PUBLIC OPINION ON OFFSHORE WIND

UC SANTA BARBARA Community Labor Center

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METHODS APPENDIX

Central Coast Tri-County Offshore Wind Poll · October 2026

2,316 residents surveyed
July 14–29, 2026

This appendix accompanies the report *Offshore Wind Energy on California's Central Coast: Local Opinions and Priorities* (UC Santa Barbara 2035 Initiative and UCSB Community Labor Center, October 2026). It gives the details that the report summarizes: how the sample was drawn and fielded, how the results were weighted, how to read the margins of error, the exact wording of every question reported, and the design and full results of the three randomized wording experiments. Every number here is computed from the same weighted response file as the report, with the same rounding rule, so the two documents agree. Authors: Alexandra Brown-Law, Eleanor Thomas, Gabriel De Roche, Nathan Mariano, Lucas Boyd, Carmen Rhodes, and Matto Mildenberger. Contact: isber-laborcenter@ucsb.edu.

1 · SAMPLING AND FIELDING

Population. Adult residents (18 and older) of San Luis Obispo, Santa Barbara, and Ventura counties, California.

Sampling frame and strata. Invitations were mailed to a random sample of residential addresses in the three counties. The sample was stratified into four groups so that the coastal San Luis Obispo County communities closest to the offshore wind lease area could be oversampled: (1) the coastal target area — the ZIP codes of Cambria, Cayucos, Morro Bay, Los Osos, Avila Beach, Pismo Beach, and Arroyo Grande; (2) the rest of San Luis Obispo County; (3) Santa Barbara County; (4) Ventura County. Any adult in the household could respond.

Fielding. The questionnaire was programmed in Qualtrics and completed online, in English or Spanish, between July 14 and July 29, 2026. Respondents consented under a UC Santa Barbara Human Subjects Committee protocol, received a $5 gift card on completion, and were entered in a drawing for $250 gift cards. The survey took about ten minutes. Both federal agreements that ended Central Coast leases (April 27 and June 17, 2026) were announced before fielding began.

Table 1. Completed responses by sampling stratum

Stratum	Completed responses in the results
San Luis Obispo County — coastal target area (7 ZIP-code communities)	655
San Luis Obispo County — rest of county	399
Santa Barbara County	692
Ventura County	570
Three counties	2,316

Question bases. Respondents who did not answer a question are left out of that question's base. The questionnaire's attention check did not screen anyone out.

Survey drop-off

Of the 2,894 people who answered the opening questions about offshore wind, 578 (20%) stopped before the demographic block at the end of the questionnaire. Without demographics they cannot be weighted, so they are not in the results. Most of the drop-off happened at the drag-and-drop ranking questions: 546 of the 578 were still answering just before the issues ranking and 349 just after it. Drop-off was lowest in San Luis Obispo County, the area closest to the lease area.

Table 2. Survey drop-off by sampling stratum

Stratum	Answered the opening questions	In the results	Stopped before demographics	Share stopped
San Luis Obispo County — coastal target area	809	655	154	19%
San Luis Obispo County — rest of county	477	399	78	16%
Santa Barbara County	864	692	172	20%
Ventura County	744	570	174	23%
Three counties	2,894	2,316	578	20%

From their completed responses, those who stopped were less familiar with offshore wind and more likely to have no opinion than those who finished; opposition was about the same (unweighted comparison). The results therefore describe residents who were engaged enough to finish a ten-minute survey, and likely overstate familiarity and opinion slightly and understate "no opinion" relative to all residents. Weighting by age, sex and race/ethnicity, which are related to familiarity, corrects part but not all of this.

Our weights rely on demographic questions at the end of the survey, so the people who stopped before then could not be weighted and are not in the results. As a sensitivity check, we re-estimated the headline items using only complete responses (n = 2,316) and using all responses (n = up to 2,894, depending on how far each person got), to see whether excluding incomplete responses meaningfully changes the findings (Table 3). The shifts are small and in the expected direction: support and familiarity a little lower, "no opinion" a little higher, opposition essentially unchanged.

