Puna Climate Resilience & Energy Transition Report

Prepared by KōCreate Community Leaders for Vibrant Hawai‘i | June 2026

I. Executive Summary

Energy in Puna is not an abstract policy issue. It is the water that stops running when the power goes out. It is the electric bill that competes with groceries. It is the memory of a neighborhood buried under lava. It is the question of who gets to decide what happens to the land.

In April and May 2026, 340 community members from 24 neighborhoods across Puna answered that question in their own words. The survey was developed and administered by KōCreate Community Leaders as part of the Puna Paiā‘ala I ka Hala project, a partnership between Vibrant Hawai‘i, KōCreate, and the Hawai‘i State Energy Office through UH Sea Grant. This report presents what they shared.

The community's top priority is affordability. Eight in ten participants said affordable energy for every household is what energy success looks like for Puna. Three in four said lower electricity bills would make the most difference if a renewable energy project came to Puna. About 60% are currently concerned about the cost of their electric bill.

Connection to the ‘āina is foundational. Nearly nine in ten participants said the land, forests, and natural environment should never be lost or compromised. The most common concerns about energy development centered on harm to sacred places, agricultural land, and the environment. These are not negotiating positions. They are core values.

The community wants local control. Community-owned solar and battery storage topped the list of energy types that feel right. Large utility-scale projects controlled by outside companies were among the top concerns. Fifty-three percent said energy decisions should be made by and for Puna, not outside companies.

Nine out of ten community members want more information about energy. Most are not familiar with the organizations currently working on energy in Hawai‘i. Most have never participated in an energy-related activity. The appetite for energy education is broad, practical, and ready to be met.

The community is open to participating, but trust has to be earned. Sixty-eight percent said they are willing or open to participating in energy planning. Nearly 100 community members signed up for a community vegetation task force. But most do not feel represented by existing energy organizations, and satisfaction among those who have participated in formal energy processes was mixed.

Puna has a history that cannot be ignored. Decades of decisions made without community input, unresolved concerns about geothermal energy, and recovery from the 2018 eruption that remains incomplete are all part of the context in which this survey was conducted. Any energy development that does not acknowledge this history and actively work to build trust will face real community resistance.

This report walks through the full picture, from who participated and what Puna values, to how power outages affect daily life, to what the community wants from energy development and how it wants to be involved.

How to Use This Report

This report belongs to Puna first. It was created by community, for community, with questions written by people who live here and responses from 340 of their neighbors. That matters because too often, Puna is asked to weigh in on energy projects at the last minute. A developer arrives. A meeting is called. A vote is held. Most people never hear about it in time. The choice gets framed as yes or no on someone else's plan, and the community is left reacting instead of leading.

This report changes that. It puts community priorities on the table before any project, proposal, or pitch arrives. It gives Puna something to point to and say: this is what we need, this is what we value, this is what we will not compromise. It shifts the conversation from reaction to intention.

The findings here are specific and ready to act on. They should be used to shape Community Benefits Agreements, guide outreach and education efforts, inform infrastructure planning, and set the terms for any energy development conversation in Puna. This report should be in the room before any developer walks through the door.

It should also be shared back with the community members who participated. They gave their time and their voice. They deserve to see what came of it, and to know that it is being used.

II. Introduction

About This Report

This report shares what Puna community members said about energy, power outages, and their future. It was put together as part of the Puna Paiāʻala I ka Hala project, a community engagement effort focused on Puna, Hawaiʻi Island.

The findings here come directly from community members who took the survey, attended gatherings, and shared their stories and ideas. This report is meant to be shared back with Puna and used by anyone involved in energy planning who wants to understand what community members actually said.

About the Project

Puna Paiāʻala I ka Hala is part of the Energy Resilient Communities initiative through UH Sea Grant. The project worked in two communities on Hawaiʻi Island: Puna and Kaʻu. The work ran through June 2026.

The project was a partnership between Vibrant Hawaiʻi, KōCreate Community Leaders, and the Hawaiʻi State Energy Office. Together, the goal was to go out into the community, listen, and document what people think and feel about energy. That includes their concerns, questions, and hopes.

The work involved:

- Listening to community members share what climate resilience means to them
- Exploring what an energy transition could look like for Puna
- Learning what information community members need to feel confident in making decisions about energy
- Supporting coastal resilience related to natural hazards and climate change

Keeping community priorities and needs at the center was the most important part of this project.

About KōCreate

KōCreate is a program of Vibrant Hawaiʻi that trains and supports community leaders across Hawaiʻi Island. KōCreate Community Leaders are people from their own communities, and they are trained in communication, planning, organizing, and leadership to do place-based community work.

The KōCreate team was invited to lead this energy engagement as part of workforce development. That means the people who did this outreach are from Puna and nearby communities. They know the people, they know the place, and they bring the values that guide this kind of work.

About Vibrant Hawaiʻi

Vibrant Hawaiʻi is a community-based leadership organization based in Hilo, Hawaiʻi Island. Their work focuses on removing barriers that make community members feel disconnected from their ability to solve the problems that matter most to them. By creating small, local opportunities to turn ideas into action, Vibrant Hawaiʻi helps people rediscover their power to create change and strengthen their communities.

Vibrant Hawaiʻi works across several areas, including workforce and economic development, community resilience, housing, education, and youth leadership. They support a network of community resilience hubs across Hawaiʻi Island and Oʻahu and

believe that community members are the ones best equipped to design and lead solutions to local challenges.

For this project, Vibrant Hawai‘i served as the lead organizational partner. They supported the KōCreate Community Leaders, hosted the online survey, covered supply costs, and provided the shared resources needed to carry out the work.

How to Read This Report

This report is organized to walk through the full story of the engagement, from how community members were reached to what they shared to what that might mean for energy planning in Puna.

Survey findings are presented as clearly as possible. When the data shows a pattern, we say so. When responses were mixed, we say that too. The goal is not to tell you what to think. The goal is to share what community members said, as faithfully as possible.

‘O ke au i hala ka lamakū . ‘O ke ala i ke kupukupu. The path is the beacon that will guide us into a prosperous future.

III. Methodology

How Community Members Were Reached

The KōCreate Community Leaders used several different approaches to reach as many people in Puna as possible. The goal was to meet Puna community members where they already were, in places that felt comfortable and familiar.

The first outreach event was the Emergency Preparedness Fair at Maku‘u Market on April 26th. Maku‘u Market is one of the most popular Sunday gatherings in Puna, drawing hundreds of community members each week to its farmers market and artisan booths. On this particular Sunday, the market also hosted booths from the Community Emergency Response Team, American Red Cross, Hawai‘i Animal Kuleana Alliance, and the Hawai‘i State Department of Health. It was a natural fit for reaching a wide range of families and community members in a relaxed, welcoming setting. During this event, we invited Puna community members to take the survey and gathered responses from a wide range of people.

On May 8th, the team set up a booth at the Activate Puna block party in Pāhoa, where community members and concertgoers were invited to take the survey. The event's energy created a lively outreach setting, and the team connected with a wide range of community members and gathered their responses.

To reach families with school-aged children, the team also tabled at the Keaʻau High School Cougar Night Market on May 13th, an event that draws many families who come for dinner or to pick up their kids after school activities.

To reach more people beyond in-person events, the survey link was shared directly with friends, neighbors, and family members in Puna, and through social media.

To reach younger voices, the team worked with an educator at a private school who administered the survey in a middle school classroom on May 15th. All students who participated live in Puna.

At the three in-person community events, anyone who completed the survey received either a gas card or a grocery store gift card. For the middle school students, candy was provided instead.

How the Survey Was Developed

Before building the survey, the KōCreate Community Leaders made time to connect with Sustainable Molokaʻi, an organization who has done similar community energy engagement work. The team learned from their process, reviewed their survey, and used it as a model when developing the Puna survey. A copy of the Sustainable Molokaʻi survey is included in the Appendix.

How Data Was Collected and Analyzed

Surveys were completed on electronic tablets at in-person events, with live data captured in real time using a wifi connection. The team used JotForm to collect survey responses, enabling more flexible data management in the field.

Once data collection was complete, the team reviewed all responses, looked for patterns across answers, and organized findings into themes. Summary data was used to support this analysis. The full dataset is included in the Appendix.

How We Worked With Open-Ended Responses

Some survey questions asked community members to answer in their own words. These open-ended responses gave people a chance to share things that could not be captured in a multiple-choice question. It is important to note that open-ended responses reflect individual voices. **All quotes are shared without identifying who said them.**

To make sense of these responses, the team read through all of the answers and looked for ideas that came up more than once. When several people said something similar, even in different words, that became a theme and was mentioned as, “several community members mentioned”. When something comes up only once or twice but feels important, we use language like “a number of people shared” to be clear about what the data does and does not show.

IV. Outreach & Engagement Best Practices

This section shares what worked well during outreach, what the team learned along the way, and what they would recommend for future community engagement efforts in Puna.

What Worked Well

Gift card incentives made a real difference in participation. At in-person events, anyone who completed the survey received either a gas card or a grocery store gift card. One practical note: the local gas company only sold gift cards in $20 increments, which can add up quickly. Gas cards are a strong incentive because they are immediately useful to most community members, but the cost may be a factor to plan around. Grocery store gift cards are a good alternative and tend to be available in smaller amounts. If using grocery cards, make sure the store is located in or near the community. One other important lesson: make sure you have enough cards for the whole event. Running out mid-event can create an awkward situation and may discourage participation toward the end. To avoid this, let participants know early that incentives are available while supplies last, on a first come, first served basis.

