

NEWSLETTER

Haítzaqv Climate Action

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Haítzaqv

Clean Energy

Vision:

The Haítzaqv Nation is practicing clean energy sovereignty and resiliency by utilizing wind, sun, earth, and water, in accordance with our gvi'las and cyclical worldview.

Mission:

- To educate and engage the Haítzaqv community to ensure ownership of our collective climate action work.
- To cultivate the abundance of the Haítzaqv homelands for future generations by living in balance and exercising Haítzaqv sovereignty.
- To adapt to climate change, by creating and implementing a clean energy plan as Haítzaqv people with specific policies, targets, and strategies.
- To create equitable access to clean energy for all Haítzaqv, derived from the gifts of the creator in the Haítzaqv Homelands.
- To increase human wellbeing through transformation to a carbon neutral community.

SO WHY CLEAN ENERGY

Every day we rely on energy in order to go through our daily lives and to function. Most of the planet currently depends on fossil fuels to provide power and energy. However, we need to push more reliance on renewable energy sources. Renewable energies are sources of clean, infinite, and competitive energy.

Here are a few advantages that help explain why clean energy is important:

- Today, electricity generation is one of the leading causes of air pollution. By introducing more renewable energies, the impacts from air pollution will be considerably lessened.
- Renewable energy sources do not emit greenhouse gases in their energy generation processes. They are also inexhaustible and adapt well to natural cycles.
- They provide a lower risk of fuel spills, less reliance on imported fuels for energy and greatly strengthen our energy security.
- Clean energies also give local economies an advantage because depending on fossil fuels results in a cycle of economic losses.
- Renewable energy sources are becoming more affordable, with their costs trending at a declining rate. They are becoming more competitive with natural gas, coal, and oil.

CURRENT TRENDS

Increasingly, governments around the world have started focusing on renewable energy as an important part of the energy portfolio. This is driven not only by energy security and diversification considerations, but also based on environmental considerations and climate change commitments.

1

SOLAR POWER

Solar power is simply the light and heat that comes from the sun. Sun that is harnessed in a few different ways: Photovoltaic cells, which convert sunlight into electricity. Solar thermal technology, where heat from the sun is used to make hot water or steam.

2

WIND POWER

Wind power is the process where wind is used to generate electricity. Wind turbines convert the kinetic energy (from motion) in the wind into mechanical power. Mechanical power can be used as a form of fuel for transportation or stored for power generation.

3

BIOMASS POWER

Biomass power is energy produced by living or once-living organisms. The most common biomass materials used for energy are plants such as trees, corn and waste. The energy from these organisms can be burned to create heat or converted into electricity.

4

HYDRO POWER

Hydroelectric power is a form of energy that harnesses the power of water in motion – such as water flowing over a waterfall to generate electricity.

5

TIDAL POWER

Tidal energy is created using the movement of our tides and oceans, where the intensity of the water from the rise and fall of tides is a form of kinetic energy. Tidal power is harnessed by converting energy from tides into useful forms of power, mainly electricity using various methods.--

SOLAR POWER

83% APPROVAL FOR SOLAR FIELD

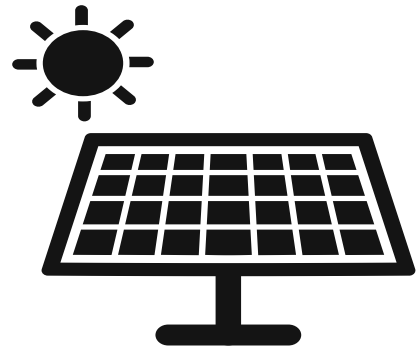
60% APPROVAL FOR SOLAR PANELS

BENEFITS:

- Solar power is pollution free and causes no greenhouse gases to be emitted after installation.
- Reduced dependence on foreign oil and fossil fuels.
- Renewable clean power that is available every day of the year, even cloudy days produce some power.

CHALLENGES:

- Needs lots of space as efficiency is not 100% yet.
- No solar power at night so there is a need for a large battery bank.
- Solar panels are not being massed produced due to lack of material and technology to lower the cost enough to be more affordable (this is starting to change).
- Lower solar production in the winter months.



OPPORTUNITY: CONTINUE TO SUPPORT INITIATIVES THAT PROMOTE ENVIRONMENTAL SUSTAINABILITY AND MITIGATE CLIMATE

What the community said:

Clean energy is important because of economic development, by giving our people clean energy without compromising the quality of life. Not only is it about environmental protection, but it is about people and the health of our community.



WIND POWER

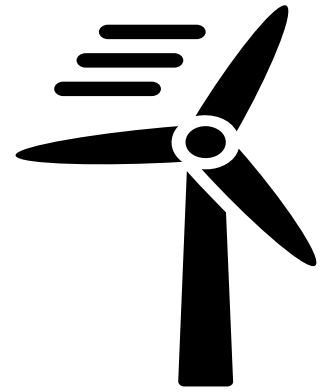
72% APPROVAL

BENEFITS:

- Wind is one of the lowest-priced energy sources available today.
- The nation's wind supply is abundant and inexhaustible.
- Wind energy doesn't pollute the air like power plants that rely on combustion of fossil fuels, such as coal or natural gas, which emit particulate matter, nitrogen oxides, and sulfur dioxide—causing human health problems.

