# Attachment A

Land Acknowledgment

#### **Land Acknowledgement Statement**

We should take a moment to acknowledge the land on which we are gathered. For thousands of years, this land has been the home of Patwin people. Today, there are three federally recognized Patwin tribes: Cachil Dehe Band of Wintun Indians of the Colusa Indian Community, Kletsel Dehe Band of Wintun Indians, and Yocha Dehe Wintun Nation.

The Patwin people have remained committed to the stewardship of this land over many centuries. It has been cherished and protected, as elders have instructed the young through generations. We are honored and grateful to be here today on their traditional lands.

Approved by Yocha Dehe Tribal Council (July 23, 2019)

# Attachment B

2/28/22 Commission Meeting Minutes

#### DRAFT MEETING MINUTES

Yolo County Climate Action Commission February 28, 2022 | 4:00 PM - 6:30 PM

#### **COMMISSION MEMBERS:**

Suzanne Reed, District 1 appointee
Robin Datel, District 2 appointee
Mark Aulman, District 3 appointee
Andrew Truman Kim, District 4 appointee
(VICE-CHAIR)

Adelita Serena, District 5 appointee Chris White, Technical Lead NJ Mvondo, Environmental Justice Lead (CHAIR)

Bernadette Austin, Climate scientist/subject matter Expert

Pelayo Alvarez, Climate scientist/subject

matter Expert

Mica Bennett, At large Ken Britten, At large

#### **EX-OFFICIO MEMBERS:**

Sarah Morgan, Yocha Dehe Wintun Nation Matt Dulcich, UC Davis

#### **SUPERVISORS:**

Supervisor Don Saylor, Yolo County Board of Supervisors, District 2 Supervisor Jim Provenza, Yolo County Board of Supervisors, District 4

#### **ATTENDANCE**

All Commission Members and Ex-Officio Members were present. Supervisor Don Saylor was present. Supervisor Jim Provenza was represented by his deputy, Richard Reed.

#### **MEETING ACTION ITEMS**

#### **Yolo County Staff Action Items**

- County staff will amend the January 31, 2022 Commission meeting summary per the requested changes by Commission Member Reed, noted in item 5 below.
- C. Tschudin will send the details for the Community Alliance with Family Farmers,
   California Small Farm Conference farm tour occurring in Davis this week to the group, as requested by N. Mvondo.
- T. Echiburú to see if funds could be distributed quickly through the County's existing channels for the Capay Valley Health and Community Center Community Resilience Hub.
- County staff to move "Recommendations regarding best practices for evaluating the climate impact of proposed development projects" to the long-range calendar in July or August 2022 if those months are not filled with Climate Action Planning-specific items.
- County staff to add S. Reed's request to discuss the Commission's role in state and federal advocacy to the long-range calendar at a future Commission meeting.

#### **Commission Action Items**

- C. White to provide data to staff to include in the next Commission meeting demonstrating the energy reduction benefits of existing home energy labelling programs.
- Commission to decide if they would prefer a Yolo County Past Planning Efforts presentation or workshop.

#### **MEETING MINUTES**

1. Authorize remote (teleconference/videoconference) meetings by finding, pursuant to Assembly Bill 361, that local officials continue to recommend measures to promote social distancing as a result of the COVID-19 pandemic.

**Decision**: Approved

Moved By: / Seconded By: S. Reed / A. Kim

Ayes: 11 Noes: 0 Abstain: 0 Absent: 0

Additional Comments/Action Items:

- 2. Welcome New Commission Members & Commission Member Introductions (Chair Mvondo)
  - Welcomed K. Britten and M. Bennett and asked for both staff and Commission Member introductions.
- 3. Approval of the Agenda

**Decision:** Approve

Moved By: / Seconded By: A. Kim / R. Datel

Ayes: 9 Noes: 0 Abstain: 2 Absent: 0

**Additional Comments/Action Items:** 

**4.** Public Comment – No public comment at this time.

#### 5. Approve 1/31 Meeting Minutes

**Decision:** Approve

Moved By: / Seconded By: M. Aulman / S. Reed

Ayes: 9 Noes: 0 Abstain: 2 Absent: 0

#### **Additional Comments/Action Items:**

- S. Reed stated on page 6, item 8.d.i in the January 31, 2022 Commission Meeting Minutes, her comments should be clarified as stating that actions the Commission approves for funding should have long-term benefits.
- S. Reed stated, on page 8, item 10.b.iii in the January 31, 2022 Commission Meeting Minutes, SWAT should be changed to SWOT (strengths, weaknesses, opportunities, and threats); S. Reed clarified she suggested a SWOT analysis to reveal the gaps, needs and strengths of the County.

#### 6. Staff Announcements/Reports (Staff/Commission Members)

- R. Datel noted staff reports are also listed under item 11 on the agenda; N. Mvondo stated this is to provide Commission members the opportunity to make suggestions for future agenda items.
- N. Mvondo announced the Community Alliance with Family Farmers is hosting the California Small Farm Conference from February 27 to March 3 and there will be a farm tour in Davis this week at 4pm. N. Mvondo to share the farm tour information with C. Tschudin to send to the group.
- No staff announcements.

#### 7. Approve Land Acknowledgment (Vice-Chair Kim)

- A. Kim commended the inclusivity of the land acknowledgment.
- T. Echiburú added as part of developing this broad and inclusive statement, the County reached out to Omar Carillo, Director of Government Affairs for Yocha Dehe Wintun Nation. The land acknowledgement stated has been approved by the Yocha Dehe Wintun National Tribal Council and by the Yolo County Board of Supervisors.
- N. Mvondo thanked Sarah Morgan for assisting with the development of the land acknowledgement statement and for participating in Commission meetings.
- T. Echiburú stated with this vote, the land acknowledgment statement will be a standing item at the top of all future commission agendas.

**Decision:** Approve

Moved By: / Seconded By: S. Reed / A. Serena and K. Britten

Ayes: 11 Noes: 0 Abstain: 0 Absent: 0

#### **Additional Comments/Action Items:**

# 8. Receive Staff Report on Proposed Yolo Climate Action Commission Amendment (T. Echiburú)

- T. Echiburú recalled the desire for Commission to review development projects, however clarified this is not in the scope of the Commission.
  - This clarification is best captured by making an amendment to the charter and by cleaning up the amendment process.
  - o Amendment to be brought to the Board of Supervisors in March.
- K. Britten asked if there can be more discussion on the Commission's ability to review projects. He stated for the City of Winters, there will be a formal liaison process between the Winters Climate Commission and the Winters Planning Commission. The Winters Climate Commission will have an early review committee to review Planning Commission projects.
  - T. Echiburú responded that this is not possible at the time due to the nature of the focus on the Climate Action and Adaptation Plan (CAAP) writing, but perhaps this could change after the adoption of the plan.
  - T. Echiburú notes that it's the Board's desire that this group work on the CAAP itself.
  - K. Britten responded that this might be out of the spirit of an emergency and requests the Board considers moving this process faster.
  - T. Echiburú responded that this feedback will go to the Board for review and there is an opportunity to continue this discussion then.
- R. Datel asked if the amendment arrangement which requires a 2/3d majority vote, is standard for any Boards or Commissions in the County.
  - T. Echiburú stated it is and it was a recommendation from County Counsel to include the 2/3<sup>rd</sup> majority to maintain consistency with other boards/commissions.

**Additional Comments/Action Items:** No public comment at this time.

#### 9. Approve Recommended Early Action Priorities (P. Marchand)

 P. Marchand provided a background of this effort to new Commission Members and listed the recommendations on the seven prioritized early actions. Staff selected the top seven early actions based on having four or more 'highs" for individual criteria. Staff combined actions where it was possible, which is reflected in the staff report. For incomplete proposals, staff used best professional judgement to prioritize the action. P. Marchand opened the floor to questions.

- A. Kim noted that the expansion of the Carl Moyer program did not appear on the current list; asked if it is too late to submit the Carl Moyer expansion project.
- P. Marchand stated there are two options 1) to prioritize and add the Carl Moyer as an early action during the meeting, or 2) go forward with other early actions and hold a motion to add Carl Moyer expansion project to the proposals to review at the next Commission meeting.
- A. Kim moved to add Carl Moyer to next Commission agenda and to continue with approval of other early actions in the meantime.
- S. Reed made an alternative motion for Commission to approve that the list of 7, as provided, move forward for further analysis and within that list, for staff to reexamine the home energy audit mandate in order to analyze the opportunities to direct that program to prioritize benefits to low-income consumers, enabling them to make and afford modifications while they reside in the home and at the time they are able to sell. The motion included a reexamination by staff of the Capay project with the recommendations and comments made by Supervisor Saylor and an examination of opportunities to expedite funding so that it does not delay the project and run up cost.
- A. Kim withdrew his original motion and seconded S. Reed's motion.
- T. Echiburu clarified that suggestion by Supervisor Saylor on Capay project will move forward without the need to be included in motion.
- C. White highlighted the benefits of the Home Energy Labeling Project to low-income communities, specifically with regards to job creation for at-risk youth.
  - P. Alvarez noted concern on whether this project benefits low-income communities, as mandated programs can create an additional cost to homeowners.
  - Staff will investigate ways to structure the Home Energy Labeling Project roll out to address this concern.

**Decision:** Approve

Moved By: / Seconded By: S. Reed / A. Kim

Ayes: 11 Noes: 0 Abstain: 0 Absent: 0

#### Additional Comments/Action Items:

**Public Comment** – Christine Shewmaker commented on the high impact of the renewable energy project, and that there are long-term actions to implement regarding moving to 100% renewable energy and that in the intermediate term, low-income communities could be assisted to renewable energy through grants. Commented on #1 on early action proposals, wanted to add a sentence that clarifies that all NEW Yolo

County buildings would include removing fossil fuels. On the mandate, there may be a way to do the carrot versus the stick.

# 10. Update on Ad-Hoc Working Group for Climate Action Plan Scope of Work (M. McCormick)

• M. McCormick noted that first meeting for RFP working group is on March 17<sup>th</sup> and staff is currently developing a presentation on the past planning efforts in Yolo County with recommended best practices.

#### 11. Commissioner Reports, Comments, Future Agenda Items

- S. Reed asked for an update on the History of Climate Action Planning Presentation and if there could be a workshop.
  - o T. Echiburú stated currently this is a presentation, not a workshop.
  - S. Reed suggested after the presentation the Commission can decide if a workshop is needed.
  - N. Mvondo responded that there is not a workshop date at this time, but that staff is working on it.
  - T. Echiburú noted that a placeholder was put on the long-range calendar, tentatively scheduled for March.
- Commission to decide if this should be a workshop or presentation.

#### 12. Long Range Calendar

- C. Tschudin added that update will be sent in between meetings.
- K. Britten suggested moving the "Recommendations regarding best practices for evaluating the climate impact of proposed development projects" currently scheduled for September 2022 to July or August on the long-range calendar.
  - T. Echiburú agreed County staff can move this item to July or August 2022 on the long-range calendar if those months are not filled with CAAP-specific items
- S. Reed asked to discuss at a future Commission meeting, the Commission's role in state and federal advocacy.