Casual, relaxed settings worked better than event environments where people were there primarily to have fun. The Makuʻu Market Emergency Preparedness Fair was one of the strongest outreach moments because people were already in a community mindset and open to conversation. The block party setting, while still valuable, was a reminder that concert-like environments can make it harder to ask people to focus on a survey.

A face-to-face, relational approach was one of the most important factors in strong participation. Community members responded well to being approached warmly and without rush. The team's local connections and approachable style built trust quickly and made people feel comfortable saying yes.

Practical setup details mattered more than expected. Having seating areas, working wifi, charged tablets, keiki area, and giveaway items all contributed to a smoother experience for community members. These things may seem small, but they made it easier for people to stop, sit down, and complete the survey.

Building on existing work improved the survey. Rather than starting from scratch, the team connected with Sustainable Molokaʻi and drew from questions that had already been tested in a similar community context. This collaborative approach strengthened the survey and honored the work others had already done.

Protecting anonymity was a deliberate and important choice. Puna has experienced a lot of surveys and data collection over the years, and the team was aware that community members may have concerns about how their answers could be used or traced back to them. Making the survey fully anonymous was a way of building trust and creating a safer space for honest responses.

Culturally Grounded Strategies

The team left space for people to answer in their own words. Rather than forcing every question into a multiple-choice format, open-ended questions were included so community members could share what Puna means to them and what they want for its future in their own language and framing. This allowed different cultural meanings and visions to come through naturally.

Including original place names and ahupuaʻa names across Puna was one of the strongest cultural components of the survey. Ahupuaʻa are traditional land divisions in Hawaiʻi that run from the mountains to the sea, and many in Puna still identify strongly with these names and boundaries. Seeing those names in the survey signaled to community members that their place and their identity were being respected.

The outreach style was relational, not transactional. The team approached people the way you would approach a neighbor, not the way a salesperson approaches a customer. This felt more aligned with how community members in Puna naturally interact with each other, in a "talk story" fashion.

The team drew from community knowledge rather than outside expertise. Adapting questions from the Sustainable Molokaʻi team and talking story with others before finalizing the survey meant that the questions reflected real community experience, not just what outside planners thought to ask.

Recommendations for Future Engagement

Set up a keiki area. Having a small table with play-doh or simple activities for children made it much easier for ʻohana to stop and complete the survey without feeling rushed. This is a simple addition that makes a big difference for families. The keiki area had blank cards, crayons, and play-doh for keiki to keep busy.

Always have seating available. A comfortable place to sit changes the experience entirely. People are far more likely to take the time to complete a survey when they are not standing in the sun or trying to balance a tablet in a crowd. The seating area also drew in participants as they were seen with tablets in a relaxed setting.

Do not run out of incentives. Plan for more gift cards than you think you will need, and have a system for tracking when supplies are running low. Incentives for the events also included branded t-shirts, which some participants preferred over a gift card.

The survey was also shared online through social media and direct links to friends, neighbors, and family in Puna. Only a small number of responses came in through that channel. This suggests that the gift card incentive played a significant role in motivating people to complete a survey of this length. For future engagement, the team recommends keeping incentives tied to in-person participation rather than assuming online sharing will drive strong response rates on its own.

Consider translating the survey into additional Pacific Islander languages. Puna is home to community members from across the Pacific, and offering the survey in other languages would make participation more accessible and send a clear message of inclusion. The team may want to consult with local community organizations to identify which languages would be most useful.

Reach out to kūpuna. Consider hosting a dedicated in-person session with kūpuna, using a paper copy of the survey. Older community members may not be comfortable with tablets or online forms, and a supported setting with a paper option would allow their voices to be included more fully. The team did provide a QR code which was linked to the survey that participants could take and fill out at a later time, but this still would not replace the consideration of a paper copy.

Education. Consider putting together a simple handout that covers the history of the occupation of Hawai‘i and how it has shaped land use, economic development, and who controls energy resources today. The handout could also cover current renewable energy sources available in Puna, who makes decisions about energy on Hawai‘i Island, and what options exist for community ownership and involvement. The survey should also include a question asking whether participants would like to receive more educational resources as a follow-up, so that engagement does not end when the survey does.

V. Engagement Activity Log

The table below is a log of all outreach and engagement activities conducted as part of this project.

Date	Location	Type of Engagement	Participants	Notes
April 26, 2026	Maku‘u Market — Emergency Preparedness Fair, Puna	Tabling / Survey	~100	CVS and KTA gift cards provided
May 8, 2026	Activate Puna Block Party, Pāhoa	Tabling / Survey	~121	CVS cards and partial KTA cards provided
May 13, 2026	Kea‘au High School Cougar Night Market	Tabling / Survey	~110	Safeway cards and remaining KTA cards provided
May 15, 2026	Private School, Middle School Classroom, Puna	Classroom Survey	6	Candy provided in place of gift cards

Date	Location	Type of Engagement	Participants	Notes
Ongoing	Online — Social Media and Direct Links	Digital Outreach / Survey	~3	Shared via social media and personal networks
		Total Responses	**340**	

VI. Participant Data

A total of 340 community members participated in this survey. The tables below show where participants live in Puna, how long they have lived here, which generation they belong to, their ethnicity, household size, and housing situation.

Community members came from **24 different neighborhoods** across Puna. The most responses came from the Keaʻau and Hawaiian Paradise Park area, which is close to where the in-person outreach events were held. Hawaiian Paradise Park, known locally as HPP, is one of the largest residential communities on Hawaiʻi Island, with a 2020 census population of nearly 15,000.[1] While there is no single official ranking, HPP is widely said to be one of the largest subdivisions in the United States, with over 8,800 lots spanning more than 15 square miles. **About one in three participants has lived in Puna for more than 20 years or was born and raised here.** Another quarter have lived here between one and five years. The survey reached people of all ages, and **about one in four participants was from Gen Z or Gen Alpha, which means younger voices are well represented in these findings.**

Neighborhood / Community

Neighborhood / Community	Number of Participants
Keaʻau — HPP (Hawaiian Paradise Park)	90
Pāhoa Town	31
Keaʻau	29
Waikaheula (Hawaiian Beaches)	26
Waikahekahe Iki (Ainaloa)	24
Keaʻau — Orchidland Estates	20
Other	20
Hawaiian Acres (Ōlaʻa)	14

Neighborhood / Community	Number of Participants
Puʻua (Nanawale)	14
Mountain View	13
Kurtistown (Ōlaʻa)	10
Seaview (Keauohana)	8
Keahialaka (Leilani Estates)	7
Kalapana	7
Opihikao	6
Fern Forest (Ōlaʻa)	4
Waʻawaʻa	3
Glenwood (Ōlaʻa)	3
Fern Acres (Ōlaʻa)	2
Kaimū	2
Makuʻu Homestead	2
Pohoiki	2
Kehena (Keauohana)	1
Eden Rock (Ōlaʻa)	1
Total	**340**

Years Lived in Puna

Years Lived in Puna	Number of Participants
Less than 1 year	14
1–5 years	87
6–10 years	62
11–20 years	67
More than 20 years	46

Years Lived in Puna	Number of Participants
Born and raised here	61
Total	**337**

Generation

Generation	Number of Participants
Gen Alpha (born 2013 or later)	10
Gen Z (born 1997–2012)	80
Millennial (born 1981–1996)	92
Gen X (born 1965–1980)	102
Baby Boomer (born 1946–1964)	52
Silent Generation (born 1928–1945)	3
Total	**339**

Ethnicity

Ethnicity in Puna is complex, and the survey reflects that. Community members could select more than one ethnicity, and many did. About half of participants identified as White or Caucasian, about four in ten identified as Hawaiian or Part-Hawaiian, and about a third identified as Asian or Pacific Islander. Many participants selected more than one of these, which speaks to the multiracial and multicultural reality of who lives in Puna today.

Ethnicity (select all that apply)	Number of Participants
White or Caucasian	168 (49%)
Hawaiian or Part-Hawaiian	143 (42%)
Asian or Pacific Islander	118 (35%)
Hispanic or Latino	35 (10%)

Ethnicity (select all that apply)	Number of Participants
Other	22 (6%)
Native American or Alaska Native	13 (4%)
Black or African American	7 (2%)
Prefer not to say	5 (1%)
Total responses: 340	

Note: Percentages are based on 340 total participants. Because community members could select more than one ethnicity, percentages will not add up to 100%.

Household Size

Household Size	Number of Participants
1 (just me)	31 (9%)
2–3 people	141 (41%)
4–6 people	133 (39%)
7 or more people	31 (9%)
Prefer not to say	3 (1%)
Total	**339**

Housing Situation

Housing Situation	Number of Participants
Own	209 (61%)
Rent	71 (21%)
Living with family / no cost	43 (13%)
Other situation	8 (2%)
Prefer not to say	5 (1%)

Housing Situation	Number of Participants
Houseless / transitional	1 (0%)
Total	**337**

Vibrant Hawai‘i Indicators

As part of this survey, community members were asked to rate the current state of seven Vibrant Hawai‘i Indicators in Puna. These indicators were developed by Vibrant Hawai‘i through a community-driven process that began in 2019, when community members across Hawai‘i Island came together in regional forums to draw their vision of a vibrant Hawai‘i and score where things stood today. From those conversations, seven indicators emerged that reflect what communities said matters most.