CHALLENGES:

- Loss of wildlife habitat and natural vegetation are the primary wildlife concerns associated with wind energy.
- Wind power plants have relatively little impact on the environment compared to conventional power plants, concern exists over the noise produced by the turbine blades and visual impacts to the landscape.
- Wind systems can involve the transportation of large and heavy equipment. This can cause a large temporarily disturbed area near the turbines.
- Alternative uses for the land might be more highly valued than electricity generation.

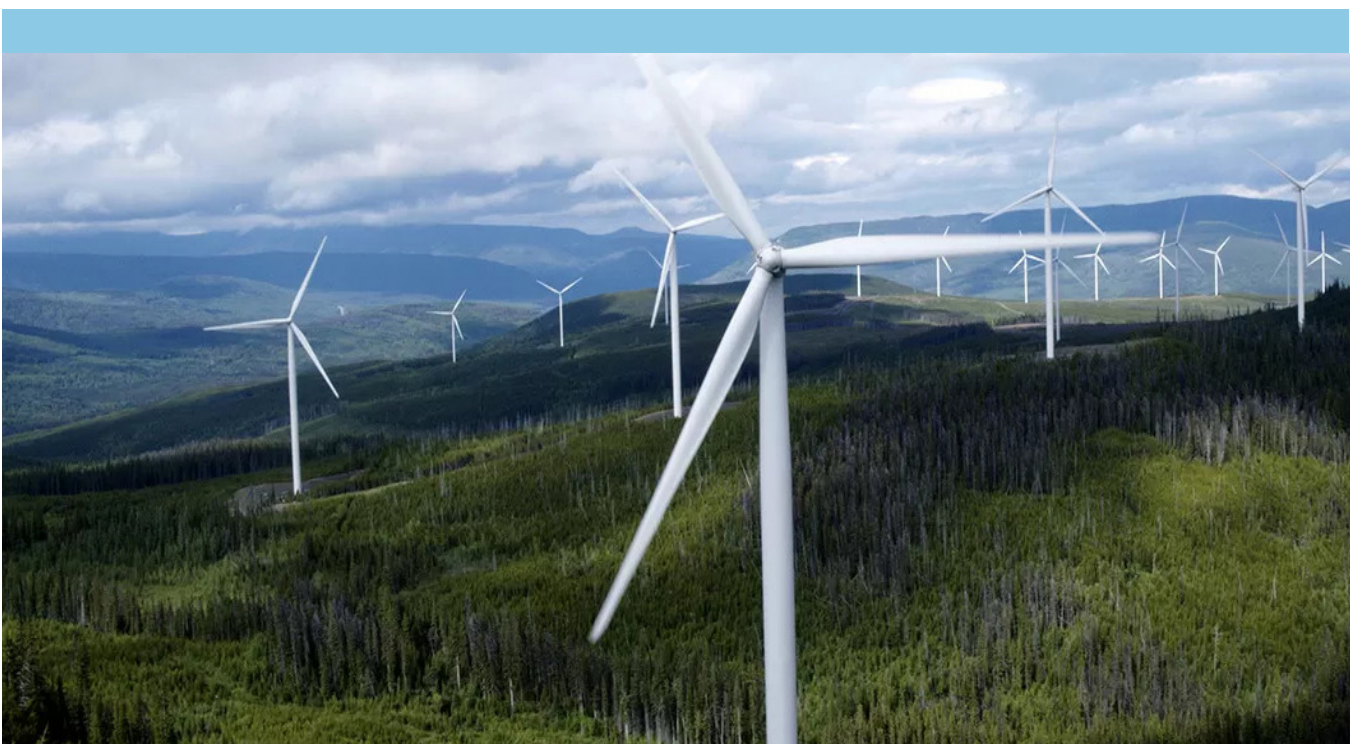


OPPORTUNITY: ENSURE FUTURE DEVELOPMENT IS ACCOMPLISHED IN AN ENVIRONMENTALLY RESPONSIBLE MANNER.

What the community said:

We all agree that we need to protect the environment, whether that is recycling, switching from diesel to heat pumps, walking instead of using our vehicles. In this survey, Heiltsuk members have communicated that we need to protect our air quality, sustainability of our resources and focus on the elements that place less stress on the environment.

Community members have said that wind power seems like the logical choice but the common concerns are noise, bird migration interruptions and that the downside to wind power is unreliability.



BIOMASS POWER

70% APPROVAL

BENEFITS:

- Biomass is always available. Humans and animals will always create waste, and plants will always grow.
- Using waste to create energy means that less of it goes into the landfill.
- Burning biomass doesn't release sulfur or mercury, and it releases less nitrogen than burning coal.

CHALLENGES:

- The burning process releases CO₂, which contributes to the climate crisis.
- It also releases carbon monoxide, which adds to air pollution.
- When trees are cut down specifically to create energy, this is, overall, worse for the environment.