#### 13. Adjournment

Meeting Adjourned at: 6:55 PM

# Attachment C

Early Action Project Descriptions

### STAFF REPORT

**DATE:** March 28, 2022

**TO:** Yolo County Climate Action Commission

**FROM:** Taro Echiburú, Director

Department of Community Services

Petrea Marchand, President

Consero Solutions

**RE:** Approve Early Action Project Descriptions

#### **RECOMMENDED ACTION**

1. Approve the following four project descriptions:

- a. Carbon Farming Partnership
- b. Electric Retrofits & Natural Gas Appliance Rebates
- c. 100% Electric Accounts
- d. Mandate Home Energy Labeling
- 2. Approve Carl Moyer proposal as a prioritized Early Action
- 3. Approve moving presentation of project descriptions and grant strategies to the Board of Supervisors to May

#### REASON FOR RECOMMENDED ACTION

- 1. Of the six approved early actions, County staff was able to develop a complete project description for four. The remaining two early actions require additional research and guidance from County staff in order to complete their project descriptions. Approval of the four project descriptions will allow County staff to begin developing a grant strategy to identify funding to support project implementation. The remaining project descriptions will be brought to the Commission for approval in April. All project descriptions and associated grant strategies will be brought to the Board of Supervisors for approval in May.
- 2. County staff has evaluated three additional early action proposals that were submitted, but not reviewed or prioritized. Based on County staff's application of approved prioritization criteria, County staff recommend the approval of the Carl Moyer project as a priority early action. If approved, County staff will proceed to develop a project description and grant strategy for approval at the April Commission meeting, along with the additional two project descriptions.
- County staff need additional time to develop two remaining project descriptions, therefore approval of all project descriptions by the Commission cannot take place until the April Commission meeting. Therefore, County staff recommend postpone

bringing the Commission's recommended early action projects and grant strategies to the Board of Supervisors until May.

#### BACKGROUND

At the February Commission meeting, the Commission approved the prioritization of seven early actions. On March 7<sup>th</sup>, the project applicant withdrew the application for the "microgrid future proof proposal". Therefore, County staff moved forward in developing project descriptions for the remaining six early action proposals. County staff completed the following four project descriptions, and recommend them for Commission approval:

- 1. Carbon Farming Partnership (Attachment C.1)
- 2. Electric Retrofits & Natural Gas Appliance Rebates (Attachment C.2)
- 3. 100% Electric Accounts (Attachment C.3)
- 4. Mandate Home Energy Labeling (Attachment C.4)

In addition, at the February Commission meeting, it was brought to County staff's attention that three submitted early action proposals were not reviewed or prioritized. These proposals are: the Yolo Agricultural Equipment Retrofit Program (Expansion of Carl Moyer), the Yolo Organic Soil Inoculant Subsidy Program, and the Yolo County Organic Certification Support Program. County staff reviewed those proposals and applied the approved prioritization criteria (Attachment C.5). Based on this review and prioritization, County staff recommend the Commission approve the Carl Moyer proposal as a prioritized Early Action. As with all proposals not selected as an Early Action, the remaining two proposals are recommended for review upon adoption of the Climate Action Plan.

Taro Echiburú

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#### CARBON FARMING PARTNERSHIP

Proposed Early Action to Implement Resolution No. 20-114 Related to the Climate Crisis

#### PROPOSED ACTION

The proposed action will provide Yolo County ("County") growers, including growers who identify as Black, Indigenous and People of Color (BIPOC) and new farmers with tools, training, and technical assistance to develop and implement Carbon Farm Plans and other practices to reduce carbon emissions and sequester carbon. The Center for Land-Based Learning ("Center") would lead this project, in partnership with the Yolo Resource Conservation District, the Carbon Cycle Institute, and the Yolo Land Trust. This proposed action would rapidly increase the pace and scale of carbon farm planning and implementation in the County, including completing model carbon farm plans and educating growers about the climate and soil health benefits of proven conservation practices, including the Conservation Reserve Program, over the next two years. In addition to training growers in carbon farming principles, the Center will integrate direct feedback from experienced growers, as well as new BIPOC farmers, into the County's new Climate Action and Adaptation Plan process, ensuring the new plan is supported by the agricultural community. Specific tasks include:

- Task 1: Build partnership and link to the Yolo Climate Action Plan
- Task 2: Develop three model Yolo Carbon Farm Plans
- Task 3: Train Yolo County producers and technical service providers on climate friendly practices and carbon farm planning, including the U.S. Department of Agriculture's Conservation Reserve Program
- Task 4: Educate new and BIPOC farmers by integrating climate and carbon farm planning into the Center's California Farm Academy
- Task 5: Engage the public and broader agricultural community through outreach, including site tours, social media and targeted outreach to BIPOC farmers

#### **BACKGROUND**

According to the Carbon Cycle Institute, agricultural and natural lands are our most valuable tools in massively scaling up rates of carbon sequestration across the globe while also building climate resilience and ecological health. The Institute advocates that carbon sequestration must become the next value-added agricultural product. The County has been a leader in agricultural land conservation for over 150 years and is poised to become a leader in helping growers address climate change impacts as well. With 85 percent of County lands designated for agricultural use,

agricultural lands are arguably the County's most valuable resource for increasing carbon sequestration and mitigating climate change.

Carbon farming involves implementing practices known to improve the rate at which carbon dioxide is removed from the atmosphere and converted to plant material and/or soil organic matter. Practices such as hedgerows, cover cropping, reduced tillage, and habitat restoration all have demonstrated carbon benefits. A set of online tools (COMET) developed by researchers at Colorado State University, the Natural Resource Conservation Service, the Climate Change Institute, and the Marin Carbon Project, allows the quantification of greenhouse gas emission reduction benefits. Enhancing working land carbon, whether in plants or soils, results in beneficial changes in a wide array of system attributes, including soil fertility, water holding capacity, biodiversity, and resilience to drought and flood. Increasing carbon capture on working lands also helps to slow rising levels of carbon dioxide and other greenhouse gases in the atmosphere.

The Center for Land-Based Learning has already implemented a suite of carbon-beneficial practices at its Maples Farm north of Woodland and has identified others in its current draft Carbon Farm Plan. Practices implemented to date include over 2,500 feet of native plant hedgerows, a pollinator bioswale, perennial conservation cover, cover cropping, and compost application. Additional practices in the planning stages, or pending funding, include a 5-acre olive orchard with a research component using biochar and compost treatments, alley cropping, riparian restoration on Cache Creek frontage property, field trials using microbial inoculant and other soil amendments, perennial grain cropping, tree and shrub establishment, windbreaks, and additional hedgerows and perennial conservation cover. All these practices are designed as demonstration sites for training and educational purposes and all incorporate ecological monitoring to track changes in soil health (including soil carbon) and biodiversity.

#### CONSISTENCY WITH EXISTING POLICIES

Sequestering carbon in agricultural landscapes also supports strategies outlined in Yolo County Sustainability Plan. Specifically, the Yolo County Sustainability Plan includes the following relevant strategies:

- Strategy EH-1: Update the County's Climate Action Plan to protect people, ecosystems, community assets, and resources from the anticipated effects of climate change
- Strategy EH-3: Prioritize nature-based solutions
- Strategy AG-1: Preserve Yolo's agricultural land and ensure a strong local agricultural economy
- Strategy AG-2: Increase carbon sequestration of farmlands
- Strategy ED-1: Raise public awareness of sustainability topics and the public's role in furthering the County's sustainability goals

The proposed action also supports the following measures outlined in the 2011 Yolo County Climate Action Plan ("2011 CAP"):

• A-6: Sequester carbon in agricultural landscapes

AD-1: Prepare for the effects of climate change on agriculture

Furthermore, the 2015 Yolo County Climate Action Plan Status Update Report recommends that "Soil-Carbon as a form of Sequestration" and "Agricultural Easement and Agricultural Land Conservation Programs" be added to the list of agricultural measures in the next Climate Action Plan.

## BENEFITS TO DISADVANTAGED/VULNERABLE COMMUNITIES

This action would benefit BIPOC farmers.

#### **GREENHOUSE GAS EMISSION REDUCTION**

In the short term, this action will not reduce greenhouse gas emissions because it is focused on education, planning, and outreach. However, carbon farm planning is a dynamic process and the Center has already identified priority implementation practices that can serve as demonstration sites for other Yolo County growers. Yolo County expects this action to reduce greenhouse gas emissions by 1% by 2030, however, depending on the number of farmers participating in the program. The 2011 CAP estimates full implementation of Measure A-6: Sequester Carbon in agricultural landscapes, would reduce GHG emissions by 12% by 2030. This estimate assumes Yolo County would sequester approximately 55,570 MT CO2e/year in 2030. The Plan acknowledges methods used for calculating carbon sequestration are complex and controversial. This action would satisfy only a portion of the actions included in Measure A-6.

#### **CO-BENEFITS**

The proposed action will increase awareness of the role of agriculture in protecting biodiversity and climate. The proposed action may improve local food security, provide greater economic equity and opportunities, strengthen the local agriculture economy, and provide support to new and BIPOC farmers. Other benefits include increased biodiversity, restored habitat, and improved air quality.

# TRANSFORMATIVE/REPLICABLE ELEMENTS

This proposed action would create replicable models of Carbon Farming Plans and the Center would create replicable series of climate trainings and associated curriculum which could be adopted by other jurisdictions. The curriculum will also be translated into Spanish.

#### **DEGREE OF READINESS**

As the initial work to develop this partnership was completed in the summer of 2021, the Center is ready to begin implementation of this program immediately.

#### COSTS

The proposed action requests \$149,845.

#### **FUNDING**

The County will seek grants for this program and will allocate American Rescue Plan funds as matching funds if needed.

#### **CONCERNS**

COVID-19 may make implementation of this proposed action difficult if in-person gatherings are restricted.

#### **PARTNERS**

- Center for Land Based Learning
- Yolo Resources Conservation District
- Carbon Cycle Institute
- Yolo Land Trust
- U.S. Department of Agriculture Natural Resource Conservation Service

#### **PERSONNEL**

Name	Role (Lead or Partner)	Email	Phone
Jeanne Wirka	Center, Lead	jeanne@landbasedlearning.org	707-322-5387
Heather Nichols	Yolo RCD, Partner	heather@yolorcd.org	530-661-1688; ext. 12
Patricia Hickey	Carbon Cycle Institute, Partner	phickey@carboncycle.org	707-292-5058
Liz Heckles	Yolo Land Trust, Partner	lheckles@theyololandtrust.org	530-662-1110
Kristen Wraithwall	Yolo County, Lead	kristen.wraithwall@yolocounty.org	530-666-8047

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# ELECTRIC RETROFITS & NATURAL GAS APPLIANCE REPLACEMENT REBATES

Proposed Early Action to Implement Resolution No. 20-114 Related to the Climate Crisis

#### PROPOSED ACTION

This proposed action will create a two-year, comprehensive outreach program in partnership with Valley Clean Energy to encourage low-income households in the unincorporated area to access \$1 billion for energy efficiency rebates in the 2022-2023 state budget and other electric retrofit and natural gas appliance rebates for existing residential homes. Taking advantage of existing energy efficiency and electric retrofits programs will lower energy bills, create local jobs, and improve indoor air quality and health-related issues by eliminating natural gas combustion in homes. Valley Clean Energy currently possesses confidential data on low-income households in the unincorporated area that had trouble paying their bills during the COVID-19 pandemic. Valley Clean Energy can work with Yolo County to reach out to these households and/or landlords of multi-family dwellings to connect them to information about rebates, help fill out applications, and help manage the retrofit if needed. Helping these households reduce ongoing costs by targeting them directly would have long-term economic and environmental benefits. The County could also partner with nonprofit organizations similar to Grid Alternatives to develop and implement the project. This project also includes the development of a system for tracking households which secure rebates by working with the state and other rebate agencies to provide data related to successful rebate applications in the unincorporated area.

#### **BACKGROUND**

Energy efficiency and electric retrofits lower energy bills, create local jobs, and improve indoor air quality and health-related issues eliminating natural gas combustion in homes. Homes and buildings where Californians live and work have been one of the largest sources of climate pollution, accounting for over a quarter of the state's greenhouse gas emissions. Retrofits may also be time-consuming and expensive to implement; the 2011 Climate Action Plan estimates the cost at an average of \$100,000/home. Roughly two-thirds of the greenhouse gas emissions from California's buildings come from gas combustion appliances like furnaces, water heaters, and stoves. About 90 percent of furnaces and hot water heaters in the state are fueled by gas or propane. Many of these older homes are likely built without ductwork for central heating and use through-the-wall furnaces that burn gas or propane. These old furnaces emit a great deal of carbon dioxide and particulate matter.