Each indicator is scored on a 4-point scale: 1 = Terrible, 2 = Bad, 3 = Good, 4 = Vibrant. Vibrant Hawai‘i collects these scores annually across the island. Including them in this survey gives us a snapshot of how Puna community members felt about each indicator at the time of this engagement.

Indicator	Definition	Avg Score	Terrible	Bad	Good	Vibrant
Living Aloha	Being in harmony with our ‘āina, community, and ourselves	3.14	3	31	203	83
Belonging	Building relationships to place and people so we can care for and be cared for	3.05	4	48	193	73
Get Chance	Access to equitable systems that promote choice and prosperity	2.74	13	106	142	50
Get Choice	The ability to take ownership of your future and contribute to collective abundance	2.81	10	90	156	52
Resilience	The ability to adapt to change and adversity without being uprooted from what matters	2.96	7	66	166	68

Indicator	Definition	Avg Score	Terrible	Bad	Good	Vibrant
Strong ʻOhana	ʻOhana as a pillar of support through aloha, belonging, and resilience	3.22	5	34	156	113
Thriving Community	Opportunities for individuals and ʻohana to contribute toward community-driven solutions	2.98	8	66	158	75

Note: Not all 340 survey participants answered this question. Response counts per indicator range from 307 to 320.

Of all seven indicators, community members in Puna rated Strong ʻOhana and Living Aloha the highest. This reflects a community that feels a strong sense of family and connection to place. Get Chance and Get Choice scored the lowest, suggesting that while community bonds are strong, access to opportunity and systems that support people's ability to shape their own futures feels like an area where more work is needed.

VII. Relevant Historical & Cultural Context

Before presenting the findings, it is important to provide some historical, cultural, and political context about Puna and the people who call it home. Community perspectives on energy, resilience, land, and development do not exist in isolation. They are shaped by generations of lived experience, cultural relationships to place, and differing understandings of Hawaiʻi's history, political, and legal status. Understanding this context is essential to understanding concerns, priorities, and aspirations expressed by community members throughout this report.

The Term "Native Hawaiian"

The words we use matter because they shape how we understand history, identity, and the challenges communities face today.

The term "Native Hawaiian" is commonly used by the United States to describe the Aboriginal Hawaiian people as an Indigenous minority group within the United States, similar to Native American tribes. This view sees Hawaiʻi as a place that was colonized and became part of the United States, and Hawaiians as Indigenous people living within a country not of their own making.

However, some Hawaiian scholars, including David Keanu Sai, argue that this description does not fully explain Hawaiʻi's history. They point out that the Hawaiian

Kingdom was an internationally recognized independent country beginning on November 28, 1843, and that the overthrow of its government in 1893 did not legally end the existence of the Hawaiian State [15].

From this perspective, calling Hawaiians only an Indigenous or ethnic group can hide the fact that Hawai‘i was once a sovereign country with its own government. It can also shift attention away from questions about the overthrow of the Hawaiian Kingdom and the effects that event continues to have today. For many Hawaiians, this is more than a disagreement about words. It affects how people understand land rights, government, identity, and economic development in Hawai‘i.

For the purposes of this report, the term "Aboriginal Hawaiian" will be used when referring to the original people of Hawai‘i. This follows the language used by Princess Bernice Pauahi Bishop, who established her trust to support the education of Hawaiian children and gave preference to those of "pure or part aboriginal blood."[14]

The Place of Puna

Ancient Hawaiians and current Hawaiians, both aboriginal and non-aboriginal, hold Puna as one of the most sacred places in all the islands. As the easternmost point at Cape Kumukahi (AKA Ha‘eha‘e) of Moku o Keawe (Hawai‘i Island), it is where the day begins. The Moa‘e (northeast trade winds) arrive here first, and the ua (rain) falls over Puna before reaching anywhere else. Puna is the home of Pele, the volcano deity, whose home is at Kīlauea and her presence is felt in the lava flows and the land itself. Traditional chants honor Puna’s forests, winds, heat, and deep connection to life and creation cycles. The knowledge, stories, hula, and traditional practices of Aboriginal Hawaiian families in Puna have been kept alive for generations and continue to be passed down today.

Scholar Davianna Pōmaika‘i McGregor, who has studied the cultural history of Puna, describes how place is central to Hawaiian identity. A place gives a person their history, the history of their family, and the history of their people. For many in Puna, this connection to the land is not just history, it is living and present.

Ahupua‘a and Place Names

Puna is made up of roughly 60 ahupua‘a, which are traditional land divisions that run from the mountains to the sea. These were not just boundaries on a map. They organized how communities fished, farmed, gathered water and medicine, and cared for the land together. People knew which ahupua‘a they lived in, and that knowledge connected them to their place, their neighbors, and their responsibilities to the land.

Much of modern Puna is covered by subdivisions that were built in the last 50 to 60 years with little attention to these traditional boundaries or Hawaiian place names. Many

community members grow up not knowing which ahupuaʻa they live in. In response, researchers at UH Hilo and Hawaiʻi Community College worked together on the Puna Ahupuaʻa Awareness Project. They created a detailed map of all the ahupuaʻa that make up the district of Puna. The map is available to the public at hilo.hawaii.edu/sdav/ahupuaa.php. The goal is to help people in Puna reconnect with the traditional names and boundaries of the land they call home.[2]

Occupation, Land Transformation, and Economic Development in Puna

To understand Puna today, it is important to understand some of the major changes that happened in Hawaiʻi after the overthrow of the Hawaiian Kingdom in 1893.

Before the overthrow, Hawaiʻi was an internationally recognized country with its own government, land systems, and economy. Many decisions about land and resources were guided by the goal of caring for both people and ʻāina. After the overthrow and the expansion of U.S. control, land and economic priorities began to change. Large areas of land were used for plantations, military purposes, tourism, and real estate development. These changes affected communities throughout Hawaiʻi, including Puna.

In Puna, many large areas of land were divided into subdivisions and sold, often with little long-term planning for roads, utilities, healthcare, or emergency services. Over time, this contributed to some of the challenges the district faces today, including housing insecurity, environmental impacts, limited infrastructure, and economic dependence on outside industries. Many Aboriginal Hawaiian families also became separated from ancestral lands and from traditional ways of providing for their families through fishing, farming, and caring for natural resources.

At the same time, Puna has remained a place of strong cultural identity and community resilience. Many families continue to practice aloha ʻāina, pass down ʻike kūpuna (ancestral knowledge), and work together on projects that strengthen food security, cultural traditions, and local economic opportunities.

Understanding this history helps explain why many people in Puna care deeply about land, community decision-making, and the future of the district. The challenges Puna faces today, and the solutions many community members support, are closely connected to questions of land, governance, identity, and the long-term impacts of the overthrow of the Hawaiian Kingdom.

The 2018 Eruption

On May 3, 2018, lava broke through the ground in the Leilani Estates neighborhood, beginning what would become the most destructive volcanic eruption in Hawaiʻi in at least 200 years. Over the next several months, 24 cracks in the earth

opened across lower Puna and began pouring out lava. By the time the eruption ended, it had covered more than 8,700 acres, buried 30 miles of roads, destroyed over 700 homes and buildings, and forced 2,500 to 3,000 community members to leave their homes, sometimes with only a few hours' notice.[3]

Entire neighborhoods were lost. Leilani Estates, Lanipuna Gardens, Kapoho Vacationland, and Kapoho Beach Lots were covered by lava. The beloved Kapoho Bay and its tidepools were destroyed. The Ahalanui warm ponds, a cherished gathering place for families and a resource for those who fish and swim, were gone.[4] **About one in four community members directly affected by the eruption were living below the poverty line.**[5] Damage to public roads, waterlines, and other infrastructure was estimated at $236.5 million.[6]

One loss that Puna is still living with today is the Pohoiki boat ramp. Lava from the eruption sent sand, rocks, and debris down to the coastline, filling in Pohoiki Bay and cutting off the only boat ramp between Hilo and South Point. Pohoiki had been a gathering place for families, lawai‘a (fishermen), surfers, and swimmers for generations. Families fished there for food. Commercial fishermen depended on it to earn a living. Since the eruption, more than half of the fishermen who used to launch at Pohoiki have sold their boats. In 2025, a $9.28 million project to dredge a channel and reopen the ramp was completed, but it failed within days due to natural ocean swells refilling the channel with sand and debris. As of the writing of this report, the ramp is still not accessible, and long-term solutions are still being worked out.[7]

Even through all of this loss, the community of Puna showed up for itself. Neighbors organized to shelter and supply families who had lost everything, care for animals, and support each other. That spirit is still part of who Puna is today.

Geothermal Energy in Puna: A History of Tension

Any conversation about energy in Puna has to include the long and complicated history of geothermal energy in the district.

Hawai‘i's first geothermal test well was drilled on Kīlauea's East Rift Zone in 1976. From the start, it was met with strong opposition. Many Aboriginal Hawaiians saw drilling into Pele's domain as a desecration of sacred land. Community groups, cultural practitioners, and organizations like the Pele Defense Fund organized protests, gave testimony at public hearings, and filed lawsuits. In 1985, a major flashpoint came when the state traded about 27,800 acres of public land at Wao Kele o Puna, the largest remaining native lowland wet forest in Hawai‘i, to the Campbell Estate for geothermal development.[8] In 1990, more than 1,000 protesters gathered at the drilling site. Over 130 people were arrested that day.