Table 3. Sensitivity check: headline items re-weighted to include uncompleted responses (three counties)

Item (three counties)	Complete responses	All responses	Shift
Support offshore wind off the California coast	57.3%	54.0%	-3.3
No opinion	21.1%	23.6%	+2.5
Oppose	21.6%	22.5%	+0.9
Familiar or very familiar with offshore wind	45.0%	43.4%	-1.6
Support offshore wind off the Central Coast	72.1%	70.6%	-1.5
Oppose the federal buyouts	72.5%	71.4%	-1.1
Support battery storage	52.9%	52.7%	-0.2

2 · WEIGHTING

Results are statistically weighted so that the respondents represent the population of each geography. Three-county results are weighted to age, sex, and race/ethnicity margins from the 2024 five-year American Community Survey (U.S. Census Bureau), and the weights take into account the stratified sampling design (the coastal oversample is weighted back to its share of the region). Each county's results use a separate weight targeted at that county's own age, sex, and race/ethnicity splits, so the coastal oversample does not overcount coastal residents in the San Luis Obispo County figures.

Because the weights are uneven, the margins of error are wider than the raw sample sizes alone would give; the margins reported (section 3) account for this.

3 · MARGINS OF ERROR, ROUNDING, AND HOW THE NUMBERS ARE REPORTED

Margins of error. The margin of error is about ±3.3 percentage points for three-county results, ±5 for San Luis Obispo and Ventura counties, ±6 for Santa Barbara County, and ±7 for the coastal target area, all at 95% confidence and already including the effect of weighting. Subgroups have wider margins; groups under 30 respondents are labeled with their own margin wherever they appear in the report. A *difference* between two groups has a larger margin than either group's own, and so does the gap between support and opposition within one group. County-to-county differences of a few points are

within the margin of error and are not reported as rankings. Each margin is computed for a 50% share on the effective sample size, which is the number of respondents divided by the design effect of the weights (1 plus the squared coefficient of variation of the weights).

Ranked questions. Items in the two ranking questions are listed by their average position across all respondents (weighted), without intervals; the top three issues in finding 7 are within 0.2 of a position of one another and should be read as a tie. The share placing each item in their top three and the share ranking it first are given in section 4.

Rounding. Every percentage is rounded to the nearest whole number, including totals such as support (strongly + somewhat), oppose, familiar, and the gap between support and opposition, which are rounded from the unrounded figures. Because of rounding, a total can differ by a point from the sum of its rounded parts, and the parts of a bar or table may not add to exactly 100. The report, the briefs, and this appendix use the same rule.

Support questions. The question about offshore wind off the California coast and the battery-storage question offered a "no opinion" option; the Central Coast question, the buyout question, and the four California-response questions did not, so respondents had to choose a stance. "Support" always means strongly or somewhat support.

Subgroups. Political ideology is grouped from the seven-point item into liberal (very liberal, liberal, somewhat liberal), moderate, and conservative (somewhat conservative, conservative, very conservative). Age is grouped as 18–34, 35–54, and 55 and older. Household income is grouped as under $50,000, $50,000–$99,999, $100,000–$149,999, and $150,000 or more. Race/ethnicity follows the questionnaire categories, with Hispanic or Latino taking precedence when more than one was selected. Homeowners are respondents who own the property they live in or other Central Coast property; renters are those who own none.

4 · QUESTIONNAIRE: THE ITEMS REPORTED, AS ASKED

Wording is reproduced from the Qualtrics questionnaire. Response options follow each item in the order shown to respondents; the three-county weighted distribution is given in brackets. Items not reported in the web report (general favorability, trust in sources for other topics, employment, education, party identification) are omitted here.

> **Familiarity.** How familiar are you with offshore wind energy? ("Very familiar" would mean that you know a lot about this technology and might feel comfortable explaining it to someone else. "No knowledge of offshore wind" would mean you have rarely, or never, heard of it before.)
>
> [Very familiar 8% · Familiar 37% · Not very familiar 36% · No knowledge of offshore wind 18%]

> **Support, California coast.** How much do you support offshore wind energy being developed off the coast of California?
>
> [Strongly support 25% · Somewhat support 32% · Somewhat oppose 11% · Strongly oppose 11% · No opinion 21%]

> **Support, Central Coast (message experiment; see section 5a).** Offshore wind power has been proposed as a potential energy source off the California Central Coast. This would mean installing wind turbines that generate electricity on floating platforms in the ocean. Underwater cables send the power to local homes and businesses. [randomly assigned message, or none] How much would you support offshore wind energy being developed off the California Central Coast?
>
> Strongly support · Somewhat support · Somewhat oppose · Strongly oppose

> **Issues ranking.** Below are some of the topics that people have raised about offshore wind energy, both positive and negative. Please read each item carefully and rank them in terms of how important each issue is to you, personally. A ranking of "1" means that is the issue you care about the most, while "8" means it is the issue you care about least. "Offshore wind…"

Table 4. Issues ranking (three counties, weighted)

