Public Comment

March 28, 2024 RCEA Board of Directors Regular Meeting

Agenda Item 7.1: Humboldt Sawmill Company Biomass Emissions Biomass Technical Advisory Group and Community Advisory Committee Report

Lori Taketa

From: Ben Martin

Sent: Monday, March 25, 2024 5:02 PM

To:Public CommentSubject:Agenda Item 7.1

Follow Up Flag: Follow up Flag Status: Flagged

Dear RCEA Board Members:

I recommend a NO vote on the biomass matter. It is an environmentally unsound source of energy.

Sincerely,

Ben R Martin, Ph D

From:

Sent: Monday, March 25, 2024 11:11 PM

To: Public Comment

Subject: Board Meeting Agenda Item 7.1

Follow Up Flag: Follow up Flag Status: Flagged

40% of RCEA's renewable portfolio comes from a power plant that emits more carbon per megawatt hour than coal and as much greenhouse gas as 88% of Humboldt's cars. I urge RCEA to keep its promises to Humboldt County:

- RCEA's promise not to do business with environmental lawbreakers provides you with the means to end the biomass contract in 2025 instead of 2031 and shift millions of dollars to clean energy.
- RCEA promised no long-term biomass contracts, but extended the Scotia biomass contract for ten more years to 2031.
- RCEA promised to end the biomass contract if the biomass plant violated environmental regulations, but is now making excuses after hundreds of violations.
- RCEA promised lower greenhouse gas emissions than PGE, but RCEA's biomass-heavy power mix emits four times more carbon per kilowatt hour than PGE. It's just not counted.

It's clear to anyone who knows the facts that RCEA should end its biomass contract. Why is RCEA ignoring the facts and its promises?

Suzanne Cook

McKinleyville, CA 95519

From:

From:	Siddharth Mehrotra
Sent:	Monday, March 25, 2024 12:55 PM
То:	Public Comment
Subject:	Agenda Item 7.1
Follow Up Flag:	Follow up
Flag Status:	Flagged
To Whom It May Concer	n,
We, the undersigned, re	mind the RCEA Board of the following promises, and the exceptions now made to them:
PROMISE 1) "100% clear mention of clean.	and renewable electricity" (exact words) by 2025 BUT now saying 100% renewable by 2030. No
PROMISE 2) No long terr	m biomass contracts BUT extended biomass contract for ten more years to 2031
PROMISE 3) End contrac of violations.	t if biomass plant violated environmental regulations BUT now making excuses after hundreds
PROMISE 4) Lower greer per kilowatt hour than P	nhouse gas emissions than PGE BUT RCEA's biomass-heavy power mix emits 4x more carbon GE.
Be it known by these sta further exceptions or co	tements, we call upon the Board to keep those promises as originally made, and make no mpromises.
Yours,	
Siddharth Mehrotra	

From: Sent: To: Subject:	Patty Harvey Monday, March 25, 2024 2:05 PM Public Comment Agenda item 7.1
Follow Up Flag: Flag Status:	Follow up Flagged
Dear RCEAI have been disappoir and to the promises you have fail	nted in your lack of appropriate response to the wishes of the people of Humboldt Co. ed to keep:
PROMISE 1) "100% clean and rene mention of clean.	ewable electricity" (exact words) by 2025 BUT now saying 100% renewable by 2030. No
PROMISE 2) No long term biomas	s contracts BUT extended biomass contract for ten more years to 2031
PROMISE 3) End contract if bioma of violations.	ass plant violated environmental regulations BUT now making excuses after hundreds
PROMISE 4) Lower greenhouse gaper kilowatt hour than PGE. It's ju	es emissions than PGE BUT RCEA's biomass-heavy power mix emits 4x more carbon est not counted.
It's time to start thinking about th	e health and safety of citizens.
Patty Harvey	
HCA/PNHP-Humboldt	
 Make a Small Loan, Make a Big Di	fference - Check out Kiva.org to Learn How!

From: garth rogers

Sent: Monday, March 25, 2024 11:44 AM

To:Public CommentSubject:CLEAN Energy!

Follow Up Flag: Follow up Flag Status: Flagged

Please end the contract with Humboldt Sawmill and stick to the original plan that calls for 100% CLEAN and renewable electricity.

Burning wood is not clean. It is worse than burning methane. Carbon from wood stays in the atmosphere significantly longer than methane and is significantly dirtier -- and is really bad for people to breathe.

Sincerely, garth rogers Arcata.

From: Emily Siegel LCSW

Sent: Monday, March 25, 2024 2:04 PM

To: Public Comment

Subject: Agenda Item 7.1 Biomass

Follow Up Flag: Follow up Flag Status: Flagged

RCEA promised "100% clean and renewable energy" by 2025. A biomass plant, particularly one as polluting as the one in Scotia, does not live up to this promise. The Scotia biomass plant emits more carbon and pollution than even the average biomass plant in California. It even produces more pollution than the PG&E gas powered plant and only a third as much electricity as that plant this is shocking. I have learned that the board is now claiming the board resolution did not say "100% clean and renewable energy" but instead said "renewable carbon freeze" energy, which still includes biomass. Furthermore, RCEA promised "no long-term biomass contracts" but instead extended the biomass contract to 2031. There was even a promise to end the contract if the biomass plant violated environmental regulations, but now all we hear is excuses for why that can't happen even though there are many violations and more are probably coming. There is no safe level or trivial health harms from biomass emissions, and the current contract can and should be ended because of environmental regulations.

I do not want my repair dollars going to biomass in anyway because it is not clean energy. Live up to your promises. Protect the health of Humboldt County residence, including their children. RCEA's reputation will only be further damaged if you do not end biomass now. -- Emily Siegel LCSW.

From: Caephren McKenna

Sent: Monday, March 25, 2024 2:24 PM

To: Public Comment

Follow Up Flag: Follow up Flag Status: Flagged

Dear Redwood Coast Energy Authority,

Please keep the following promises that were made to the people of Humboldt:

- 1. "100% clean and renewable electricity" (exact words) by 2025.
- 2. No long term biomass contracts.
- 3. End contract if biomass plant violates environmental regulations.
- 4. Lower greenhouse gas emissions than those of PG&E.

Please consider the long term impacts of your actions and decisions on both the people and the environment of Humboldt.

Thank you for reading.

Sincerely,

Caephren McKenna

RCEA'S BROKEN BIOMASS PROMISES

1) PROMISED to include environmental compliance in selection of biomass contractors and require a high standard of ongoing environmental performance Sources: Biomass RFO Guidelines https://redwoodenergy.org/wp-content/uploads/2017/08/RCEA Biomass RFO Guidelines.pdf
Repower 2019 Update https://redwoodenergy.org/wp-content/uploads/2020/06/RePower-2019-Update-FINAL-.pdf

Board voted for the biomass contract 6 weeks after air district cited HRC for over 1000 violations for failing to report over 800 episodes of excessive emissions the previous year. RCEA staff has tried to excuse and minimize the plant's violations of Clean Air and Water Acts to the public and delay action by misleading the public with a plan for an air monitor study that is incapable of proving or disproving adverse health impacts from plant emissions, which health experts already accept as real.