In 1992, the Hawai‘i State Supreme Court ruled in Pele Defense Fund v. Paty that the state has a duty to protect "Native" Hawaiian customary practices on public trust lands. This was a landmark decision for "Native" Hawaiian rights. The Campbell Estate

abandoned its geothermal project in 1994. In 2007, Wao Kele o Puna was purchased by the Office of Hawaiian Affairs and protected permanently.[9]

The Puna Geothermal Venture plant, known as PGV, opened in 1993 and today provides about 19% of Hawai‘i Island’s electricity.[10] The plant has continued to face opposition from the community since its inception. Community members living near PGV have raised concerns about health impacts from hydrogen sulfide gas emissions for many years. **In 2016, the U.S. Environmental Protection Agency reached a settlement with PGV after finding that the company had failed to take necessary steps to prevent accidental releases of hydrogen sulfide in 2013. PGV agreed to pay a civil penalty of $76,500.**[11] Health studies on the impacts of geothermal operations on Puna’s community have found that risks exist, but the full extent of those impacts has not been fully resolved.

The 2018 eruption temporarily shut down PGV after lava flows surrounded the facility. It did not reopen until November 2020.

The debate over geothermal energy in Puna is not resolved. Some community members see it as a violation of sacred land and a health risk. Others see it as a path to lower electricity costs and energy independence for Hawai‘i. This is a real, longstanding tension in Puna, and it is important background for understanding how community members think and feel about energy development today.

What Makes Puna, Puna? What Should Never Be Lost or Compromised?

Community members were asked to choose from a list of things that make Puna unique. They could select more than one answer. **The results show strong, consistent agreement across the board.**

What should never be lost or compromised	Responses	% of 340
The land, forests, and natural environment (‘āina)	296	87%
Native Hawaiian culture, language, and practices	256	75%
Agricultural land and food systems	234	69%
Long-time community relationships and social fabric	219	64%
Ability to live off-grid and self-sufficiently	216	64%
Spiritual and sacred places (wahi pana)	204	60%
Access to affordable land and housing	201	59%
Self-determination and local decision-making	184	54%

Taken together, these responses reflect a community that sees itself as deeply connected to place. Not just living in a location, but living with and from the land, in relationship with the people around them, and in continuity with the culture and values that came before. This is what scholars and community practitioners describe as place-based knowledge: the understanding that who we are is inseparable from where we are.

A few community members also wrote in their own answers. One mentioned ocean access. Another wrote about the live and let live attitude of Puna. Another mentioned the arts. These additions, while fewer in number, speak to the same underlying theme: that Puna holds something that feels different, and that difference is worth protecting.

Vision for the Future

Community members were also asked an open-ended question: what is your vision for the future of Puna, for your children and grandchildren? A total of 309 community members responded in their own words.

Because these are open-ended responses, they reflect individual voices and perspectives. Not everyone said the same thing. But several ideas came up again and again, and together they paint a picture of what community members hope Puna can be.

The most common thread running through the responses was the ʻāina. Many community members wrote about wanting the land to be protected, the forests to stay standing, and the natural environment to remain intact for future generations. This was not just about scenery. It was about survival, sustenance, and identity.

> *"For the ʻāina and the people to thrive."*
>
> *"I want Puna to stay forested."*
>
> *"Community control of ea and ʻāina."*

These responses echo the values expressed in the previous question. The land is not separate from the community. It is part of it.

Community, ʻohana, and connection to each other came up nearly as often. Many community members described wanting Puna to be a place where people look out for one another, where families can stay together across generations, and where the bonds between neighbors remain strong.

> *"A place where community works together to create a safe, accessible, and inclusive space for everyone to thrive."*

"People who value 'ohana, community and live aloha, where locals and Hawaiians are the leaders and transplants come to support that way of life, not to cause housing inflation and price them out."

"My vision is that my children and grandchildren can choose to stay in Puna, afford to buy a home, work in the professions they choose, maintain their connection to the 'āina, feel support in continuing cultural practices, and live in safe and respectful places."

Culture and Hawaiian identity came up in many responses as something community members want to see carried forward.

"Puna should be a place where culture thrives, and where these wahi pana are known. I would hope for my keiki to understand the deep history of this place."

"For the keiki to learn more about our culture and agriculture."

"I hope my keiki will have the opportunity to live in Puna, close to their 'ohana."

Self-sufficiency and sustainability came up repeatedly as both a value and a practical goal.

"To continue to be able to be self sufficient, grow our food, collect our water, generate our own power, connect with our communities."

"A clean self-sufficient grid independent community with food security."

"Permaculture and self-sustaining sovereignty."

Affordability was another recurring concern. Many community members wrote about wanting to stay in Puna, or wanting their children and grandchildren to be able to stay, without being priced out.

"Not to be priced out of our home."

"Keeping Puna affordable for the next generation."

"That my children and grandchildren can affordably live and work here."

Safety also came up in a significant number of responses. Community members wrote about wanting safer streets, less drug use, and less homelessness, particularly in and around Pāhoa Town. This was not a fringe concern. It showed up across many different responses and reflects something real about daily life in Puna that community members want to see change.

It is worth noting that not everyone shared the same vision. Some community members wrote that they want Puna to stay exactly as it is. Others said they want better roads, a hospital closer to home, more stores, and improved services. Both of these things came up, and both are worth noting. This tension between preserving what is here and improving what is lacking is real, and any planning for Puna's future will need to hold both of those things at once.

Finally, a number of community members wrote specifically about energy, even though this question was not directly about energy. They described wanting energy independence, the ability to generate their own power, and freedom from dependence on the grid.

> *"Peace throughout the land, prosperity for the people, food, abundance, water, security, natural energy sources."*
>
> *"Energy and food sovereignty."*

What This History Means for Planning

The history of Puna holds important lessons for anyone making decisions about energy, land, and development here.

Over the past several decades, large parts of Puna were developed and subdivided with little input from the community. Traditional land boundaries and cultural practices were largely ignored, and long-term infrastructure needs were not fully planned for. Today, people in Puna still live with the results of those choices: roads with no emergency alternatives, limited access to hospitals and services, and neighborhoods built in areas with high volcanic risk.

The history of geothermal energy in Puna shows what can happen when development moves forward without earning community trust first. Decades of protests, lawsuits, and ongoing health concerns did not start from nowhere. They grew from a pattern of decisions being made without the community. That history is still present in how many people in Puna think and feel about energy development today.

The 2018 eruption revealed both how vulnerable Puna's infrastructure is and how strong its community is. Years later, recovery is still unfinished. The Pohoiki boat ramp is still not open. Roads and services that were lost have not fully come back.

All of this points to a few clear things that matter for planning. Community trust has to be built before decisions are made, not after. Infrastructure has to be designed with natural hazard risk in mind. And any development that touches Puna's land, culture, or resources needs to include the people who live here from the very start.

VIII. Impacts of Power Outages and Community Preparedness

Power outages are not a rare or distant concern for people in Puna. They are a regular part of life here. The Puna district sits at the end of long transmission lines that run through dense forest, along roads with few alternatives, and through areas exposed to high winds, heavy rain, and volcanic activity. When something goes wrong, it often takes a long time to fix.

The March 2026 Kona Low storm, which hit just weeks before this survey was conducted, left about 16,000 Hawaiian Electric customers on Hawai‘i Island without power, with Puna among the hardest hit areas. Hawaiian Electric warned community

members to plan for prolonged outages lasting possibly days, and restoration was slowed by fallen trees, downed lines, and flooded roads blocking access to the hardest hit neighborhoods.[12] This was not an isolated event. After Tropical Storm Iselle struck Puna in August 2014, some community members were without power for over two weeks. Full power restoration across the island took nearly five weeks.[13] These storms are part of a pattern that Puna has lived with for a long time, and the survey data reflects that lived experience.

What Became Difficult or Dangerous During Outages

The survey asked community members to select everything that became difficult or dangerous for them or their ʻohana during recent power outages, including storm-related outages.

The most common impact was keeping food from spoiling. Seven in ten community members selected this. **The second most common was water access, selected by about half of all participants.** This finding is specific to Puna in an important way. Many households in Puna rely on electric well pumps or catchment systems to get their water. When the power goes out, the water stops too.

Nearly one in four community members said that power outages create a direct medical risk for someone in their household. Safety and lighting at night and cooking and preparing food were each selected by about 46% of community members. Communication, including getting emergency information and reaching family, was selected by 45%. Caring for kūpuna (elders) or keiki (children) was selected by 39%, and medical equipment or medications that require power was selected by 24%.

Only 22% of participants said their household was not significantly impacted. That means the large majority of community members in Puna have felt the effects of outages in real, practical ways.

A small number of community members wrote in additional impacts. A few noted that they are off-grid and were not affected. One community member shared that their roof leaked and their ceiling partially collapsed during a storm event. These individual responses, while few, speak to the range of experiences across Puna.

Impact During Power Outages	Responses	% of 340
Keeping food from spoiling / refrigeration	240	71%
Water access (well pumps, catchment systems)	172	51%
Safety and lighting at night	158	46%
Cooking and preparing food	157	46%
Communication — getting emergency information or reaching family	154	45%

Impact During Power Outages	Responses	% of 340
Caring for kūpuna (elders) or keiki (children)	134	39%
Working from home or losing income	87	29%
Medical equipment or medications that require power	81	24%
Our household was not significantly impacted	75	25%
Running a small business or farm	56	16%

How Prepared Do Households Feel

The survey asked community members how well prepared their household is for disasters as seen in the table below. These numbers suggest that most community members in Puna are taking some steps toward preparedness, but many feel they still have room to go. The gap between where people are and where they want to be shows up clearly in the next question.