The 2011 Climate Action Plan's "supporting measures for energy" state that Yolo County will partner with PG&E, Yolo Energy Watch, and other organizations to promote existing financial incentives and rebates for energy efficient appliance upgrades and replacements. The 2011

Climate Action Plan also includes a measure to reduce energy consumption in existing residential and non-residential units (Measure E-2). As part of this measure, the CAP provides suggested participation goals or metrics: 70% of residential units complete an energy efficiency retrofit, with an average energy efficiency improvement of 15%, by 2030. The 2015 Yolo County CAP Status Update Report recommends the County promote the Energy Upgrade California program, which offers a variety of rebates and resources for residential property owners. Pacific Gas & Electric also maintains a list of available rebates and savings programs.

The 2021 Sustainability Plan also includes a strategy to electrify existing homes and new residential development (BU-2) by providing incentive programs to encourage electrification of existing homes (BU-2.1). The suggested tracking metric for Action BU-2.1 is the number of existing homes converted to all electric, as well as associated greenhouse gas reduction quantification. Providing education and outreach to low-income County residents regarding existing rebate programs of would facilitate implementation of Action BU-2.1.

#### **CONSISTENCY WITH EXISTING POLICIES**

This proposal supports Measure E-2: Reduce Energy Consumption in Existing Residential and Non-Residential Buildings of the Yolo County Climate Action Plan (2011). Building electrification also supports strategies outlined in Yolo County Sustainability Plan. Specifically, the Yolo County Sustainability Plan includes the following relevant strategy:

- Strategy BU-2: Electrify Existing Homes and New Residential Development
  - Action BU-2.1: Provie incentive programs to encourage electrification of existing homes

# BENEFITS TO DISADVANTAGED/VULNERABLE COMMUNITIES

The electric retrofits and natural gas appliance replacement electric retrofit program and natural gas appliance replacement rebates would be designed to benefit and prioritize low-income households and disadvantaged communities.

#### **GREENHOUSE GAS EMISSION REDUCTION**

The amount of greenhouse gas emission reduction resulting from this proposal is unknown, although is likely small because only approximately 20,000 people live in the unincorporated area of Yolo County and not all households will undertake retrofits because of this program. The California Air Resources Board estimates residential and commercial buildings are responsible for 25% of greenhouse gas emissions in California, however, so the program may still result in an important reduction. Based on the California Air Resources Board's 2019 Greenhouse Gas Inventory, building electrification in California would result in an average annual savings of approximately 50 million metric tons of carbon dioxide equivalent (MTCO2e) through 2045, so this program will ensure Yolo County is doing its share to achieve this goal.

Implementation of all components of Measure E-2 of the 2011 CAP was estimated to reduce carbon dioxide equivalent emissions by 12,322 MT by 2030. This measure assumes that 70% of existing (2008) residential units and 30% of commercial buildings in the unincorporated county would implement energy efficiency improvements that reduce energy consumption by 15%. The actual

greenhouse gas emission reduction impact of this action is dependent on the number of residential homes/businesses that participate in promoted rebate programs.

#### **CO-BENEFITS**

- Improved air quality and health by reducing hazardous pollutants
- Greater economic equity and opportunity
- Lower energy and water bills over time
- Job creation
- Improved safety and decrease risk of gas leaks, fires, and explosions
- Improved climate resiliency, particularly by providing efficient cooling during heat waves

## TRANSFORMATIVE/REPLICABLE ELEMENTS

This project would create replicable models for electrification and natural gas rebate programs throughout the County, region, and state. The outreach program would provide template outreach materials which other jurisdictions could use to implement a similar program.

#### **DEGREE OF READINESS**

This project requires the identification of partners and funding sources before it is ready to be implemented.

#### COSTS

The total cost of this action is \$350,000 to \$450,000 for a two-year outreach campaign. The estimated cost to develop an outreach strategy is \$50,000 and the estimated cost to implement the strategy is \$150,000 to \$200,000/year, including social media, earned media, videos, web site, sponsorships, and paid advertisements. Therefore, we anticipate implementation costs to be closer to \$250,000 in the first year.

#### **FUNDING**

Yolo County staff recommends allocating \$100,000 of American Rescue Plan funds in beginning stages of this effort and will pursue additional funding strategies for this project that could include ARP funding, grants, or a combination of both.

#### **CONCERNS**

Electrification retrofits may be too expensive for some residents, even with the rebates. The County may need to consider providing additional funds to encourage low-income residents on fixed incomes to implement the retrofits.

#### **PARTNERS**

Yolo-Solano Air Quality Management District

- Valley Clean Energy
- Pacific Gas & Electric

## **PERSONNEL**

Name	Role (Lead or Partner)	Email	Phone
Kristen Wraithwall	Lead	kristen.wraithwall@yolocounty.org	530-666-8047
Yolo-Solano Air Quality Management District	Co-Lead	TBD	TBD
Mitch Sears, Valley Clean Energy	Co-Lead	mitch.sears@valleycleanenergy.org	707-292-5058
Rebecca Boyles, Valley Clean Energy	Co-Lead	rebecca.boyles@valleycleanenergy.org	7530-446-2753



Taro Echiburú DIRECTOR

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#### 100% RENEWABLE ENERGY ELECTRIC ACCOUNTS

Proposed Early Action to Implement Resolution No. 20-114 Related to the Climate Crisis

#### PROPOSED ACTION

The proposed action would result in the enrollment of all Yolo County electric accounts not covered by existing County solar/renewable projects into Valley Clean Energy's UltraGreen program, which provides 100% renewable and 100% carbon-free electricity for an increase of 1.5 cents/kilowatt hour. Yolo County has installed solar to offset County electricity use and was one of two initial founding members of Valley Clean Energy, a community choice aggregation agency that consolidates the purchase of renewable energy for the City of Davis, the City of Winters, the City of Woodland, and the County of Yolo. A 2019 report to the Valley Clean Energy Board of Directors estimated Yolo County renewable energy projects only cover 2/3 of the County's electric accounts; this action would ensure 100% of Yolo County's electricity is from renewable sources. The action also is essential to ensure Yolo County's related action to remove fossil fuels from Yolo County operations results in a decrease in carbon emissions, since the transition to all-electric appliances and equipment will not result in the maximum potential emission reduction without a complementary move to 100% renewable energy accounts.

#### **BACKGROUND**

Climate scientists have increasingly identified electricity generated by fossil fuels (e.g. natural gas) as a key contributor to greenhouse gas emissions warming the planet. The power sector is the single largest source of carbon emissions at 24 gigatons per year<sup>1</sup>. Yolo County's action will help reduce demand for electricity generated by fossil fuels in Yolo County and will allow the County to lead by example in supporting the UltraGreen option from VCE.

#### CONSISTENCY WITH EXISTING POLICIES

This early action is consistent with AQ-1 of the February 2021 Yolo County Sustainability Plan. The 2011 Yolo County Climate Action Plan does not address the reduction of existing County operations. Specifically, the Yolo County Sustainability Plan includes the following relevant strategy:

Action AQ 1.2. Increase adoption of electric vehicles and equipment

Early Action: 100% Renewable Energy Electric Accounts

1

<sup>&</sup>lt;sup>1</sup> Doerr, John. Speed and Scale: An Action Plan for Solving our Climate Crisis Now. Penguin Business, 2021.

## BENEFITS TO DISADVANTAGED/VULNERABLE COMMUNITIES

This action will not benefit disadvantaged or vulnerable communities.

#### **GREENHOUSE GAS EMISSION REDUCTION**

Enrolling all of Yolo County municipal electric accounts not covered by existing County solar/renewable projects into Valley Clean Energy's UltraGreen program would reduce greenhouse gas emissions, although the exact reduction is unknown at this time. Yolo County would work with Valley Clean Energy to estimate the greenhouse gas emission reduction for tracking purposes as part of signing up for UltraGreen.

#### **CO-BENEFITS**

The action may help reduce pollution in other areas of the state or country from electricity generated from fossil fuels by reducing demand.

## TRANSFORMATIVE/REPLICABLE ELEMENTS

If Yolo County shares the County's decisions to transition to 100% electric accounts with the public through earned media or paid media, the County's action may influence other local jurisdictions to similarly make the transition.

#### **DEGREE OF READINESS**

Funding to transition all Yolo County's accounts to 100% electric will be included in the 2023-24 Yolo County budget with the goal of transitioning all accounts by July 1, 2023. Yolo County staff propose ongoing funding for 100% electric in future budgets as well.

#### COSTS

According to a March 14, 2019 Valley Clean Energy Alliance staff report, it would cost Yolo County approximately \$16,000 per year (about \$1,333 per month) to opt into Valley Clean Energy's UltraGreen for the remaining 1/3 of Yolo County's accounts which are currently not 100% renewable.

#### **FUNDING**

Yolo County will explore funding options for this action, which may include ARP, funds, General Fund, Department funds, or a combination of these, to align with the 2023-24 County budget.

#### **CONCERNS**

The Yolo County Administrator's Office will determine which Departments, if any, will pay for the increased cost of UltraGreen and which funding strategy to apply.

## **PARTNERS**

Yolo County would work with Valley Clean Energy to implement this early action.

## **PERSONNEL**

In the chart below, please list names, role, and contact information for all project leader(s) and project partners.

Name	Role (Lead or Partner)	Email	Phone		
Kristen Wraithwall	Lead	kristen.wraithwall@yolocounty.org	530-666-8047		
Mitch Sears, Valley Clean Energy	Partner	mitch.sears@valleycleanenergy.org	707-292-5058		



Planning & Public Works 292 West Beamer Street Woodland, CA 95695-2598 (530) 666-8775 FAX (530) 666-8156 www.yolocounty.org Environmental Health 292 West Beamer Street Woodland, CA 95695-2598 (530) 666-8646 FAX (530) 669-1448 www.yolocounty.org Integrated Waste Management 44090 CR 28H Woodland, CA 95776 (530) 666-8852 FAX (530) 666-8853 www.yolocounty.org

#### HOME ENERGY LABELING

Proposed Early Action to Implement Resolution No. 20-114 Related to the Climate Crisis

#### PROPOSED ACTION

The proposed action will create a mandatory Home Energy Score Program for homes listed for sale in the unincorporated area. Yolo County would require homeowners to complete a home energy assessment prior to listing a home for sale, which involves a trained technician assessing a home's energy use and assigning a score on a one to ten scale. This score motivates home buyers and sellers to improve the home's energy efficiency and increase the score by installing energy-efficient appliances or making other improvements. The County will work with partners to provide toolkits, checklists, information about rebates/incentives, and other recommendations to homeowners regarding options to improve home energy efficiency. The County would host webinars for real estate agents to educate them about the program and coordinate with local job training centers to train home energy assessment technicians. The County will also evaluate options to subsidize the cost of home energy assessments for low-income households and/or provide additional funding beyond state/federal rebates to increase the energy efficiency of homes for low-income households.

#### BACKGROUND

The California Air Resources Board estimates residential and commercial buildings are responsible for 25% of greenhouse gas emissions in California. Therefore, improving the energy efficiency of existing residential buildings has become a priority for the state. Similar Home Energy Score Programs have been implemented in Berkeley, California and Portland, Oregon. In both Portland and Berkeley, improving the home energy score is not mandatory. In Berkeley, the Bay Area Regional Energy Network (BayREN) provides incentives to low scoring homes to implement energy efficiency measures and partners with Rising Sun, a job training program, to hire and train technicians. BayREN's Green Labeling program has two offerings: (1) regional Home Energy Sector Score that trains Assessors to do a HEScore and provides incentives for scores and (2) continuing education and other opportunities for realtors, appraisers and lenders to increase their ability to understand, market, and evaluate energy efficient and green homes. The primary objective of the program is to establish integrated and aligned green labeling to increase awareness and transparency of residential energy information. In 2020, BayREN, through the Green Labeling program, provided single family homes with 1,626 Home Energy Scores and \$317,300 incentives. In Berkeley, home energy assessment fees are paid by the seller. In Portland, assessment fees are paid by the utility.