2) PROMISED No long term biomass contracts.

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

In 2021 biomass contract was extended for 10 years. The CPUC defines "long term" as 10 years or more.

3) PROMISED 100% clean and renewable electricity by 2025

Source: <u>https://redwoodenergy.org/wp-content/uploads/2019/04/7.2-1-Resolution-2019-1-100-Renewables-by-2025.pdf</u>

RCEA tells the public now that the 2019 resolution said "100% renewable and carbon free" when that is not the case.

4) PROMISED to provide power with lower greenhouse gas emissions than PGESources: RCEA website Power Resources, Power Mix https://redwoodenergy.org/power-resources/ Repower Update 2019 https://redwoodenergy.org/power-power-2019-Update-FINAL-.pdf

RCEA's biomass heavy (20%) power mix is more than twice (being very conservative, probably 3-4 times) as carbon intensive as PGE's power mix and, kilowatt hour for kilowatt hour, heats the planet far more over the critical next 2 decades. PGE's power mix includes 4% biomass which it, unlike RCEA, is required to buy, and 9% fossil gas powered plants as its only fossil fuel source. Even counting upstream emissions, gas plants emit 1/3 as much CO2e per kwh as the HSC biomass plant.

5) PROMISED not to disseminate untrue or misleading information

Source: RCEA Prohibition Against Disseminating Untrue or Misleading Information https://redwoodenergy.org/wp-content/uploads/2018/12/RCEA Untrue Misleading Info Policy 11.21.16.pdf

Despite knowing that the HSC plant's fuel is amost exclusively mill waste, and that it is illegal to open burn mill waste, RCEA staff repeatedly invite speakers to RCEA public forums about biomass who misinform the public by conflating the combustion of mill waste with the prevention of pile burning and wildfires. Staff know what these speakers are going to say and, after they predictably say it, don't offer the public any information about what the biomass plant actually burns. To me, giving someone time on the agenda as an invited guest when you know they are going to mislead the public qualifies as "disseminating misleading information", especially if you don't bother to correct the resulting misimpressions.

Humboldt Coalition for Clean Energy

350 Humboldt Humboldt Unitarian Climate Action Campaign EPIC

Northcoast Environmental Center
Women's Intl League for Peace and Freedom-Humboldt
Humboldt Health Care for All
Buddhist Peace Fellowship

HOPE Coalition

Redwood Alliance

Lost Coast League

Sierra Club Redwoods North Group

Friends of the Eel River

Humboldt Green Party

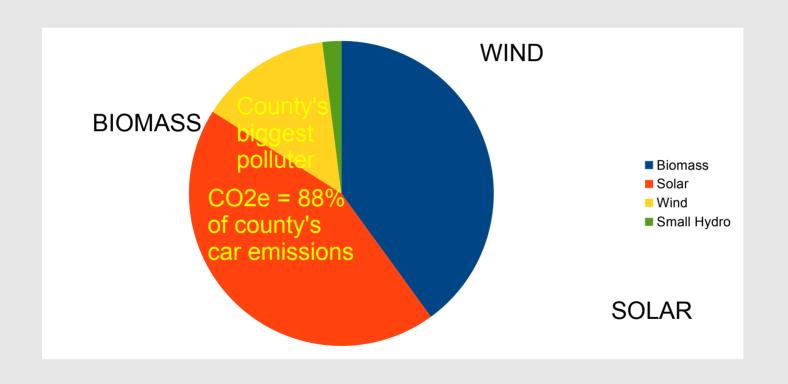
Humboldt Democratic Central Committee

Humboldt Progressive Democrats

Climate Health Now

CA Alliance for Retired Americans-North State CA Nurses for Environmental Health and Justice

Biomass is 40% of RCEA's Renewable Portfolio



RCEA's Broken Promises "100% clean and renewable" by 2025

Ensure biomass plant compliance with environmental law both in selection and retention

Biomass RFO Guidelines 2016, RCEA Board Minutes 2019, RCEA Integrated Resource Plans 2020 & 2022, RCEA website 2024

Our ask:

Terminate biomass contract, replace with clean energy by 2025.

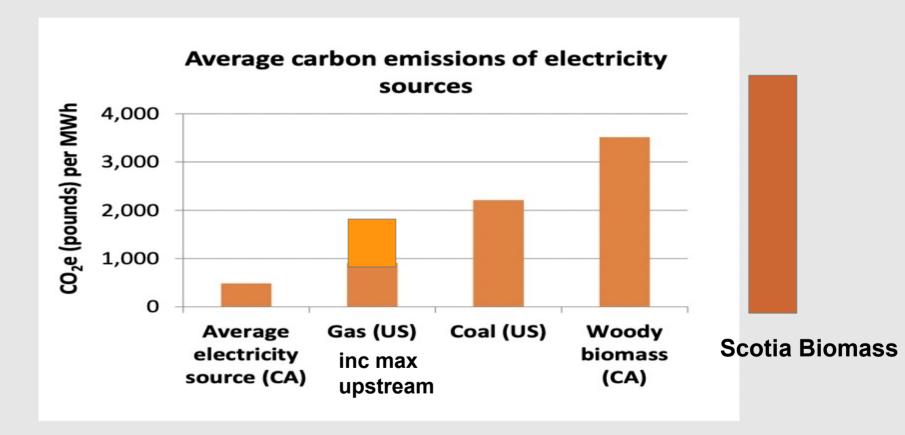
Within 10 years on current path:

Exceed 1.5 C

Reach 5 Irreversible Global Tipping Points

500 scientists to world leaders re biomass: "Regrowth takes time the world does not have."

UNEP 2023; McKay et al. 2022; Lamboll et al 2023



Sources: CPUC, CARB

Heat Rate = amount of heat or fuel needed to generate 1 kwh

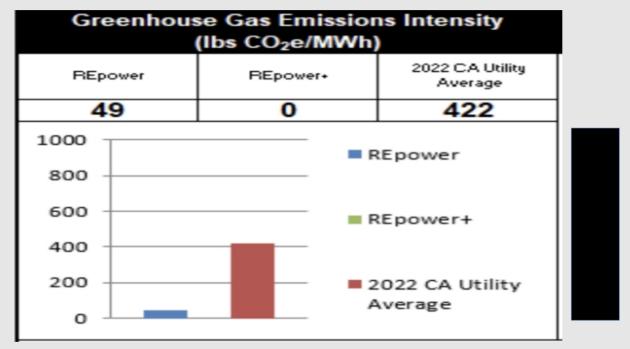
Efficiency when new 24% 38 years later 14%

NREL, CA Energy Commission



To produce 1 kw of electricity today, the plant must burn nearly twice as much wood as it did in 1989