Level of Preparedness	Responses	% of 330
Somewhat prepared	220	65%
Well prepared	89	29%
Not prepared	21	6%
Total	**330**	

Note: 330 of 340 participants answered this question.

What Would Help Community Members Be Better Prepared

The survey asked community members to select everything that would help them and their households be better prepared for disasters and power outages.

The top response, selected by 59% of participants, was access to affordable backup power, including generators, solar systems, and battery storage. This was the most selected option by a wide margin. It also connects directly to the next section of this report, which looks at what community members want and need to know about energy options available to them.

Access to emergency food and water storage supplies came second at 44%. Financial assistance to make home improvements for resilience was third at 36%. A community tool or equipment lending program was selected by 35%, and knowing which neighbors can be counted on for mutual support was selected by 34%.

These responses reflect something important. The most common answers are not only about individual households getting better equipped. They are also about community resources, shared tools, and neighbor networks. This mirrors the values around self-sufficiency and community connection that came through in Section VII. Community members in Puna are not just asking for help from outside. They are asking for the tools and connections to help themselves and each other.

Only 14% of participants said they feel well prepared at this time.

What Would Help With Preparedness	Responses	% of 340
Access to affordable backup power (generator, solar, battery)	200	59%
Access to emergency food and water storage supplies	149	44%
Financial assistance to make home improvements for resilience	124	36%
A community tool or equipment lending program	118	35%
Knowing which neighbors I can count on for mutual support	115	34%
Connections to existing programs or resources I may not know about	111	33%
More information about what to do before, during, and after an outage	106	31%
Help creating a household emergency plan	101	30%
Knowing my evacuation routes and local emergency resources	84	25%
A community emergency preparedness group in my neighborhood	84	25%
More accessible emergency alerts and communication in my area	79	23%
Support for household members with medical or mobility needs	64	19%
I feel well prepared at this time	47	14%

What Causes Power Outages in Puna

The survey asked community members to select the most common causes of power outages in their neighborhood. The results point clearly to one primary cause: trees and vegetation on power lines.

Eight in ten community members selected trees or large branches falling on power lines. Seven in ten selected storm or high wind damage to poles or lines. These two responses reflect something specific about living in Puna, where dense forest, heavy rainfall, and frequent storms create ongoing pressure on power infrastructure.

Vehicle accidents involving utility poles were selected by 36%. Overgrown vegetation on neighboring or vacant properties was selected by 24%. This second finding is worth

noting separately. It points not just to weather events but to a land maintenance challenge in Puna, where many lots sit vacant or are not regularly cleared, and overgrown trees and brush can bring down power lines. This is a community-level issue, not just a utility issue, and it came up elsewhere in the survey as well.

Only 9% of community members said they are not sure what causes their outages, which suggests that people in Puna have a clear and grounded understanding of what is going wrong with their power infrastructure.

Cause of Power Outages	Responses	% of 340
Trees or large branches falling on power lines	279	82%
Storm or high wind damage to poles or lines	242	71%
Vehicle accidents involving utility poles	122	36%
Overgrown vegetation on neighboring or vacant properties	81	24%
Equipment or hardware failures on the line	71	21%
Animals damaging lines or equipment	41	12%
I'm not sure of the cause	32	9%
I haven't experienced outages in my area	11	3%

IX. Community Energy Information Needs

One of the most important findings in this entire survey is how much community members in Puna want to learn about energy.

The survey asked community members what else they need to know to feel confident making decisions about energy in Puna. **Only 8% of participants said they feel they already have enough information. That means nine out of ten community members said they want to know more.**

This is not a small gap. It is a clear and consistent signal across the community that energy education is needed and wanted. At the same time, the responses show that community members are not starting from zero. They are asking specific, informed questions about real options and real decisions. The appetite for information is broad and it is practical.

The most selected response was solar, wind, and other renewable energy options available in Puna, chosen by 56% of participants. Battery storage and backup power systems came second at 48%. How the electric grid works was selected by 42%. How to reduce energy costs was selected by 37%.

Microgrids and community energy systems and what developers are currently proposing for the area were each selected by about one in three participants. Our rights and options as a community were selected by 32%, and energy and its connection to water and agriculture was selected by 31%. How to participate in energy decision-making was selected by 28%, and energy justice and community rights was selected by 26%.

Notably, about one in three community members selected all of the above. This is a strong signal. For many people in Puna, the need is not about one specific topic. It is about understanding the whole picture.

A few community members also wrote in their own responses. One asked specifically about how much power Puna produces in a 24-hour cycle. This kind of question reflects the same values we heard throughout the survey: community members want to understand not just what energy costs them, but how the energy system around them actually works and what role Puna plays in it.

Taken together, these responses show that community members in Puna are ready for a real conversation about energy. They want to understand their options, know their rights, and be part of the decisions being made about their future. That is exactly what this engagement process was designed to support.

Information Needed to Make Confident Energy Decisions	Responses	% of 340
Solar, wind, and other renewable options available to us	192	56%
Battery storage and backup power systems	163	48%
How the electric grid works	144	42%
How to reduce energy costs	125	37%
Microgrids and community energy systems	116	34%
What developers are currently proposing for our area	115	34%
All of the above	111	33%
Our rights and options as a community	109	32%
Energy and its connection to water and agriculture	105	31%
How to participate in energy decision-making	94	28%
Energy justice and community rights	89	29%
I feel I have enough information right now	27	8%

X. Energy Costs, Current Conditions, and Health Concerns

To understand what energy means to people in Puna, it helps to start with where things stand today. This section looks at what community members are currently paying for electricity, how concerned they are about those costs, what they have already done to reduce their usage, how they feel about the environmental and health impacts of current electricity production, and what they hope energy could look like for Puna in the future.

What Community Members Are Currently Paying

The survey asked community members about their average monthly electricity costs as shown in the table below. Twelve percent of participants pay $50 or less each month. This group likely includes community members who are off-grid or generate most of their own power.

Notably, 14% of participants said they do not know what they pay each month. Knowing your bill is a basic starting point for making decisions about energy, and not everyone is there yet.

Average Monthly Electricity Cost	Responses	% of 340
$50 or less	42	12%
$50–$150	61	18%
$150–$250	70	21%
$250–$350	54	16%
$350–$450	36	11%
$450 or more	23	7%
I don’t know	49	14%

When asked about their monthly electricity usage in kilowatt hours, 58% of participants said they do not know. This is not surprising since most people do not read their bills in technical terms, but it reflects a real gap in energy literacy that any community education effort should address.

Average Monthly Electricity Usage	Responses	% of 340
Less than 500 kWh	35	10%
500–1,000 kWh	74	25%
More than 1,000 kWh	28	8%
I don’t know	196	58%

How Concerned Are Community Members About Energy Costs

The survey asked community members to rate how concerned they are about the cost of their electric bill on a scale of 1 to 5 as shown in the table below.

These numbers show that for the majority of community members in Puna, the electric bill is a real source of stress. It is not a minor concern.

Concern About Electric Bill	Responses	% of 340
5 — Extremely concerned	55	16%
4 — Very concerned	69	22%
3 — Somewhat concerned	83	24%
2 — Slightly concerned	54	16%
1 — Not at all concerned	46	14%
I don’t know	29	9%

Steps Community Members Have Already Taken

The survey asked community members what they have already done to reduce their electricity usage. The results show that many people in Puna are actively trying to manage their energy use.

The most common step, taken by 62% of participants, was using fans instead of air conditioning. This reflects the reality of life in a place that rarely gets cold enough to need heating but can get warm enough to want cooling, and where running air conditioning is often simply too expensive. Energy-efficient lighting was second at 56%. Taking shorter showers was selected by 45%, which speaks to the connection between electricity and water that is specific to Puna, where electric pumps power many household water systems. Installing Energy Star appliances was selected by 41%, and solar water heating by 23%.

The write-in responses added texture to this picture. Several community members mentioned living entirely off-grid. Others described using propane for cooking, water heating, and laundry. Several mentioned solar panels and battery systems. A few described simple habits like turning off lights and unplugging appliances. One community member noted they use high-power appliances late at night when electricity is cheaper.

These responses show a community that is already resourceful and proactive. **Many people in Puna are not waiting for outside solutions.** They are already finding ways to manage.

Steps Taken to Reduce Electricity Usage	Responses	% of 340
Use fans instead of air conditioning	210	62%
Installed energy efficient lighting	189	56%
Take shorter showers	154	45%
Installed Energy Star appliances	141	41%
Installed solar water heating	79	23%

Concern About Environmental and Health Impacts

The survey also asked community members how concerned they are about the environmental and health impacts of how electricity is currently produced.

The results are striking. **About 83% of participants said they are somewhat, very, or extremely concerned.** This finding sits alongside what we heard in Section VII about the history of geothermal energy in Puna and the long record of community concern about hydrogen sulfide emissions and the health impacts of PGV. It also reflects a broader awareness about fossil fuels, pollution, and the health of the ʻāina. For many community members in Puna, energy is not just an economic issue. It is a health and environmental one too.