#### **CONSISTENCY WITH EXISTING POLICIES**

The February 2021 Yolo County Sustainability Plan includes the following relevant strategies to support this project:

- Action ED 1.1. Support existing County outreach and awareness programs arounds stormwater quality, energy efficiency, water conservation, and waste
- Action ED 1.1. Work with indigenous groups, vulnerable populations, and community-based organizations in creating sustainability outreach and education programs
- Action AQ 2.2 Work with school districts, community colleges, and career technical education providers to develop a green workforce pipeline
- Action BU 2.1. Provide incentive programs to encourage electrification of existing homes

The 2011 Yolo County Climate Action Plan includes the following relevant strategies:

Measure E-2: Reduce energy consumption in existing residential and non-residential units

## BENEFITS TO DISADVANTAGED/VULNERABLE COMMUNITIES

This action could benefit low-income households in disadvantaged communities by providing an incentive for homeowners to increase the energy efficiency of homes before placing the home on the market for sale. These energy efficiency improvements will in turn reduce ongoing energy and water costs for low-income households, therefore freeing up limited income for other household needs. To realize these benefits, the County needs to ensure low-income households who are selling their home have sufficient resources to pay for the energy audit required as part of the home energy labeling program, as well as sufficient funding to implement energy efficiency improvements. This program also could provide workforce training opportunities for residents of disadvantaged communities to conduct home energy audits.

#### **GREENHOUSE GAS EMISSION REDUCTION**

The amount of greenhouse gas emission reduction resulting from this proposal is unknown, although the California Air Resources Board estimates residential and commercial buildings are responsible for 25% of GHG emissions in California. Implementation of all components of Measure E-2 of the 2011 CAP was estimated to reduce greenhouse gas emissions by 3% by 2030. This measure assumes that 20% of existing (2008) residential units and 10% of commercial buildings in the county would implement energy efficiency improvements that reduce energy consumption by 15%. The number of households that will benefit from this proposal in the unincorporated area is unknown but is likely small given only 20,000 people live in unincorporated Yolo County. However, the transformative nature of the project may encourage other jurisdictions to adopt the program.

#### **CO-BENEFITS**

The program may create "green" jobs by creating training and employment opportunities for people working to assess and retrofit homes. This program also will improve climate resiliency, particularly by providing efficient cooling during heat waves.

# TRANSFORMATIVE/REPLICABLE ELEMENTS

If Yolo County successfully implements this program, Yolo County would be one of the first counties to require a Home Energy Score. (Only Berkeley and Portland have implemented such a program in the U.S. thus far.) This action could result in adoption of the program by other local jurisdictions in the area.

#### **DEGREE OF READINESS**

Tools to implement this program, including a scoring portal and labeling already exist and can be accessed for free on the <u>Department of Energy website</u>. A County-wide Ordinance would need to be adopted before implementing this measure.

#### **COSTS**

Yolo County has not yet estimated the cost of developing this program.

#### **FUNDING**

Yolo County will seek grants to implement this program (administration, incentives, and/or workforce development), but may also allocate General Fund or American Rescue Plan funds as part of the annual budget process. These funds will be disbursed to the California Energy Commission through the State Energy Program. Yolo County will need to work with the California Energy Commission to understand how to secure funding.

#### **CONCERNS**

This project could be seen as placing an unfair cost/burden on homeowners, especially low-income homeowners. If the County subsidizes the cost of home energy assessment and/or provide additional funding to supplement state/federal rebates, it may help address this concern.

#### **PARTNERS**

Yolo County may collaborate with real estate agents, utility providers, local job training centers, and other units of local government, such as cities to implement this program. To secure funding the County may work with the U.S. Department of Energy and the California Energy Commission to secure funding to support the program.

#### **PERSONNEL**

In the chart below, please list names, role, and contact information for all project leader(s) and project partners.

Name	(Lead or Partner)	Email	Phone
Kristen Wraithwall	Lead	kristen.wraithwall@yolocounty.org	530-666-8047

						Implementing intity Identified										TOTAL NUMBER OF	
Number	Name All County Electric Accounts	Proposer s	Project Lead	Status	(Y/N) a	and Confirmed?	Cost Estimated	1. Collaborations or Partnerships  Medium	2. Grounded in Existing Policies Medium	3. Benefits DACs Low	4. Reduces GHG HIGH	5. Co-Benefits Low	6. Cost/Benefit HIGH	7. Sustainable Ongoing Funding Source HIGH	8. Transformative or Replicable HIGH	"HIGHS"	Name All County Electric Accounts
1	to 100% Renewable Electricity	C.Shewmaker	Yolo County	Mostly Complete	Yes	Yes		r Partnership with Valley Clean Energy	Consistent with AQ-1 of Sustainability Plan	Municipal accounts- no direct benefit to DACs  Medium	Electrification of County operations significantly reduces GHG emissions relative to other actions.	Does not provide direct health, economic, or social benefits beyond GHG reduction.  Medium	Low cost of implementation; likely benefit justifies cost.  Insufficient Information	County highly likely to commit to ongoing funding.	Project can be replicated in other jurisdictions throughout the Count and elsewhere	2	to 100% Renewable Electricity
	Building Electrification			Mostly				Does not require partnership to pass electrification ordinance		Electrification of residential homes can benefit health of DAC residents. Assumes some new	Electrification significantly reduces GHG emissions (CARB estimates residential and commercial building y, are responsible for 25% of GHG emissions in CA), but Yolo County anticipates few new buildings in unincorporated area so likely less greenhouse gas emission reduction relative to other actions.	Co-benefits include improvements to public health.	Cost information not listed in proposal.	Assumes County would devote planning staff time to implementation of ordinance.	Project can be replicated in other jurisdictions throughout the County and elsewhere	3	Building Electrification
3	Community Energy Resilience Readiness	C.Shewmaker  A.Kim	Yolo County  Yocha Dehe Wintun Nation?	Complete		Yes Unclear	Not listed \$ 25,000.0	Wintun Nation, RISE, Inc. Climate Cente	and Impacts to Air Quality	Community Center into a "resilience center" to serve local residents in the face of a likely increase in the frequency and impact of grid outages.	tow  d The proposal will decrease GHG emissions for one building, the Capay Valley Health and Community e Center, so has low GHG emissions relative to other early action proposals.	High Will provide continuous power for residents and businesses during a grid outage, will reduce operating costs of the Center could increase eligibility of Center for state grant opportunitie for resilience hubs.	<ul> <li>benefits, which go beyond reducing GHG emissions and si include providing power to residents and business during power outages.</li> </ul>		resilience hub at the Capay Valley Health and Community Center will provide a model for other communities.	7	Community Energy Resilience Readiness
	Support for Urban Farming	A.Kim	Center for Land- Based Learning	Complete	Vec	Yes	\$ 195,573.0	Low No partners listed.	MIGH Consistent with Action LF-1.2 of the Sustainability Plan: increase Consumption o Local Food Products with the County to Reduce Reporting or Importing of Foods.	Medium The proposal may benefit some disadvantaged of farmers and provide access to fresh produce to some disadvantaged communities. It also will result in a cultural crop needs assessment to understand the cultural, culinary, and dietary needs of the County's most vulnerable and underserved communities. It is unclear how many disadvantaged farmers or community residents the project will serve.	Low It is unclear from the proposal how much food the urban farms will produce and therefore how much GHG emission reduction the project will achieve relative to other early actions. The proposal will also teach urban farmers climate smart agricultural practices, but it unclear how much GHG reduction this work will produce relative to other actions.	Medium Will result in some jobs for farmers, including potentially disadvantaged farmers, will result in the purchase of infrastructure and equipment that can be shared by urban farmers, and will result in an increase in fresh produce in som vulnerable/underserved communities. It is unclear how many jobs the proposal will produce (and for how long), as well as how many people will benefit from an increased access to produce.		Low  It is unclear how the Center will sustain the program once the requested funding is exhausted.	HIGH The Center's urban farming program is already transformative and replicable and this proposal will only serve to increase the transformative and replicable nature of the proposal.	2	Support for Urban Farming
4		A.KIIII	based Learning	Complete	res	res	\$ 195,573.00	HIGH	HIGH	Medium	HIGH	Medium	Medium	Low	HIGH	4	
5	arbon Farming Partnership	<b>p</b> A.Kim	Center for Land- Based Learning	Complete	Yes	Yes	\$ 149,845.0	Includes partnership with the Yolo County RCD, Carbon Cycle Institute, and Yolo Land Trust.		with BIPOC communities, although it's unclear ho many.	ng The proposal will result in three model Yolo Carbon w Farm plans and associated GHG emission reductions, as well as potentially incentivize other farmers to undertake carbon farming. This may result in significant GHG emission reductions relative to other early actions although the exact amount is unknown.		The cost of the proposal may not justify the cost from a climate action/sustainability perspective given the relatively low and/or uncertain amount of benefits.	It's unclear how the Center will sustain the program once the proposed funding is exhausted.	The proposal will result in a transformative, highly replicable outcome as a result of the creation of three carbon farming plans		Carbon Farming Partnership
,	Aicrobial Literacy Initiative	е	Center for Land-					Low No partners listed	HIGH Soil microbes may help with carbon sequestration, which is a goal of both the CAP and the Sustainability Plan.	Low Unclear whether will benefit disadvantaged/vulnerable communities.	Low  The proposal primarily focuses on education, so it's unclear how much GHG emission reduction will occu relative to other early actions. Proposal may be more appropriate for inclusion in the climate action planning process to determine extent to which this proposal will sequester carbon relative to other	r	Low  The cost of the proposal may not justify the cost from a climate action/sustainability perspective given the relatively low and/or uncertain amount of benefits.	Low It's unclear how the Center will sustain the program once the proposed funding is exhausted.	Medium The soil inoculant demonstration project and education events may be replicable/transformative.	1	Microbial Literacy Initiative
6	Yolo County EV Rideshare Cooperative	A.Kim	Based Learning	Complete	Yes		\$ 41,696.0	Low The proposal does not include an implementing entity or partners.	HIGH The proposal is consistent with Sustainability Plan Strategy AQ - 1.2, "increase adoption of electric vehicles and equipment."	with a focus on serving residents living in the unincorporated area, which includes two disadvantaged communities and potentially a number of vulnerable communities. It is unclear how many residents in these communities would	methods.  Medium  Given the small number of people living in the unincorporated area and the uncertainty as to whether people will use this service, it's unclear how much the proposal will reduce GHG emissions.	Medium  No co-benefits are listed in the proposal.	Insufficient Information  Cost information not listed in proposal, but is likely high given the need for developing an application and recruiting drivers. In addition, it's unclear how many people would use the cooperative and therefore whether the costs would justify the benefits.	Low Unclear how funding for this effort would be sustained.	Medium  Unclear whether this a transformative or replicable proposal given the lack of detail or examples from other communities who have successfully implemented it.	1	Yolo County EV Rideshare Cooperative
7	Spatial Analysis of Climate Vulnerability	R.Datel	Yolo County	Incomplete	Yes	No	Not listed	Low Does not include any partnerships	HIGH  Consistent with Action EH 1.5 in the Sustainability Plan to "Conduct a comprehensive climate vulnerability assessment to develop adaptation and resilience strategies" and Action AQ-3.1, "Mitigate the impacts of wildfire smoke on public health, with a focus on vulnerable			Medium  Potential co-benefits include identification of areas for tree planting and resilience centers, which could provide shade an other benefits to communities.		HIGH One-time funding; no ongoing funding needed.	Medium  The analysis is specific to Yolo County, but may be transformative or replicable depending on execution.	3	Spatial Analysis of Climate Vulnerability
8	EV Charging Stations & Outreach	R.Datel	Yolo County			No	Not listed		in both the CAP and the Sustainability Plan, including Sustainability Plan Action AQ 1.2: "Increase adoption of electric vehicles and	HIGH  y The majority of unincorporated communities in Yolo County are disadvantaged or home to vulnerable communities, so the addition of charging stations in these communities will be benefit disadvantaged/low-income residents if/when they switch to electric vehicles. Given California aims to have all-electric cars at some point, having charging stations should eventually benefit these communities.	area will benefit city residents and people outside of Yolo County traveling through the region, therefore encouraging people to switch to electric vehicles and potentially significantly reducing GHG emissions relative to other options.				Medium  While installing electric vehicle charging stations in the incorporated area is replicable, the proposal does not include "transformative" elements that would set it apart from other proposals, such as using charging stations as an opportunity to educate people about climate change and individual and collective opportunities to efforts to reduce GHG emissions.	4	EV Charging Stations & Outreach
9		K.Datei	Yolo County	Incomplete	Yes		Not listed	High	High	Low	High	High	Insufficient Information	Medium	Low	4	
	Removing Fossil Fuels from Yolo County Operations	R.Datel	Yolo County	Incomplete	Yes		Not listed	YSAQMD as potential partners and responsible parties. The proposal also mentions that working with other cities, school districts, and special districts may enable Yolo County to purchase new equipment and vehicles at a discounted	d The project is consistent with and advances Sustainability Plan Strategy AQ-1.1,1.2, and 1.3 HIGH	Removing fossil fuels from Yolo County Operations would not directly benefit disadvantaged communities  Medium	Removing fossil fuels from operations/electrification will s. significantly reduce GHG emissions over time relative to other proposed projects.  Medium	The proposal does not specify any co-benefits.  Medium	Cost information not listed in proposal.  Insufficient Information	Volo County is likely to provide ongoing funding to phase out fossil fuels from County operations.  Low	Other jurisdictions may follow suite in phasing out fossil fuels from their operations.  Medium	1	Removing Fossil Fuels from Yolo County Operations
11	Essential Electric Bikes	R.Datel	Yolo County	Incomplete	Yes	No	Not listed	Identifies the County as the implementing entity and lists the Bike Campaign as a potential partner, but it unclear whether the Bike Campaign has agreed to be a partner.		The proposal envisions giving electric bikes to essential workers and other highly vulnerable households impacted by COVID-19 in the unincorporated County, which includes two disadvantaged communities and potentially a number of vulnerable communities. It is unclear how many residents in these communities accept the gift of an electric bike.	Given the population of the unincorporated area is under 20,000 people and the proposal does not identify the number of essential workers or highly- vulnerable households who will receive bikes, it is difficult to measure the GHG emission reduction relative to other proposals.	The proposal discusses the potential benefit of addressing negative impacts of COVID-19, but does not provide much detail.	Cost information not listed in proposal.	No sustainable, ongoing funding source is identified for this program	The proposal does not provide sufficient detail to determine whether it is transformative or replicable, but it has potential.		Essential Electric Bikes
	Soil Carbon Sequestration		Similar to CLBL	Mostly					d Sustainability Plan, including Strategy AG- of the Sustainability Plan - Increase Carbon m Sequestration on Farmlands	disadvantaged/vulnerable communities, but may benefit some disadvantaged farmers.	Medium Unclear how proposal will reduce GHG emissions or by how much; recommend integrating this proposal to enroll lands in the USDA Conservation Reserve Program with the Center for Land-Based Learning's proposal since that proposal includes an implementing entity, cost proposal, detailed deliverables, etc.	Medium Lists open space conservation as a co-benefit.	Insufficient Information  Cost information not listed in proposal	Low Unclear how funding for this effort would be sustained.	Medium Yolo County has significant opportunities to lead by example for carbon sequestration on agricultural land. Combined with the Center for Land-Based Learning proposal, this proposal could be transformative and/or replicable.	1	Soil Carbon Sequestration
12	Home Energy Labeling	M.Aulman	proposal	Complete		W.	Not listed	since they created the home energy		but is likely to benefit disadvantaged and vulnerable households who are buying or renting new home.	buildings are responsible for 25% of GHG emissions in	HIGH Improvements in home energy efficiency could also reduce n costs for homeowners, especially if funded with rebates or incentives. This project could also create more jobs for people who contract for the work in residential homes.	indicates funding will be available the Energy	Medium  I The proposal does not identify an ongoing, sustainable funding source, but the County may be willing to absorb these ongoing costs.	HIGH  If Yolo County successfully implements this programs and measures success, Yolo County could be one of the first counties to require a Home Energy Score and therefore it could be transformative or replicable. Currently only Berkely and Portland require a Home Energy Score when listing a home for sale. It also could result in adoption by the cities in Yolo County.	4	Home Energy Labeling
13	Heating	C.White	Yolo County  Yolo County	Mostly Complete	Yes	Yes	NOT IISTED	Medium This proposals lists Yolo-Solano Air Quality Management District as the implementing entity, but it's unclear whether they have agreed to implement the program.	decrease the use of natural gas in homes.	but is likely to benefit disadvantaged and vulnerable households, especially if there are rebates to pay for the improvements. If combined with the Yolo County staff proposal to offer rebates, this will benefit more disadvantaged and vulnerable households.	buildings are responsible for 25% of GHG emissions in CA), any proposal that helps to reduce natural gas us if in homes will likely have significant GHG emission reductions relative to other proposals. It's unclear, however, how many households this program will benefit given the small number of people living in the incorporated area.		potential costs or provide a quantitative estimate of GHG emissions reduction.	Medium  Proposal does not discuss a sustainable, ongoing funding source.	HIGH  If Yolo County successfully implements this program and measures success, it could be transformative or replicable. It also could result in adoption by the cities in Yolo County.	3	Heating
						٦		Low	HIGH	Medium	HIGH	Low	Insufficient Information	Low	Medium	2	