RCEA'S Power Content Label



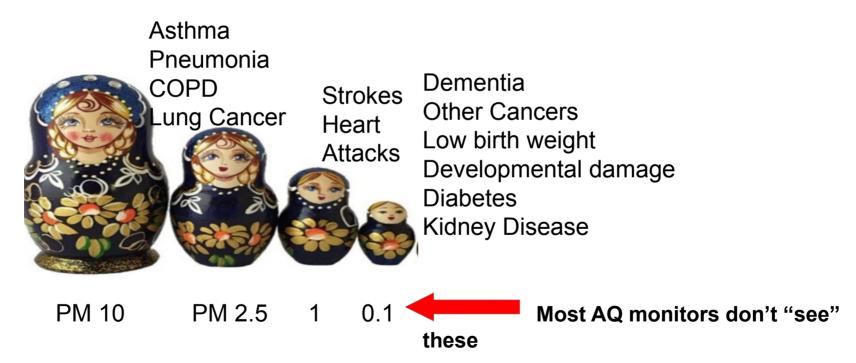
Repower GHG including biomass CO2e @ 5,233 lb/MWh

Generation from: CEC Quarterly Fuel and Energy Report

Facility GHG from: CARB

Particulates: SIZE MATTERS

What Purple Air Won't Tell You



MOST BIOMASS PARTICULATES IN THIS RANGE

FOR PERSPECTIVE

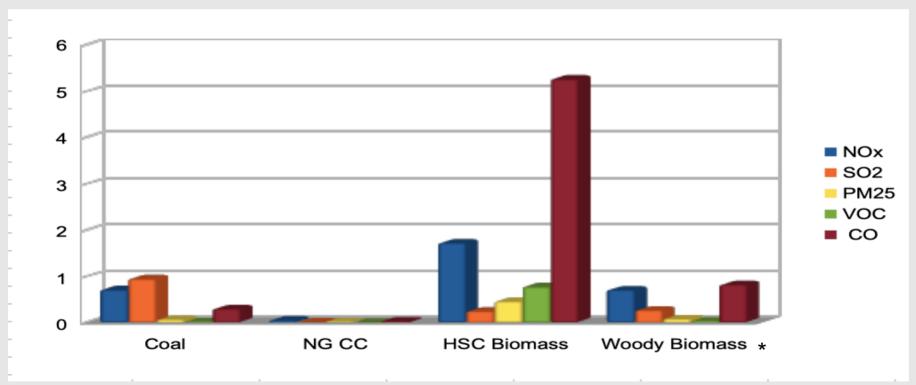
Statewide Air Pollution from Electricity in 2026

Biomass: 4% of generation

51% of NOx 44% of PM2.5 54% of SO2

Pollutant Emissions per Kilowatt Hour

US Power Plant Averages & Humboldt Sawmill Co



Argonne Natl Lab, 2020; CARB 2021; CEC Quarterly Fuel and Energy Report, 2021 *Western Region

National health organizations calling for an end to biomass combustion



THE COMMUNITY

CHECK-UP-

IN WOMEN'S HEALTH

Caring for Whomen





MEALTH ASSOCIATION

Asthma and Allergy

Children's Environmental Health

Network

Foundation of America

COLUMBIA

WIC for a Healthier America ATIONAL ENVIRONMENT

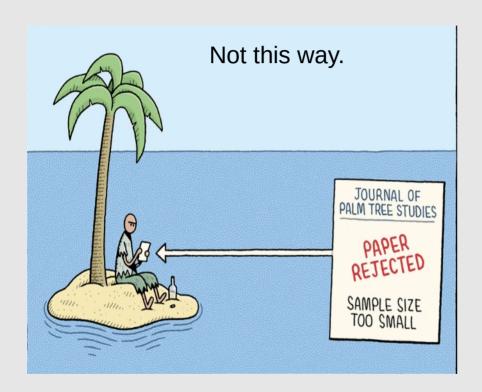
MAILMAN SCHOOL OF PUBLIC HEALTH CLIMATE & HEALTH

National WIC Association

Health Care

Without Harm

Why? And how do they know?



Extrapolation from statewide study (NY) on biomass proximity and ER visits

7-8 additional respiratory ER visits per month from Scotia/Rio Dell



Humboldt County Health Dept; Lee, 2021

BIG DATA

All US Medicare/United HealthCare

Every ug/m³ increases

Hospitalizations

Premature Deaths

No Safe Levels
No Safe Places

COMPUTER MODELING

Emissions + Demographics +
Dispersion + Risk
EPA's Co Benefit Risk
Assessment for PM2.5
TOTAL DAMAGES

\$4-9 million annually

EPA COBRA, CARB 2021

OEHHA's Air Dispersion and Modeling Risk Tool for Air Toxics

Facility Search Engine								
Every 4 years. Step 1: Prioritization Score								
Fa	Facility Name: Humboldt S			Sawmill Company			y ID :	60
	Street: 153 Main S			Street			ode :	2421
	City: Scotia						Zip :	95565
Facility Prioritization	Inventory Year		Above High Threshold?		District Prioritization Threshold High Low			
Cancer Prioritization			Yes			50		10
Chronic Prioritization			Step 2: Ti	riaaere	d by S	Score > 5	0	
Acute Prioritization	Step 2: Triggered by Score > 50 Scotia biomass plant's score is 5,999 cores determine whether a facility must conduct a risk assessment for the 'Hot Spots' program.							
Prioritization so	ores determ	ine whethe	r a facility must	conduct a r	isk asse	ssment for the	Hot :	Spots" program.
Health Risk				Dist	rict			District

Health Risk Assessment Inventory Year	Value	District Notification Level	District RRAP Level
Cancer Risk Health Risk Asse	essment	10	none
Chronic Hazard Index Acute Hazard Acute Hazard		1	none
Acute Hazard 20+ years overdu		1	none
20. years everal			



74% disadvantaged, 1 in 5 chronically absent

CHILDREN AND ELDERS

BABIES IN UTERO

LOW INCOME

NONWHITE



HOW POLLUTION PULLS THEM DOWN

Biomass plant within 6 miles of home Worse Asthma More Missed School Days Higher Drop out Rate Lower Adult Income Shorter Life Expectancy

Pollution doesn't have to be every day to cause life-changing and life-ending harm

CHRONIC DISEASE

AIR VIOLATIONS (cited)

