

SACRAMENTO VALLEY

BASINWIDE AIR POLLUTION CONTROL COUNCIL

	Vice Chair		Chair					
Butte	Colusa	Feather River	Glenn	Placer	Sacramento	Shasta	Tehama	Yolo-Solano

****MEETING NOTICE****

Date: February 7, 2025

Time: 10:00 AM

Location: Feather River AQMD, 541
Washington, Yuba City, CA
95991 and ZOOM

Alternate
Location:

Alternate Butte County AQMD
Location: 629 Entler Avenue, Suite 15
Chico, CA 95928

Colusa County APCD
100 Sunrise Blvd, Suite F
Colusa, CA 95932

Glenn County APCD
720 N Colusa Street
Willows, CA 95988

Office of Councilmember Guerra
New City Hall
915 I St 5th Floor
Sacramento, CA 95814

Placer County APCD
110 Maple Street
Auburn, CA 95602

Sacramento-Metropolitan AQMD
777 12th Street, 3rd Floor
Sacramento, CA 95814

Shasta County AQMD
1855 Placer Street, Suite 101
Redding, CA 96001

Tehama County APCD
1834 Walnut Street
Red Bluff, CA 96080

Yolo-Solano AQMD
1947 Galileo Court, Suite 103
Davis, CA 95618

Join Zoom Meeting

[https://us02web.zoom.us/j/8761137793?
pwd=aXRodE6qyIP1AT83tCKeNJA3JCY8BQ.1](https://us02web.zoom.us/j/8761137793?pwd=aXRodE6qyIP1AT83tCKeNJA3JCY8BQ.1)

Meeting ID: 876 1137 7793
Passcode: 622535
Phone: +1 669 900 9128 US (San Jose)

AGENDA

ITEM NO.

1. Call To Order/ Roll Call

2. Period of Public Comment

3. Presentation: Lawrence Berkeley National Laboratory's Mobile Biomass Conversion Unit

4. Elect 2025 BCC Chair & Vice Chair

5. Approval of Minutes

Approval of Minutes from the December 6, 2024 Meeting

6. Financial Status Reports

Financial Status Report

7. Status Reports

Basinwide Control Council (BCC) Members Report	Council Members
California Air Pollution Control Officers Association (CAPCOA) Report	CAPCOA Board Member
Broader Sacramento Area (BSA) Report	BSA Member
California Air Resources Board (CARB) Liaison Report	CARB Representative
Technical Advisory Committee (TAC) Report	TAC Chair
Smoke Management Program (SMP) Report	SMP Coordinator

8. 2024 Fall Intensive Burn Season Final Report

Recommended action: approve final fall burn report for the Smoke Management Program 2024 (motion needed).

9. Sacramento Valley Ag Commissioners Letter to BCC

Recommended action: follow recommendation of Sacramento Valley Ag Commissioners to approve the findings of University of California Cooperative Extension Rice Farm Advisors, thus allowing five more years of rice burning authorizations (motion needed).

10. Biomass Energy: Biomass Legislative Advocacy, April 2-3, 2025

Review draft plans for April legislative advocacy days in Sacramento.

11. 2025 BCC Meeting Schedule Changes

Recommended action: approve proposed changes to April and June BCC meetings, and discuss the meeting activities (motion needed).

12. Set Next BCC Meeting Agenda - April 3rd Hosted by: Sacramento-Metropolitan AQMD

Set Next BCC Meeting Agenda

13. Adjourn Meeting.

MEETING AGENDAS ARE POSTED BY EACH MEMBER AIR DISTRICT OF THE SACRAMENTO VALLEY BASIN AND AT THE SVBCC WEBSITE LISTED BELOW.

*Meeting information can be viewed at www.airquality.org/SVBCC

Questions, comments, and correspondence may be directed to:

Sacramento Valley Basinwide Air Pollution Control Council

Laurie LaGrone, Secretary-Treasurer

629 Entler Avenue, Suite 15

Chico, CA 95928

530-332-9400 ext. 105

bcctacsecretary@gmail.com

Mobile Biorefineries: Caribou Biofuels

A Distributed Approach to Reduce Wildfire Risk and Boost the CA Economy

Blake Simmons

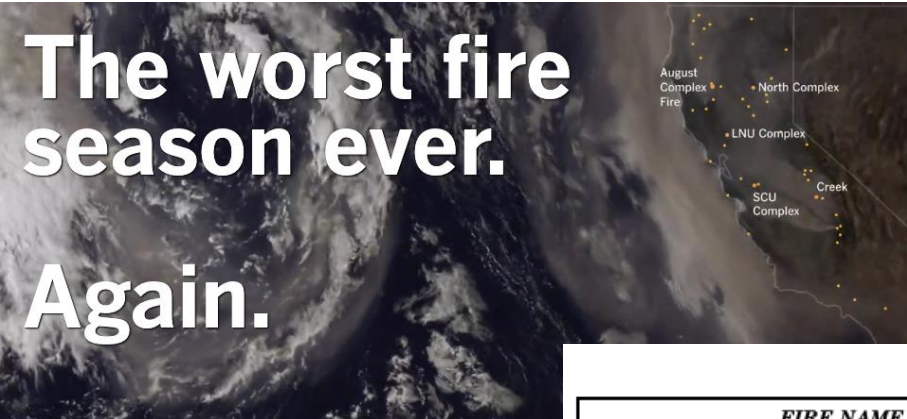
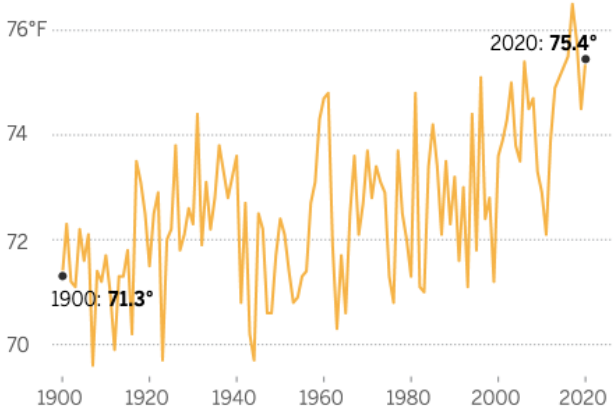
**Director, Biological Systems and Engineering Division
Lawrence Berkeley National Laboratory**

February 7, 2025

The Problem

- Some California forests have 500-800 trees per acre, compared with 60-100 prior to pre-Gold Rush.
- With temperatures rising, intensifying drought, our forests are now a powder keg.
- 11 million Californians live in the wildland-urban interface.

Average summer temperature in California (June-August)



- In 2020, five of the six largest wildfires in California history were burning -- at the same time; 4% of the land of the state burned
- To date in 2024, 6,788,766 acres have burned across the United States in 35,609 wildfire incidents

Top 20 Largest California Wildfires

	<i>FIRE NAME (CAUSE)</i>	<i>DATE</i>	<i>COUNTY</i>	<i>ACRES</i>	<i>STRUCTURES</i>	<i>DEATHS</i>
1	AUGUST COMPLEX (<i>Under Investigation</i>)*	August 2020	Mendocino, Humboldt, Trinity, Tehama, Glenn, Lake, & Colusa	1,032,649	935	1
2	MENDOCINO COMPLEX (<i>Under Investigation</i>)	July 2018	Colusa, Lake, Mendocino & Glenn	459,123	280	1
3	SCU LIGHTNING COMPLEX (<i>Under Investigation</i>)*	August 2020	Stanislaus, Santa Clara, Alameda, Contra Costa, & San Joaquin	396,624	222	0
4	CREEK FIRE (<i>Under Investigation</i>)*	September 2020	Fresno & Madera	377,693	853	0
5	LNU LIGHTNING COMPLEX (<i>Under Investigation</i>)*	August 2020	Sonoma, Lake, Napa, Yolo & Solano	363,220	1,491	6
6	NORTH COMPLEX (<i>Under Investigation</i>)*	August 2020	Butte, Plumas & Yuba	318,930	2,352	15

<https://www.latimes.com/projects/california-fires-damage-climate-change-analysis/>

https://www.fire.ca.gov/media/4jandlhh/top20_acres.pdf



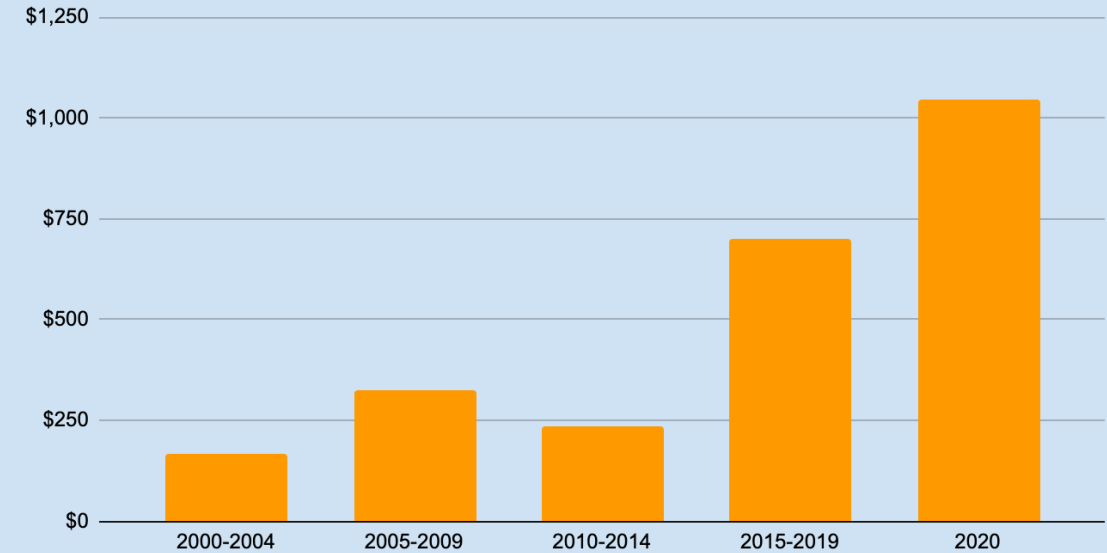
The Carbon and Economic Costs are Enormous