Updated for March 28, 2022 Commission meeting

er Name	Proposer	Project Lead		Entity Identified and Confirmed?	Cost	1. Collaborations or Partnerships	2. Grounded in Existing Policies	3. Benefits DACs	4. Reduces GHG	5. Co-Benefits	6. Cost/Benefit	7. Sustainable Ongoing Funding Source	8. Transformative or Replicable	TOTAL NUMBER OF "HIGHS"	Name
Esparto Active Transportation	Fioposei	Project Leau	Status (17N)	and commined:	COST	No partners listed.	Both the CAP and the Sustainability Plan	Esparto is not a disadvantaged communities. It is	Given the town of Esparto is less than 5,000 people,		Cost information not listed in proposal	Proposal does not identify a sustainable, ongoing	Proposal could potentially be transformative	nions	Esparto Active Transportation
Improvements	0.001	Val. Co. at			No. 15 co. 1		focus on reducing vehicle miles travelled.	home to some vulnerable communities, such as farmworkers.	increasing walking and biking in Esparto is unlikely to significant reduce GHG emissions relative to other actions.			funding source for maintaining the improvements.	and/or replicable, but proposal does not describe such features.		Improvements
	R.Datel	Yolo County	Incomplete Yes		Not listed	HIGH	ніен	HIGH	HIGH	HIGH	Insufficient Information	Medium	HIGH	6	
Electric Retrofits & Natural Gas Appliance Replacement Rebates for Vulnerable Households							decrease the use of natural gas in home and to help vulnerable communities.	d disadvantaged or vulnerable households and	buildings are responsible for 25% of GHG emissions in CA), any proposal that helps to reduce natural gas use	Improvements in home energy efficiency could also reduce costs for homeowners, especially if funded with rebates or incentives. This project could also create more jobs for people who contract for the work in residential homes.	potential costs or provide a quantitative estimate of	Proposal does not discuss a sustainable, ongoing funding source, but American Rescue Plan funds could provide funding for at least three years, which would provide enough time to apply for grants to continue/expand the program.	If Yolo County successfully implements this program and measures success, it could be transformative or replicable. It also could result in adoption by the cities in Yolo County.		Electric Retrofits & Natu Gas Appliance Replacem Rebates for Vulnerable Households
	County Staff	Yolo County	Mostly Complete Yes	Yes	Not listed	nouseholds were impacted by COVID-15			incorporated area.						
	county stan	Tolo County	complete res	163	Not listed	Medium	Medium	Low	Low	Low	Insufficient Information	Medium	Low	0	
CalGreen Standards Training	County Staff	Yolo County	Mostly Complete Yes	Yes	Not listed	This project would be implemented in coordination with the California Building Standards Commission.	This action was listed in the recommendations of the 2015 CAP Progress Report, but not listed in an adopted plan. It does advance policies of the 2011 CAP and Sustainability Plan.	s communities.	Coordinating a training will assist with compliance standards, but does not directly contribute to the reduction of GHG emissions.	The proposal does not specify any co-benefits.	Cost information not listed in proposal.	The proposal does not identify an ongoing, sustainable funding source, but the County may be willing to absorb these ongoing costs.	While other jurisdictions may host a training (replicable), this project is not transformative.		CalGreen Standards Traini
	County Stair	rolo County	Complete res	res	Not listed	Low	Medium	Low	Low	Low	Insufficient Information	Low	Medium	0	
Updated Permitting System			Mostly			The proposal does not specify any partners or collaborators to implement this project.	This action was listed in the recommendation for the Energy Sector of the 2015 CAP progress report, but not in an		This project would help track progress on energy efficiency/GHG reduction, but would not in itself reduce GHG emissions	The proposal does not specify any co-benefits.	Cost information not listed in proposal.	The proposal does not identify an ongoing, sustainable funding source, but the County may be willing to absorb these ongoing costs.	Other jurisdictions may be able to adopt/implement the permitting system if successfully used/piloted by Yolo County.		Updated Permitting System
	County Staff	Yolo County	Complete Yes	Yes	Not listed	High	adopted plan.  High	Medium	High	Medium	Insufficient Information	High	Medium	4	
ZEV Master Plan	Robin Datel	Yolo County	Mostly Complete Yes	Yes	Not listed		The County's Sustainability Plan includes implementation of EV charging stations	The project could benefit disadvantaged	This project would support the transition to ZEVs, which would reduce GHG emissions significantly over	The proposal does not specify any co-benefits.	Cost information not listed in proposal.	Yolo County is slated to receive approximately \$700,000 to install charging stations in the unincorporated area by June 2022. Yolo County is also receiving funds for EV chargers from the California Energy Commission's CALeVIP.	If Yolo County successfully implements this program and measures success, it could be transformative or replicable. It also could result in adoption by the cities in Yolo County.	•	ZEV Master Plan
	noom outer	Tolo county	Complete 163	163	Not listed	Low	High	Low	High	Medium	Insufficient Information	High	Medium	3	
Purchase of Electric Vehicles for County Fleet	County Staff	Yolo County	Mostly Complete Yes	Yes	Not listed	This project involves one entity only (Yolo County).	the County's Sustainability Plan (Action AQ-1.2)		which would reduce GHG emissions significantly over time.	The proposal does not specify any co-benefits.	Cost information not listed in proposal.	The proposal does not identify an ongoing, sustainable funding source, but the County may be willing to absorb these ongoing costs.			Purchase of Electric Vehicl for County Fleet
Agricultural Pump Efficiency Workshop	County Staff	Yolo County	Mostly Complete Yes	Yes	Not listed		the 2011 Climate Action Plan	Medium  This project may benefit farmers in disadvantaged communities.	Low  This project would only reduce emissions over time if farmers utilized incentives to purchase pump upgrades.	Low The proposal does not specify any co-benefits.	Insufficient Information  Cost information not listed in proposal	Medium The proposal lists past project sponsors. This project is a one-time investment and does not require ongoing funding. Yolo County may be willing to absorb this one-time cost.	Medium This project is replicable in that other jurisdictions may host a similar workshop, but it is not transformative.	1	Agricultural Pump Efficien Workshop
		Yolo Solano Air	Complete Yes	Yes	Not listed	High	High	Medium	Medium	High	Low	High	Medium	4	
Yolo Agricultural Equipment Retrofit Program (Expansion of Carl Moyer)		Quality Management District						are first-come-first-serve, and therefore not truly	6% in farm equipment and achieve upgrades for 75% of tractors by 2030. GHG emission impact would be tracked based upon key performance indicators.	reduction in repair costs, improvement of equipment reliability, and reduction of harmful exhaust emissions (public health benefit).	Cost information not listed in proposal. More coordination with the Yolo County Air Quality Management District is needed to determine cost of proposed additional elements of the existing program and duration of proposed additional elements.	The proposal lists past project sponsors. The program provides additional funding to the Yolo County Air Quality Management District, who already administers the funding. The proposal does not identify an ongoing sustainable funding source, but the County may be willing to absorb ongoing costs to bolster program outcomes.	adoption by other counties with substantial agricultural communities.		Yolo Agricultural Equitme Retrofit Program (Expansion of Carl Moyer)
	A.Kim	No Project	Complete Yes	Identified, not	Not Listed	High	High	Low	Medium	Low	Low	Medium	Medium	2	
Yolo Organic Soil Inoculant Subsidy Program		lead/applicant		confirmed		The project proposal lists Center for Land Based Learning, Yolo County Farm Bureau and Yolo Farm to Fork as potential partners.	The project proposal does not demonstrate consistency with existing County plans/policies; however, it is likely the program would advance Strategy AG- 2 of the Sustainability Plan - Increase Carbon Sequestration on Farmlands.	may benefit farmers in disadvantaged	chemical fertilizers and chemical pesticides from 50-	The proposed project will help farmers reduce use of chemical ferttilizers and pesticides, which will have environmental benefits.	Cost information not listed in proposal.	The proposal mentions that farmers may continue to use the program without future funding (subsidies) because they would see the success of inoculants.	in adoption in other counties with substantial		Yolo Organic Soil Inocular Subsidy Program
	A.Kim	No Project	Complete Yes	Not confirmed	Not Listed	High	Low	Low	Low		Low	Low	Medium	1	
Yolo County Organic Certification Support Program		lead/applicant at this time				The project proposal lists Yolo County Agriculture Department, California	program could improve the County's carbon			practices, which will reduce use of fertilizers and pesticides and benefit the environment.	Cost information not listed in proposal.	The proposed project does not identify a source of ongoing funding.	The proposal states the pilot program can serve as a model for other counties working to advance their County's Organic Certification Program, but seems unlikely to be transformative or replicable since it is implementing an organic certification program that is widely used elsewhere.		Yolo County Organic Certification Support Program