Concern About Environmental and Health Impacts	Responses	% of 340
5 — Extremely concerned	76	25%
4 — Very concerned	109	32%
3 — Somewhat concerned	98	29%
2 — Slightly concerned	22	6%
1 — Not at all concerned	11	3%
I don’t know	18	5%

What Energy Success Looks Like for Puna

The survey asked community members to select from a list of what energy success would look like for Puna. They could choose more than one answer. The results show a community with a clear and consistent vision.

Eight in ten community members, 81%, selected energy that is affordable for every household. This was the top response by a wide margin. It is the single clearest signal in this entire section: affordability is the foundation that everything else is built on.

About two in three selected energy that protects and supports the ʻāina and energy that is resilient, meaning the community can still function when the grid goes down. About 64% selected energy that is reliable with no more outages disrupting daily life.

A few community members wrote in their own answers. One wrote simply: “Free and sustainable.” Another wrote: “Access to equipment for off-grid.” These additions reflect the same values: affordability, self-sufficiency, and local control.

Taken together, these responses paint a clear picture of what the community wants from an energy future. It is not just about switching to solar or reducing emissions. It is about building a system that is affordable, resilient, locally controlled, and connected to the land and food systems that Puna depends on.

What Energy Success Looks Like for Puna	Responses	% of 340
Energy that is affordable for every household	276	81%
Energy that protects and supports our ʻāina	225	66%
Energy that is resilient — our community can function when the grid goes down	222	65%
Energy that is reliable — no more outages disrupting daily life	217	64%
Energy that supports food and water security	203	60%
Energy that creates local jobs and keeps money in Puna	196	58%
Energy that is locally owned and controlled by our community	190	56%
Energy decisions made by and for Puna — not outside companies	181	53%

How Renewable Energy Can Support the Future

The survey asked community members an open-ended question: how can renewable energy support the future you want for Puna?

Because this was an open-ended question, the responses reflect individual voices. Not everyone said the same thing. But several themes came up again and again across the more than 270 responses.

The most common theme was lower costs and greater affordability. Many community members described renewable energy primarily as a way to bring down electric bills and reduce the overall cost of living in Puna. Several responses connected this directly to being able to stay in Puna, saying that lower energy costs could help families who are struggling to afford to remain here.

“Less helco bills allows for more food on the table and sustainable households.”

"Renewable energy can save families money and make us self sufficient. We're just not able to afford it."

"Provide a means for younger generations and families to afford to live and work in Puna."

The second most common theme was energy independence and self-sufficiency. Many community members described wanting to be free from dependence on HECO and outside energy companies. Solar was by far the most commonly mentioned technology, with many people describing wanting every home to have solar panels.

"We will not be dependent on HELCO or any other electric company."

"By giving us financial freedom from energy suppliers and sovereignty over our own power supply."

"Maintain our independence. Keep us sustainably powered off what our island produces, sun, wind, ocean so we aren't so dependent upon the mainland."

Protecting the ʻāina and the environment also came through strongly. Several community members described renewable energy as a way to keep the land clean, reduce pollution, and care for the natural environment.

"By not polluting the ʻāina."

"To able to afford AND to be in harmony with ʻāina."

"It can reduce costs and help protect the ʻāina."

A number of community members mentioned geothermal energy specifically and negatively. Several wrote "no geothermal" or "don't mess with Pele." One community member shared a particularly striking response about a recent hydrogen sulfide release at PGV:

"No geothermal!!! Community just got poisoned on Wed. Was 6 hr. 'clean out.' A dear friend went to hospital. Everyone I know coughing."

This response reflects the living history discussed in Section VII. The concerns about geothermal energy in Puna are not abstract or historical. They are present and personal for some community members.

A smaller number of responses were more open to or supportive of geothermal energy, with one community member writing that PGV provides baseline power and price stability. One response made a detailed case for nuclear energy. These perspectives, while fewer in number, are part of the full picture and worth acknowledging.

Several responses from younger community members reflected curiosity and openness rather than specific opinions. A number said they do not know enough yet and want to learn more, which connects directly to the findings in Section IX about the broad appetite for energy education.

"No idea. I need more education."

"I don't know much about it."

"I'm not sure of all the options but if renewable energy can offset monthly energy prices in a sustainable way, I'm for it."

XI. Community Participation and Representation

The survey asked community members how connected they feel to energy decision-making in Puna, whether they want to be involved, and what kinds of participation would work best for them. The responses paint a picture of a community that is engaged, willing, and ready to step up, but one that feels largely left out of the conversations that shape their energy future.

Community-Led Actions People Are Willing to Support

The survey asked community members what community-led actions they would be willing to support or participate in to improve neighborhood resilience as shown in the table below. (They could select more than one answer.)

The most selected response was checking in on kūpuna or vulnerable neighbors after storms, chosen by 49% of participants. This reflects the same values around caring for elders and looking out for each other that came through in Section VII. It also speaks to a community that already sees itself as a support network, not just a collection of households.

A few community members wrote in their own responses. One mentioned their involvement with the Pāhoa Night Market. One wrote honestly about not having enough time despite wanting to help. These responses reflect real-life constraints that any community organizing effort should account for.

Community-Led Action	Responses	% of 340
Checking in on kūpuna or vulnerable neighbors after storms	166	49%
Helping identify properties with hazardous trees or overgrowth	145	43%
Neighborhood vegetation management days (community work parties)	138	41%
A community tool-sharing or equipment lending program	127	37%
Connecting neighbors who need help with those who can provide it	125	37%
Organizing a neighborhood mutual aid network (Resilience Hub)	99	29%
Advocating to county or state officials about vegetation and access issues	89	29%
Supporting a community fund for vegetation management assistance	76	25%
I'm interested but would need more information first	73	21%

Community-Led Action	Responses	% of 340
I’m not in a position to participate right now	41	12%

Interest in a Community Vegetation and Road-Clearing Task Force

The survey also asked whether community members would be interested in a community-based vegetation and road-clearing task force, described as a trained, verified team of Puna community members authorized to safely clear hazardous trees and restore access after storms. Those who said yes were asked to provide their email address.

Nearly 100 community members provided their contact information in response to this question. That is a meaningful level of interest in a specific, practical, community-led solution to one of Puna’s most persistent infrastructure challenges. These contacts represent a real starting point for anyone looking to organize this kind of effort.

How Well Represented Do Community Members Feel

The survey asked community members how well they feel their energy priorities are currently represented by organizations working on energy issues in Hawai‘i as shown in the table below.

The most common single response was “I don’t know,” selected by 87 participants. Taken together, only about 8% of participants who answered this question said they feel mostly or fully represented. That is a small fraction of the community. The large number of “I don’t know” responses also tells its own story: many community members may not even be aware of who is working on energy issues, let alone whether those organizations are speaking for them.

How Well Represented Do You Feel?	Responses	% of 301
5 — Fully represented	8	3%
4 — Mostly represented	14	5%
3 — Somewhat represented	76	25%
2 — Slightly represented	67	22%
1 — Not represented at all	49	16%
I don’t know	87	29%

Interest in Participating in Energy Planning

The survey asked community members directly: would you like to participate in energy planning for Puna?

The most common response was “maybe, I’d like to learn more first,” 54% of all respondents. Forty-seven said yes outright, and 75 said no. That means about 68% of participants, combining the yes and maybe responses, are at least open to participating in energy planning. The large number of “maybe” responses is particularly telling. It does not reflect disinterest. **It reflects a community that wants to engage but first needs more information, more context, and probably more trust that their participation will actually matter.**

This connects directly to what we found in Section IX. Nine out of ten community members said they want to know more about energy. The “maybe” in Q35 and the information gap in Q29 are telling the same story. Community members are ready to show up, but they want to come prepared.

Would You Like to Participate in Energy Planning?	Responses	% of 306
Yes	47	14%
Maybe / I’d like to learn more first	184	54%
No	75	25%

Preferred Ways to Participate

The survey asked community members which ways of participating work best for them as shown in the table below. Participants could select more than one answer.

What stands out here is the spread. There is no single dominant channel. **Community members want to be met in multiple ways, not just one.** This has practical implications for any future engagement effort: reaching Puna well means using a mix of in-person, online, and self-paced options rather than relying on any single approach.

The strong showing for in-person talk alongside digital options also reflects what we heard throughout this survey. Community members in Puna value face-to-face connection. At the same time, many people have real constraints on their time and appreciate being able to engage on their own terms.

Preferred Ways to Participate	Responses	% of 340
Reading information online	126	37%
In-person talk story / community gatherings	124	36%
Engaging via social media	114	34%

Preferred Ways to Participate	Responses	% of 340
Watching recorded videos at my own pace	110	32%
Zoom meetings or online workshops	109	32%
Filling out surveys like this one	108	32%
A presentation to my existing community group or organization	68	22%

XII. Data to Inform a Draft Community Benefits Agreement

This section shares what community members in Puna said about energy development. It covers what kinds of development feel right, what opportunities they see, what concerns them, what would make the most difference, and what they want from any developer who comes to Puna.

These findings are meant to serve as a foundation for a Community Benefits Agreement, a formal document that spells out what a community expects from a developer before any project moves forward. The data here reflects what community members actually said. It is not a final agreement. It is a starting point built from community voice.

What Kinds of Energy Development Feel Right for Puna

Community members were asked to select the kinds of energy development that feel right for Puna. They could choose more than one. **Community-owned solar and battery storage topped the list by a clear margin.** The preference for community-scale, locally controlled options over large utility-scale development runs through this data and connects to the broader values of self-determination and local control that came through across the survey.