Item (questionnaire order)	Rank by average position	Average position	In top three	Ranked first
Helps energy bills go down	1	3.50	52%	29%
Creates high-skilled, well-paying jobs in nearby communities	5	4.30	38%	4%
Reduces our dependence on fossil fuels and/or foreign energy	3	3.66	56%	19%

Item (questionnaire order)	Rank by average position	Average position	In top three	Ranked first
Helps protect the ocean from the effects of climate change	4	3.98	46%	10%
Would be at least 20 miles from shore	6	5.48	17%	4%
Could negatively impact local marine ecosystems	2	3.64	53%	27%
Would need new industrial facilities to be built in our ports	7	5.64	18%	2%
Builds turbines that might be visible from shore + extensive underwater cabling	8	5.81	21%	5%

Community benefits ranking. Hypothetically, as part of offshore wind development, companies could commit to providing additional community benefits for the Central Coast. Below are some different community benefits that could be part of a hypothetical offshore wind development plan. Please read each item carefully and rank them in order of most to least preferred. A ranking of "1" means that is the benefit you would most prefer to see in an offshore wind development plan, while "8" means it is the issue you would least prefer.

Table 5. Community benefits ranking (three counties, weighted)

Item (questionnaire order)	Rank by average position	Average position	In top three	Ranked first
Hire locally, pay living wages, and provide job training for workers	1	2.92	66%	31%
Build affordable housing and protect local businesses affected by construction	2	3.73	49%	14%
Build open and green spaces such as a public park	3	4.02	44%	10%
Provide funding for childcare centers, health centers, art centers, and/or schools	6	4.15	36%	9%
Invest in local environmental programs such as green building certification, air monitoring, and flood mitigation	4	4.06	38%	13%
Make commitments about construction hours, noise, traffic & parking	7	5.06	25%	4%
Include community input in decisions, create advocacy councils, and make measurable and transparent commitments	5	4.06	42%	19%

Purpose of the power (experiment; see section 5b). California's electricity supply may need to increase in the coming decade to meet growing demand. How much would you support offshore wind energy being developed off the coast of California, if it helped [randomly assigned purpose]?

Strongly support · Somewhat support · Somewhat oppose · Strongly oppose

Federal buyouts (experiment; see section 5c). The [federal government / Trump administration] has paid several companies to abandon their leases to build offshore wind turbines in U.S. waters. [randomly assigned description] How much do you support the federal government paying companies to cancel their offshore wind leases and invest in oil and gas energy?

[Strongly support 12% · Somewhat support 16% · Somewhat oppose 22% · Strongly oppose 50%]

California's potential responses. The State of California could potentially respond to these recent actions from the federal government.

(1) How much do you support California continuing to try and develop offshore wind energy as a renewable energy source for the state?

[Strongly support 41% · Somewhat support 33% · Somewhat oppose 12% · Strongly oppose 14%]

(2) How much do you support California suing or pursuing other legal action against the federal government, such as requesting documents of the deal be made public?

[Strongly support 53% · Somewhat support 22% · Somewhat oppose 9% · Strongly oppose 16%]

(3) How much do you support California continuing to build other infrastructure, such as electricity transmission and port infrastructure, to support potential offshore wind in the future?

[Strongly support 40% · Somewhat support 36% · Somewhat oppose 11% · Strongly oppose 12%]

(4) If it were economically feasible, how much would you support the State of California leading the development of offshore wind energy off our coast, instead of private companies?

[Strongly support 41% · Somewhat support 31% · Somewhat oppose 11% · Strongly oppose 18%]

Trusted sources. Please move the top three groups that you trust the most for information on energy and electricity into the box on the right. Then rank them from most to least trusted, with "1" being your most trusted source.

Fourteen groups were offered; the share placing each in their top three and the share ranking it first (three counties, weighted; n = 1,806):

Table 6. Most-trusted sources for information on energy and electricity (three counties, weighted)

Source	In top three	Ranked first
Scientists	86%	60%
Universities and colleges	39%	5%
Electricians and construction workers	30%	6%
National nonprofit organizations	23%	4%
Local nonprofit organizations	23%	4%
California state government agencies	21%	3%
Electric utility and generation companies	20%	5%
Neighbors or residents of your community	15%	4%
Teachers	10%	2%
Federal government agencies	10%	3%
Fishermen	8%	2%
Tribal representatives	8%	2%
Labor union representatives	5%	1%
Elected officials	3%	0%

Please move the top three groups that you trust the most for information on climate and the environment into the box on the right. Then rank them from most to least trusted, with "1" being your most trusted source.

Three counties, weighted; n = 1,945.