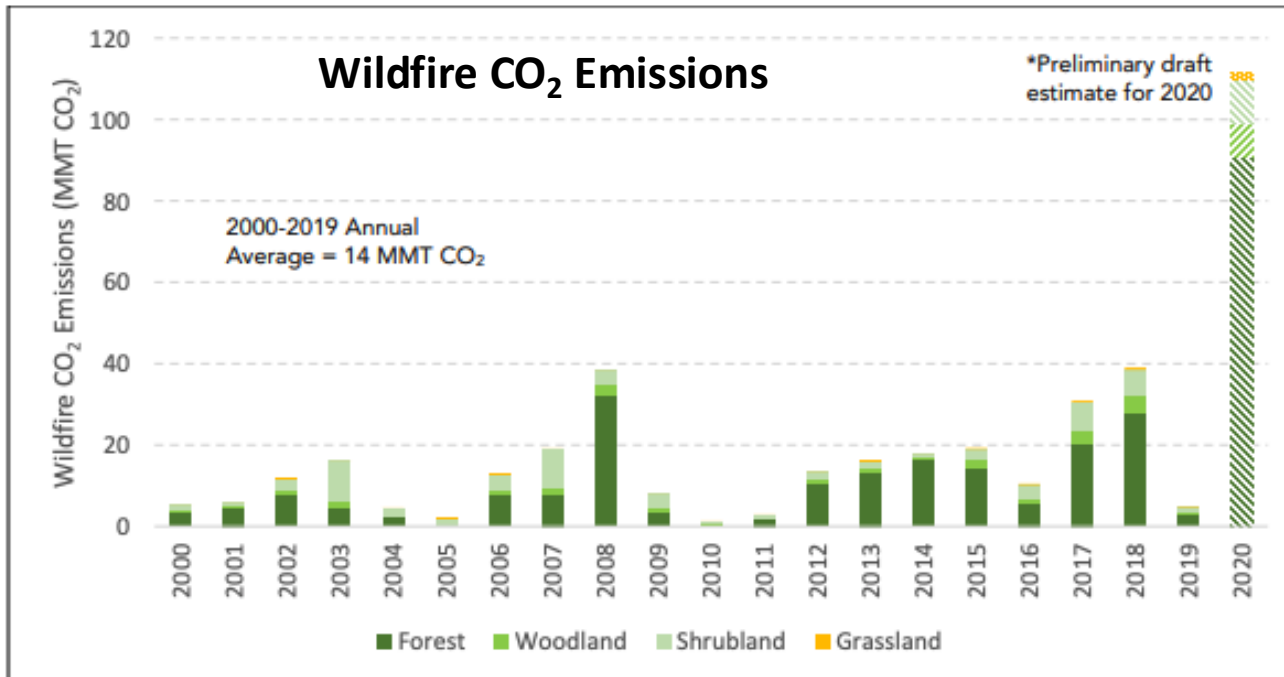
Economic damages

- 2018: ~\$120-140B
- 2020: ~\$130-150B
- 2022: ~\$110-135B

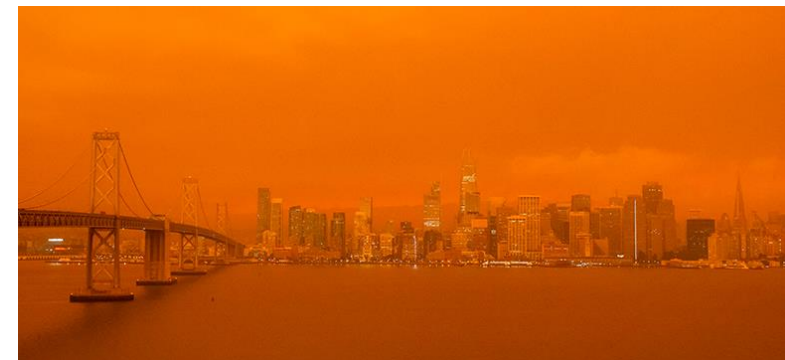
CAL FIRE Emergency Fund Fire Suppression Expenditures
(in millions)



<https://www.fire.ca.gov/media/px5lnaaw/suppressioncostsonepage1.pdf>

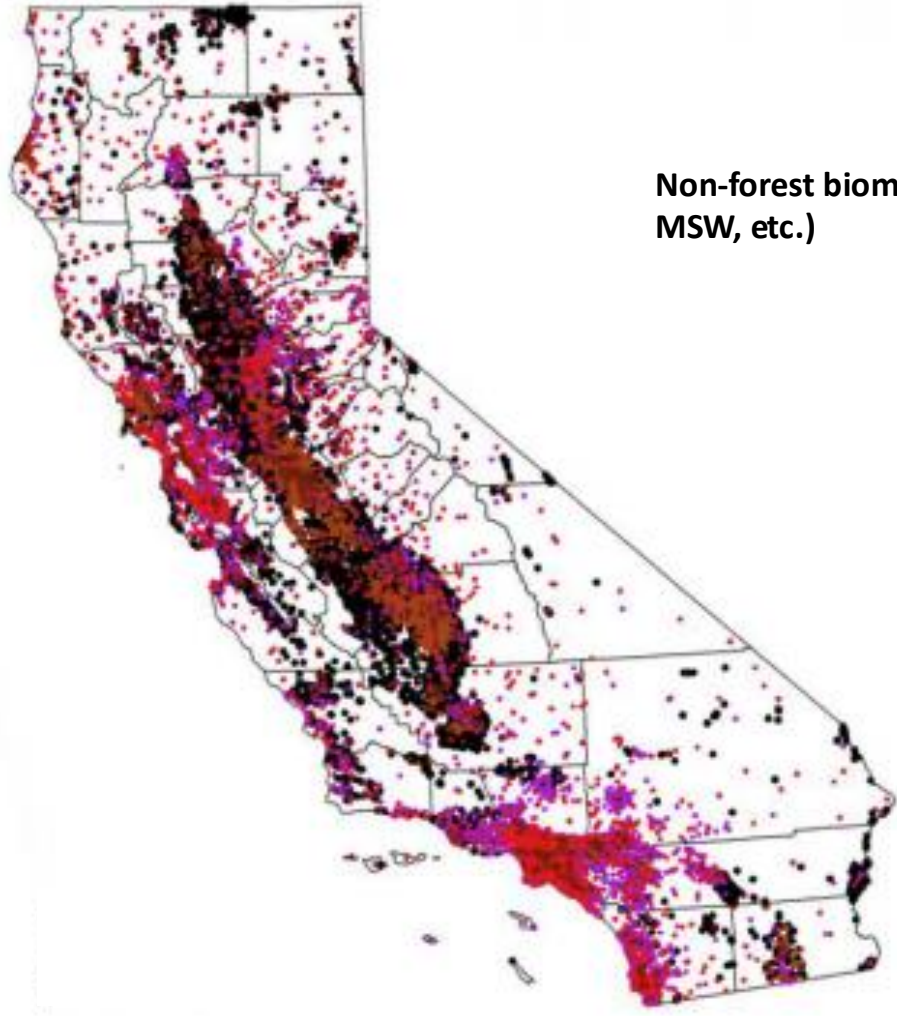
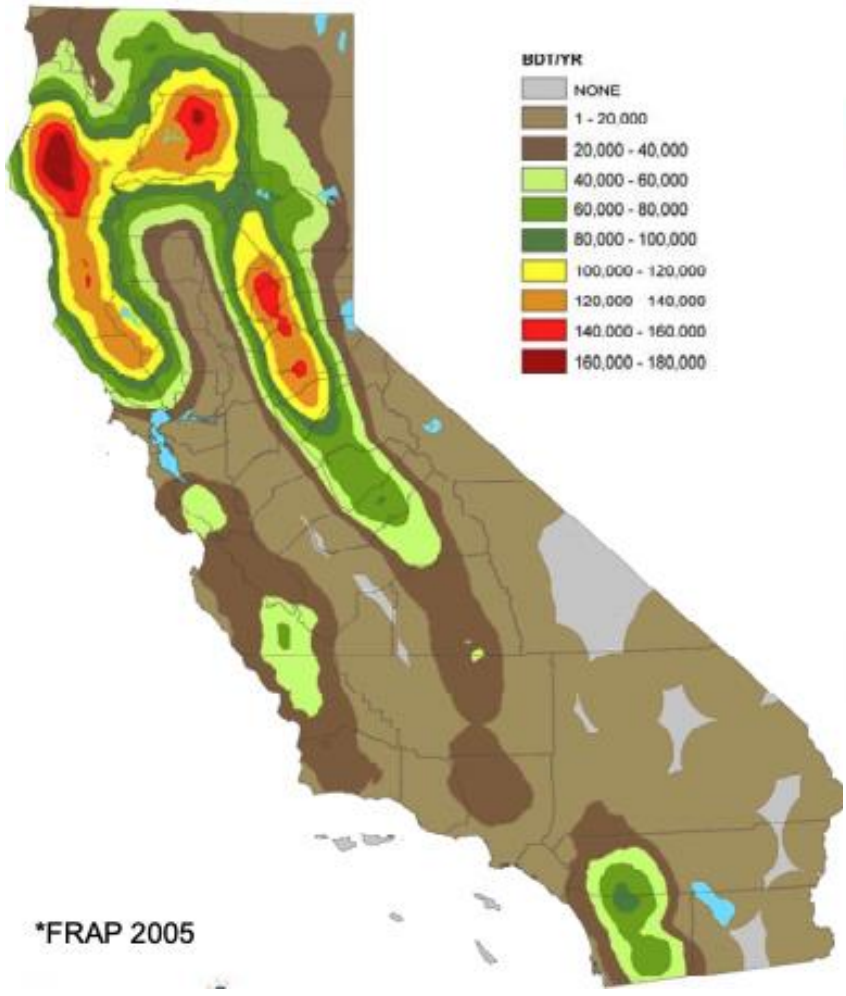


https://ww3.arb.ca.gov/cc/inventory/pubs/ca_ghg_wildfire_forestmanagement.pdf



California generates 56 million bone dry tons of per year of forest, agricultural, and municipal organic waste

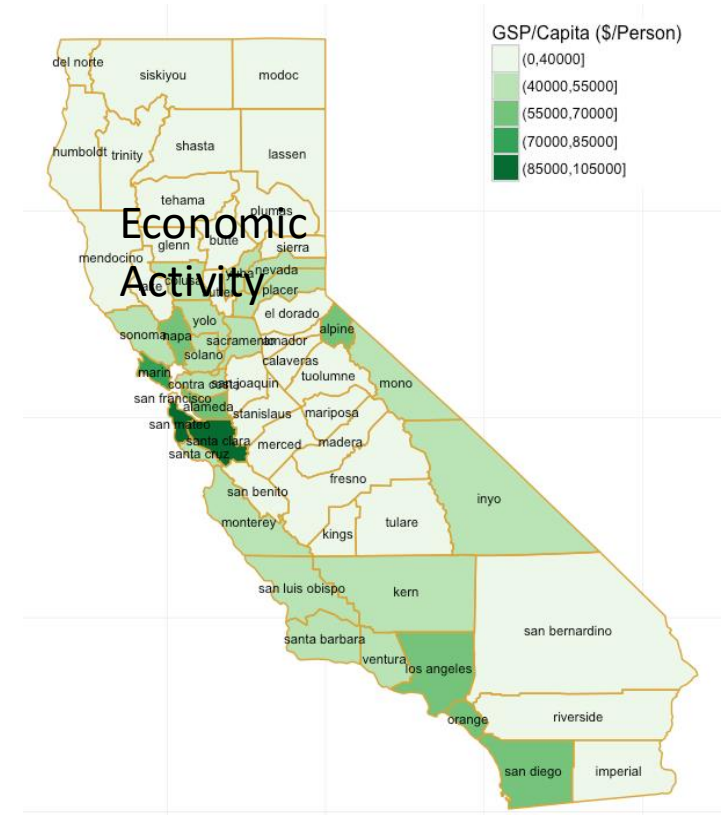
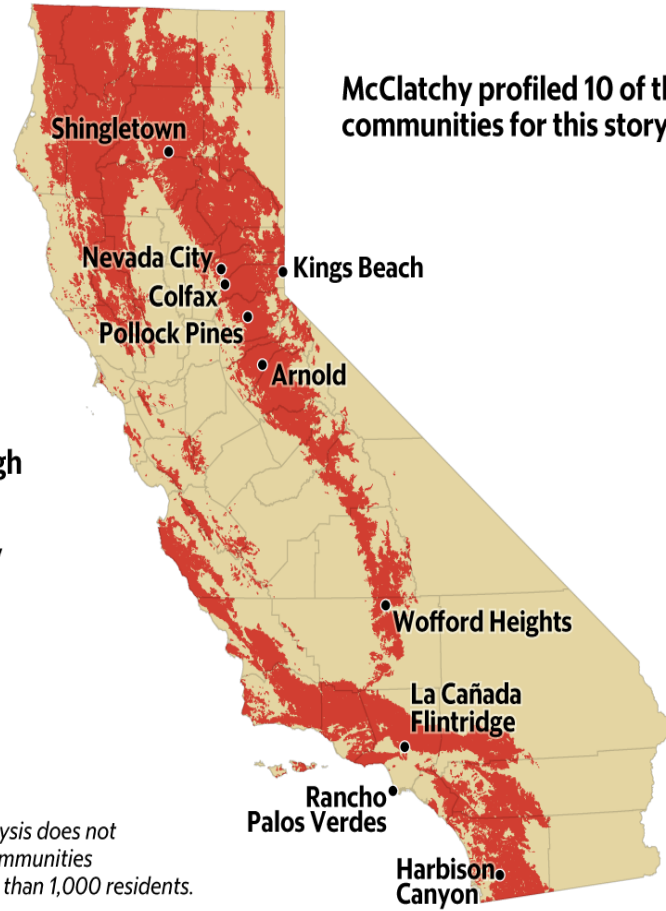
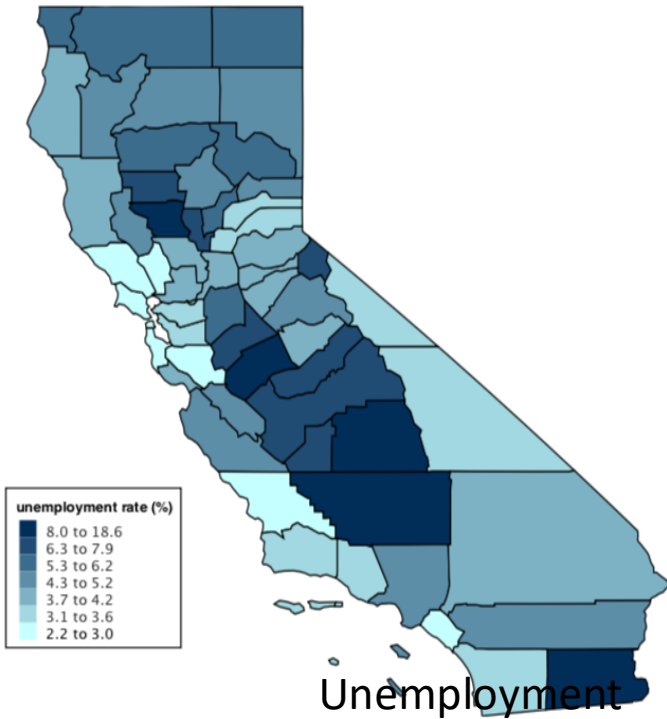
Forest resources available through wildfire prevention



Non-forest biomass (Ag waste, MSW, etc.)