# Attachment D

Platform Climate Safe CA May 2021



# Climate-Safe California Rapid Decarbonization Campaign

## **Endorsement Platform**

The COVID-19 pandemic has been a stark reminder: we ignore science at our peril and early action saves lives. An endorsement of Climate-Safe California, based on the latest science, is a public pledge of support for accelerated, aggressive climate policy by the state of California, not support for specific legislation. Urgent action is required to ensure a safe and healthy future for all. The solutions exist today to reverse the climate crisis. By committing to and demonstrating the bold policies required in the world's fifth largest economy, we will inspire other states, our nation and countries around the world to greater action for a climate-safe Earth. We welcome organizations and individuals to endorse here. Please share widely.

# A. THE CLIMATE CRISIS IS HERE NOW, WORSE THAN ANTICIPATED, AND ACCELERATING, THREATENING ALL LIFE

- The climate crisis is more severe than projected. Climate change increasingly threatens natural ecosystems, wildlife, fisheries, food production, economies, community health, and the fate of humanity. More than 11,000 scientist signatories from around the world "declared clearly and unequivocally that planet Earth is facing a climate emergency" that requires bold and prompt action to "sustain life on our planet, our only home."
- ➤ Nine of fifteen global climate system tipping points are already activated. The likelihood of abrupt, irreversible runaway climate chaos increases considerably if emissions are not significantly reduced soon. Even though the earth has warmed by approximately 1.1°C (2°F) since the start of the industrial era, we are losing the Amazon rainforest, potentially adding 1°C (1.8°F) of additional warming by itself. The West Antarctic and Greenland ice sheets are melting much faster than expected, changing ocean currents, accelerating sea level rise, and driving more extremes. Multiple other measurable, interconnected global impacts are likely to be triggered at lower warming thresholds than previously thought. [See more in Appendix A.]
- B. MASSIVE REDUCTIONS OF WARMING EMISSIONS, WITH INITIAL DRAWDOWN FROM THE ATMOSPHERE, ARE REQUIRED BY 2030 TO PREVENT CATASTROPHIC IMPACTS
  - ➤ UN IPCC scientists conservatively recommended that emissions globally must be cut 45% by 2030 from 2010 levels. In addition, upwards of one trillion tons of greenhouse gases (GHGs) that humans have already released into the atmosphere must be removed over the decades ahead, to secure a safe future for all life. The countries of the world must triple their emissions reductions commitments (Nationally Determined Contributions pledges) to follow a 2°C (3.6°F) pathway and multiply them *five* times to follow a 1.5°C (2.7°F) pathway to achieve the goal of limiting global warming per the 2015 Paris Climate Agreement. New science indicates these goals may be insufficient to avoid the worst. [See more in Appendix B.]

- C. CALIFORNIA MUST ACCELERATE ITS CLIMATE LEADERSHIP TO AVOID INCREASINGLY DIRE CONSEQUENCES, DEMONSTRATE EQUITABLE, JUST SOLUTIONS, AND INSPIRE GREATER CLIMATE ACTION WORLDWIDE<sup>vi</sup>
  - The climate crisis is already negatively impacting California with record-breaking drought<sup>vii</sup>, extreme heat, floods, fires<sup>viii</sup>, smoke storms and winds. This is resulting in loss of human life and significant expense to the state, businesses, local communities, and families. The costs of inaction are substantially greater than action. California's 2018 wildfires, less than half the size of the 2020 conflagrations, cost a staggering \$148.5 billion (about two thirds of California's pre-COVID 2020 budget) in capital losses, health costs and supply chain losses far from the actual wildfire footprint. The 2020 wildfires and smoke storms took 32 lives directly and another 1200-3000 lives from increased particulate matter in the air.
  - ➤ California's oil and gas infrastructure, xiii from freeways to oil rigs, is often sited in lower income communities and communities of color, dangerously close to homes, schools, and hospitals, primarily due to historic redlining and redevelopment. Constantly exposed to polluted air, they suffer from significantly lower life expectancy, xiv and higher rates of asthma, cancer, and other diseases xv than white people and those in wealthier neighborhoods.
  - ➤ California's current goals of achieving 40% below 1990 levels of GHG emissions and 60% GHG-free electricity by 2030 are inadequate and lag behind others. The United Kingdom recently committed to increasing its GHG reduction goals to 68% below 1990 levels by 2030<sup>xvi</sup> and called for 100% Zero Emission Vehicle (ZEV) car sales by 2030.<sup>xviii</sup> President-elect Biden's climate action plan calls for 100% GHG-free electricity by 2035.<sup>xviii</sup> Rhode Island has committed to 100% renewable electricity by 2030, fifteen years ahead of current California law.<sup>xix</sup>
  - There are dozens of scalable solutions available now to reverse the climate crisis. The solutions significantly reduce emissions, increase natural sequestration, provide jobs and other economic benefits, foster biodiverse ecosystems, and support a healthy, equitable society for all.xx Solar energy projects have fallen in cost by close to 90% over the past decade, and wind by 70%. Energy storage is now falling in cost as fast as solar and wind energy have.xxi Investments in clean energy generate more than twice as many jobs as fossil fuel investments do.xxii In California, an \$80 billion investment in meeting the state's climate goals would create 725,000 jobs.xxiii The potential exists to create hundreds of thousands of good paying jobs while securing an equitable, clean energy future for all.xxiv xxv [See more in Appendix C.]

# THEREFORE, WE/I ENDORSE THE CLIMATE-SAFE CALIFORNIA\*\*VI CAMPAIGN AND CALL ON THE STATE OF CALIFORNIA TO ENACT THE FOLLOWING SOLUTIONS:\*XVII

- 1. COMMIT TO 80% BELOW 1990 LEVELS OF GHG EMISSIONS\*\*xviii AND NET NEGATIVE EMISSIONS BY 2030,\*\*xix accelerating existing state policy timelines.\*\*xx
- 2. SECURE A JUST TRANSITION FOR WORKERS, THEIR FAMILIES AND COMMUNITIES WHO DEPEND ON FOSSIL FUEL INDUSTRIES, ensuring their economic well-being. XXXII
- CLOSE THE CLIMATE GAP WHEN ENACTING CLIMATE POLICIES TO ENSURE LOWER-INCOME COMMUNITIES AND COMMUNITIES OF COLOR ARE NO LONGER DISPROPORTIONATELY HARMED by the health and economic consequences of fossil fuel development, production, and use, and have equitable access to climate-friendly solutions.
- 4. ENACT BY 2025 THE SUITE OF POLICIES REQUIRED BY SCIENCE TO PUT US ON TRACK FOR NET-NEGATIVE EMISSIONS BY 2030
  - a. ACCELERATE THE PHASE-OUT OF FOSSIL FUEL DEVELOPMENT, PRODUCTION, AND USE
    - i. Immediately halt new oil and gas drilling and infrastructure development
    - ii. Invest now and ramp up public-private efforts to transition fossil fuel workers to good quality jobs or early retirement
    - iii. Ensure significantly greater GHG-free transportation and mobility, including no new internal combustion vehicles licensed by 2030
    - Secure 100% clean, distributed, resilient electricity and storage, including mobile assets such as electric vehicles, by 2030
    - v. Ensure significantly greater GHG-reduction in buildings including 100% electric appliances required in all new buildings, by 2023

#### b. INCREASE NATURE-BASED CARBON SEQUESTRATION

i. Protect and increase natural carbon sequestration from the atmosphere to secure an additional ~100+ MMT of CO2e annually by 2030 through major investments in healthy soils and improved agricultural practices; forest, wetland, and other habitat and vegetation protection and management; and climate-smart habitat restoration at scale in California starting no later than 2022

#### c. INVEST IN COMMUNITY RESILIENCE

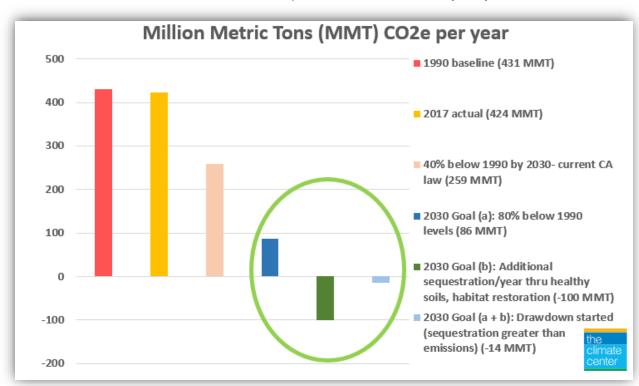
- i. Fund and support every California community by 2025 to:
  - Develop and implement resilience measures as currently required by state lawxxxii such as community resilience centers and resilience staffing to reduce deleterious climate impacts on human health, from increased heat, fire and smoke exposure to flooding, drought, and spread of disease

2. Establish clean energy community microgrids and battery storage linked to electric transportation, empowering communities to keep the lights on for critical facilities such as fire stations and hospitals during planned or unplanned outages<sup>xxxiii</sup>

#### d. GENERATE THE FUNDS NEEDED FOR SPEED AND SCALE CLIMATE ACTION

i. Generate by no later than 2025 an estimated \$12-20 billion per year in new state funds to pay for this urgently needed suite of policies from progressive and equitable financing mechanisms, such as frequent flyer fees, xxxiv green bonds, and a carbon fee and dividend type program

The chart below shows what is required to achieve a Climate-Safe California.



