as follows:

REPRESENTING JURISDICTION	MEMBER NAME	TERM EXPIRATION DATE
ARCATA	Norman Bell	4/11/2023
AT-LARGE	Jerome Carman	4/12/2022
AT-LARGE	Colin Fiske	4/12/2022
AT-LARGE	Larry Goldberg, Chair	4/12/2022
AT-LARGE	Pam Halstead	4/12/2022
BLUE LAKE	Kit Mann	4/11/2023
COUNTY 1: ORLEANS - E. HUMBOLDT	Luna Latimer	4/11/2023
COUNTY 2: SOUTHERN HUMBOLDT	Matty Tittmann	4/13/2021
COUNTY 3: MCKINLEYVILLE EUREKA	Tom Hofweber (resigned) Catherine Gurin	4/12/2022 4/11/2023

FERNDALE	Dennis Leonardi, Vice Chair	4/12/2022
FORTUNA	Elizabeth Burks	4/12/2022
HBMWD	Amin Younes	4/12/2022
RIO DELL	Roger Hess	4/12/2022
TRINIDAD	Richard Johnson	4/11/2023

## **RECOMMENDED ACTION**

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Accept nominations for, and appoint, a Community Advisory Committee chair and vice chair for terms beginning April 12, 2021, and ending April 12, 2022.



**COMMUNITY ADVISORY COMMITTEE  
STAFF REPORT  
Agenda Item # 7**

AGENDA DATE:	January 12, 2021
TO:	RCEA Community Advisory Committee
PREPARED BY:	Matthew Marshall, Executive Director
SUBJECT:	Countywide Climate Action Plan Development Update

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**BACKGROUND**

The County of Humboldt is coordinating with other local agencies to develop a regional Climate Action Plan (CAP) to reduce greenhouse gas emissions throughout Humboldt County.

In early 2019, Humboldt County local governments decided to take a regional approach to climate action planning. The Regional CAP partnership consists of RCEA, the County of Humboldt and the city governments of Arcata, Eureka, Blue Lake, Ferndale, Fortuna, Rio Dell and Trinidad. Together, these local governments are working to develop strategies to reduce emissions throughout our region. The plan will include locally-oriented strategies to reduce emissions from vehicle travel, electricity consumption, natural gas use, and other sources of greenhouse gases.

To gather input on this process the County hosted a series of public workshops to introduce the Climate Action Plan; these meeting included:

- Humboldt State University Climate Action Forum, 4/24/2019
- Arcata Introductory CAP Workshop, 5/20/2019
- Redway Introductory CAP Workshop, 6/04/2019
- McKinleyville Introductory CAP Workshop, 6/12/2019
- Willow Creek Introductory CAP Workshop, 6/18/2019
- Eureka Introductory CAP Workshop, 1/15/2020.

While the pandemic slowed progress on this initiative, RCEA and its team of consultants have worked with staff from the County and cities over the course of 2020 to continue developing the draft Regional CAP. The current targeted schedule for completing the CAP in 2021 includes:

- January-March: Finalize strategies, gather input/feedback from targeted stakeholder groups
- March-June: Public meetings/input, incorporate public comment
- June-July: Begin CEQA review
- August: County and cities plan adoption meetings.

RCEA staff will provide a status report on this project to Community Advisory Committee at the meeting.

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**STAFF RECOMMENDATION**

N/A – Information only.



**COMMUNITY ADVISORY COMMITTEE  
STAFF REPORT  
Agenda Item # 8**

AGENDA DATE:	January 12, 2021
TO:	Community Advisory Committee
PREPARED BY:	Richard Engel, Power Resources Director
SUBJECT:	RCEA Role Recommendations for Alternative Biomass Uses

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**SUMMARY**

During a discussion of the Humboldt State University student presentation on alternative biomass uses at its October 13, 2020, meeting, the Community Advisory Committee agreed to form an ad hoc subcommittee to draft a proposal to the RCEA Board of Directors on suggested agency involvement in development or promotion of alternative biomass uses in the region. Committee members Jerome Carman, Luna Latimer, Kit Mann, and later Dennis Leonardi and Catherine Gurin, volunteered to serve on this subcommittee. Staff recommended the subcommittee work with RCEA consultant Michael Furniss, who is contracted to implement some of RCEA's updated strategic plan biomass initiatives, which include assembling a biomass technical advisory working group to, among other tasks, consider the HSU students' research findings. RCEA Executive Director Matthew Marshall has authorized the subcommittee to act as the advisory group identified in the strategic plan. Power Resources Director Richard Engel was designated staff liaison for the subcommittee.