Risk management and economic opportunity

Unemployment rates by county, not seasonally adjusted, California June 2019



For California ... What 56 million tons of sustainable biomass could mean ---



2.5 billion
gallons of **jet**
fuel
(60%+ of current
California jet
consumption)



2.5 billion
pounds of
bioproducts



C02e
reduction of
25 million tons



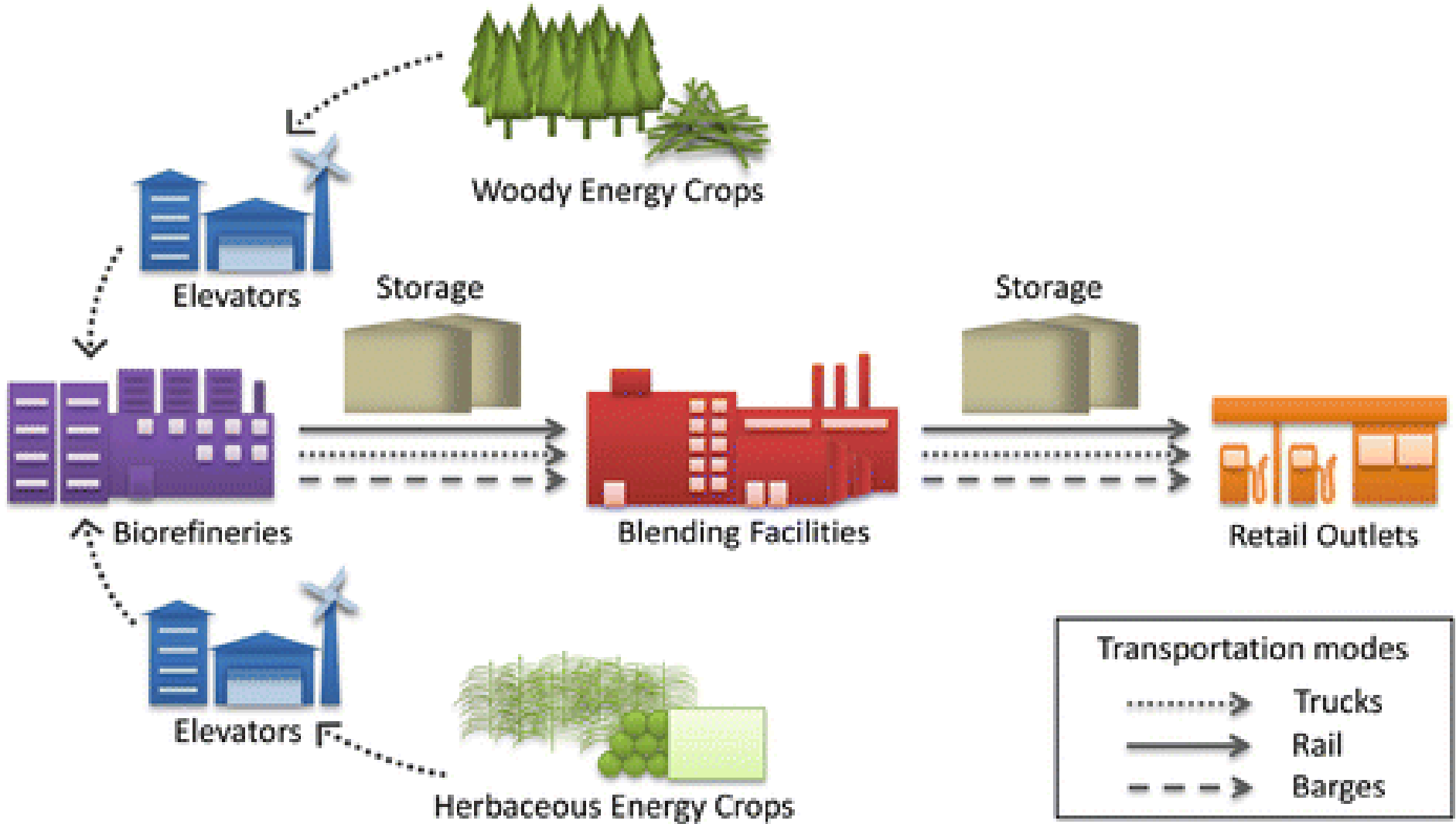
61,600
direct
jobs



**Building the
Bioeconomy**

This Photo by Unknown Author is
licensed under [CC BY-NC-ND](#)

The Conventional Biorefinery Approach



Centralized Biomass Conversion Doesn't Always Work



Biomass from forest thinnings

High
Transportation cost
Labor, GHG emissions,
Capital Cost,



Biomass power Station

Low revenue selling
power to utilities.

Severe limits to conventional approaches to the efficient conversion of woody biomass thinnings generated in remote locations

Our Approach

We generate revenue by converting a diverse range of waste streams to valuable products that enable decarbonization.



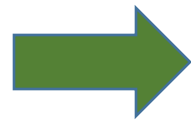
Forestry Waste



Agricultural Waste



Plastic Waste



Caribou Conversion Technology:
Inclined Rotary Gasifier (IRG)



Biocrude, power, and
products



Biochar

Birth of the Technology

Generate electrical power from raw wet waste on Forward Operating Bases (FOB)

Reduce JP-8 (diesel) fuel consumption

Fuel deliveries require military escort

Estimated delivered cost to FOB \$350 to \$800 per gallon

Eliminate burn pits

Smoke and pollutants

Health risks



Compact and Flexible System

- Low parasitic load
- Simple and light weight
- Small reactor and process vessels
- Minimal or no feedstock preparation
- Process dripping wet feedstock
- Able to process soil, stones, glass, and metals mixed with feedstock
- Safe (low hydrogen production)
- High energy syngas from cracking heavy oil into gasoline and diesel.



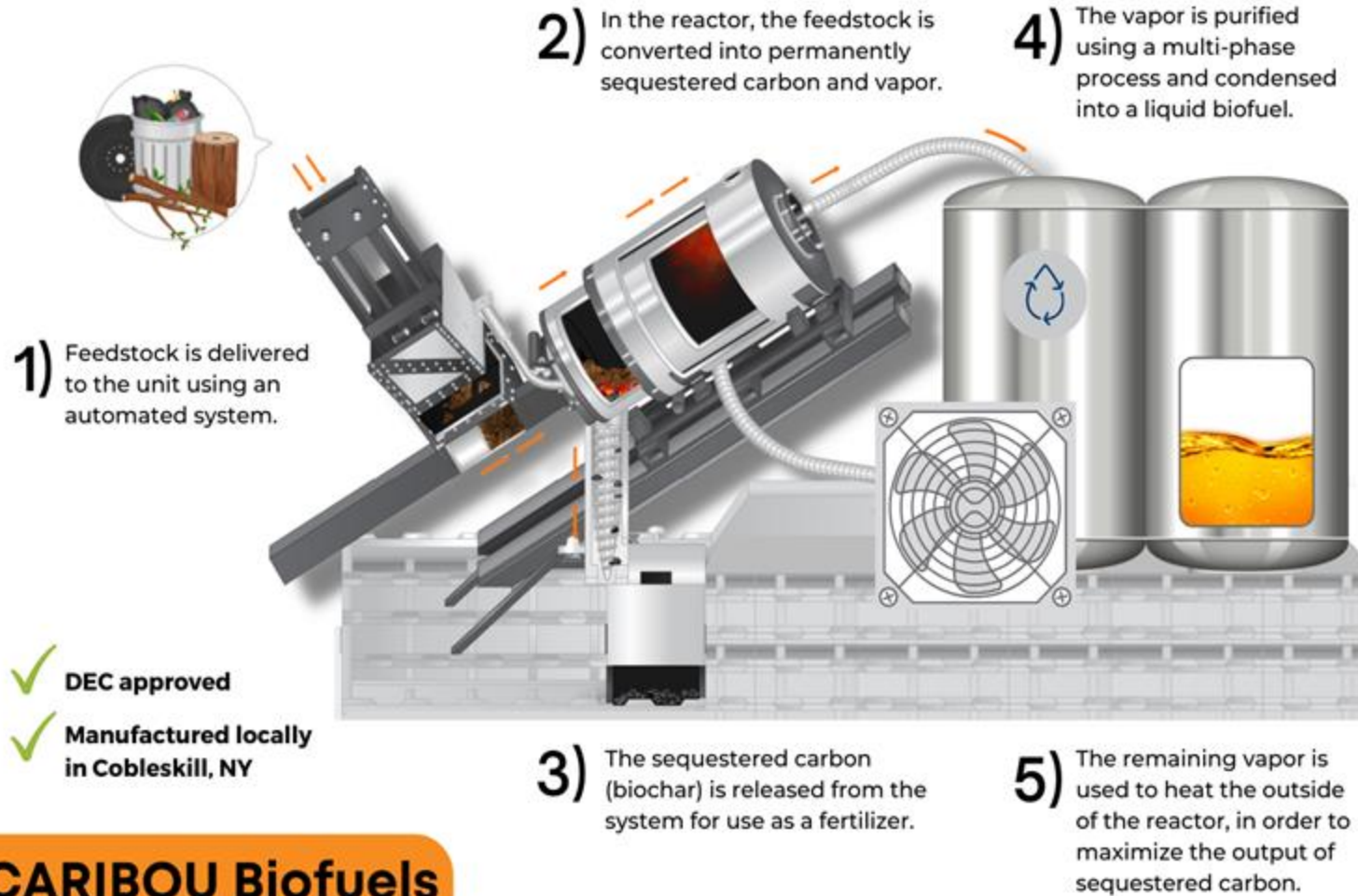
Feedstock Flexible

- Able to process dripping wet feedstock
- Cardboard (flat and corrugated)
- Wood (pallets, crates, demolition, etc.)
- Plastics (film, tarps, containers, etc.)
- Clothing (cotton, polyester, canvas, etc.)
- Food (bread, produce, meat, vegetables, etc.)
- Rubber (tires, hose, belts, etc.)
- Used lubricants (crankcase oil, gear lube, grease, off spec fuel, etc.)
- Ag wastes (manure, refusals, hay, grass, etc.)
- Trimmings (branches, leaves, cuttings, etc.)



The inclined rotary gasifier developed at SCU (source: SCU).