One in four participants said they do not know enough to make an informed decision. This connects directly to what we heard in Section IX, where nine out of ten community members said they want more information about energy options. The appetite for education is real and it shows up here too.

Geothermal came in at 20%, tied with biomass. Only 3% said none of the above feel right for Puna, suggesting that most community members are open to some form of energy development, as long as it aligns with community values.

What Kinds of Energy Development Feel Right for Puna	Responses	% of 340
Community-owned solar	163	48%
Battery storage and microgrids	152	45%
Ocean or wave energy	133	39%
Wind energy	126	37%

What Kinds of Energy Development Feel Right for Puna	Responses	% of 340
I don’t know enough to make an informed decision	90	29%
Large-scale ground-mounted solar (utility-scale)	86	25%
Energy cooperatives	85	25%
Biofuel	72	21%
Biomass or bioenergy	68	22%
Geothermal	68	22%
Hydrogen energy systems	44	13%
Micro-hydro or run-of-river hydro	38	11%
None of the above feel right for Puna	9	3%

What Opportunities Community Members See in Energy Development

Community members were asked what opportunities they see in energy development for Puna. The results show that most community members do see real potential, particularly around cost, jobs, and resilience.

Seven in ten community members selected lower and more stable electricity costs as an opportunity. That is the same value that came through in another section, where 81% said energy success means affordable energy for every household. The through-line is clear: energy development in Puna will be most welcomed when it brings costs down for the people who live here.

Opportunities in Energy Development for Puna	Responses	% of 340
Lower and more stable electricity costs for community members	241	71%
Local jobs and economic opportunity	214	63%
Greater energy reliability and resilience	187	55%
Support for food and water systems	161	47%
Reduced environmental harm from fossil fuels	155	46%
Stronger local control over our energy future	146	43%
Community ownership and revenue sharing	126	37%
I don’t see significant opportunities at this time	20	6%

What Concerns Community Members About Energy Development

Community members were asked to select everything that concerns them most about energy development in Puna. The responses show that concern is broad and consistent. **No single issue stands out above the rest.** Instead, a cluster of closely related worries came through at nearly equal strength, with the top five responses all falling between 59% and 62%.

Sacred land, outside control, profit over people, agricultural land, environmental harm, lack of voice, and displacement are all part of the same picture for many community members in Puna. The closeness of these numbers matters. **It means a developer cannot address one concern and expect the others to go away.** They all need to be taken seriously. Only 7% of participants said they have no major concerns at this time.

Concerns About Energy Development in Puna	Responses	% of 340
Projects that disturb sacred or culturally significant places	212	62%
Large utility-scale projects controlled by outside companies	208	61%
Projects that primarily benefit investors over residents	207	61%
Projects that harm or remove agricultural land	205	60%
Environmental harm to ʻāina, water, or wildlife	201	59%
Projects that lack genuine community input	181	53%
Development that displaces long-time families	169	50%
I don’t have major concerns at this time	25	7%

What Would Make the Most Difference

Community members were asked: if a renewable energy project came to Puna, what would make the most difference to your community? The responses show that community members want tangible, local benefits, not just cleaner energy.

Lower electricity bills for local community members topped the list at 76%. Any energy project that comes to Puna and does not meaningfully reduce what community members pay for electricity will be hard to justify to the people who live here.

What Would Make the Most Difference	Responses	% of 340
Lower electricity bills for local community members	259	76%
Affordable energy access for low-income households	213	63%
Local jobs and paid job training	206	61%
Support for local food and water systems	173	51%
Backup power for schools, health centers, and community sites	173	51%
Protection of ʻāina and cultural resources	156	46%
Funding for community facilities or programs	120	35%
Revenue sharing or community ownership	103	30%

What Matters Most When Evaluating a Developer

Community members were asked what matters most when deciding whether an energy developer is right for Puna. The results show that community members are looking for transparency, accountability, and genuine partnership throughout the entire process, not just at the start.

Transparent sharing of plans, timelines, and financials topped the list at 59%. Transparency and accountability were the top two priorities. Community members are not simply asking to be informed. They are asking to be partners throughout, with real mechanisms to raise concerns and real legal protections that cannot be undone.

It is also worth noting plainly that **11% of participants said they would not trust any outside developer.** That is not a fringe view. It reflects the real and historical distrust that comes from decades of decisions being made about Puna without Puna. Any energy development process that does not acknowledge and actively work to rebuild that trust will face real community resistance.

What Matters Most When Evaluating a Developer	Responses	% of 340
Transparent sharing of plans, timelines, and financials	202	59%
Genuine consultation throughout the entire project, not just at the beginning	192	56%
Clear accountability structures so the community can track progress and raise concerns at any stage	192	56%
Local people hired at wages equal to those brought from outside	174	51%
Legal agreements that protect community interests in perpetuity	166	49%
A track record of fair and accountable work in similar communities	137	40%
Community veto power over decisions that affect ʻāina or cultural resources	130	38%
Contracts that address ownership of data, images, voices, and quotes, with community approval required	129	38%
Legal agreements that cannot be changed without community consent	124	36%
Developer team members living in Puna during the project	122	36%
A community panel involved in selecting the developer	110	32%
I would not trust any outside developer	37	11%

XIII. Synthesis & Key Findings

This section brings together the major themes from across the survey and this report. It is meant to give a clear picture of what community members in Puna shared, what it means as a whole, and what it points to for anyone involved in energy planning, investment, or community benefits discussions in Puna.

What the Survey Shows Overall

Three hundred and forty community members from 24 neighborhoods across Puna took the time to share what they think, feel, and need when it comes to energy. They came from every generation, from Gen Alpha to the Silent Generation. About one in three has lived in Puna for more than 20 years or was born and raised here. The survey reached a multiracial community that reflects the real demographic complexity of Puna today.

This was not a survey of people who were already engaged in energy planning. 76% of participants said they have never participated in any energy-related activity. Most said they are not familiar with the organizations working on energy in Hawai‘i. And 9 out of 10 said they want to know more before they feel confident making decisions about energy.

What this means is that the 340 voices in this survey are largely people who have not been part of the conversation before. That makes their responses more valuable, not less.

The Land Comes First

Across nearly every question in this survey, the connection to ‘āina came first. Nearly nine in ten community members said the land, forests, and natural environment should never be lost or compromised. Two in three said energy that protects and supports the ‘āina is part of what energy success looks like. The most common concerns about energy development centered on harm to sacred places, agricultural land, and the natural environment.

This is not a political position. It is a foundational value that runs across generations, ethnicities, and neighborhoods in Puna. The ‘āina is not just scenery. For many community members in Puna, it is identity, sustenance, and responsibility. Any energy planning that does not begin from that understanding will struggle to earn community trust.

Affordability Is the Floor

If there is one finding that stands above all others in this survey, it is this: community members in Puna want energy that is affordable. Eight in ten said affordable energy for every household is what energy success looks like. Three in four said lower electricity bills would make the most difference if a renewable energy project came to Puna. **About 60% said they are somewhat, very, or extremely concerned about the cost of their electric bill right now.**

Affordability is not just one priority among many. It is the floor. Community members are already stretching to stay in Puna. They are already managing energy use in creative ways, using fans instead of air conditioning, taking shorter showers, installing efficient lighting, and in many cases going partially or fully off-grid. They are not asking to be saved. They are asking for a system that works with them instead of against them.

Any energy development that does not meaningfully reduce what community members pay for electricity will be hard to justify to the people who live here.

Self-Sufficiency and Local Control Are Core Values

The desire for energy independence came through consistently across the survey. Community members want to generate their own power, collect their own water, grow their own food, and live with less dependence on outside systems. Sixty-four percent said the ability to live off-grid and self-sufficiently is something that should never be lost in Puna. Fifty-three percent said energy decisions made by and for Puna, not outside companies, is part of what energy success looks like.

This is not a fringe view. It is a value that connects directly to Puna's history, culture, and geographic reality. It also reflects something practical. Puna sits at the end of long transmission lines, in high volcanic hazard zones, along roads with few alternatives. Self-sufficiency is not just a cultural preference. For many community members, it is a survival strategy.

Community-owned solar and battery storage topped the list of energy development types that feel right. Large-scale utility-scale projects controlled by outside companies were among the top concerns. **The preference is clear: small, local, community-controlled, and connected to the land.**

Listening Through History: How the Past Shapes Energy Conversations in Puna

The long, turbulent history of occupation, development, and geothermal energy in Puna is not background information. It is the context that shapes how community members hear and respond to any conversation about energy today. Decades of protests, lawsuits, unresolved health concerns, and a pattern of decisions being made without input from the community have left a lasting mark. The 2018 eruption, which temporarily shut down PGV and left recovery still unfinished years later, added another layer to that story.

The survey reflects this history directly. Sixty-two percent said projects that disturb sacred or culturally significant places concern them most. Sixty-one percent said large utility-scale projects controlled by outside companies are a concern. Eleven percent said they would not trust any outside developer at all.

At the same time, only 3% said no forms of energy development feel right for Puna. Most community members are open to development. They are just asking for it to be done differently than it has been done before. The path forward is not to pretend the history does not exist. It is to acknowledge it and build from there.

The Community Is Ready, But Needs to Be Met Halfway

Sixty-eight percent of participants said they are either willing or open to participating in energy planning for Puna. Nearly 100 community members provided their contact

information expressing interest in a community vegetation and road-clearing task force. About half said they would be willing to check in on kūpuna and vulnerable neighbors after storms. These are not passive responses and reflect a community that wants to be involved.