We welcome your input, feedback and questions. Email us at climatesafe@theclimatecenter.org.

Please endorse the Climate-Safe California platform <a href="here">here</a> and share with others.

# Appendix: Additional References

- A. THE CLIMATE CRISIS IS HERE NOW, WORSE THAN ANTICIPATED, AND ACCELERATING, THREATENING ALL LIFE
  - ➤ Climate change is making air pollution, heat waves, the spread of disease, and other perils worse. It is exposing more people in more places to dangerous weather extremes from flooding to drought. The health and well-being of older people, workers in agricultural and construction trades, and people in lower income communities are disproportionately affected.\*\*
  - The last five years have been the world's hottest in recorded history. Last year, 2019, capped the hottest decade on record and was a year when the oceans were the warmest ever recorded.xxxvi
  - ➤ Over 70 U.S. health organizations declared that climate change is a public health emergency urging immediate action from all sectors of society to rapidly reverse the climate crisis.\*\*xxxvii
  - The economic disruptions and instabilities caused by the climate crisis are already significant. These events are likely to become even more frequent, widespread, and severe, undermining the security, well-being, and future prospects of communities, families, and individuals as well as institutions, public and private, requiring "immediate collective action." xxxxviii
  - As climate change progresses, natural greenhouse gas sinks are increasingly losing their ability to slow climate change. These include soils, wetlands, and the ocean, which remove about half of all emissions from human activities. To avoid "sweeping and severe" consequences for nature and humanity, we must drastically reduce emissions now.xxxiix
  - ➤ Abrupt permafrost thaw in the Arctic doubles previous estimates of emissions of carbon dioxide (CO2). In addition, methane, which is 83 times more powerful as an agent of warming than CO2 over its ~20-year lifespan in the atmosphere, is not included in any climate models, including those of the UN Intergovernmental Panel on Climate Change (IPCC).xl
  - The top layer of the ocean is heating up and thickening, driving more drought, intense storms, fisheries impacts, deoxygenation and less CO2 absorption. Co-author of that study, Michael Mann said, "The impacts of climate change are proving to be worse than we predicted... driving a more vicious cycle of warming." xli
  - More than 3/4 of the world's oceans are speeding up due to global warming. These changes, which were not expected until the end of the century, increase threats to marine ecosystems and the likelihood of more extreme weather events. XIII At the same time, freshwater from melting ice is slowing down the Atlantic circulation, which moderates weather in Europe. XIIII
  - Climate change is causing abrupt changes in dryland regions of the world and projected to cause abrupt ecosystem collapse starting in tropical oceans this decade. The changes are damaging ecosystems where over 2 billion people live and threatening the ability of soils and vegetation in those regions to produce food, sequester carbon, hold water, and sustain biodiversity. xliv
  - Western US is now in the early stages of a global warming-induced severe megadrought threatening water supplies, agriculture and ecosystems xIV
  - ➤ Rapidly increasing loss of biodiversity and ecosystem function diminish humanity's ability to slow the economic and societal impacts of climate change. These losses lessen our resilience to growing extremes by reducing food and job security and increasing health risks.xivi
  - Climate models have been generally ineffective at demonstrating the growing understanding by scientists of climate system sensitivities. This limits policymakers' abilities to address the increasing magnitude of the global warming challenge. xivii
  - As of early September 2020, California has been experiencing wildfires forecast in California's Fourth Climate Change Assessment not to hit until 2050. xlviii

- B. MASSIVE REDUCTIONS OF WARMING EMISSIONS WITH INITIAL DRAWDOWN OF ATMOSPHERIC GREENHOUSE GAS BY 2030 ARE REQUIRED TO PREVENT CATASTROPHIC IMPACTS
  - Scientists have concluded that to secure "a tolerable climate future," we must immediately and aggressively pursue carbon neutral energy production by 2030. They further concluded that we must "hope for some luck" that the global climate system's sensitivity to the continued addition of warming greenhouse gas emissions is low. These conclusions were based on an assessment of more than 5 million future climate pathways. xlix
  - The threshold for dangerous climate change (>1.5C) likely to be crossed between 2027 and 2042 globally, sooner than anticipated by the IPCC in the 1.5C report.
  - An influential global environmental scientist explains that "the next decade is our window" to avoid "runaway global warming." Said Johan Rockström, "We have underestimated the risks off unleashing irreversible changes ...We are seeing strong evidence already for declaring a state of planetary emergency... We don't want to push the 'on' buttons of runaway global warming. The next decade is our window...with consequences for all future generations."
- C. CALIFORNIA MUST ACCELERATE ITS CLIMATE LEADERSHIP TO AVOID INCREASINGLY DIRE CONSEQUENCES AND INSPIRE CLIMATE ACTION WORLDWIDE
  - California, the world's fifth largest economy, has been a global climate policy leader. California has consistently demonstrated that investments in a clean energy economy can yield economic benefits.
  - California has recognized that to avoid irreversible climate chaos, we must dramatically increase our efforts. "The state must increase its efforts to conserve, restore, and manage California's forests, rangelands, farms, urban green spaces, wetlands, and soils." | Iliii
  - ➤ Governor Newsom acknowledged amid the 2020 fire and smoke storms, "We are in a climate damn emergency." He conceded that "across the entire spectrum, our climate goals are inadequate. We have to step up our game. As we lead the nation in low carbon green growth, we'll have to fast track our efforts."
  - ➤ Other regions show that bolder climate policies are possible. Uruguay plans to become a net carbon sink by 2030; Copenhagen's target for achieving net-zero emissions is 2025; Finland's is 2035. Norway's goal to end sales of new fossil fuel-powered vehicles is 2025. Rhode Island's goal for achieving 100% renewable energy is 2030. V
  - A supermajority of Californians (80%) view global warming as a serious threat to the future economy and quality of life (July 2018). Among Democratic primary votes, climate change was the highest priority (Dec 2019). Vi

i Ripple, et al. World Scientists' Warning of a Climate Emergency, BioScience, Volume 70, Issue 1, Jan 2020; IPCC 2018 Lenton, et al. Climate tipping points — too risky to bet against: The growing threat of abrupt and irreversible climate changes must compel political and economic action on emissions. Nature. Nov 27, 2019; ScienceDaily, Nine climate tipping points now 'active,' warn scientists Nov 27, 2019

iii UN Intergovernmental Panel on Climate Change, Global Warming of 1.5 °C, Oct 2018

iv Herrando-Pérez et al. <u>Statistical Language Backs Conservatism in Climate-Change Assessments</u>. BioScience, March 2019, and <u>Study shows IPCC is underselling climate change</u>; IPCC assessments are inherently conservative as they require scientific then political consensus from governments across the globe.

<sup>&</sup>lt;sup>v</sup> United Nations Environment Program, <u>Emissions Gap Report 2020</u>, Dec 2020; UN Framework Convention on Climate Change (UNFCCC), <u>The Paris Agreement</u>, Dec 2015.

- vi Daniel M Kammen, Teenie Matlock, Manuel Pastor, David Pellow, Veerabhadran Ramanathan, Tom Steyer, Leah Stokes, Feliz Ventura. Accelerating the timeline for climate action in California. March 2021.
- vii Williams, et al. <u>Large contribution from anthropogenic warming to an emerging North American megadrought</u>.

  Science. 17 Apr 2020. <u>The western U.S. is locked in the grips of the first human-caused megadrought, study finds</u>. Washington Post. 16 Apr 2020
- viii Goss et al. <u>Climate change is increasing the risk of extreme autumn wildfire conditions across California</u>. Envir. Research Letters Mar 2020. Climate Change Has Doubled Riskiest Fire Days in California, E&E News, Apr 2020
- ix Bedsworth et al. California's Fourth Climate Change Assessment: Statewide Summary Report. Jan 2019.
- \* Roston and Bloomberg. <u>The Massive Cost of Not Adapting to Climate Change</u>, Fortune, Sept 20, 2019; Gonzalez, <u>Huge Costs in Climate Inaction</u>, Business Insurance, Jan 2019
- xi Wang, D et al. **Economic footprint of California wildfires in 2018**. *Nature Sustainability*, 2020 DOI: 10.1038/s41893-020-00646-7
- xii <u>Indirect mortality from recent wildfires in California</u>, Stanford University, Center on Food Security and the Environment, Sept 2020
- xiii https://www.wilderness.org/articles/blog/new-drilling-and-fracking-california-will-hurt-latino-communities
- https://insideclimatenews.org/news/04032020/air-pollution-shortens-life-expectency-fossil-fuel/;
  http://www.who.int/globalchange/en/; Leleiveld et al., Cardiovascular, March 2020; Hoffman et al. Climate Jan 2020
  Bekkar et al JAMA June 2020; https://www.nytimes.com/2020/06/18/climate/climate-change-pregnancy-study.html

  \*\*V\* https://www.lung.org/clean-air/outdoors/who-is-at-risk/disparities
- xvi https://www.theguardian.com/environment/2020/dec/03/uk-vows-outdo-other-major-economies-emissions-cuts-by-2030
- xvii https://www.cbsnews.com/news/uk-ban-new-gasoline-diesel-cars-vehicles-by-2030-boris-johnson-green-industrial-revolution/
- xviii https://www.bbc.com/news/science-environment-54858638
- xix https://www.reuters.com/article/us-usa-rhode-island-renewables/rhode-island-governor-aims-for-100-renewable-power-by-2030-idUSKBN1ZG2BI
- xx <u>Drawdown 2020 Review</u>, March 2020
- xxi N. Kittner, F. Lil, and D. M. Kammen (2017) "Energy storage deployment and innovation for the clean energy transition," *Nature Energy*, **2**, 17125.
- xxii Political Economy Research Institute <a href="https://www.peri.umass.edu/images/CA-EconRecProgram-6-12-20">https://www.peri.umass.edu/images/CA-EconRecProgram-6-12-20</a> Final.pdf
  xxii World Resources Institute <a href="https://www.wri.org/blog/2020/07/economic-benefits-climate-action-us">https://www.wri.org/blog/2020/07/economic-benefits-climate-action-us</a>
- xxiv https://laborcenter.berkeley.edu/putting-california-on-the-high-road-a-jobs-and-climate-action-plan-for-2030/
- xxvRobert Pollin, Jeannette Wicks-Lim, Shouvik Chakraborty, Caitlin Kline, and Gregor Semieniuk. <u>A program for economic recovery and clean energy transition in California.</u> June 2021; and, https://www.californiaclimatejobsplan.com/equitable-transition
- xxvi Climate-Safe California is defined as CA becoming a net carbon sink with sequestration greater than emissions, achieving initial stages of drawdown by 2030.
- xxviii Note that this suite of policies will be updated with the latest science, and input from experts and partners. xxviii 80% below 1990 levels of 431 MMT CO2e equals 86 MMT of CO2e annual emissions by 2030.
- wix With vastly increased investments in nature-based sequestration on natural and working lands starting no later than 2022 (also providing other benefits e.g., water, biodiversity and food security), California can sequester an additional 100+ MMT CO2e annually from the atmosphere by 2030. Combined with reaching measured emissions reductions of 80% below 1990 levels or 86 MMT of annual CO2e emissions by 2030, the state could reach -14 MMT CO2e annually, starting drawdown or net negative emissions. Nascent negative emissions technologies could likely scale up by the 2030's to further increase atmospheric drawdown of GHGs.
- xxx Existing state policies call for achieving 80% below 1990 levels of GHGs by 2050 (Governor Schwarzenegger Executive Order S-3-05 2005) and "maintaining net-negative emissions" after achieving carbon neutrality by "no later than 2045" (Governor Jerry Brown Executive Orders B-55-18 2018).
- xxxi World Resources Institute. Leaving no worker behind in shifting to a low-carbon future. March 2019.
- xxxii California Senate Bill 379 (2015) requires that "all cities and counties to include climate adaptation and resiliency strategies in the Safety Elements of their General Plans upon the next revision beginning January 1, 2017" but provides no funds to pay for this.