Table 7. Most-trusted sources for information on climate and the environment (three counties, weighted)

Source	In top three	Ranked first
Scientists	88%	62%
Universities and colleges	47%	7%
National nonprofit organizations	34%	3%
Local nonprofit organizations	24%	3%
California state government agencies	20%	4%
Teachers	15%	3%
Electricians and construction workers	13%	2%
Fishermen	12%	3%
Neighbors or residents of your community	12%	4%
Federal government agencies	10%	2%

Source	In top three	Ranked first
Tribal representatives	10%	1%
Electric utility and generation companies	8%	2%
Elected officials	3%	1%
Labor union representatives	2%	0%

Please move the top three groups that you trust the most for information on the economy and jobs into the box on the right. Then rank them from most to least trusted, with "1" being your most trusted source.

Three counties, weighted; n = 1,978.

Table 8. Most-trusted sources for information on the economy and jobs (three counties, weighted)

Source	In top three	Ranked first
Universities and colleges	41%	13%
National nonprofit organizations	36%	11%
California state government agencies	35%	9%
Scientists	33%	19%
Labor union representatives	29%	9%
Local nonprofit organizations	25%	5%
Neighbors or residents of your community	24%	9%
Federal government agencies	21%	10%
Teachers	16%	3%
Electricians and construction workers	16%	5%
Elected officials	11%	3%
Fishermen	6%	1%
Electric utility and generation companies	5%	1%
Tribal representatives	3%	1%

Battery storage. How familiar are you with battery energy storage systems? ("Very familiar" would mean that you know a lot about this technology and might feel comfortable explaining it to someone else. "No knowledge of battery energy storage" would mean you have rarely, or never, heard of it before.)

[Very familiar 13% · Familiar 35% · Not very familiar 35% · No knowledge of battery energy storage 17%]

How much do you support battery storage facilities being built in the Central Coast of California?

[Strongly support 21% · Somewhat support 32% · Somewhat oppose 11% · Strongly oppose 11% · No opinion 25%]

Demographics used in the report. How would you describe yourself politically? (Very conservative … Moderate / Middle-of-the-road … Very liberal) · What is your age? · What was your combined household income in 2025 (before taxes)? · What racial or ethnic group best describes you? (select all that apply) · Do you own property in the Central Coast area? · Does your property have an ocean view?

5 · RANDOMIZED WORDING EXPERIMENTS

Three questions randomized what respondents read before answering. Because each respondent was assigned to a group at random, the groups are alike in every other way, so a difference in their answers can be attributed to the wording they saw. The tables give the full weighted distribution for every message group.

5a · Message framing (report finding 4)

After the common introduction (section 4), one of five short messages was shown, or no message. Four messages came from advocates and one from opponents. Support ranged from 68% to 75% across the six groups. With groups of 363–404

respondents, each group's margin of error is about ±8 points. Differences between the message groups are not statistically significant.

Table 9. Support for offshore wind off the Central Coast, by message group (three counties, weighted)

Message shown before the question	Group size	Strongly support	Somewhat support	Somewhat oppose	Strongly oppose	Support	Oppose
No message (control group)	404	31%	37%	14%	18%	68%	32%
Opposing message: "Opponents say that the turbines would be visible from shore, with lights that you can see at night."	385	31%	37%	12%	20%	68%	32%
Supporting message: "Advocates highlight that the turbines would be at least 20 miles off the coast and barely visible from shore."	385	38%	36%	13%	13%	74%	26%
Supporting message: "Advocates say that this would create high-skilled, well-paying jobs in nearby communities for workers building and maintaining the platforms."	389	33%	42%	17%	8%	75%	25%
Supporting message: "Advocates say that this would increase the supply of electricity and help bring energy bills down."	363	33%	41%	14%	12%	74%	26%
Supporting message: "Advocates say that this would reduce pollution from fossil fuel power plants and help the state meet its climate goals."	390	35%	35%	16%	15%	70%	30%

5b · Stated purpose of the power (report finding 5)

The end of the question was completed by one of six randomly assigned purposes. Five of the six drew 70–78% support; data centers drew 55%. With groups of 366–403 respondents, each group's margin of error is about ±8 points, with the data center purpose as the only message with a statistically significant difference in support.

