Planning for Climate Change in Clackamas County: Analysis of Spanish Language Survey Responses

August 12, 2022

The Climate Action Plan Project Management Team developed a non-scientific, online survey to gather feedback from residents and other interested parties in spring 2022 about actions needed to respond to climate change and help the county reach its goal of being carbon neutral by 2050. The survey, offered in both English and Spanish, included up to 50 questions depending on the interests of the respondent.

SURVEY RESULTS: TOP FIVE TAKE-AWAYS

A: There is interest in the topic of climate change.

- Though only 22 people responded to the survey in Spanish, the average amount of time spent responding was 19 minutes. (That is considerably more than the average of 7-10 minutes people usually spend on a 15-30-question survey, per

 El cambio climatologico esta
 - SurveyMonkey.)
- 85% of respondents said climate change is very important or important to them personally
- 82% said they had personally experienced the effects of climate change, including temperature extremes, wildfires, changing seasons, rising prices and snowstorms.

B. Everyone has a role to play in responding to climate change.

The majority of respondents said city, county, state and federal governments; and individuals have the biggest role to play. The options were community and grassroots organizations; non-profits; city, county, state or federal governments; private businesses, and/or individual, all or none; and they could choose as many as they wanted. Only 5% said "none of the above."

Todos y cada uno tiene la obligacion de cuidar el ambiente para un mejor futuro para lasfuturas generaciones Each and every one has the obligation to take care of the environment for a better future for future generations.

afectando nuestro ambiente y forma

de vida. Climate change is affecting

our environment and way of life.

C. There are high levels of concern about climate change impact.

While 82% of respondents said they had experienced the impacts of climate change, 90% or more are concerned or somewhat concerned about:

- Reduced water quality (100%)
- More wildfires and smoke (95%)
- Increase in diseases transmitted by mosquitoes, ticks and fleas (95%)
- Reduced air quality and increased asthma (95%)
- Impact on native wildlife, including salmon and other fish, and animals that pollinate crops such as (bees, birds and bats (94%)
- Energy insecurity, e.g., reduced reliable, predictable access to electricity and natural gas (94%)
- More frequent and severe floods (94%)
- Impact on native trees and other vegetation (92%)
- Disruptions to production/distribution of products that reduce access to food and other goods (90%)
- Prolonged drought and water shortages (90%)
- Increased urban flooding (90%)

- D. There is support for many county climate actions.
 - Support for county climate actions ranged from 40% to 97% per action in a variety of areas:
 - o taking climate action in its own facilities and operations,
 - supporting climate action in the community
 - o advocating for climate action with other jurisdictions and organizations
 - Opposition to the same measures ranged from 0% to 29% per action.
- E. All those who responded said they are interested in increasing energy efficiency, but they need support to help make it happen.
 - 50% or more said they were interested in adding insulation, improving heating/cooling systems, installing solar panels and/or purchasing more efficient appliances.
 - All respondents said they would need at least some financial support, education, training, a link to resources or permission of a building owner in order to make improvements.

BACKGROUND

RESPONDENTS

There were 22 respondents to the survey, which was open June 8 – July 15, 2022. Of the 9 people who responded to the demographics questions:

- 89% live in the county, 33% work in the county and 11% are students in the county
- 89% are female; 11% are male
- 44% are under age 34, 44% are between 35 and 54, and 11% are 55 or older
- 89% identified as Hispanic or LatinX; 11% identified as White or Caucasian

CREATION/PROMOTION

The survey was constructed using Survey Monkey and promoted in a variety ways, including:

- Emails to interested parties, county advisory groups, business organizations, etc.
- Social media and media release
- #ClackCo Monthly and #ClackCo Weekly
- Dedicated webpage, linked from the front page of www.clackamas.us

SURVEY CONTENT

The survey was divided into four sections:

- Overview
- II. Climate Actions
- III. Demographic Information
- IV. Conclusion

The second section, Climate Actions, was sub-divided into the following five categories to give people the option to respond to questions in the areas of most interest to them:

- 1. Buildings and Energy Generation -- our built environment, and the energy we use to light, heat, cool and operate it (7 respondents)
- 2. Transportation and Land Use -- how we get people and goods from one place to another; how and where we build the places in which we live, work, shop and play (7 respondents)
- 3. Water and Wastewater -- the water we consume or use, and how we treat polluted water generated from rainwater runoff and human activities (6 respondents)
- 4. Consumption and Waste -- the things we buy, use and throw away (10 respondents)
- 5. *Carbon Sequestration* -- the process of capturing and storing atmospheric carbon dioxide (4 respondents)

KEY FINDINGS

NOTE: These findings are rounded to the nearest whole number and based on the number of people who answered that specific question.