HUMBOLDT

Humboldt Sawmill 292

Humboldt PGE Plant (

SHASTA

Burney Forest Products 1

Sierra Pacific Shasta 1

Sierra Pacific Burney 1

Sustainable Resource Mgmt 1

Wheelabrator Shasta 1

Sierra Pacific Anderson 85



Five Years Enforcing Outdated Carbon Monoxide Limits

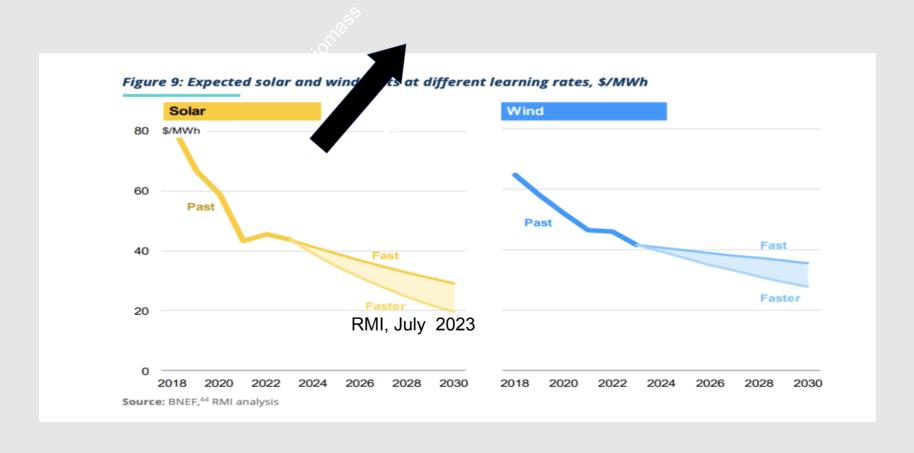
Days Operating with Carbon Monoxide Over EPA Limit

2021 Calendar



31

While clean power prices fall, biomass's built-in annual price increase leads to \$98/Mwh by 2031



From: Kimball Wanzenberg
To: Public Comment
Subject: Agenda Item 7.1

Date: Tuesday, March 26, 2024 10:03:17 PM

I have a slightly different view of burning biomass for energy and electricity.

It seems as if the entire Western US is waiting for a costly conflagration. I would prefer to keep the forests healthy and intact by grooming them - like certain Native American tribes used to do. Removing dead logs, branches and leaves will remove half of the fuel available for forest fires. If we managed our forests like this state-wide, we would save dozens of lives and homes every year, and \$billions.

My plan calls for chipping or briquetting the wood, thoroughly drying it, running it through a "J" burner to drive a steam-turbine and tying into a local power line instead of burning gas, coal or oil. Otherwise, the fuel could be transported to a central facility. You could even put the power plant on two flatbed trucks and bring it to the wood. We once built a pyrometallurgical metals recovery plant where the values were in the smoke. We used a series of wet cyclones to trap the emissions, followed by an electrostatic precipitator. Perhaps the solution is to retrofit better equipment in the old power plant. In any case, burning wet or damp wood is likely to increase emissions. Best wishes for a good outcome.

Andrew K. Wanzenberg

From: Mary Hurley
To: Public Comment

Subject: Public Comment - Agenda Item 7.1 for 3-28-24 RCEA Board Meeting

Date: Wednesday, March 27, 2024 7:24:31 PM

Please submit this public comment on the biomass portion of the RCEA energy portfolio for the 3-28-24 board meeting:

I urge the RCEA Board to reconsider the recommendation to extend the biomass portion of its energy portfolio to 2031. RCEA promised the community that they would provide 100% clean and renewable energy by 2025. Past and current community input shows that the public wants to move away from the dirtier biomass portion of the energy portfolio. The biomass energy power mix emits four times more carbon per kilowatt hour than PG&E.

The Scotia biomass plant is old and outdated and records show they have been cited for more than 1,000 violations of the Clean Air Act. The production of dirty biomass has additional health costs that affect pregnant women and children as well as other adults adversely with detrimental health effects ranging from diabetes, in-utero exposure, and kidney damage. RCEA can replace biomass with cleaner energy energy with the guarantee of more solar and storage coming online in 2025.

The Scotia plant can move to develop safer and cleaner replacements for biomass in lieu of burning it and needs to prioritize this effort. Burning biomass should not be stressed as the only solution to wildfire mitigation.

Our community must do its part to prevent a tipping point in increased global warming that will have disastrous consequences for all life. This is why RCEA needs to commit to a 100% clean and renewable energy portfolio now as there isn't time to delay. The increased costs now are not comparable to a world that is too warm to live in for future generations.

Thank you.

Mary Hurley

Eureka, CA 95503

From: Elizabeth Connors-Keith
To: Public Comment
Subject: Agenda Item 7.1

Date: Thursday, March 28, 2024 11:52:21 AM

KEEP YOUR PROMISES TO HUMBOLDT:

PROMISE 1) "100% clean and renewable electricity" (exact words) by 2025 BUT now you're saying 100% renewable by 2030 and no mention of clean.

PROMISE 2) No long-term biomass contracts-- BUT you extended the biomass contract for ten more years to 2031.

PROMISE 3) End the contract if the biomass plant violated environmental regulations-- BUT now you're making excuses after hundreds of violations.

PROMISE 4) Lower greenhouse gas emissions than PG&E-- BUT RCEA's biomass-heavy power mix emits 4x more carbon per kilowatt hour than PG&E; it's just not counted.

Thank you, Elizabeth Connors-Keith From: Walter Paniak
To: Public Comment

Subject: Comments for section 7.1 Biomass

Date: Thursday, March 28, 2024 10:52:20 AM

Attachments: 2024-03-27 17-49.pdf

I have a few comments and attachments that the board should consider.

1. I question the status of carbon neutrality of burning wood at an industrial scale. The EPA and CARB both show that the California Land Carbon sink is decreasing. See the first 2 pages of the first attachment where not only is the carbon sink reducing but it may

be a carbon source. The EPA lumps all categories together. While the California Air Resources Board breaks down carbon stores into components like soil, forest, crop land and above ground forest and surface debris. To determine how this affects Humboldt county use the Time Lapse tool in Google Earth and you decide if we are in a carbon deficit by using the forty year cycle of the "cut". The European Union's Sentinel 2 satellite system allows you to download recent images. The attached JPEG image north and east of Arcata shows a cloudless composite from the last two months. Again you can judge the sustainability of clear cuts viewed from space with low quality resolution. The carbon sink and carbon cycle are just like a bank account and just because you are getting paid interest does mean you can continually make withdrawals without harmful effects. Trees can't select their CO2 source during the day. How is this cut sustainable in the time frame that is relevant?

Years ago The Biomass Resources Group from Cal Berkeley gave an alternative for slash utilization in the forest. That was to masticate limbs and small trees in place. The benefits were less soil compaction, increased soil carbon along with retention of micronutrients. It took me months the find out that this organization is fully funded by the Department of Agriculture.

Burning forest waste has a benefit as a revenue source and a reduced fuel load. Reducing the Ladder fuel small trees by shredding in place or as a revenue source. It appears that revenue is the choice for timber companies regardless of the benefits to the soil.

The Department of Agriculture fire simulation model stated that once this year and the previous year needles or leaves begin to decompose the fuel ability to flash and to allow a crown fire was greatly reduced. Nor did they mention HRC sister company reply to Measure V in Mendocino county. Their consultant said that there was no correlation between the hack and squirt problem of dead tan oaks and the locations of high fire incidents.

2. When did the definition of clean change from "no problem" to "well it could be worse and there is no definitive indication that people are falling over with sickness. See the next 3 pages in the scanned attachment about HSC pollution details. Yes every year is about the same and it appears to be up to the local board to go beyond reporting every four years.