The subcommittee met three times since the October 2020 meeting and has helped to shape the attached draft proposal, which draws on the subcommittee members' knowledge and experience of biomass from carbon cycle and sequestration, forest product waste stream management, forest management and RCEA core agency mission and power procurement needs perspectives. Additional research resources were introduced to inform the group's proposal drafting process.

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**SUBCOMMITTEE RECOMMENDATION**

The subcommittee requests that the CAC provide input on the draft report to the Board and/or approve the report for presentation to the RCEA Board of Directors.

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**ATTACHMENT**

Alternative Uses of Biomass Material in Humboldt County: Preliminary Report to the RCEA Board of Directors from the Community Advisory Committee *was not available at agenda publication, but will be made available online at [www.redwoodenergy.org](http://www.redwoodenergy.org) prior to the CAC meeting.*

# **Alternative Uses of Biomass Material in Humboldt County**

## **Preliminary Report to the RCEA Board of Directors**

### **from the Community Advisory Committee**

*Draft Final*

January 2021

At its October 2020 meeting, the RCEA Community Advisory Committee (CAC) formed an ad hoc subcommittee to consider alternative uses of local biomass material, including both local mill wastes and in-woods slash and thinning material.

The subcommittee includes CAC members Katy Gurin, Dennis Leonardi, Kit Mann, Jerome Carman, and Luna Latimer, with support from staff members Richard Engel and Lori Taketa and RCEA consultant Michael Furniss. The subcommittee held its first meetings on November 3 and December 4, and January 8.

RCEA is an energy agency whose stated purpose is “to develop and implement sustainable energy initiatives that reduce energy demand, increase energy efficiency, and advance the use of clean, efficient and renewable resources available in the region.” Because RCEA is now a partner with the County of Humboldt in developing a regionwide climate action plan, the subcommittee agrees that RCEA should also appropriately assess energy and non-energy uses of biomass that provide climate change solutions. The subcommittee also agrees it may be appropriate for RCEA to facilitate third-party actions that can advance alternative biomass uses.

The subcommittee agrees to the following scope:

- While the immediate issue relevant to RCEA is management of the mill waste that primarily fuels the one operating local biomass plant, the subcommittee also recommends that RCEA help address uses for in-forest materials that are being managed for fuel reduction and forest health, particularly in the primarily important Wildland-Urban Interface (WUI).
- RCEA will consider both energy and non-energy alternative uses of biomass material.
- Recommendations for specific measures will specify whether the recommendation is in the context of continuation, reduction, or expansion of biomass electric power production.
- The subcommittee does not propose to provide guidance on management decisions about RCEA’s current biomass power procurement; the group limits its scope to reviewing and recommending alternative uses of the material currently used as feedstock at biomass power plants and in-woods slash disposal. Staff and consultants will provide decision support for related decisions about power procurement.

The subcommittee endorses the following problem statement regarding biomass alternatives:

- Since the launch of RCEA's community choice energy program, which includes a local biomass power component, the Board has heard community concerns and expert panels about air quality impacts of biomass power production using the existing plants; concerns about whether biomass power should be considered an effective climate solution; and concerns from the forestry community and forest products industry about the need for feasible waste disposal.
- Of the County's existing three biomass plants, only one currently remains operational. Industry-wide in the USA, biomass power is in decline due to other forms of renewable energy, including wind and solar, becoming available at lower costs.
- Biomass-generated power substitutes for burning natural gas in our service area and this can be considered a climate benefit, but compared with natural gas, produces more emissions per unit of power generated and much more particulate air pollution than natural gas.
- With declining use of biomass power, the local forest products industry is faced with the problem of how to dispose of mill waste (100+ truckloads per day in the peak logging and lumber manufacture season and market periods). In addition, Humboldt County, like much of northern California, faces elevated wildfire risk associated with nearly ubiquitous densification of forests resulting from a century of aggressive and effective fire suppression. Transporting remote and dispersed in-woods fuels for energy production or alternative uses remains prohibitively expensive in most situations.