The Inclined Rotary Gasifier (IRG)



Value Proposition:

- Feedstock flexible, minimal processing
- Compact -Mobile, transportable, or stationary
- No expensive catalysts to make a renewable liquid fuels

Roadmap

Ready for production manufacturing expansion

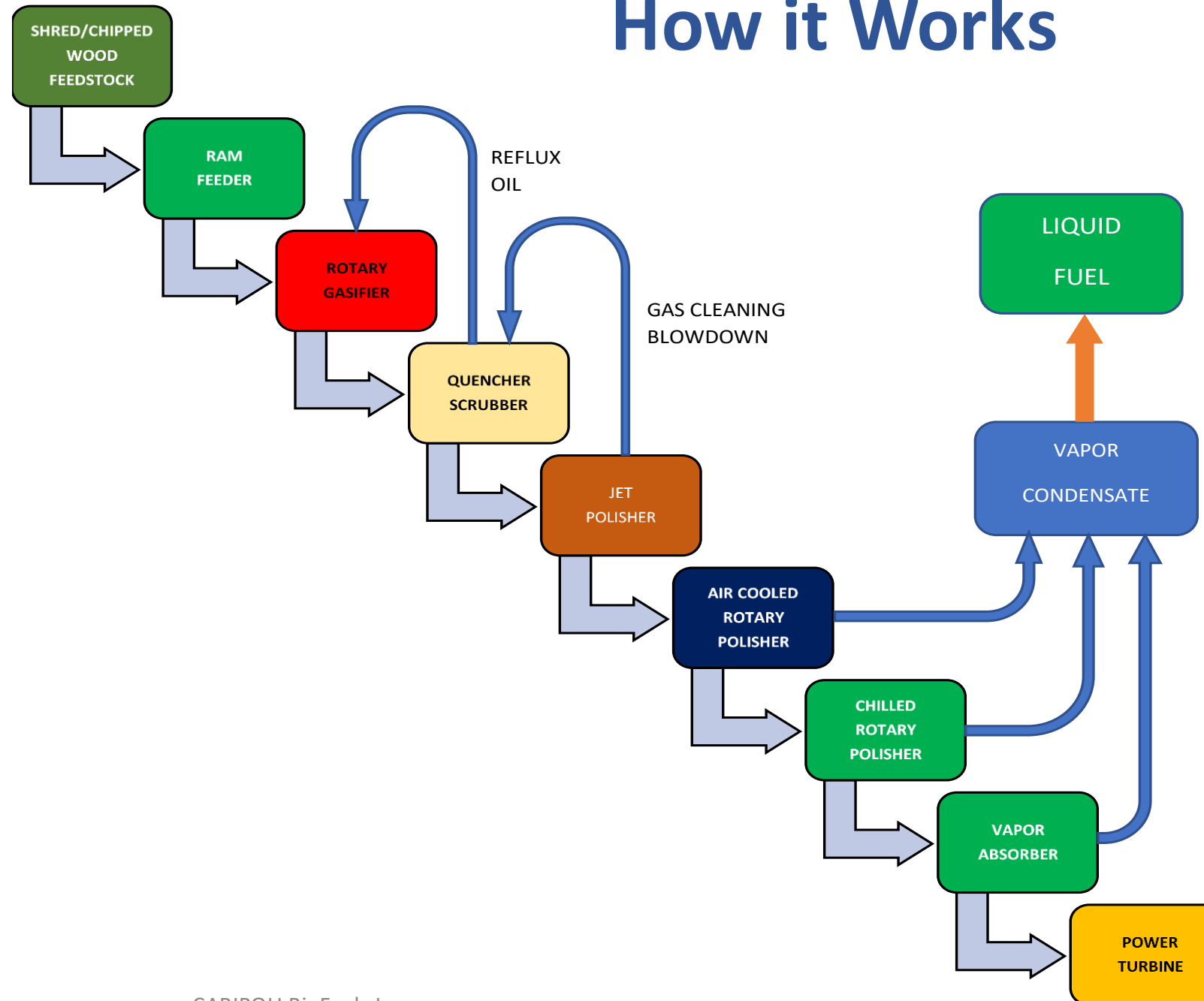
Patent No.: US 10,760,016 B2

Date of Patent: Sep. 1, 2020

CARIBOU Biofuels
Inclined Rotary Gasifier (IRG)

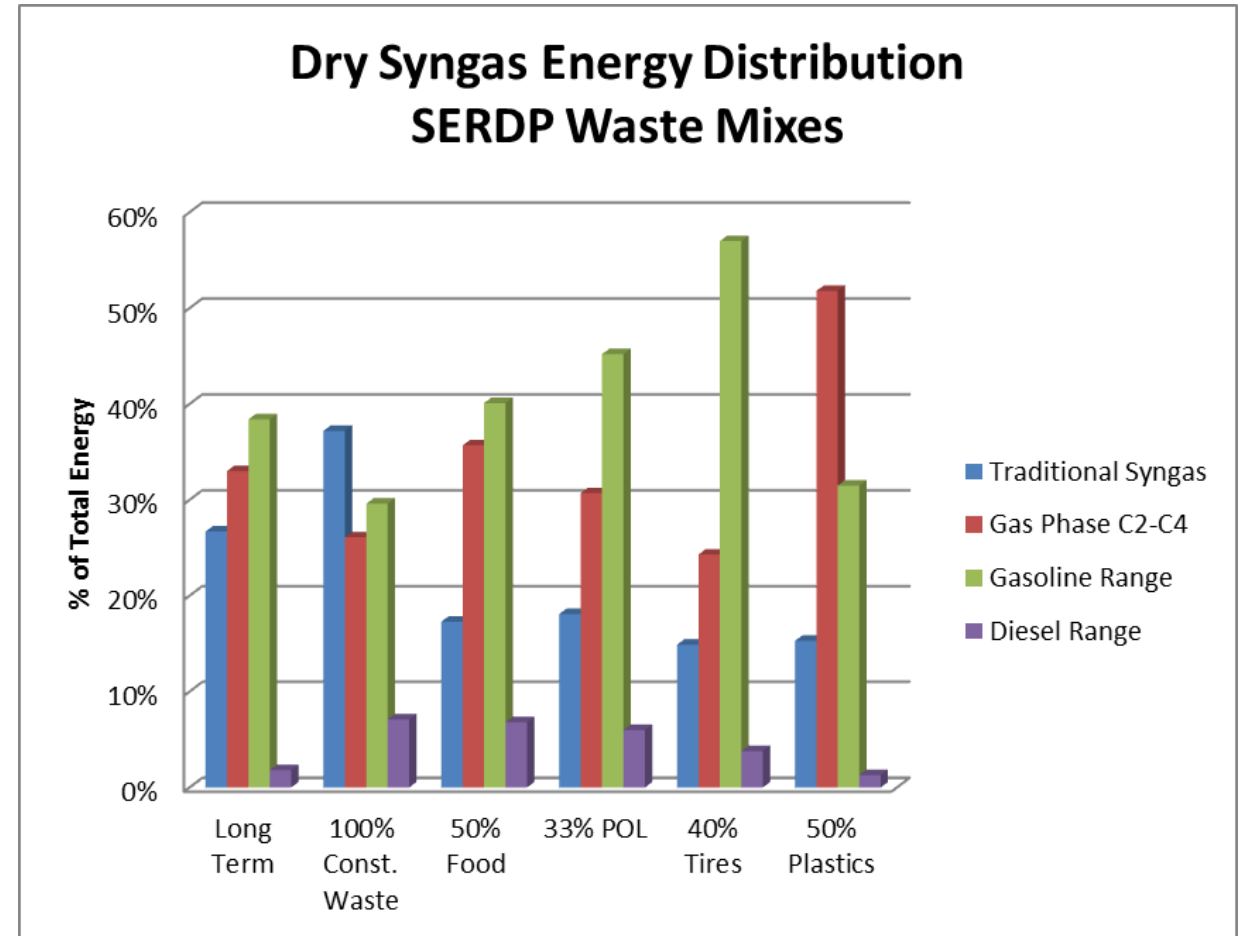
CARIBOU PROCESS

1. Feedstock Mix of chips, shred, bark, needles, etc.
2. Ram Feeder – densify and push feedstock
3. Rotary Gasifier – converts feedstock to gas, oil, and fixed carbon
4. Quencher – flash cools gas <math>< 80^{\circ}\text{C}</math> to liquify oil
5. Scrubber – cleans gas with oil @ - 6. Jet Polisher – cleans gas with liquid @ - 7. Air Cooled Rotary Polisher cleans gas and liquifies vapors above - 8. Chilled Rotary Polisher – cleans gas and liquifies vapors above - 9. Vapor Absorber – absorbs remaining vapors above - 10. Power Turbine – electrical power to operate system

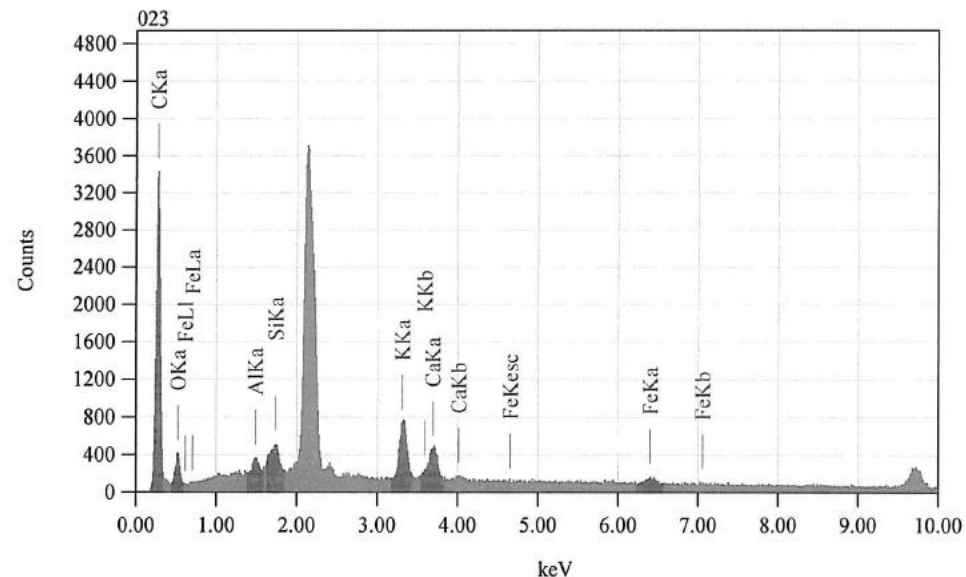
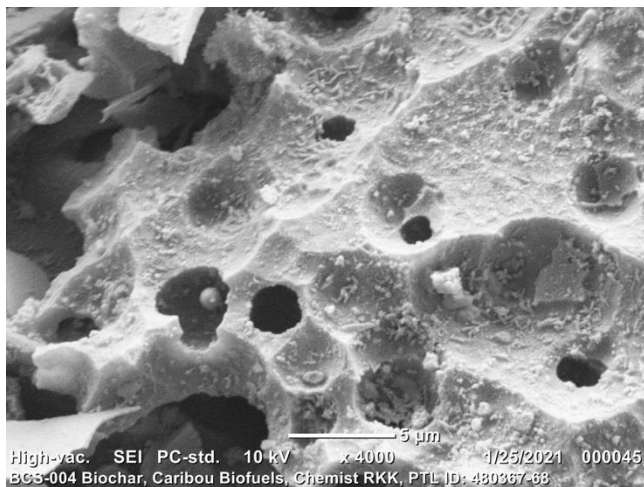
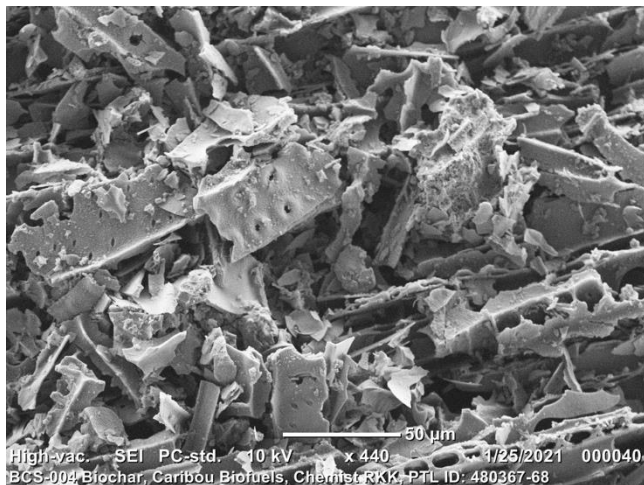