This is CARB data for HSC that was last reported under the title of Acute Hazard Index. You can see criteria pollutants, for example, 239 tons of NOX and toxic pollutants on the subsequent pages.

These pollutants are apparently not harmful enough to make a difference to the local Air Board. They are there to regulate pollution.

Would you willingly put children that you care for in the middle school less than a 1000 ft away.

What is the status of the emissions inventory plan by HSC in order to comply with AB 2588 Toxic Hots Reporting?

This was mentioned at the CAC meeting by the ARB local director.

3. Biomass power is the most costly power. The Energy Information Agency EIA for 2024 forecast the Average Wholesale Price for Northern California shows an estimated price of \$43 per MW. (See the last image as a screen shot) April's power cost for HSC will be in the lower

70s range. This is even when solar energy has to be greatly discounted in the Spring. The least efficient power is the most expensive.

Why do rate payers have to subsidize a privately held company incorporated in Delaware, per in the California Secretary of Statesks data base it's mailing address is Capella Ca. Sansome Partner llc is an under the radar long term investment LLC and I don't see any leverage unless they were convinced that something like biochar or hydrogen extraction was more lucrative in term of profit or tax breaks for other ventures. I don't think RCEA has much leverage especially when you are not willing to walk away.

In terms of climate change and reducing the single most significant point source of CO2 and pollutants when will we sacrifice for the common good, if the time is not now then when? If it is not us then who?