The survey also shows that participation has to be earned. Most community members have never been part of an energy conversation before. Most do not feel represented by the organizations currently working on energy in Hawai‘i. Of those who have participated, satisfaction was mixed at best. **The “maybe” response in Q35 tells the real story: community members are open, but they want more information, more transparency, and more confidence that their participation will actually matter before they commit.**

Community members also know who is being left out. When asked whose voices they worry will be missed, they named kūpuna, Kanaka Maoli, long-time residents, low-income families, keiki, and people in rural areas without internet access. As two community members put it:

“Kūpuna voices NEED to be heard because they know and understand the land better than anyone.”

“Generational families that have always been here. They know the most and need to be heard.”

Any future engagement that relies primarily on digital outreach, public hearings, or English-only formats will miss exactly the voices that community members themselves say matter most.

What Community Members Want From Energy Development

Taken together, the survey points to a clear set of community priorities for energy development in Puna.

Bring costs down. Lower electricity bills for every household are the single most selected community benefit. Affordable energy is not a nice-to-have. It is the starting point.

Create local jobs. Community members want energy development to generate real economic opportunity for the people who live here, with fair wages and paid training.

Protect the ‘āina and culture. Sacred places, agricultural land, and the natural environment must be protected. These are non-negotiable for a large majority of community members.

Keep control local. Community members want energy decisions to be made by and for Puna, with genuine community input throughout, not just at the beginning. They want legal agreements that cannot be changed without community consent and accountability structures that last for the life of the project.

Support food, water, and community resilience. Energy success means backup power for schools and health centers, support for food and water systems, and a community that can function when the grid goes down.

Build trust. The community has a long memory when it comes to broken promises and decisions made without them. Transparency, a track record, and genuine accountability are not optional. They are the foundation of any successful partnership.

Key Implications for Planning and Investment

The data in this report is specific, consistent, and actionable. Here is what it points to for anyone working on energy planning, investment, or community benefits in Puna.

Energy education is needed now. Nine out of ten community members want more information. Energy literacy programs, accessible materials, and community-centered workshops are not preparation for future engagement. They are the work itself.

Community ownership models deserve serious attention. Community-owned solar, battery storage, microgrids, and energy cooperatives were the top choices. These models deserve genuine exploration, not just as talking points but as real options.

The Community Benefits Agreement process must start with trust, not paperwork. The data from Section XII gives a clear picture of what community members expect from a developer. **Transparency, consultation throughout, legal protections, local hiring, and community veto power over decisions affecting ʻāina and cultural resources are not negotiating positions. They are baseline expectations.**

Outreach must reach the people who are hardest to reach. Kūpuna, Kanaka Maoli, long-time residents, low-income families, and rural community members without internet access need dedicated, in-person, accessible outreach. This report represents a strong start, but it should not be the end.

Puna's infrastructure vulnerabilities are real and urgent. Trees and vegetation on power lines are causing the majority of outages. Nearly half of community members feel only somewhat prepared for disasters. Affordable backup power is the top preparedness need. These are solvable problems that do not require waiting for a large energy project to begin.

XIV. Appendices

The appendices include supporting materials, reference documents, and raw data from the Puna Climate Resilience and Energy Transition engagement process. All raw data is stored in the designated Vibrant Hawaiʻi Google Drive folder.

Appendix A: Puna Climate Resilience & Energy Transition Survey

The full survey as administered, including all 37 questions across 8 sections. The survey was designed to understand Puna's collective energy situation, values, and vision, and to directly shape a community report on energy transition priorities.

Survey available at: https://form.jotform.com/261130685584056

Short link: bit.ly/kocreate_energy

Puna KōCreate Community Leaders:

Mina Viritua Jr., Ikaika Rodenhurst, Keanu Wilson, Stephanie Haʻo, and Kalehua Kukahiko

Note on Kaʻū KōCreate Community Leaders:

This survey was developed as part of a broader Energy Resilient Communities initiative also serving Kaʻū. The Kaʻū KōCreate Community Leaders, Kassie Shibuya and Uʻilani Kailiwai, contributed to the shared survey development process and are leading a parallel engagement effort in Kaʻū.

With gratitude to Sustʻāinable Molokaʻi and the Molokaʻi Clean Energy Hui for their pioneering community energy engagement work, which served as a model for this survey.

Appendix B: Molokaʻi Community Energy Resilience Action Plan

The full community energy engagement report that served as a model for this project. Developed by the Molokaʻi Clean Energy Hui between 2021 and 2023, this report documents a community-led process to determine and create Molokaʻi's own energy solutions.

Full report and appendices available at:
https://molokaicleanenergyhui.org/1.0-final-report/

Appendix C: Full Survey Dataset

Raw survey data from all 340 responses across all 37 questions. Data is stored in the designated Vibrant Hawaiʻi Google Drive folder. All responses are anonymous and will only be reported in aggregate.

Appendix D: Supplemental Demographic and Energy Data

Additional data not included in the main report body, available in the full dataset:

Q10 / Q10a / Q10b — How electricity needs are currently met; off-grid status and length of time off-grid; satisfaction with off-grid setup

Q21 — Reasons neighbors may not address vegetation or property maintenance issues

Q31 — Full familiarity ratings for all seven energy organizations listed in the survey

Appendix E: Survey Outreach Materials

Printed materials used during in-person outreach events, including the survey flyer and QR code scan sheet distributed at Makuʻu Market, Activate Puna, and the Keaʻau High School Cougar Night Market.

Appendix F: Outreach Event Photos

Photos from outreach events conducted as part of this engagement, including the Emergency Preparedness Fair at Makuʻu Market on April 26, 2026, and the Activate Puna Block Party in Pāhoa on May 8, 2026. Photos show the Vibrant Hawaiʻi team at the survey booth, community members completing surveys on tablets, the keiki activity area, and families participating in the process.

References

[1] U.S. Census Bureau. (2020). *Hawaiian Paradise Park CDP, Hawaii.* QuickFacts. Retrieved from https://www.census.gov/quickfacts/fact/table/hawaiianparadiseparkcdphawaii

[2] Kapp, D. & Ells-Hoʻokano, K. (2019). *Puna Ahupuaʻa Awareness Project.* University of Hawaiʻi at Hilo / Hawaiʻi Community College. Retrieved from https://hilo.hawaii.edu/sdav/ahupuaa.php

[3] U.S. Geological Survey. (2018). *2018 lower East Rift Zone eruption and summit collapse at Kīlauea.* Retrieved from https://www.usgs.gov/volcanoes/kilauea/science/2018-lower-east-rift-zone-eruption-and-summit-collapse-kilauea

[4] County of Hawaiʻi Recovery Site. (n.d.). *Ocean access.* Retrieved from https://recovery.hawaiicounty.gov/infrastructure/ocean-access

[5] Meredith, E.S., et al. (2022). Damage assessment for the 2018 lower East Rift Zone lava flows of Kīlauea volcano, Hawaiʻi. *Bulletin of Volcanology, 84,* 65. https://doi.org/10.1007/s00445-022-01568-2

[6] Honolulu Star-Advertiser. (2021, May 3). Lower Puna residents are frustrated by the wait for road repairs and boat ramp access. Retrieved from https://www.staradvertiser.com/2021/05/03/hawaii-news/lower-puna-residents-are-frustrated-by-the-wait-for-road-repairs-and-boat-ramp-access/

[7] Big Island Video News. (2025, October 20). Pohoiki dredging project fails to open boat ramp. Retrieved from https://www.bigislandvideonews.com/2025/10/20/pohoiki-dredging-project-fails-to-open-boat-ramp/

[8] Ka Wai Ola. (2025, September). Geothermal energy: Solution or sacrilege? Retrieved from https://kawaiola.news/cover/geothermal-energy-solution-or-sacrilege/

[9] Ibid.

[10] Hawai‘i Groundwater & Geothermal Resources Center. (2025). Ka Wai Ola: Geothermal energy: Solution or sacrilege. Retrieved from https://www.higp.hawaii.edu/hggrc/ka-wai-ola-geothermal-energy-solution-or-sacrilege/

[11] U.S. Environmental Protection Agency. (2016, January 12). *EPA finds Puna Geothermal Venture violated chemical safety rules.* EPA Region 9 News Release. Retrieved from https://www.epa.gov/archive/epa/newsreleases/epa-finds-puna-geothermal-venture-violated-chemical-safety-rules.html

[12] Big Island Now / Hawaii Tribune-Herald. (2026, March 15–17). Kona low storm power outage coverage. Retrieved from https://bigislandnow.com/2026/03/15/what-you-need-to-know-about-the-kona-low-sunday-on-big-island-about-27k-still-without-power-crews-working-as-fast-as-possible/

[13] Airlink Inc. (n.d.). *Hurricane Iselle.* Retrieved from https://airlinkflight.org/responses/hurricane-iselle/

[14] **Bishop, B. P.** (n.d.). *Pauahi's will*. Kamehameha Schools. Retrieved June 3, 2026, from https://www.ksbe.edu/about-us/about-pauahi/will

[15] Sai, D. K. (2017). Hawaiian neutrality: From the Crimean Conflict through the Spanish-American War. In P. H. Edling & M. S. Cullinane (Eds.), *Unconquered states: Non-European powers in the imperial age* (pp. 51–73). Routledge.