Several alternative uses of local biomass have been assessed. In spring 2020, a class of graduating engineering seniors at HSU did an analysis of potential uses of local mill wastes, broadly falling into three categories:

- Energy uses – torrefaction, gasification, pyrolysis, ethanol, wood pellets
- Manufactured goods – oriented strand board, tissue, particle board, bioplastics (nano-cellulose products were not considered).
- Agricultural use – biochar, compost, mulch, animal bedding

The students' slide decks are available on RCEA's website: <https://redwoodenergy.org/community-choice-energy/about-community-choice/power-sources/humboldt-county-biomass/> (see "Humboldt State University Capstone Class on Alternative Biomass Uses").<sup>1</sup>

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<sup>1</sup> The student research is of special value in that it was performed specifically for RCEA in reference to the local mill waste problem. Mr. Furniss has gathered additional information resources on biomass power and alternative uses of biomass at: [https://redwoodenergy.org/wp-content/uploads/2020/07/Biomass-Humboldt-RCEA-1\\_19-FINAL-1.pdf](https://redwoodenergy.org/wp-content/uploads/2020/07/Biomass-Humboldt-RCEA-1_19-FINAL-1.pdf)



Given RCEA's principal mission<sup>2</sup>, staff are interested in the energy-producing uses examined by the students. However, recent economic analysis by the California Energy Commission and other entities has generally shown these technologies are not cost-competitive with other renewable resources such as wind and solar, even when those intermittent resources are coupled with energy storage to address reliability needs.<sup>3</sup>

Having examined the various alternatives proposed by the student teams and the literature, RCEA consultant Michael Furniss notes that there is an opportunity for significant local carbon sequestration in managing waste biomass (~400,000 metric tons of CO<sub>2</sub> equivalent per year), via C-sequestering non-energy uses such as nanocellulose products, compost, and biochar.

The CAC's biomass subcommittee requests guidance from the Board on a continuing role for the subcommittee.

- Does the Board wish to have this subcommittee continue to operate in an advisory role on biomass alternatives?
- To what degree does the Board wish to lead and collaborate on advocating, researching, testing, and implementing alternative uses of local biomass derived from mill waste, in-forest fuels treatment slash, and other sources?
- Would RCEA consider funding a Life Cycle Analysis, including alternative uses, for local mill waste?
- Does the Board wish to move forward to pursue grant funding for biochar, nanocellulose, and/or compost demonstration projects?
- Are there other specific questions the Board would like the subcommittee and staff to consider?

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<sup>2</sup> RCEA's policy on Biomass is reflected in this document: RePower Humboldt The Redwood Coast Energy Authority's Comprehensive Action Plan for Energy <https://redwoodenergy.org/wp-content/uploads/2020/06/RePower-2019-Update-FINAL-.pdf>.

<sup>3</sup> California Energy Commission. "Estimated Cost of New Utility-Scale Generation in California: 2018 Update" (see Figure 7) <https://ww2.energy.ca.gov/2019publications/CEC-200-2019-005/CEC-200-2019-005.pdf>.



# REDWOOD COAST Energy Authority

## COMMUNITY ADVISORY COMMITTEE STAFF REPORT Agenda Item # 9

AGENDA DATE:	January 12, 2021
TO:	RCEA Community Advisory Committee
PREPARED BY:	Matthew Marshall, Executive Director
SUBJECT:	RePower Humboldt Energy Strategic Plan Update

### SUMMARY

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Following approximately nine months of analysis and gathering public input, in December of 2019 the RCEA Board adopted an update to the RePower Humboldt Plan, RCEA's comprehensive action plan for energy. The plan establishes goals and strategies to guide RCEA's work over the 2020-2030 period, and is available online at:

<https://redwoodenergy.org/wp-content/uploads/2020/06/RePower-2019-Update-FINAL-.pdf>

Staff intends to provide RePower Humboldt Plan updates every six months going forward to keep the Committee informed on implementation progress. At the meeting staff will provide a presentation on the current status of plan implementation and related activities. This will include updates on the four focus areas of the plan:

1. Regional Planning and Coordination
2. Integrated Demand Side Management
3. Low-carbon Transportation
4. Energy Generation and Utility Services.

### STAFF RECOMMENDATION

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N/A – Information only.