Walt Paniak Arcata



+ Sources & Uses

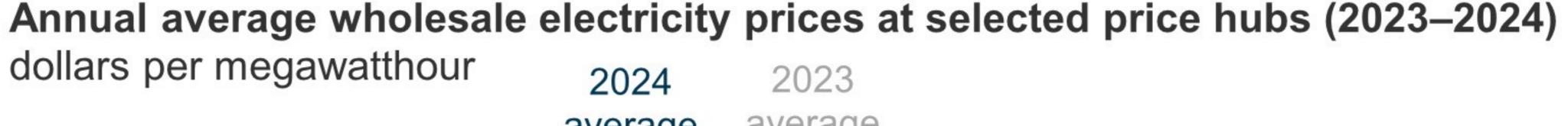
+ Topics

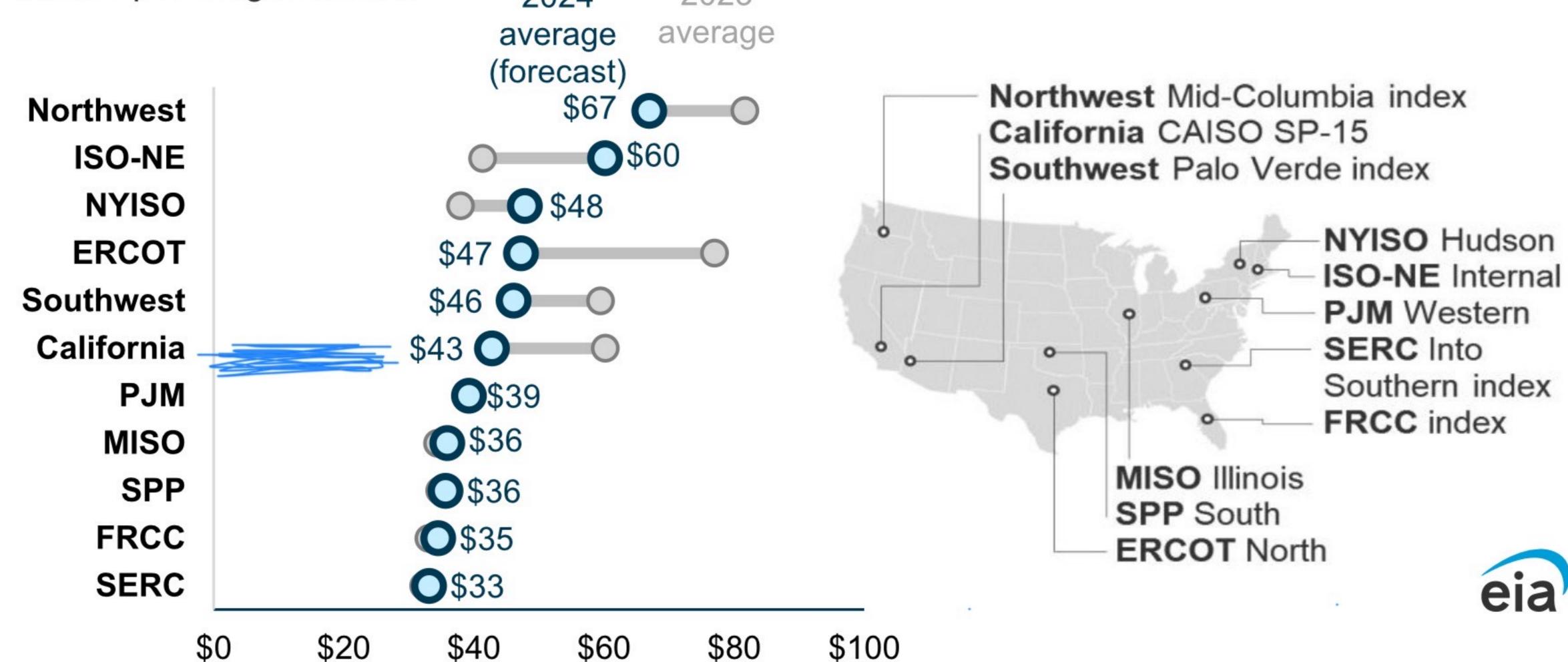
+ Geography



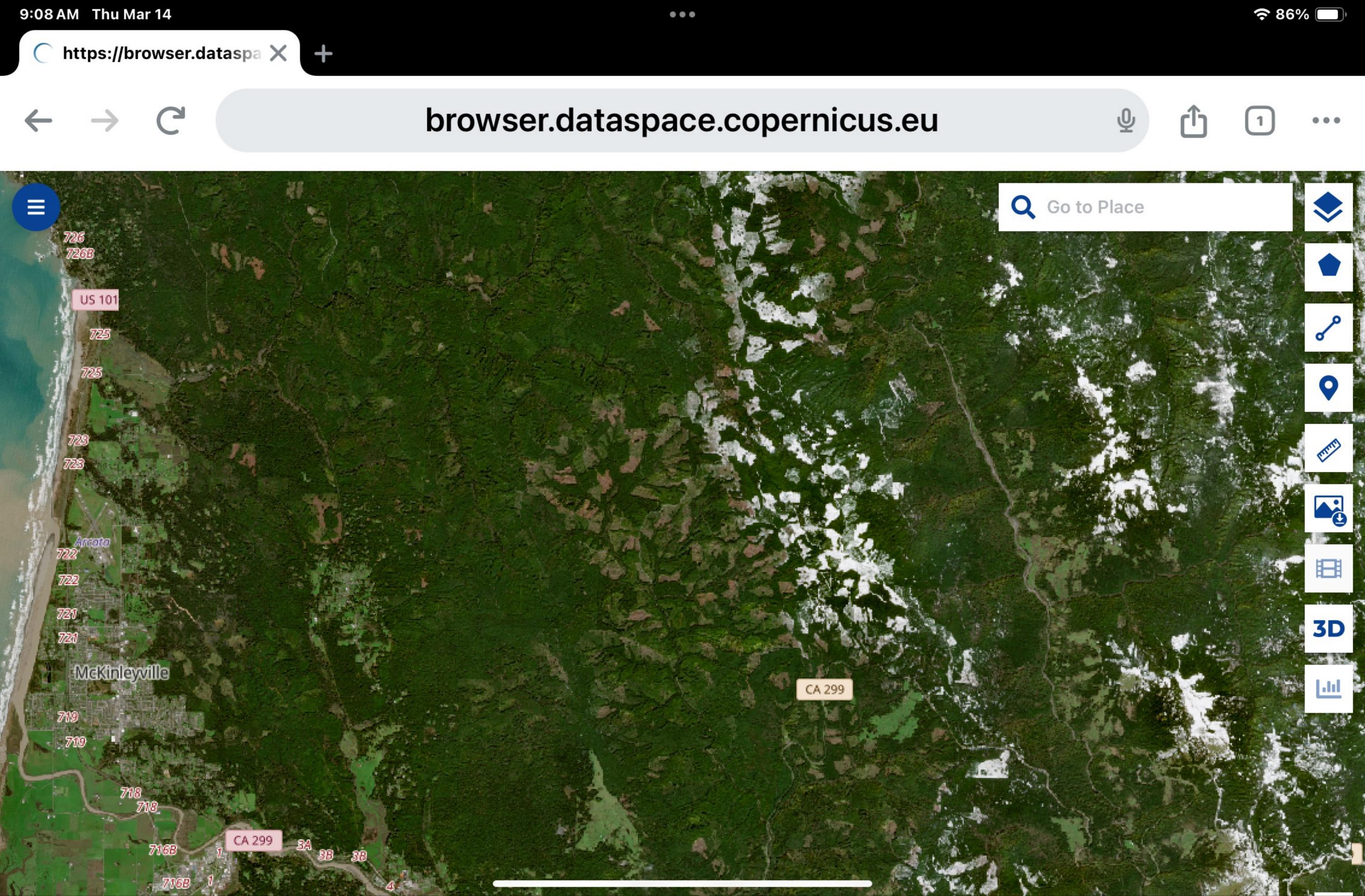
In most U.S. regions, 2024 wholesale electricity prices will be similar to 2023







Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, January 2024



•

III

E'i

(no subject) 🔑 Inbox

公



me 11:24 AM to me ~

⊕ ← …

Hi Walter,

Thank you for your question. I believe you are talking about results from either the State Inventory Tool or the US GHG Inventory by State data?

In either case, you are interpreting the results correctly. A negative number represents a sink, so a smaller negative number represents a smaller amount of carbon being stored in soil/forests. In other words, the amount of carbon absorbed by the Land Use and Forestry sector was smaller in 2021 than in 2012.

2:12 PM Thu Feb 15

cfpub.epa.gov

♥ 81% 📟

California Emissions and Removals, Land Use, Land-Use Change, and Forestry, MMT CO2 eq.	06	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Methane	829	2.901	4.514	2.408	1.938	1.987	2.671	3.162	2.739	3.257	2.452					
Nitrous oxide	561	0 617	1.475	0.332	0.053	0.004				3.231	2.453	3.454	3.446	2.077	7.174	9.881
				0.332	0.053	0.084	0.464	0.721	0.494	0.843	0.324	0.924	0.921	0.126	2.869	4.472
Total	5 658	35.961	-33.058	-36.280	-35.964	-34.642	-34.305	-33.183	-33,465	-30.654	-31.338	20.247		_		4.472
Carbon										50.034	31.338	-29.247	28.822	-30 437	-21.593	-16.907
dioxide	9.048	39.480	39.047	39.020	37.955	36.713	-37.440	37.066	36.698	34,753	-34.114	33.625	33.188	-32.640	31.636	31.260

Related National Charts

Download data (CSV)

More Detailed Views

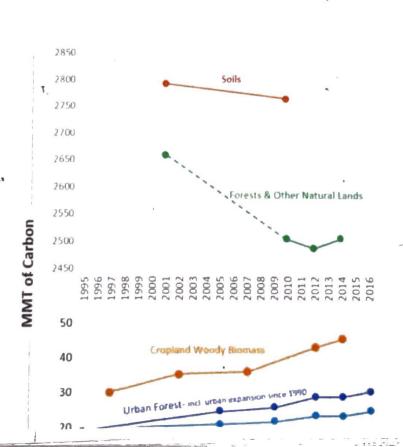
Higher-Level Overview(s) • Inventory Sector

Ca Carbon sink going



X

Thank you for digging into the numbers here, and you interest in this topic. Though I am unfamiliar with the exact numbers you are referencing and you don't provide a citation, your summation of the land carbon sink is correct. The California Air Resources Board actually estimates that all lands in California having been a net source of emissions. Additionally, US Forest Service funded research has also found exactly what you are pointing out here. This decreasing sink, or even source, of emissions from California's lands are caused by many factors including land management and land use decisions, climate change and its effects like wildfires and drought induced mortality, as well as more people and our aging infrastructure causing forest loss through wildfire ignitions or poorly planned developments or resource extract.







Index

Acute Hazard Index 1 none

The facility health risk assessment (HRA) and prioritization score data were collected under the Air Toxic 'Hot Spots' Program. The risk data, submitted to the ARB, may not have been derived from the same toxic emission data that was reported to CEIDARS. Because the facility may have taken action to reduce risks pursuant to the risk assessment, the risk from the facility may have been substantially reduced since the risk assessment was conducted. To determine if more recent data is available, please contact the district.

Program Status:

HRC criteria pollutants 2021

Emissions Data

	Pollutant	Emissions	Unit
Data from 2021	TOG	66.2	Tons/Yr
Download CSV file	ROG	34.5	Tons/Yr
	CO	634.6	Tons/Yr
	NOX	239.6	Tons/Yr
	SOX	38.7	Tons/Yr
	PM	32.9	Tons/Yr
	PM10	26.5	Tons/Yŗ
	PM2.5	23.7	Tons/Yr







Q

Facility Name: Hum

Humboldt Sawmill Company

Facility ID: 60

Street:

153 Main Street

SIC Code:

2421

City:

Scotia

Zip:

95565

Phone:

(707) 764-4390

County:

Humboldt

Air Basin:

North Coast

District:

North Coast Unified Agmd

Above the threshold

Facility Prioritization	Inventory Year	Above High Threshold?	District Pri Threshold High	oritization Low	
Cancer Prioritization		Yes	50		10
Chronic Prioritization		Yes	50		10
Acute Prioritization		Yes	50		10

Prioritization scores determine whether a facility must conduct a risk assessment for the "Hot Spots" program. The scores themselves are not an accurate measurement of facility risk