Table 10. Support for offshore wind, by stated purpose of the power (three counties, weighted)

Purpose shown	Group size	Strongly support	Somewhat support	Somewhat oppose	Strongly oppose	Support	Oppose
"…if it helped enable electrification in homes (such as heat pumps and electric stoves)"	373	36%	41%	9%	14%	77%	23%
"…if it helped enable electrification of schools and other community buildings"	403	36%	41%	10%	13%	77%	23%
"…if it helped provide power for data centers"	366	25%	30%	12%	33%	55%	45%
"…if it helped provide power for electric vehicle charging stations"	401	35%	35%	13%	17%	70%	30%
"…if it helped provide power for homes across California"	379	46%	30%	14%	11%	75%	25%
"…if it helped provide power for homes on the Central Coast"	394	37%	41%	11%	10%	78%	22%

5c · Description of the federal buyouts (report finding 8)

Every respondent read the one-sentence lead-in, with the actor randomly worded as "the federal government" or "the Trump administration," followed by one of three brief descriptions of the buyouts: a one-sentence description, a taxpayer-money description, or a reinvestment description (the latter two carried the randomized actor wording, giving five versions in all). The report presents the combined result across all versions (73% oppose). The five versions:

A · One-sentence description: "This included ending two agreements that companies had with the federal government to build wind turbines off the Central Coast of California."

B · Taxpayer-money description, "the federal government": "The federal government used taxpayer money from the U.S. Treasury to pay one Central Coast developer $120 million, and the other developer an estimated $112 million."

C · Taxpayer-money description, "the Trump administration": "The Trump administration used taxpayer money from the U.S. Treasury to pay one Central Coast developer $120 million, and the other developer an estimated $112 million."

D · Reinvestment description, "the federal government": "The federal government paid the Central Coast developers an estimated $232 million to end their leases. The federal government is also requiring that one developer invest the $120 million into oil and gas drilling in the Gulf, and the other developer invest in natural gas-fired power plants in the Midwest."

E · Reinvestment description, "the Trump administration": "The Trump administration paid the Central Coast developers an estimated $232 million to end their leases. The Trump administration is also requiring that one developer invest the $120 million into oil and gas drilling in the Gulf, and the other developer invest in natural gas-fired power plants in the Midwest."

Each version's margin of error is about ±6–8 points; for the two actor wordings, each combined across the descriptions that carried it, about ±6 points.

Table 11. Support for the federal buyouts, by description shown (three counties, weighted)

Description shown	Group size	Strongly support	Somewhat support	Somewhat oppose	Strongly oppose	Support	Oppose
A · One-sentence description	778	11%	15%	21%	53%	26%	74%
B · Taxpayer-money description, "the federal government"	379	15%	16%	21%	47%	32%	68%
C · Taxpayer-money description, "the Trump administration"	392	10%	17%	16%	57%	27%	73%
D · Reinvestment description, "the federal government"	370	14%	21%	24%	40%	36%	64%
E · Reinvestment description, "the Trump administration"	397	7%	13%	28%	52%	20%	80%

Table 12. Support for the federal buyouts, by actor named (three counties, weighted)

Actor wording (the two descriptions that carried it, combined)	Group size	Strongly support	Somewhat support	Somewhat oppose	Strongly oppose	Support	Oppose
"the federal government"	747	15%	19%	23%	44%	34%	66%
"the Trump administration"	787	9%	15%	22%	54%	23%	77%

6 · CENSUS-TRACT ESTIMATES (MULTILEVEL REGRESSION AND POSTSTRATIFICATION)

The census-tract map that follows finding 3 shows **model estimates**, not direct survey results. Most of the region's 362 mainland census tracts have too few respondents to estimate opinion in each tract directly, so we used multilevel regression and poststratification (MRP). A multilevel model of each answer uses sex, age, race/ethnicity, county, census tract, the tract's 2024 presidential vote, distance to the shore and to the wind lease area, household income, home ownership, and education. The model's predictions are then weighted to each tract's adult population from the American Community Survey (2020–2024) (poststratification). Unlike the weighted results, the model also uses the answers of respondents who stopped before the demographic questions (section 1). Tracts with few respondents are pulled strongly toward similar tracts, so the map shows broad patterns and should not be used to rank individual neighborhoods.

Estimates are produced for offshore wind off the California coast (support, oppose, and no opinion, the last taken as the remainder), the federal buyouts (support and oppose), and battery storage (support, oppose, and no opinion). Each estimate is the posterior median, with a 90% interval; the gap between support and opposition is computed for each posterior draw. Tract-level intervals are wide (a median of about ±10 points on the gap between support and opposition), so the map is best read for broad patterns rather than for any single tract.

The tract estimates are calibrated to the survey weights: added up to each county and to the two San Luis Obispo sampling areas, they reproduce the weighted survey results in this report to within about half a point. The distance-to-shore comparisons in the text group tracts into those within 2 kilometers of the shore, 2–10 kilometers, and more than 10 kilometers.

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