- <sup>xxxiii</sup> 2020 saw bills in the California state legislature to address this including <u>SB 1240</u> (Senator Nancy Skinner) Utility Reform Planning and <u>SB 1314</u> (Senator Bill Dodd) the Community Energy Resilience Act, prioritizing initial efforts in lower income communities.
- There were approximately 240 million passengers at California's top 8 airports in 2018. If most paid a \$10 climate-safe California fee, with exceptions for lower-income travelers, the state could secure almost ~\$2.4 billion annually.

  \*\*\*XXXY\*\* Raymond et al. \*\*The emergence of heat and humidity too severe for human tolerance\*. Science Advances., May 2020; Leleiveld et al., \*\*Loss of life expectancy from air pollution: a worldwide perspective. \*\*Cardiovascular Research\*, March 2020; Hoffman et al. \*\*Effects of Historical Housing Policies on Resident Exposure to Intra-Urban Heat\*. \*\*Climate\*, 2020; K.L. Ebi, et al. \*\*Human Health.\*\* In \*\*Fourth Natl. \*\*Climate Assessment, Volume II.\*\* U.S. Global Change Research Program, Washington, DC.
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  June 2019; and US Call to Action on Climate, Health and Equity (pdf)
- xxxviii Global Risks Report 2020: A decade left: Confronting Runaway Climate Threat. World Economic Forum. Jan 15 2020; Gonzalez, Huge Costs in Climate Inaction, Business Insurance, Jan 2019
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- https://insideclimatenews.org/news/28092020/ocean-stratification-climate-change I
- <sup>xlii</sup> Hu et al. <u>Deep-reaching acceleration of global ocean circulation over the past two decades</u> Science Advances. 05 Feb 2020; C. Mooney. <u>Oceans speeding up: another mega-scale consequence of climate change</u>. Wash Post, Feb. 5 2020.
- xiiii A. Woodward, Melting ice is slowing down the Atlantic ocean's circulation system. Business Insider, Sept 26, 2019.
- xliv Berdugo, et al. Global ecosystem thresholds driven by aridity. Science, 2020; 367 (6479): 787; Major study shows climate change can cause abrupt changes to dryland ecosystems. ScienceDaily, Feb 2020. Trisos et al. The projected timing of abrupt ecological disruption from climate change. Nature, 2020
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- xivi Dangers of Accelerated Biodiversity Loss in Global Risks Report 2020. World Economic Forum. Jan 15 2020
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- xlviii Kolden, @pyrogeog on Twitter, Sept 10, 2020
- xlix Lamontagne et al. Robust abatement pathways to tolerable climate futures require immediate global action. Nature Climate Change, 2019 and Few pathways to an acceptable climate future without immediate action, March 11, 2019. Note the IPCC assesses only a handful of future climate pathways.
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- liii California Air Resources Board, Natural and Working Lands, 2020.
- liv https://calmatters.org/environment/2020/09/california-governor-climate-emergency/
- <sup>Iv</sup> For more on these bold accelerated targets, see: Copenhagen, Norway, Uruguay, Finland, and Rhode Island.
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#### Attachment E

Overview of Climate-Related Planning Efforts in Yolo County

# Climate-Related Planning Efforts in Yolo County



**MARCH 2022** 

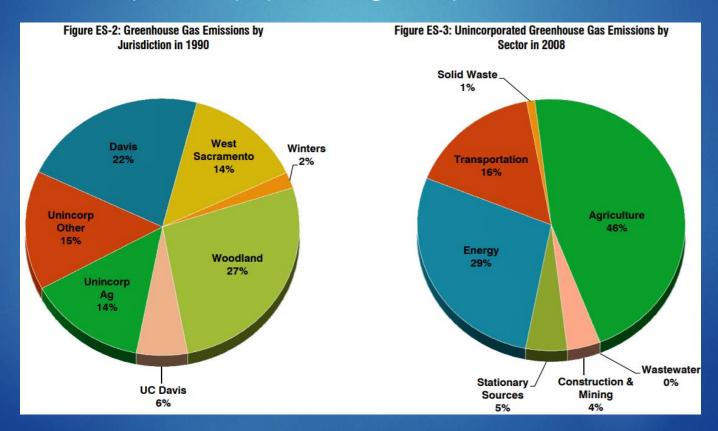
- Yolo County has been planning for climate change, sustainability, and emissions reduction since the 1980s
- The following slides outline some of the major climate action events of recent years



- Yolo County became one of 12 members to sponsor the Cool Counties Initiative, pledging to collectively reduce GHG emissions 80% below 1990 levels by 2050
- Yolo County Climate Change Compact
  - Information exchange on how best to analyze and reduce GHG emissions



- ▶ 2008 GHG Inventory
  - Total emissions increased 6% between 1990 & 2008
  - Unincorporated population grew by 9.8%



### Yolo County Climate Action Timeline: **2008** cont'd

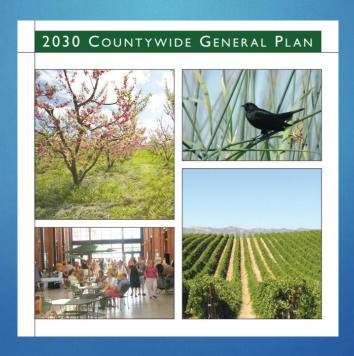
- ▶ 2008 Action Plan for Reducing GHG Emissions
  - County Operations only
  - Conducted detailed inventory and analysis of three county facilities
  - Summarized general strategies to reduce operational GHG emissions
  - Recommendation for the County to consider adoption of a "no GHG emissions growth" from individual projects" policy







- Adopted 2030 General Plan
  - Contains 350+ policies that pertain to climate change
  - Requires County to develop a Climate Action Plan



- Climate Action Plan
  - Goals
  - 1990 GHG levels by 2020
  - 27% below 1990 levels by 2030
  - 53% below 1990 levels by 2040
  - 80% below 1990 levels by 2050

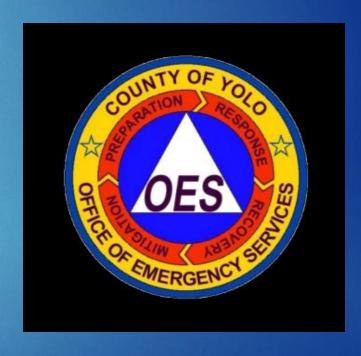


- Key Findings on Reductions
  - Agriculture is nearly half of GHG emissions
    - Ag emissions reductions require very large shifts in crop patterns and operations
  - Reductions focuses on energy sector through building efficiency measures and building-scale renewable energy
  - Community Choice Aggregation Program accounts for 45% of GHG reductions

- CAP Progress Report
  - Produced by CivicSpark Fellows
  - Status of Measure Implementation on CAP's five strategies:
    - Agriculture
    - ▶ Transportation and Land Use
    - Building Energy
    - Solid Waste and Wastewater
    - Adaptation
  - Barriers to implementation included funding, capacity, staff time, leadership
  - Recommendations included:
    - Focusing on implementation, and
    - Establishing clear monitoring and reporting protocol for CAP progress



- Multi-jurisdictional Hazard Mitigation Plan - Yolo County Community Profile
  - Identifies climate change as a "highly likely" and "critical" hazard
  - References existing CAP mitigation measures
  - MJHMP integrated into Safety Element
- 2nd GHG Inventory
  - Uses 2016 data
  - Shows an overall emissions reduction of ~8%



- Valley Clean Energy Alliance (VCE) was established as the Community Choice Aggregation Program and official electricity provider for Yolo County and provides energy with reduced environmental impacts.
  - Customers can opt out or choose from two level of cleaner energy choices:
    - Standard Green 75% carbon free and 45% renewable energy sources, or
    - Ultra Green 100% carbon free and 100% renewable energy sources



- Resolution Declaring a Climate Crisis Requiring an Urgent and Inclusive Mobilization in Yolo County
  - Declares climate change a crisis requiring urgent and immediate mobilization of resources
  - Directs creation of Yolo County Climate Action Commission charged with the development of the Yolo County 2022 Climate Action Plan and advising on Plan implementation
  - Carbon neutral, and then negative, by 2030



- Yolo County Sustainability Plan
  - Describes foundational policies and programs that support sustainability – roll up document
  - 7-year implementation timeframe
  - List 8 key elements (health, water, air quality, buildings, waste, local food, agriculture, and education)
  - Summarizes and compiles climate planning from the previous years, along with new equity considerations



PUBLIC DRAFT

Yolo County Sustainability Plan

- Yolo County Climate Action Commission
  - Develop Scope of Work for CAP



Prioritize Early Actions

Category of Membership	Number of members	Appointment	Voting Status
Supervisorial District Community Members	5	Appointed by BOS	Yes
At-large Community Members	2	Appointed by 5 YCCAC members	Yes
Technical Lead (Climate Scientists/Subject Matter Experts)	1	Appointed by BOS with staff recommendation	Yes
Climate Scientists/Subject Matter Experts	2	Appointed by YCCAC	Yes
Environmental Justice Lead	1	Appointed by BOS with staff recommendation	Yes
Total	9 – 11		

#### Yolo Lessons Learned

- VCE significant part of action in the later 2010's
- Work from the Sustainability Plan to build the CAAP Scope of Work
  - Ensuring assigned leadership and budget
  - Ensure monitoring, reporting, verification
  - Many measures are nascent



### Interviews with Other Jurisdictions

- Interviews on CAP process and Scopes of Work
  - Completed
    - Monterey County
    - Santa Barbara County
    - Ventura County
    - Sacramento County
  - Upcoming
    - Napa County
    - City of Sacramento
    - A jurisdiction outside of California



#### CAP SOW Lessons Learned

- CAP needs dedicated staff at the senior level
- Half are doing CEQA-compliant CAPs for streamlining, half are not, for time efficiency
- High interest in a regional approach but time and capacity constraints
- Consultant involvement varied
- Adaptation included or in supporting documents



#### Attachment F

Long Range Calendar

#### Yolo County Climate Action Commission

#### Long Range Calendar 2022

#### **UPDATED – March 18, 2022**

Month	Topics	
February	Early Action Prioritization	
	CAP Working Groups	
March	CAP scope of work	
	Review Early Actions with associated budgets (Part I)	
	Ad-Hoc Working Group	
	Presentation on Climate Action Efforts in Yolo County	
	Consider recommending the Board endorse Climate Safe California	
April	Review Early Actions with associated budgets (Part II)	
	Recommend Early Actions to BOS (tentative)	
	CAP Request for Proposals (initial discussion)	
May	CAP Request for Proposals Recommendation to BOS (if needed)	
	Early action grant strategy	
	(BOS Consideration of Early Actions)	
June	Commission's Roles in State/Federal Advocacy	
	(Release of RFP)	
July		
August	Recommendations regarding best practices for evaluating the	
	climate impact of proposed development projects	
September	(Contract for CAP award)	
October	CAP Process	
November	CAP Kickoff	
December		