Tunable Outputs

- Produces a liquid fuel similar to gasoline or a clean syngas
- Simple thermal process
- Chemical transformation – NOT incineration or combustion
- Accelerates what naturally occurs in the earth over thousands of years to less than 20 minutes



Biochar Analysis



Acquisition Parameter
 Instrument : JCM-6000
 Acc. Voltage : 15.0 kV
 Probe Current: 1.00000 nA
 PHA mode : T3
 Real Time : 32.18 sec
 Live Time : 30.00 sec
 Dead Time : 6 %
 Counting Rate: 7716 cps
 Energy Range : 0 - 20 keV

ZAF Method Standardless Quantitative Analysis
 Fitting Coefficient : 0.4417

Element	(keV)	Mass%	Sigma	Atom%
C K	0.277	66.47	0.17	76.34
O K	0.525	23.19	0.39	20.00
Al K*	1.486	0.81	0.04	0.41
Si K*	1.739	0.66	0.04	0.32
K K*	3.312	4.35	0.06	1.53
Ca K*	3.690	2.82	0.06	0.97
Fe K*	6.398	1.70	0.09	0.42
Total		100.00		100.00

SAMPLE ID	BET SPECIFIC SURFACE AREA (m ² /g)	ADSORBATE GAS
Biochar		
BCS-002	350.26	Nitrogen
BCS-004	176.56	

Rapid Startup and Shutdown

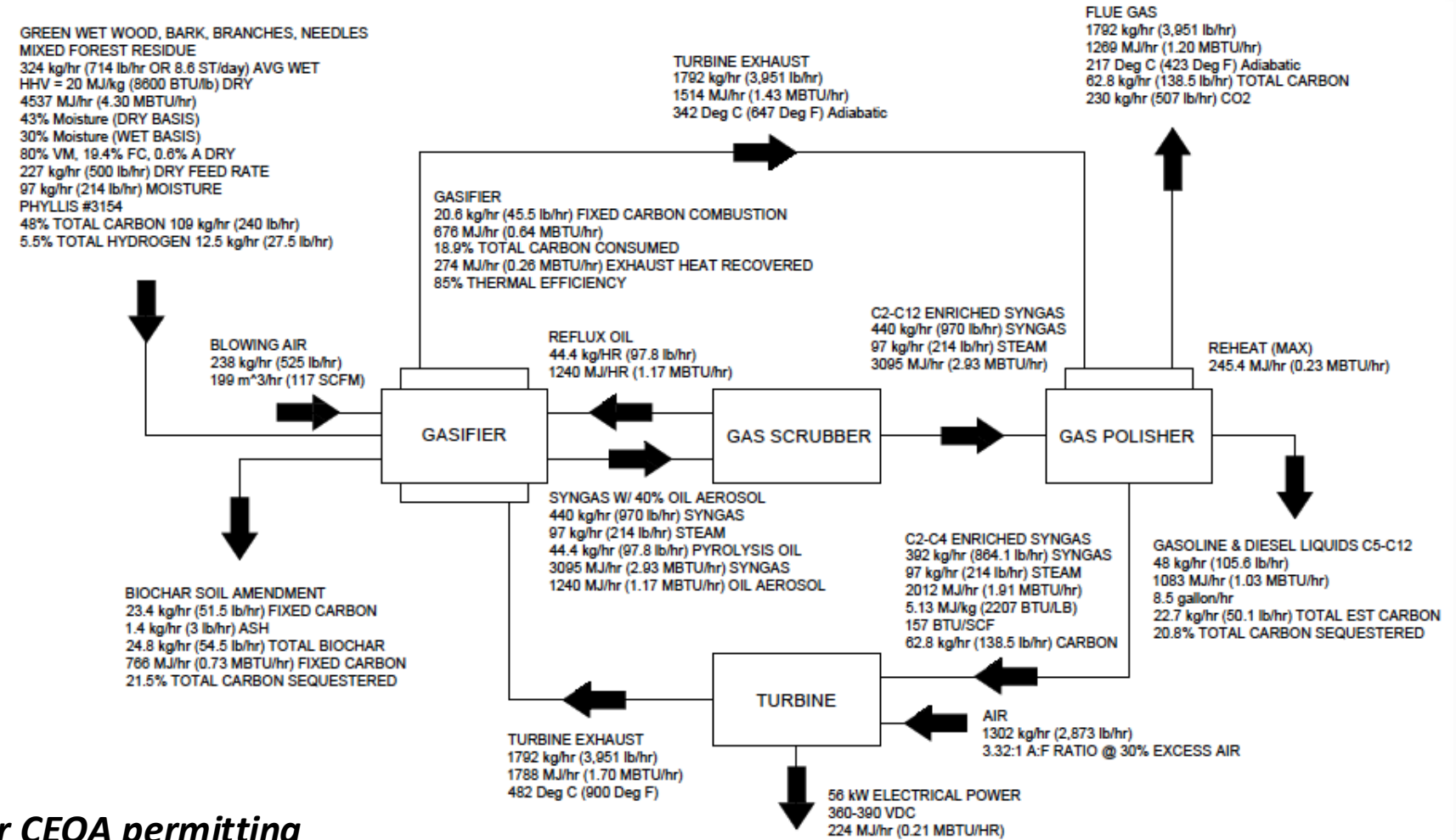


- Build completed at Cobleskill, NY
- Cold and hot testing underway
- Shipped to CA in December 2024 to Flory outside of Modesto

Performance and Emissions

Typical emissions generated by IRG unit operating on wet wood:

- CO₂ – 11.3%
- CO – 26.2 ppm
- NO – 34.2 ppm
- NO₂ – 0.0 ppm
- NO_x – 34.2 ppm
- SO₂ – 3.4 ppm
- C_xH_y – 0%



We are working with a 3rd party for CEQA permitting

Technology Comparison

Landfills



Advantage:

Low tech & easy to operate

Disadvantage:

Emissions, volatiles, land use

Composts



Advantage:

Low tech & easy to understand

Disadvantage:

Emissions, low value, inefficient conversion

Digesters



Advantage:

Good for wet biomass

Disadvantage:

Expensive, big, inefficient

Incinerators



Advantage:

Established facilities and operations

Disadvantage:

Emissions, energy inefficient

Gasifiers



Advantage:

Efficient and scaled

Disadvantage:

Requires catalysts, expensive, needs to operate at large scale

Manufacturing Partnership - Flory Industries



Largest Agricultural Machinery Manufacturer in California.



Flory Industries, Salida, CA

Currently deployed at Flory

- Testing
- Design for manufacture
- Large Scale Production

Go to Market Strategy



Defense

The US Army paid \$10 Million for research and development .

Light weight and mobile.

Eliminates burn pits and converts trash into fuel at a remote base.

Program with Northrop Grumman.



Forestry

Cal Fire paid \$5.8 Million to build prototype and \$500k to operate in CA

Wood can be processed on site to make biocrude that can be injected into wells for CDR \$\$.

Wildfire risk mitigation and woody biomass conversion.

\$50 million State of California biofuels project 2024



Agriculture

Del Monte ready for \$2.5 Million installation. Ag burning ban.

Very flexible in feedstocks. Mobile. Make electricity or heat while disposing of ag waste.

Dairies, orchards, corn husks, vineyards, marijuana.

FOAs and SBIR/STTR.



MSW

Get paid to process waste biomass @ \$60-\$80 a ton.

States now require biomass to be diverted from landfills. Deploy at sorting facilities.

Convert biomass to biocrude and biochar. Option for mixed waste including plastic.

Paid to process feedstock, fuel, carbon credits, & biochar

Background

Key Strengths

Application

Financials

Deployment Scenarios

- Core technology can be scaled to fit mobile and centralized processing units
 - Best of both worlds in terms of flexible technology development
- Future incarnations of CARIBOU could integrate biopower and biofuel/bioproduction generation
 - Syngas fermentation
 - Sugar production and conversion
- Can be scaled and deployed in multiple locations
 - MSW/mixed feedstock conversion in urban areas
 - Ag residue/forestry thinning/feedlot runoff conversion in rural areas



Summary

- **Providing a solution that can scale in both a centralized and a distributed way is essential to accessing the true potential of distributed carbon.**
- **Improved social, economic and environmental justice in rural and historically disadvantaged communities.**
- **Mobility – go to where the biomass is.**
- **Vast opportunities for robust public private partnerships.**
- **The state/agency/industry defines the equipment and rules.**
- **Revenue generated will allow for significant scale up and employment opportunities.**



THANKS!!

Please reach out to me at
basimmons@lbl.gov with any
questions.

Sacramento Valley
Basinwide Air Pollution Control Council

Title: Approval of Minutes from the December 6, 2024 Meeting

Presenter: BCC/TAC Secretary-Treasurer

Motion needed.

ATTACHMENTS:

Description

2024-12-06_BCC_Meeting Minutes_DRAFT

Upload Date

2/5/2025

Type

Supporting Documents

SACRAMENTO VALLEY

BASINWIDE AIR POLLUTION CONTROL COUNCIL

				Chair	Vice-Chair			
Butte	Colusa	Feather River	Glenn	Placer	Sacramento	Shasta	Tehama	Yolo-Solano

Meeting Minutes – December 6, 2024

1. Call to Order/ Introductions

A regular meeting of the Sacramento Valley Basinwide Air Pollution Control Council was called to order at the office of Glenn County APCD at 10:02am by Chair Scott Alvord and a quorum established. Those present were as follows:

PRESENT: Butte County AQMD: Tami Ritter, BCC Member
Colusa County APCD: Gary Evans, BCC Member
Feather River AQMD: Matt Conant, BCC Member (Zoom)
Glenn County APCD: Grant Carmon, BCC Member
Placer County APCD: Scott Alvord, BCC Chair
Sacramento-Metro AQMD: Eric Guerra, BCC Vice Chair
Shasta County AQMD: Chris Kelstrom, BCC Alternate Member (Zoom)
Tehama County APCD: Patti Nolen, BCC Member (Zoom)
Yolo-Solano AQMD: Angel Barajas, BCC Member (Zoom)

Butte County AQMD: absent

Colusa County APCD: Anastacia Allen, TAC Member
Feather River AQMD: Chris Brown, TAC Member (Zoom)
Glenn County APCD: Marcie Skelton, TAC Member
Placer County APCD: Erik White, TAC Member
Sacramento-Metro AQMD: Alberto Ayala and Amy Roberts, TAC Members
Shasta County AQMD: Rob Stahl, TAC Chair (Zoom)
Tehama County APCD: Joe Tona, TAC Vice Chair (Zoom)
Yolo-Solano AQMD: Gretchen Bennitt, TAC Member (Zoom)

Smoke Management Plan Coordinator: absent

CA Air Resources Board: Adam Gerber
BCC Secretary-Treasurer: Laurie LaGrone

Guests: Mr. Stahl introduced Director of Resource Management Mr. Sean Ewing, new APCO for Shasta County AQMD.

2. Period of Public Comment

Mr. Alvord opened the meeting to public comments. Hearing none, the item was closed.

3. PM2.5 Standard Presentation – Sondra Spaethe of Feather River AQMD presented an informative report about PM 2.5, followed by member questions and answers.

4. Approval of Minutes from October 4, 2024 Meeting

MOTION: Mr. Conant moved to approve the minutes as presented; Mr. Guerra seconded the motion. The minutes were approved in a roll call vote with one abstention and no objections.

<< *Item #9 was moved to this point to accommodate honorees who were not able to stay until the end* >>

(9.) Outgoing BCC Board Members

TAC Chair Rob Stahl and TAC Member Anastacia Allen named outgoing board members and thanked them for their service and dedication to the BCC: current Chair Councilman Scott Alvord, Placer County; Supervisor Patrick Jones, Shasta County; Supervisor Matt Conant, Feather River District; Supervisor Gary Evans, Colusa County; and Supervisor Candy Carlson, Tehama County.