CLIMATE ACTION CATEGORIES

In this section, respondents were asked to let us know their degree of support for actions that could be taken by the county for its own operations; to educate, incentivize and/or regulate in the community, or to advocate with other agencies and organizations. Then they were asked about actions they might be willing to take and what could be done to support them. Please note that the number of respondents for each category was a subset of the whole.

BUILDINGS AND ENERGY GENERATION

8. County actions. Rate your degree of support for each of the following possible future actions related to how the county operates its own facilities and programs.

Possible Future County Action	% Support	% Oppose	% Need more information
a) The county <i>reduces the amount of energy</i> used for heating, cooling, equipment, lighting and appliances in its buildings	28.5	14	28.5
b) All new county-owned <i>buildings are built to be carbon-neutral</i> (meaning the design and operations do not emit greenhouse gases)	66	17	17
c) The county increases the number of its buildings that have solar panels	50	16	33
d) All electricity for county-owned buildings comes from zero- carbon energy sources (e.g., wind, solar, water)	50	33	17
e) All current county-owned <i>buildings are retro-fitted</i> to be carbon-neutral in coming years	50	33	17

9. County supports action in the community (education, incentives, regulations, grants, etc.) Rate your degree of support for each of the following possible actions.

Possible Future County Support	% Support	% Oppose	% Need more information
a) Support <i>energy efficient design and operations of all new buildings</i> constructed in Clackamas County, including houses, apartments, offices, schools and commercial and industrial buildings.	53	18	29
b) Support the use of <i>clean energy sources to heat, cool and power homes</i> .	67	33	0
c) Support the use of <i>clean energy sources to heat, cool and</i> power commercial and industrial buildings.	67	33	0
d) Support the <i>installation of solar</i> on all suitable buildings, especially new buildings.	67	33	0

10. County advocates: Rate your degree of support for each of the following possible future actions.

	Possible Future County Advocacy	% Support	% Oppose	% Need more information
a)	Reduce amount of energy used to heat, cool and power	Support	Oppose	IIIIOIIIIatioii
aj	equipment, lighting and appliances in buildings located in Clackamas County	43	14	43
b)	Encourage residents and businesses to subscribe to 100% renewable electricity (from a source such as water, wind or solar power)	83	17	0

11. Which of the following energy efficiency improvements are you interested in making? (check all that apply)

- Improving building insulation 67%
- Installing solar panels 50%
- Installing more efficient heating/cooling system 50%
- Replacing older appliances with more efficient options 50%
- Installing more efficient windows/doors 33%
- Installing low-flow showers, faucets and toilets 17%

12. What support would you need to make the above changes? (check all that apply)

- Partial financial support 33%
- List of recommended professionals and contractors 33%
- Information on making changes myself 50%
- Education 67%
- Full financial support 67%
- Agreement/support of building owner 33%

TRANSPORTATION AND LAND USE

14. County operations: Rate your degree of support for each of the following possible future actions.

	Possible Future County Action	% Support	% Oppose	% Need more information
a)	Reduce amount of employee commuting by increasing teleworking / working from home	57	29	14
b)	Transition all county-owned vehicles to zero-emissions vehicles (e.g., patrol cars, pick-up trucks, delivery vans)	67	17	17

15. County supports action in the community (education, incentives, regulations, grants, etc.): Rate your degree of support for each of the following possible future actions.

Possible Future County Support	% Support	% Oppose	% Need more information
a) Provide additional infrastructure (sidewalks, bike paths, etc.) to make it easier and safer for people to walk or bike	72	14	14
b) Increase infrastructure to support electric vehicles, e.g., electric charging stations	67	17	17
c) Provide support for people to use transit, ride in vehicles with two or more occupants (carpool or ride-share), walk and bike	83	17	0
d) Build most new housing in and near current and planned population centers and major travel corridors	83	17	0

16. County advocates: Rate your degree of support for each of the following possible future actions.

	Possible Future County Advocacy	% Support	% Oppose	% Need more information
a)	Transit companies purchase and use electric buses that operate on renewable electricity	72	14	14
b)	Increase the number of zero-emission vehicles sold and registered in the county	83	17	0
c)	Expand high capacity transit services, such as bus rapid transit or light rail	67	33	0

17. Are you interested in purchasing or leasing an electric vehicle? (check one)

- Yes 50%
- No − 50%

18. Are there any barriers to you purchasing an electric car or truck? (check all that apply)

- Cost 83%
- Concern about lack of charging stations 17%
- Other 17%
- Not interested 17%

19. If the county were to invest in infrastructure to support lower transportation emissions, where would you prefer they focus? (check all that apply)

- Expand infrastructure for walking and biking 50%
- Infrastructure to support zero emissions vehicles, e.g., EV charging stations 33%
- None of the above 33%
- Expand bus transit service 17%
- Other 17%

WATER AND WASTEWATER

21. County Operations: Rate your degree of support for each of the following possible future actions.

	Possible Future County Action	% Support	% Oppose	% Need more information
a)	County wastewater treatment facilities with sufficient			
	capacity generate and capture renewable natural gas	50	0	50
	from wastewater treatment for use on-site.			