OPPORTUNITY: JOINING HCAT TO PROMOTE GUIDELINES IN SUSTAINABLE DEVELOPMENT.

What the community said:

Heiltsuk members have said that a clean environment, clean air, and clean water are important for our future generations. We heard from our Heiltsuk members that being stewards of the land is our responsibility. The way we interact with the ecosystems and how we maintain our natural resources by avoiding the ability for future generations to meet their needs. As stewards of the land, there is a relationship between the Heiltsuk culture and the land that is respected. The Heiltsuk see biomass power as another way of being good stewards of the land.

Concerns with biomass power was where would a facility be placed, the smell and how harmful it is by contributing greenhouse gasses.



HYDRO POWER

59% APPROVAL

BENEFITS:

- Hydropower is completely renewable, which means it will never run out unless the water stops flowing.
- The creation of hydropower does not release emissions into the atmosphere.
- Hydropower is reliable, hydro plants can adjust the flow of water. This allows the plant to produce more energy when it is required or reduce the energy output when it is not

CHALLENGES:

- To create a hydro plant, a running water source must be dammed. This prevents fish from reaching their breeding ground, which in turn affects any animal that relies on those fish for food.
- Hydropower can impact water quality and flow. Hydropower plants can cause low dissolved oxygen levels in the water, a problem that is harmful to riparian (riverbank) habitats.
- Hydropower plants can be impacted by drought. When water is not available, the hydropower plants can't produce electricity.



OPPORTUNITY: THE HEILTSUK NATION IS KNOWLEDGEABLE AND WILLING TO WORK WITH HCAT IN ACHIEVING LONG-TERM ENVIRONMENTAL GOALS.

What the community said:

The Heiltsuk care about food and clean water supply. Heiltsuk members have communicated that we need to protect our clean drinking water and the sustainability of our resources and focus on the elements that place stress on the environment. Hydro power made sense to Heiltsuk members and to keep in mind as a secondary power source, however, was not the highest voted on. It was also expressed that we already have access to this power and that the community uses this energy, so why are we voting on this type of renewable energy?



TIDAL POWER

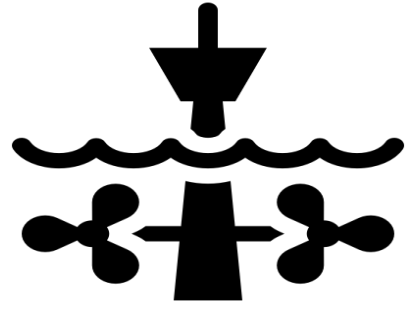
56% APPROVAL

BENEFITS:

- Tides happen at the same time every day with such regularity that they can be scheduled years or even decades in advance.
- Once a tidal-power system is up and running, it's comparatively cheap to maintain because the technology has few moving parts.
- Tides have extremely high energy density compared to wind power and other energy sources, which means very little power gets wasted in the process of converting kinetic energy into electricity needed.

CHALLENGES:

- Limited availability of sites for construction has remained a major constraint in the development of tidal power projects.
- Disturbs migration of living creatures in the ocean.
- It produces power for only about 10 hours of the day when the tide is moving in and out.



OPPORTUNITY: IMPLEMENT GREENHOUSE GAS AND ENERGY REDUCTION POLICIES.

What the community said:

When it came to tidal power the common theme was to protect our ocean resources especially the salmon. A lot of responses have shown that tidal power appeared favorable, however, given that the tides are predictable it does not mean that we would have constant power production from this process. For example, we need energy in the evening and if there is no energy supply how would this affect us?

Tidal power has the potential to be appropriate, but location is a concern. The main concern in the survey results was around protecting the ocean habitat and the supply of food that is important to the Heiltsuk Nation.





HOW ARE HEILTSUK VALUES RELATED TO THE NATURAL WORLD AND OUR HOMELANDS?

Connectivity explains the connection people have to our community, our territories, and the ecosystem on our homelands. Understanding the concept of Heiltsuk values related to our homelands is also key to understanding what influences and drives our decision-making process for many Heiltsuk members, particularly decisions related to land use. Survey results have shown that the Heiltsuk need to focus on applying our values to our actions and how this will influence how we relate to the natural world.

Another aspect of connectivity and decision making is the long-range view. Decisions are not made in the moment, for the immediate future. Decisions are made with consideration of their impact on the future generations.

Consequently, Heiltsuk values are important by protecting our wellbeing, culture, forest and biodiversity. As stated, “Heiltsuk values can help deal with climate issues by caring for the land and using the same practices and conservation methods”. It has been expressed as Heiltsuk members it is our responsibility to care for the environment. By means of lowering the need for fossil fuel and trying to work on ways they are transported through our territory will contribute to the pressures to find renewable sources of energy.



WHAT'S NEXT?

- HCAT is in the process of determining opportunities for follow up feasibility work of the clean energy projects the community has given feedback on. We are reviewing all community suggestions and bringing strategies and opportunities from a regional level.
- Youth Engagement. If we don't have a date yet even mentioning our planning process and that we are working with the CCP team?
- HCAT is in the process of planning the next ethelo survey that will build on the first survey (I don't have all the right wording for this, but please chime in team?).



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