5. Financial Status Report

Ms. LaGrone provided a summary of the financial status report as of October 31, 2024.

MOTION: On a motion from Mr. Carmon, seconded by Mr. Conant, the financial status report was unanimously approved in a roll call vote.

<< Mr. Conant and Mr. Barajas left the meeting during Status Reports >>

6. Status Reports

- **Basinwide Control Council (BCC) Members Report** – Mr. Guerra commented on the need to advance biomass and hydrogen energy discussions and education, and his plan to pursue that in the coming year in his role as a local air district member.
- **California Air Pollution Control Officers Association (CAPCOA) Report** – Joe Tona CAPCOA’s Fall Membership meeting was held in late October. Mr. Tona detailed the new Rural CAPCOA leadership for the coming year. The EPA was present at the conference.

Mr. Tona cited several programs for which CAPCOA had requested increased funding, including FARMER grants, AB617 and the wood stove replacement program.

- **Broader Sacramento Area (BSA) Report** – no report.
- **CA Air Resources Board (CARB) Report** – no report. Mr. Guerra plans to request that CARB meet with any interested APCO to develop local LCFS (Low Carbon Fuel Standard) pathways for farmers.
- **Technical Advisory Committee (TAC) Report** – Mr. Stahl reported the TAC’s ongoing push to increase funding for the FARMER grant program. Local activity includes defining the role of district professionals, and contributing data for the 2024 rice burn report.
- **Smoke Management Program (SMP) Report** – Mr. Tawa provided highlights from the 2024 burn season, with a final report expected in the first quarter of 2025.

7. Remnant Rice Straw Disease Testing Report – Marcie Skelton

Ms. Skelton provided a background of the five-year report, conducted by University of California Cooperative Extension and California Rice, and answered questions about rice disease mitigation.

8. Biomass Energy Report – Rob Stahl

Mr. Stahl identified potential biomass projects in Colusa and Feather River air districts.

Mr. Guerra and Mr. Alvord accentuated the need to educate elected leaders about the importance of biomass energy in our communities – especially for its role reducing fuel load for reducing wildfires.

Mr. Guerra asked about the feasibility of multi-district permitting for mobile air curtain burners across the BCC’s nine districts. A long discussion of the topic ensued.

9. << Item moved to just after Approval of Minutes >>

10. 2025 Meeting Schedules – BCC/TAC Secretary-Treasurer

Proposed 2025 TAC and BCC meeting schedules were presented for approval, and 2025 in-person meetings were discussed. Changes were made to allow for an in-person meeting in Sacramento in April, to facilitate meetings with legislators while they are in session. A field trip to a Colusa County biomass facility was proposed, with more meeting date changes.

MOTION: Mr. Guerra made a motion to change the April meeting to an in-person meeting in Sacramento (exact date yet to be determined), the June meeting to Colusa County with an included field trip, and the December meeting to be hosted by Yolo-Solano. Ms. Ritter seconded the motion, and the motion was approved in a roll call vote with no objections or abstentions and two absences.

11. Communications: FPPC Form 700 Filing Letter – BCC/TAC Secretary-Treasurer

The Secretary reminded the members of the early April deadline to file Forms 700, and of 2025 changes to filing rules from the Fair Political Practices Commission.

12. Set Next BCC Meeting Agenda – February 7, 2025 Hosted by: Feather River AQMD

13. Adjourn Meeting

A motion to adjourn the meeting was made by Mr. Guerra and seconded by Mr. Evans. The motion was approved with two absences. Mr. Alvord adjourned the meeting at 11:18 am.

Respectfully submitted by: Laurie LaGrone, BCC Secretary-Treasurer

BCC:ll

Sacramento Valley
Basinwide Air Pollution Control Council

Title: Financial Status Report

Presenter: BCC/TAC Secretary-Treasurer

Recommended action: receive Financial Status Report as of December 31, 2024 (motion needed).

ATTACHMENTS:

Description	Upload Date	Type
Financial Report - Bank Account Register 12-31-2024	2/5/2025	Supporting Documents
Financial Report - Profit & Loss Budget vs Actual 12-31-2024	2/5/2025	Supporting Documents
2024-12-20_BCC_Reconciliation_Detail	2/5/2025	Supporting Documents

Sacramento Valley Basinwide Air Pollution Control Council

01/10/25

Bank Accounts Register

Accrual Basis

As of December 31, 2024

<i>Type</i>	<i>Date</i>	<i>Num</i>	<i>Name</i>	<i>Split</i>	<i>Debit</i>	<i>Credit</i>	<i>Balance</i>
Tri Counties Bank							28,464.98
Bill Pm...	07/17/2024	1066	Butte County AQMD	Accounts Payable		1,389.45	27,075.53
Bill Pm...	07/17/2024	1067	Western Weather Group	Accounts Payable		4,283.33	22,792.20
Bill Pm...	07/17/2024	1068	Western Weather Group	Accounts Payable		814.67	21,977.53
Deposit	08/15/2024			-SPLIT-	66,266.00		88,243.53
Bill Pm...	08/22/2024	1069	Butte County AQMD	Accounts Payable		1,389.45	86,854.08
Bill Pm...	08/22/2024	1070	Western Weather Group	Accounts Payable		4,283.33	82,570.75
Bill Pm...	08/22/2024	1071	Western Weather Group	Accounts Payable		814.67	81,756.08
Deposit	09/11/2024			-SPLIT-	27,226.00		108,982.08
Bill Pm...	09/18/2024	1072	Butte County AQMD	Accounts Payable		1,389.45	107,592.63
Bill Pm...	09/18/2024	1073	Western Weather Group	Accounts Payable		4,283.33	103,309.30
Bill Pm...	09/18/2024	1074	Western Weather Group	Accounts Payable		814.67	102,494.63
Bill Pm...	10/16/2024	1075	Butte County AQMD	Accounts Payable		1,389.45	101,105.18
Bill Pm...	10/16/2024	1076	Western Weather Group	Accounts Payable		4,283.33	96,821.85
Bill Pm...	10/16/2024	1077	Western Weather Group	Accounts Payable		814.67	96,007.18
Bill Pm...	11/20/2024	1078	CA Special Districts Assn	Accounts Payable		500.00	95,507.18
Bill Pm...	11/20/2024	1079	Butte County AQMD	Accounts Payable		1,389.45	94,117.73
Bill Pm...	11/20/2024	1080	Western Weather Group	Accounts Payable		4,283.33	89,834.40
Bill Pm...	11/20/2024	1081	Western Weather Group	Accounts Payable		814.67	89,019.73
Bill Pm...	12/18/2024	1082	Butte County AQMD	Accounts Payable		1,389.45	87,630.28
Bill Pm...	12/18/2024	1083	Western Weather Group	Accounts Payable		4,283.33	83,346.95
Bill Pm...	12/18/2024	1084	Western Weather Group	Accounts Payable		814.67	82,532.28
Total Tri Counties Bank					93,492.00	39,424.70	82,532.28
U. S. Bank							
Total U. S. Bank							
TOTAL					93,492.00	39,424.70	82,532.28

Sacramento Valley Basinwide Air Pollution Control Council

Profit & Loss Budget vs. Actual

July through December 2024

	Jul - Dec 24	Budget	% of Budget
Ordinary Income/Expense			
Income			
Annual District Assessments	93,492.00		
Total Income	93,492.00		
Expense			
Professional Services			
Administrative Services	8,336.70		
Ag Burn Services	25,699.98		
Meteorological Services	4,888.02		
Total Professional Services	38,924.70		
Special Department Expense			
Memberships	500.00		
Total Special Department Expense	500.00		
Total Expense	39,424.70		
Net Ordinary Income	54,067.30		
Net Income	54,067.30		

Sacramento Valley Basinwide Air Pollution Control Council

Reconciliation Detail

Tri Counties Bank, Period Ending 12/20/2024

Type	Date	Num	Name	Clr	Amount	Balance
Beginning Balance						96,009.18
Cleared Transactions						
Checks and Payments - 5 items						
Bill Pmt -Check	11/20/2024	1080	Western Weather G...	X	-4,283.33	-4,283.33
Bill Pmt -Check	11/20/2024	1079	Butte County AQMD	X	-1,389.45	-5,672.78
Bill Pmt -Check	11/20/2024	1081	Western Weather G...	X	-814.67	-6,487.45
Bill Pmt -Check	11/20/2024	1078	CA Special Districts ...	X	-500.00	-6,987.45
Bill Pmt -Check	12/18/2024	1082	Butte County AQMD	X	-1,389.45	-8,376.90
Total Checks and Payments					-8,376.90	-8,376.90
Total Cleared Transactions					-8,376.90	-8,376.90
Cleared Balance					-8,376.90	87,632.28
Uncleared Transactions						
Checks and Payments - 3 items						
General Journal	08/16/2023	Jrnl 5			-2.00	-2.00
Bill Pmt -Check	12/18/2024	1083	Western Weather G...		-4,283.33	-4,285.33
Bill Pmt -Check	12/18/2024	1084	Western Weather G...		-814.67	-5,100.00
Total Checks and Payments					-5,100.00	-5,100.00
Total Uncleared Transactions					-5,100.00	-5,100.00
Register Balance as of 12/20/2024					-13,476.90	82,532.28
Ending Balance					-13,476.90	82,532.28

Sacramento Valley
Basinwide Air Pollution Control Council

Title: 2024 Fall Intensive Burn Season Final Report

Presenter: SMP Coordinator Kai Tawa

Recommended action: approve final fall burn report for the Smoke Management Program 2024 (motion needed).

ATTACHMENTS:

Description

2024 Intensive Fall Burn Season Report

Upload Date

2/5/2025

Type

Supporting Documents

Smoke Management Program

Intensive Fall Burn Season

2024 Summary Report



The Smoke Management Program is an air quality program that was developed to manage agricultural burning by allocating acreage to Air Districts based on the quality of overall meteorological conditions pertaining to smoke dispersion. The quality of conditions is determined by numerous factors such as average basinwide PM_{2.5} measurements, inversion strength, wind speed and wind direction, among others. If conditions are poor, the California Air Resources Board (ARB) and/or the Smoke Management Program Coordinator (SMPC) may reduce acreage allocations or issue a No Burn Day. For superior ventilation conditions, they may allocate significantly more acreage assuming conditions are safe and public impact is not expected.

The 2024 Fall Burn Season took place between September 16 and November 27, 2024. Like the prior year, drought conditions were absent from the Sacramento Valley Air Basin (SVAB), resulting in a high number of planted rice acres, at 551,927 acres. This is the second highest number since 2016, lower only than last year's 555,739 acres.

The weather conditions throughout the season can be summarized as unusually active. The season featured the highest number of Wet Days since 2017 and featured the second highest seasonal rainfall on record. The 19 Wet Days accounted for more than a quarter of the season's burn day types and the 6.55" of rain is over three times the normal amount received during the Intensive Fall Burn Season. The most notable rainfall came via a powerful atmospheric river storm in late November. The copious rainfall resulted in the burn season ending early, on November 27, three days before its traditional end. Outside of rain, the unsettled conditions resulted in a total of six No Burn Days due to gusty north winds. All this active weather resulted in the 2024 season featuring the lowest-ever recorded seasonal average PM_{2.5} concentration at only 6.9 µg/m³. There were two Extended Burn Days, taking advantage of pre-storm, high-dispersion conditions.

Operationally, the only notable change was an overhaul of the pre-season training program. Rather than an extended live seminar, information that does not change from year to year was made into YouTube videos accessible via Western Weather Group's YouTube channel. This resulted in the training seminars being converted into workshops, with their length cut from 90 minutes down to only 45 minutes. The new live workshop only features material relevant to the current year and recent history and features examples intended to deepen the understanding of Fall Burn procedures. Feedback for this change was positive.

Together, the overall favorable weather conditions in combination with excellent work from all Air Districts resulted in 2024 being one of the most productive Intensive Fall Burn Seasons within the past ten years by a few different metrics. This year featured the highest number of rice acres burned since 2015, at 20,998 acres, or 17% of allowable burned. Additionally, seven complaints were received, which is below the historical average and significantly lower than last year's tally.