	_							
		last a	vailable dat		ic chemicals		NAMES CONTROL OF THE PARTY OF T	
FACID	CO		AB		POLLUTANT		EMISSIONS	_LBS_YR
	60	12			2,4-DiNPhenol		0.61493	
	60	12			2-Chlorophenol		0.08199	
	60	12		91576	2MeNaphthalene	_	0	
	60	12			3-MeCholanthren		σ	
	60	12			4-Nitrophenol		0.37579	
	60	12		83329	Acenaphthene		3.10883	
	60	12		208968	Acenaphthylene		17.08147	
	60	12	NC	75070	Acetaldehyde		8702.387	
	60	12		107028	Acrolein		13776.65	
	60	12			Anthracene		10.24888	
	60	12			Antimony		26.98872	
	60	12	NC	7440382			75.15844	
	60	12		50328	15.15		8.88233	
	60	12			B[a]anthracene		0.22207	
	60	12			B[b]fluoranthen		0.34163	
	60	12	101 (5)		B[e]pyrene		0.00888	
	60	12			B[g,h,i]perylen		0.31772	
	60	12			B[k]fluoranthen		0.12299	
	60	12		7440393			580.7697	
	60	12			Benzene		14348.42	
	60	12			Beryllium		3.75793	
	60	12		56235			153.7331	
	60	12			Cadmium		14.00679	
	60	12 1		7782505	Chlorine		2698.871	
	60	12			Chlorobenzn:	-	112.7376	
	60	12			Chloroform		95.65615	
	60	12			Chromium		71.74214	
	60	12			Chrysene		0.12982	
	60	12		7440484			22.2059	
	60	12 1		7440508			167.3983	
	60	12 1		18540299			11.95702	
	60	12 1			D[a,h]anthracen		0	
	60	12 N			DiClBenzenes		0	
	60	12 1			DieselExhPM		115.632	
	60	12 N			Fluoranthene		5.46606	
1	60	12 M			Fluorene		11.61539	
	60	12 N	VC	50000	Formaldehyde		15229.34	
(60	12 N	VC	7647010	HCI		128.8284	
(60	12 N	VC .	110543	Hexane		0	
(50	12 N	NC	193395	In[1,2,3-cd]pyr		0.29722	
€	50	12 N	VC	7439921	Lead		163.9826	ξ
6	50	12 N	IC	7439965	Manganese		5466.068	
6	50	12 N	IC	7439976	Mercury		2.28937	
6	60	12 N	IC	67561	Methanol		6362.783	
6	60	12 N	IC	7664417	NH3		1117918	

-

60	12 NC	91203 Naphthalene	331.3703
60	12 NC	7440020 Nickel	112.7377
60	12 NC	1151 PAHs-w/o	3.112557
60	12 NC	1336363 PCBs	0.00888
60	12 NC	85018 Phenanthrene	23.91405
60	12 NC	108952 Phenol	174.2309
60	12 NC	123386 Propionaldehyde	77.1781
60	12 NC	129000 Pyrene	12.64028
60	12 NC	7782492 Selenium	9.55562
60	12 NC	108883 Toluene	0
60	12 NC	41903575 TotalTetraCDD	0.0016
60	12 NC	7440622 Vanadium	3.34796
60	12 NC	7440666 Zinc	1434.843
•••			

.

•

•

From: Tina Garsen
To: Public Comment
Subject: Agenda item 7.1

Date: Thursday, March 28, 2024 8:03:53 AM

Please desist from using biomass as a source of energy for our community. This was supposed to be a short term solution. Please keep your word.

Respectfully Betina Garsen Eureka California Sent from my iPhone From: Sue Y. Lee
To: Public Comment
Subject: Agenda Item 7.1

Date: Thursday, March 28, 2024 4:00:45 AM

Dear Members of the Board of Directors for RCEA,

The Humboldt Sawmill Co (HSC) biomass plant has been operating for 2 years without a permit as required by the federal Clean Air Act and in violation of provisions of the North Coast Unified Air Quality Management District. That HSC has filed a renewal permit application in May, 2023 over a year after the permit to operate expired, instead of 6 months prior to expiration, does not mean that HSC can keep operating according to State, Federal and local air district regulations. Given this violation by HSC, and under this circumstance, a provision in RCEA's contract with HSC would allow RCEA to withdraw its contract with HSC for biomass energy.

HSC has also been found to have committed numerous air quality infractions, and are emitting nearly three hundred thousand metric tons of global warming carbon dioxide annually, a quantity equivalent to 80% of emissions from all Humboldt's passenger vehicles. As a consequence, the HSC biomass plant is endangering our planet's life support systems and the health of our collective children and future generations, and that is a moral issue.

Given the health and climate impacts of biomass energy production by HSC, please do what's morally right and protect the health of our planet and our children. Please recommend that RCEA also do the morally right thing, and

remove biomass electricity from its RePower renewable portfolio, and keep its promise for !00% clean non-polluting energy by 2025.

Thank you for doing the right thing. Sincerely, sue y. lee mossman RCEA RePower + customer

From: Lynda McDevitt
To: Public Comment
Subject: Agenda 7.1

Date: Thursday, March 28, 2024 12:02:39 PM

Dear RCEA Board,

The RCEA contract with Humboldt Sawmill must be terminated for multiple reasons. The multiple Air Quality violations have given terms for termination. The promotion of biomass energy as clean and carbon neutral is a false equivalency due to the massive pollution and the time line for carbon neutrality makes no sense in terms of climate change. We need clean energy not biomass' dirty, CO2 spewing energy.

Please get creative. We need another source of energy for Humboldt. Keep your promises! Sincerely,

Lynda McDevitt

Buddhist Peace Fellowship, Humboldt Chapter

From: Daniel Chandler
To: Public Comment
Subject: Biomass combustion

Date: Thursday, March 28, 2024 1:40:30 PM

This is the text of the comment I plan to make in person today.

My name is Daniel Chandler. I am on the Biomass Technical Advisory Committee. As a climate advocate, I am most frustrated when people recognize the climate crisis but choose to present climate problems as solutions. Advocates of hydrogen that comes from processing methane is an example. In this county, biomass combustion fits this description. We all know it is not a climate solution – it is obvious because in 2019 RCEA said burning woody biomass was a transitional measure that was only for five years. If it were good for the climate, why would we phase it out?

Biomass is in the Integrated Resource Plan until 2035. And now RCEA is saying we are stuck with this plant that will have put over 5 million metric tons of carbon into the air by then. But this is crazy. The *only* thing we are supposed to get out of RCEA is a faster transition to carbon free renewables. The mission statement says: "RCEA's mission is to develop and implement sustainable energy initiatives... and advance the use of <u>clean</u>, efficient and <u>renewable</u> resources...