22. County Supports Action in the Community (education, incentives, regulations, grants, etc.): Rate your degree of support for each of the following possible future actions.

	Possible Future County Support	% Support	% Oppose	% Need more information
a)	County wastewater treatment facilities with sufficient			
	capacity generate and capture renewable natural gas from	50	50	0
	wastewater treatment for use on-site.			

23. County Advocates: Rate your degree of support for each of the following possible future actions.

	Possible Future County Advocacy	% Support	% Oppose	% Need more information
a)	Increase public education and resources to encourage water conservation.	83	0	17

24. The actions of individual households can make a difference in maintaining a healthy and adequate supply of water. What would encourage you to conserve water at home? (check all that apply)

- Knowing that I am helping to protect the environment 83%
- Knowing that I will save money 67%
- Knowing that I am helping to protect wildlife 67%
- Other 17%

Información en español, impactos sobre el ahorro del agua y estímulos Information in Spanish, impacts on water saving and incentives

25. Are there any barriers to you conserving water at home? (check all that apply)

- There are no barriers 17%
- Cost of installing or replacing equipment 83%
- I need information on how to conserve 33%
- I don't control water use in my household 33%

CONSUMPTION AND WASTE

28. County Operations: Rate your degree of support for each of the following possible future actions.

	Possible Future County Action	% Support	% Oppose	% Need more information
a)	Clackamas County prioritizes purchasing services and products that minimize the release of greenhouse gases	60	10	30

29. County Supports Action in the Community (Education, incentives, regulations, grants, etc.): Rate your degree of support for each of the following possible future actions.

	Possible Future County Support	%	%	% Need more
	rossible ruture county support	Support	Oppose	information
a)	The county supports the production, processing and sale of locally grown food.	80	10	10
b)	The county sponsors repair fairs and other activities to support reuse of materials and products.	100	0	0

30. County Advocates: Rate your degree of support for each of the following possible future actions.

	Possible Future County Advocacy	% Support	% Oppose	% Need more information
a)	Encourage the purchase of products and services that are designed to be reused and easy to repair.	60	0	40
b)	Reduce the amount of food and other organic waste sent to landfills	100	0	0

- 31. The amount of waste is we create is impacted by individual decisions such as how much we buy, what we buy, how we take care of what we buy and what we do with things when we are done with them. How interested are you in reducing your waste?
 - Interested (very or somewhat) 90%
 - Need more information 10%
- 32. What support would you need to make the above changes? (check all that apply)
 - Information on making changes myself –90%
 - Education 90%
 - Authority/permission from building owner 40
- 33. Share any other suggestions on actions individuals can take to reduce consumption and waste.?
 - Two suggestions were about recycling, removing and reusing plastics
 - Other suggestions included having places to donate items that other programs don't accept and having everyone buy small amounts.

CARBON SEQUESTRATION

35. County Operations: Rate your degree of support for each of the following possible future actions.

Possible Future County Action	% Support	% Oppose	% Need more information
a) Implement forest management practices that increase carbon sequestration and growth	50	0	50

36. County Supports Action in the Community (education, incentives, regulations, grants, etc.): Rate your degree of support for each of the following possible future actions.

	Possible Future County Support	% Support	% Oppose	% Need more information
a)	Support forest and agricultural management and practices that increase carbon sequestration	50	0	50
b)	Identify and encourage financial incentives for farm and forest landowners to increase carbon sequestration	67	0	33

37. County Advocates: Rate your degree of support for each of the following possible future actions.

	Possible Future County Advocacy	% Support	% Oppose	% Need more information
a)	Continue to investigate carbon sequestration capacity and opportunities	75	0	25

38. Share any other tips you have about actions individuals can take to capture carbon.

Pueden usar transportación pública en vez de carros propios They can use public transportation instead of own cars

- 49. Please share any other climate action ideas you think we should consider.
 - Teach people about the importance of using Public Transportation
 - Offer more transportation resources for students and seniors at low or no cost.
 - Reduce noise from cars, do not allow fires near large vegetation.