To directly compare complaint tallies, last year featured 26 total complaints, with most coming from separate, single-day incidents and ten of them coming from a single day in which complications of a very large prescribed fire resulted in significant air quality impacts in the SVAB. At the end of the 2023 season, districts that saw high complaint tallies worked with the SMPC to find solutions to avoid issues in the future, which have clearly shown great success.

In words, 36,078 total acres were burned in the SVAB, marking the third highest total burn acreage in the past ten years, after 2023 and 2015. This high number in combination with a low number of reports also resulted in the highest acres-per-complaint score since 2016, at 5,124 acres/complaint. See the tables and charts below for more detailed information.

2024 Smoke Management Program Intensive Fall Burn Season Statistics

County	Complaints	Acres Burned
Butte	4	6175
Colusa	0	8305
Glenn	2	7631
Placer	0	157
Sacramento	0	1337
Shasta	0	2446
Sutter	0	5923
Tehama	0	1512
Yolo/Solano	1	1969
Yuba	0	823
Total	7	36078

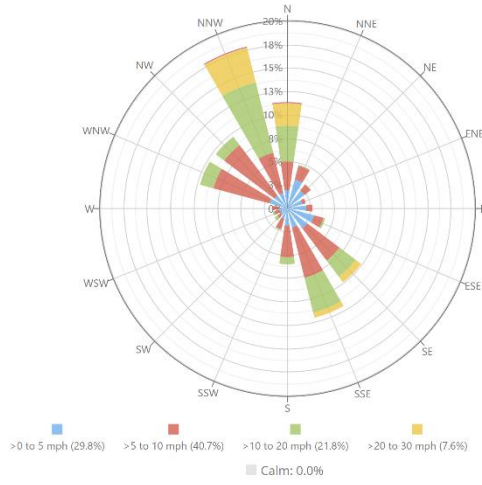
Meteorological Parameter	Value
12am-6am avg. PM _{2.5}	6.9µg/m ³
500mb Height	5738m
Avg 6am Inversion	9.0°F
Avg ARB Wind Speed	10.3mph
Total Rainfall	6.55"

County	Rice	Other Crops	Orchard	Prescribed Burning	Misc.	Total
Butte	2409	5	3045	712	4	6175
Colusa	7467	181	581	76	0	8305
Glenn	5914	156	1367	95	99	7631
Placer	156	0	1	0	0	157
Sacramento	0	423	692	0	0	1137
Shasta	0	0	0	2446	0	2446
Sutter	4409	44	1245	0	225	5923
Tehama	0	5	1258	232	17	1512
Yolo/Solano	105	71	1602	27	164	1969
Yuba	538	9	210	40	26	823
Totals:	20998	894	10001	3628	557	36078

2024 Fall Burn Season – Wind Roses

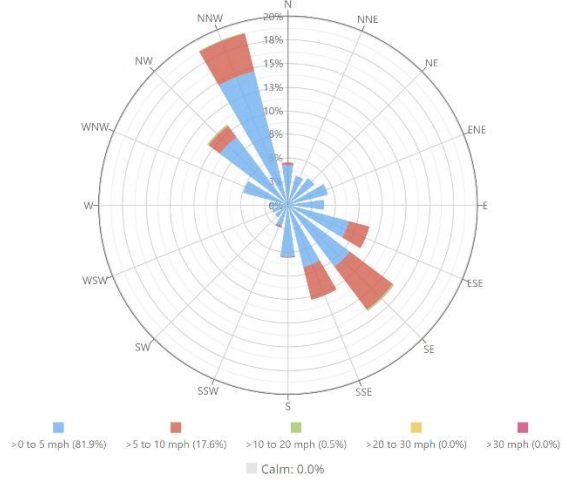
Orland Buttes-Hilltop

9/16/2024 - 11/27/2024



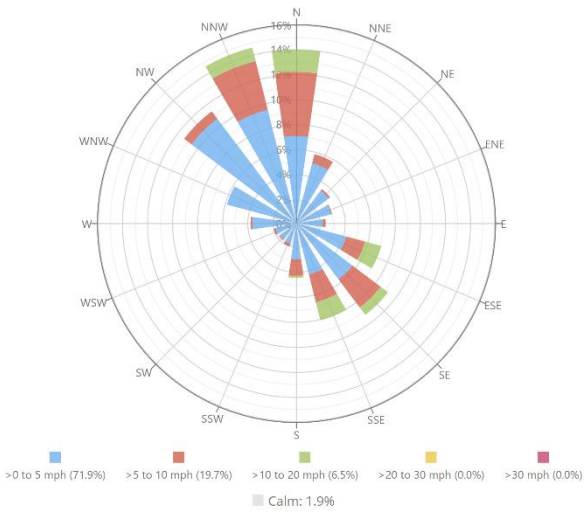
Durham

9/16/2024 - 11/27/2024



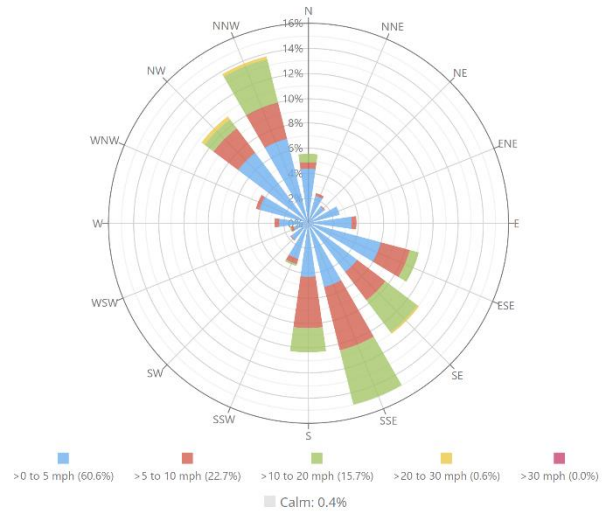
Bayliss Blue Gum (J&J Farms)

9/16/2024 - 11/27/2024



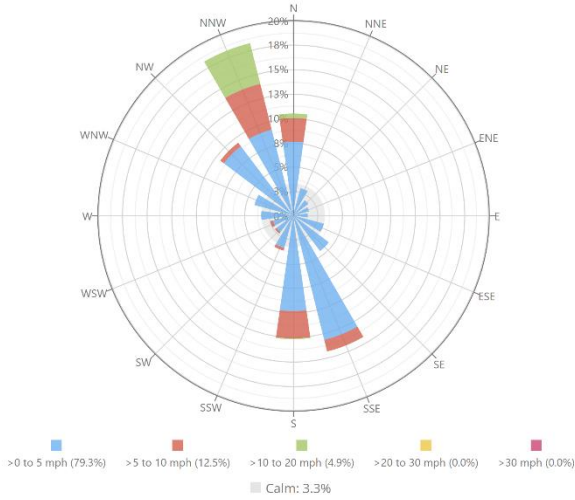
North Yuba

9/16/2024 - 11/27/2024



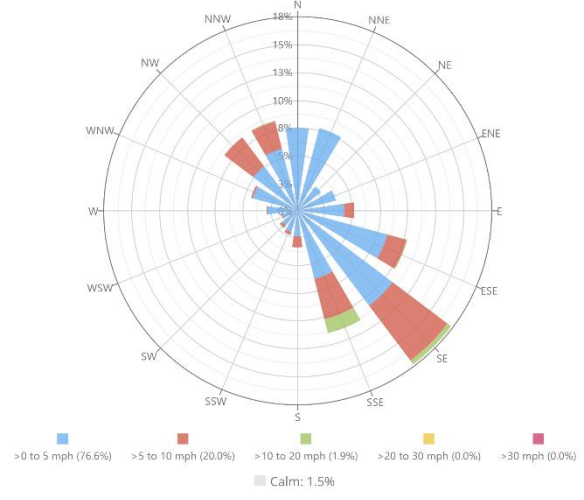
Plainfield

9/16/2024 - 11/27/2024



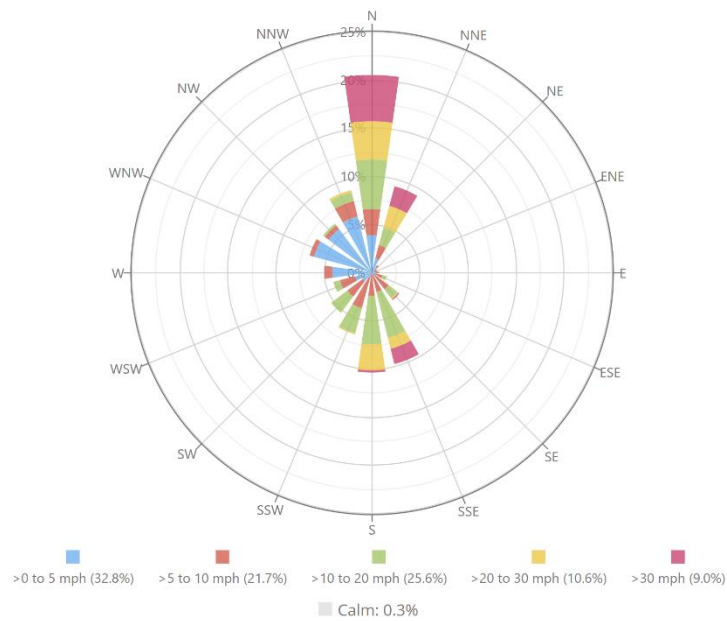
Yuba City-South (Sierra Gold)

9/16/2024 - 11/27/2024



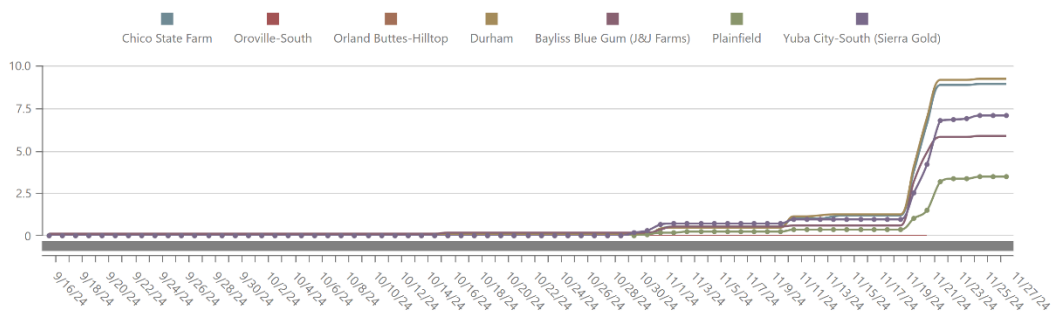
Sutter Buttes

9/16/2024 - 11/27/2024



Seasonal Rainfall (In)

9/16/2024 - 11/27/2024



Sacramento Valley
Basinwide Air Pollution Control Council

Title: Sacramento Valley Ag Commissioners Letter to BCC

Presenter: TAC Member

Recommended action: follow recommendation of Sacramento Valley Ag Commissioners to approve the findings of University of California Cooperative Extension Rice Farm Advisors, thus allowing five more years of rice burning authorizations (motion needed).

ATTACHMENTS:

Description

Rice Burning Findings_BCC(2024)FINAL

Upload Date

2/5/2025

Type

Supporting Documents



**Sacramento Valley
Agricultural Commissioners and Sealers Association**

Alpine ° Amador ° Butte ° Calaveras ° Colusa ° El Dorado ° Glenn ° Nevada
Placer ° Sacramento ° Solano ° Sutter ° Tuolumne ° Yolo ° Yuba

December 12, 2024

Sacramento Valley Basinwide Air Pollution Control Council
C/O Laurie LaGrone, BCC Secretary
629 Entler Ave. Suite 15
Chico, CA 95928
bcctacsecretary@gmail.com

Subject: Updated Consultative Findings on Prevalence of Rice Disease Levels

Dear Members of the BCC,

In accordance with the Sacramento Valley Basinwide Air Pollution Control Council's Conditional Rice Straw Burning Program ("Program"), pursuant to California Health and Safety Code 41865(e), the Sacramento Valley Agricultural Commissioners are writing to report our consultative findings regarding the prevailing levels of qualifying rice diseases (stem rot, aggregate sheath spot, blast). Beginning in 2010, we were required to report to the Sacramento Valley Basinwide Air Pollution Control Council once every five years to certify that there is sufficient disease observations in the fields to justify burning up to the 25 percent level.