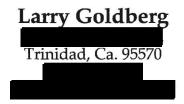
In 2021 we did not need to extend the contract for HSC. That was a terrible mistake. It can still be corrected by getting out of the biomass contract as soon as we can buy a carbon free renewable long-term replacement. I request that the RCEA Board consider its responsibilities to the mission of the RCEA – not staff – and *direct* staff to eliminate biomass from the RCEA portfolio as quickly as possible without incurring penalties.

Daniel Chandler, Ph.D.

Trinidad, CA 95570

Submitted by a member of the public at the 3/28/24 Board meeting.

https://redwoodenergy.org/wp-content/uploads/2024/03/2024.03.12-CAC-Meeting-Public-Comment Redacted-disc.pdf



To: RCEA board

From: Larry Goldberg, Trinidad Resident

Re: Biomass issue

I have been proud to serve on the Citizens Advisory Committee (CAC) for the past six years, but my term has expired. I am speaking today as a private citizen of Trinidad, but reflecting on my vote at the last CAC meeting held earlier this month.

I have many observations to share which contributed to my NO vote:

- Baseload power is critical to RCEA's power reliability mix. Solar is wonderful, but it doesn't shine at night. Nuclear power was a baseload generator for Humboldt for roughly a dozen years (1964-76). We recently lost the Terra-Gen wind project which could have been a baseload generator as well. We need baseload power for at least the next dozen years, until offshore wind comes online (mid-2030s). The biomass plant fills a unique niche providing LOCAL baseload power which, without it, if we lost power from the outside, the only power generation resource available would be fracked natural gas plant at PG&E, which contributes to Greenhouse Gas (and I'm strongly opposed to fracked natural gas).
- Biomass is a long-standing resource in our area & important to our economy. Industrial logging
 creates waste and we need to deal with it efficiently and safely. The Timber industry is not going
 away anytime soon and we need to be realistic about its waste stream.
- There is an opt-in option for RCEA customers to opt-out of biomass energy and purchase strictly 100% renewable, green energy (Renewable Power+ program). Fewer than 1% of customers opt-into this program. I suggest that everyone who opposes biomass opt-in for this program to send a signal that they would prefer non-biomass power.
- Even if RCEA cancels their contract with HSC, they would continue operating, selling to PG&E. We are NOT achieving the closure of the biomass plant. All the health issues remain despite RCEA canceling its contract.
- With significant investments in newer technology, HSC stands to upgrade its facilities to be
 more efficient and cleaner, and RCEA has the best position to monitor the plant's performance. I
 have it on good authority that significant new technologies are coming that will make this
 Biomass issue irrelevant. Technology for clean biomass power is on the immediate horizon, but
 it's not public at this time.
- If RCEA gives up the HSC contract, PG&E will probably NOT be pressing HSC to meet environmental goals any more than RCEA. RCEA is in the best position to hold HSC's "feet to

the fire" to perform.

- Wildfire is a serious issue for both health & safety as well as Climate Change. Vastly more
 pollution is produced by wildfire than all biomass plants combined. The HSC company is critical
 in helping to reduce forest fuels to reduce wildfire hazards in our region.
- Many alternative uses of biomass will develop over time and as economically viable. We should
 be pressing HSC to move forward rapidly with bio-char and other alternatives to burning mill
 waste (and the technology is rapidly improving).
- Scale is an issue. While we have solar, wind and hydro, we don't have them in the scale necessary to offset our current power needs. Batteries won't solve the problem either (I know because I sell them). It's a SCALE issue.
- The opponents of HSC contract are not forest management professionals, and according to the
 forest experts who attended the meeting, fuel reduction is critical to mitigate wildfire risk. As a
 homeowner who manages a small timber stand, I can tell you that forest slash is critical to
 remove and dispose of (unless it's mulched onsite). Wildfires are a serious risk in our region and
 we cannot dismiss this issue as trivial.
- Native Americans used to burn millions of acres to maintain forest health in the past. Today we haven't done that for decades and we can't do it on public & private forest lands, so we use mechanical means to reduce forest waste. Biomass reduction is critical to forest health and we don't want it burnt onsite (in the hills), but burnt in a controlled environment with pollution controls. Composing is no solution either not in the volume being generated.
- If we cancel the HSC contract today, there will be significant repercussions to RCEA ratepayers in short order. It will cost >\$50 million over the life of the remaining contract to lose this power. RCEA ratepayers will have to pick up the burden which will increase everyone's bills and likely encourage many folks to ditch RCEA and go directly with PG&E (who is less reliable for environmental issues).

In closing, I voted NO for all these reasons. I suggest the following:

- 1) Opponents need to maintain vigilance to monitor HSC's environmental record and hold their feet to the fire to improve overall efficiency and performance.
- 2) Opponents should seek out viable alternatives to baseload generation. Solar alone with batteries will NOT meet our energy goals. Unfortunately, our current choices are nuclear, gas and coal, none of which are benign. Geothermal, wave energy and wind would be good alternatives, but all of these take YEARS and \$\$ to bring online.
- 3) Get educated on energy. Read the RCEA energy plans and understand the fuel mix that they adopted. Biomass is in the mix FOR A REASON. Get educated on the physics, economics & practical reality of why we have the energy mix we have today.
- 4) We need FULL THROATED SUPPORT for the offshore wind development which can significantly address our energy loads.

From: paula levine
To: Public Comment

Subject: biomass...agenda item 7.1... 3/28/2024

Date: Thursday, March 28, 2024 2:52:30 PM

Please drop biomass and keep your promise for 100% clean non-polluting energy.

Thanks, Paula Levine

Trinidad, ca



Virus-free.www.avast.com



Thank you for the opportunity to speak in opposition to biomass power.

1. We only have a limited time to slow the climate catastrophe.

Therefore, I would like to pose a few questions to the board.

Where is the carbon from burning being sequestered. Both the EPA and Carb show a decline in Californian's Land carbon sink.

Question 2: What is the status of AB 2588 Toxic Hotspot Report referenced by the air District director on the 12th of March?

2. Cost: Over the years RCEA rate payers have paid substantially more than the market price. The EIA forecast Average Wholesale Price for the CAISO region is \$43.00 per MW for 2024. We will pay in the low 70s range in April. HSC uses about 20 to 30% of the power behind the meter. Rate payers are again paying more than their fare share for HSC fixed and variable cost. Rate payers are paying for replacement equipment, and they do not receive the tax break of a depreciation schedule.

This is the greatest point source of CO2 and pollutants that we can control. When will we make the sacrifice needed for future generations, if the time is not now or soon than when? If it's not us, then who?

Walt Paniale

Who recognizes the name Eunice Newton Foote? Rise your hand.

As we approach the end of Women History Month, I would like to recognize Eunice Newton Foote as the first amateur scientist who in 1856. While living in Seneca Falls NY wrote an elegant and precise scientific paper where she hypothesized that increased levels of CO2 would warm the atmosphere. This was the first scientific paper recognizing the greenhouse effect and it had to be presented by a male at a contemporary scientific meeting.

She also signed the declaration of sentiments on the rights of women at the Seneca Falls Convention in 1848 . . She is listed just below Elizabeth Cady Stanton.