After review of the 2024 inspection report prepared by University of California Cooperative Extension Rice Farm Advisors (UC Extension), we are electing Step 2 of your adopted 2024 Disease Evaluation Protocol. This Step invites all of the Sacramento Valley Ag Commissioners to issue an approval letter on the matter to apply for the next five years of rice burning authorizations.

In general, we are unaware of any evidence that would lead us to conclude that the prevailing levels of rice diseases have decreased over the past five years. In summary, the general conclusions of our technical consultation with UC Extension are as follows:

- Adequate numbers of samples were collected from each county during the 2024 growing season.
- Significant percentages of both aggregate sheath spot and stem rot, in addition to several other diseases, were found in all eight Sacramento Valley counties.

Based upon the UC Extension study results, the Sacramento Valley Agricultural Commissioners find that sufficient levels of qualifying rice diseases exist throughout the Sacramento Valley to justify up to 25 percent burning by each growers choosing to utilize burning as a management practice. In making this finding, we recognize that growers planning to burn for disease control must still obtain a rice straw burning permit from their county air pollution control or air quality management district in order to burn any rice fields in the Sacramento Valley.

If you have any questions, please contact Lindsey Carter, CACASA Executive Director at 209-712-7120 or lindseyl@cacasa.org.

Sincerely,



M. Anastacia Allen, Colusa County Agricultural Commissioner



Lisa Herbert, Sutter County Agricultural Commissioner



Louie Mendoza, Butte County Agricultural Commissioner



Marcie Skelton, Glenn County Agricultural Commissioner



Stephen Scheer, Yuba County Agricultural Commissioner



**Sacramento Valley
Agricultural Commissioners and Sealers Association**

Alpine ° Amador ° Butte ° Calaveras ° Colusa ° El Dorado ° Glenn ° Nevada
Placer ° Sacramento ° Solano ° Sutter ° Tuolumne ° Yolo ° Yuba

Humberto Izquierdo, Yolo County Agricultural Commissioner

Josh Huntsinger, Placer County Agricultural Commissioner

Chris Flores, Sacramento County Agricultural Commissioner

Sacramento Valley
Basinwide Air Pollution Control Council

Title: Biomass Energy: Biomass Legislative Advocacy, April 2-3, 2025

Presenter: Sac-Metro AQMD

Review draft plans for April legislative advocacy days in Sacramento.

ATTACHMENTS:

Description	Upload Date	Type
Biomass Advocacy Schedule (DRAFT)	2/5/2025	Supporting Documents
Biomass to Bioenergy Benefits_DRAFT	2/5/2025	Supporting Documents



DRAFT

Biomass Utilization Legislative Advocacy Event

April 2-3, 2025

Wednesday, April 2, 2025

Travel to Sacramento

Time	Event	Where
11:00 AM – 1:00 PM	BCC Preparation Meeting & Working Lunch	TBD
1:00 – 4:30 PM	Meetings with Legislators and Relevant Committees	State Capitol
5:00 – 7:00 PM	BCC Dinner (TBD)	TBD

Thursday, April 3, 2025

Time	Event	Where
8:30 AM – 10:00 AM	BCC Meeting & Advocacy Preparation	TBD
10:30 AM – 12:00 PM	Meetings with Key Members and Governor's Office	State Capitol
12:00 PM – 1:00 PM	Lunch	TBD
1:30 PM – 3:00 PM	Meetings with Key Agencies (CDFA, Governor's Office, etc.)	State Capitol
3:00 PM – 3:30 PM	Wrap up	TBD

Travel Home

Goals for Biomass Legislative Advocacy Event

The Basinwide Control Council is charged with overseeing the Smoke Management Program and promoting air quality in the Sacramento Valley Air Basin (SVAB). A key focus in recent years has been to increase biomass utilization for bioenergy and beneficial bioproducts and reduce agricultural and prescribed burning and associated smoke and impacts to air quality. The planned legislative advocacy event will focus on educating key legislators, committees and other state agencies to seek funding for biomass utilization projects in the SVAB region.

General Event Logistics

- Meetings with legislators will be done by separate BCC member teams.
- Each team will be made up of 2-3 representative districts and 3-6 BCC/TAC members.
- Meetings will generally last 30 minutes.
- Day 1 will focus on meeting with legislators (Thursday legislators are in session and less available to meet)
- Day 2 will focus on meeting with other key agencies and potential supporters

BCC Member Expectations

- BCC Members will be essential to reaching out to their regional legislator(s) to schedule a meeting on April 2.
- BCC members that agree to assist with this effort will need to make contact with their legislator in the first week of March.
- Materials will be provided to support BCC Members
 - Save the Date email template
 - Advocacy 2-page document
 - Talking Points



DRAFT

AGRICULTURAL BIOMASS UTILIZATION FOR CLEAN ENERGY BENEFITS

WHAT IS THE PROBLEM?

With nearly \$60 billion in cash receipts from the growing of hundreds of different commodities, California’s agricultural industry is a major contributor to the state’s economic growth. Northern California accounts for approximately 10% of this output. Biomass generated from ag crops has long been considered a waste byproduct slated for destruction through open burning. Burning waste is economical and convenient relative to chipping, shredding, and mulching, which are practices made possible only with state funds to offset the higher costs. But burning creates ozone and particle pollution and a ban is in effect in the San Joaquin Valley. The state’s carbon neutrality goals also include priorities for increased carbon storage and biomass utilization, but funding is needed to scale up projects.

WHAT IS THE SOLUTION?

There is a better way to utilize this ubiquitous and renewable resource that will result in significant air quality benefits, contribute to California’s push toward clean energy alternatives, and provide increased prosperity to rural communities that need jobs and innovation the most. Biomass-to-fuels is a viable option for producing high-value liquid and gaseous carbon-negative fuels. The Bioeconomy Development Opportunity Zone Initiative (BDO Zone) recently assessed Northern California as having tens of thousands of tons of agricultural residue annually that can be converted into usable products like biochar and hydrogen. In essence, the region is ready for a new “biomass energy 2.0” that transitions the industry from conventional biomass energy combustion practices to new sustainable approaches with the right legislative signals, supportive policies, and public and private investments to harness the potential opportunities. The solutions we are pursuing here for agricultural biomass are similarly viable and relevant for forest biomass.

WHAT IS THE ASK?

To make the multiple benefits of biomass utilization a reality, significant public funding in the order of \$50 million is needed to advance and scale up biomass-based projects to support a robust bioeconomy in Northern California and around the state.

State funding will also be a powerful indicator to private investors and will have a synergistic and leveraging effect to further vital energy transition actions.



THE MULTIPLE BENEFITS OF BIOMASS UTILIZATION

Using agriculture biomass for alternative uses compared to burning is a winning strategy to improve air quality, decrease climate pollution, and increase economic opportunities for rural Californians. The benefits are many and the time is right to harness this renewable resource for the many co-benefits outlined below.



IMPROVES AIR QUALITY FOR HEALTHIER COMMUNITIES

Pollution from agricultural burning has been a historic contributor to overall air quality issues to the disbenefit of local communities and general air quality levels. While agricultural burning is managed throughout the state, any reduction in burning ag residue will benefit impacted communities by reducing exposure to particulate matter pollution that can trigger health effects like asthma and other lung and heart conditions.



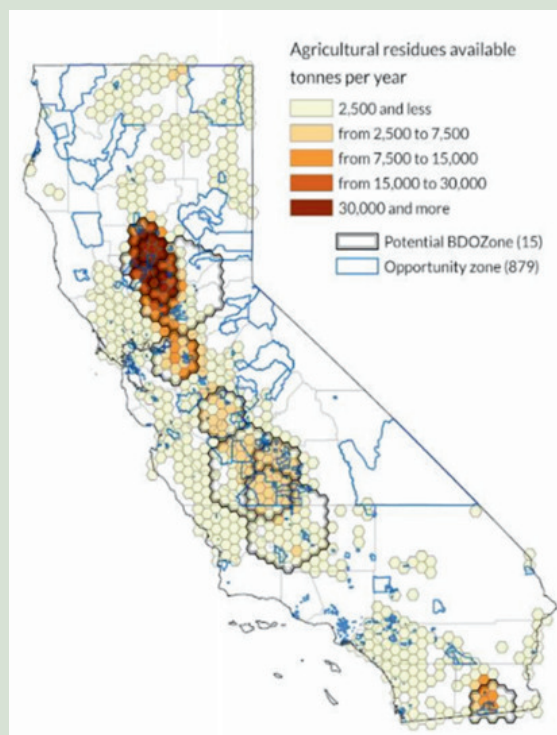
REDUCES CLIMATE POLLUTION

Climate change is a complex issue that requires a multitude of strategies to meet state targets to reduce GHG emissions. Redirecting biomass residues to beneficial alternative uses will not only reduce releases of black carbon and particle pollution, products such as low-carbon and carbon negative fuels and biochar will support the state's goals for clean fuels. Hundreds of thousands to millions of GHG emissions are expected to be reduced through the utilization of biomass. When coupled with carbon sequestration strategies, utilization of biomass resources has been estimated to be one of the best ways to reduce carbon emissions as outlined in research done by the Lawrence Livermore National Laboratory in the 2020 "Getting to Neutral" report.



DRIVES ECONOMIC & WORKFORCE DEVELOPMENT

The biomass resources available to be converted into useful bioproducts and clean energy alternatives are in the millions of tons annually. This is a feedstock that could be utilized to create numerous products or converted to energy and liquid fuels using non-combustion techniques, supporting new clean energy industries. Creating new opportunities that promote utilization of biomass feedstocks in communities throughout the state's agricultural heartland would provide prospects for building a sustained and skilled workforce. The biomass industry on average would typically employ a greater number of employees compared to other energy industries, making it a viable job and economic driver for the future in rural regions of the state that are traditionally underserved.



This map from the BDO Zone Initiative shows Northern California Valley has significant agricultural biomass resources available in the tens of thousands of tons.

Sacramento Valley
Basinwide Air Pollution Control Council

Title: 2025 BCC Meeting Schedule Changes

Presenter: BCC/TAC Secretary-Treasurer

Recommended action: approve proposed changes to April and June BCC meetings, and discuss the meeting activities (motion needed).

ATTACHMENTS:

Description

REV2025 BCC Meeting Schedule 2025-02-07 - DRAFT

Upload Date

2/5/2025

Type

Supporting Documents

SACRAMENTO VALLEY

BASINWIDE AIR POLLUTION CONTROL COUNCIL

					Chair	Vice Chair		
Butte	Colusa	Feather River	Glenn	Placer	Sacramento	Shasta	Tehama	Yolo-Solano

2025 BCC MEETING SCHEDULE

February 7, 2025

Host: Feather River AQMD
541 Washington
Yuba City, CA 95991

April 4, 2025 – In Person Meeting

Possible change to Special Meeting 4/3

Host: Sacramento-Metropolitan AQMD
777 12th Street, 3rd Floor
Sacramento, CA 95814

June 6, 2025 – Field Trip Meeting

Proposed Host:
Colusa County APCD
100 Sunrise Blvd, Suite F
Colusa, CA 95932

August 1, 2025

Host: Shasta County AQMD
1855 Placer Street, Suite 101
Redding, CA 96001

October 3, 2025

Host: Tehama County APCD
1834 Walnut Street
Red Bluff, CA 96080

December 5, 2025

Host: Placer County APCD
110 Maple Street
Auburn, CA 95603

Dates are always the first Friday of every other month at 10:00 a.m. beginning in February. Tentative meeting locations are listed here but are subject to change depending upon room availability. The dates are firm. Please check agendas for final meeting locations.

If you have any questions, please contact:

Laurie LaGrone
BCC/TAC Secretary-Treasurer
bcctacsecretary@gmail.com

629 Entler Avenue
Chico, CA 95926
530-332-9400 ext. 105