



What We Heard Report

Engagement with Indigenous Peoples on the CleanBC Roadmap to 2030

SUMMER 2021



Graphic recordings by Drawing Change Kristen Elkow

LAND ACKNOWLEDGEMENT

We acknowledge with respect and gratitude that this report was produced on the territory of the Lək'wəŋən peoples, and recognize the Songhees and Esquimalt (Xwsepsum), and WSÁNEĆ Nations whose deep connections with this land continue to this day.

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EXECUTIVE SUMMARY

In summer 2021, the Climate Action Secretariat, under the Ministry of Environment and Climate Change Strategy (Ministry) and partner ministries held virtual engagement sessions with Indigenous peoples in B.C. to discuss the development of the new provincial climate plan, CleanBC Roadmap to 2030 (Roadmap), which was released in October 2021. This report reflects what was heard during the virtual engagement session and the information gathered during these sessions was used to inform the development of the Roadmap.

Four virtual engagement sessions were held and facilitated by Wesley Shennan, a contractor with the Naut'sa mawt Tribal Council, a 100% Indigenous-owned event management company. During these sessions the Ministry with the support of ministry partners (Ministry of Energy, Mines and Low Carbon Innovation, Ministry of the Attorney General and Ministry Responsible for Housing, Ministry of Transportation and Infrastructure, Ministry of Municipal Affairs, Ministry of Forests, Lands, Natural Resource Operations & Rural Development and Ministry of Agriculture, Food and Fisheries) shared information regarding the early development of the nine pathways for the Roadmap, specifically: Buildings, Transportation, Communities, Circular Economy, Negative Emissions Technology, Oil & Gas, Industrial Decarbonization and Bioeconomy. Pathway-specific development and ideas were discussed in small breakout groups between government subject matter experts and Indigenous participants. Feedback, suggestions, and ideas were recorded by government representatives, who would report back to the large group on what was heard, allowing space for correction of misrepresentation or for participants to emphasize or add feedback. This information was shared with Roadmap policy experts to guide the development of their pathway.

Main overarching themes that emerged during the engagement conversations were: the *Declaration on the Rights of Indigenous Peoples Act (Declaration Act)* and Indigenous Rights, diversity of Indigenous peoples throughout the Province, the importance of education and training, information and data sharing and the need for adequate funding. The Province is committed to continue engagement with Indigenous peoples as programs, policies and legislation related to the Roadmap develop. Continuing engagement will ensure that Indigenous voices are represented in future work as the CleanBC Roadmap to 2030 is further developed and implemented while upholding the commitment to the *Declaration Act*.



INTRODUCTION

CleanBC, launched in late 2018, was British Columbia's (B.C.) plan to reduce climate pollution, while creating jobs and economic opportunities for people, businesses, and communities.

CleanBC identified key actions to achieve the Province's legislated climate targets of reducing greenhouse gas (GHG) emissions by 40% by the year 2030, based on 2007 levels. The [CleanBC Roadmap to 2030](#) was a commitment from last year's [Climate Change Accountability Report](#) and was informed by new emissions projections showing greater action to meet its 2030 GHG targets was required. The Roadmap was developed to bridge the gap in emissions.

Indigenous peoples are stewards of the land and Indigenous values, knowledge, wisdom, and leadership are critical to the success of the provincial response to climate change. The Climate Action Secretariat, under the Ministry of Environment and Climate Change Strategy and partner ministries held virtual engagement sessions with Indigenous peoples in B.C. during summer of 2021 to discuss the development of the Roadmap. The approach to Indigenous engagement is consistent with BC's *Declaration on the Right of Indigenous Peoples Act (Declaration Act)* and the Minister's [mandate letter](#). The Ministry is committed to creating opportunities for Indigenous peoples to be full partners in our economy and providing a clear and sustainable path for everyone to work toward lasting reconciliation and to building a low-carbon economy with new clean economic opportunities, and supporting communities to prepare for climate impacts. Indigenous engagement on the draft Roadmap informed the final plan and seeks to advance reconciliation efforts, respond to modern social and environmental conditions, including COVID-19 recovery, the impacts of climate change, and ensure that the CleanBC Roadmap to 2030 works for people throughout the province.

This What We Heard Report is intended to reflect discussions that were had with 75 participants, representing 50 Indigenous communities and organizations from across the Province. The Government of B.C. acknowledges that Indigenous people are disproportionately impacted by climate change, while contributing the least to the causes of climate change. The Province is grateful for their leadership and guidance. Indigenous knowledge, partnership and cooperation have been instrumental in furthering climate action in B.C. The Province thanks the participants for their time and openness on the path to reconciliation, collaborative decision-making, and climate resiliency.



ENGAGEMENT STRUCTURE AND OVERVIEW

During the summer of 2021 the Province hosted four province-wide virtual engagement sessions for Indigenous peoples on the development of the CleanBC Roadmap to 2030, facilitated by Naut'sa mawt Tribal Council.

Sessions were facilitated by Wesley Shennan, a contractor with the Naut'sa mawt Tribal Council who opened the session with an overview on cultural safety, followed by an Elder's blessing and welcome. Following the opening Mr. Shennan introduced the counsellor, Maura Gowans, who held virtual space for any participants in need of emotional support, in recognition of the disproportionate impact climate change has on Indigenous peoples and potential compounding impacts of modern social and environmental issues. An introduction to the technical team was done next to ensure participants were able to fully participate and knew who to connect with for any technical issues. After that the graphic recorder was introduced, a graphic recorder attended every session, they listened in on the conversations and recorded participants' input through drawings. Some of these drawings are highlighted throughout this report. Each session had an overview presentation on the CleanBC Roadmap to 2030 which was delivered by staff at the Climate Action Secretariat. These presentations highlighted what has been done to date, and the need to meet a gap in emissions reduction needed to meet B.C.'s 2030 GHG emission reduction target. The presentation then shifted to focus on information sharing on the following Roadmap pathways:

1. June 25th - Transportation, Buildings, Communities and Circular Economy
2. June 29th – Bioeconomy and Negative Emission Technology
3. July 6th – Clean Fuels, Industry Decarbonization and Oil & Gas
4. July 8th – Wrap up Meeting where all three sessions were summarized and discussed in detail



WE ARE SHARING SPACE

Need to know who we are & where we're coming from

to know where we're going.



After each presentation there was an open question and answer section. To facilitate deeper conversation and engagement small group breakout rooms were used.

Breakout sessions allowed for smaller group conversations with provincial staff who are subject matter experts on the specific pathway discussed. For example, staff from the Ministry of Energy, Mines, and Low Carbon Innovation were there to answer questions about zero-emission vehicle technology. Guiding questions were provided to facilitate the conversation. Jam boards (virtual white board) were used to allow for participants to share feedback and thoughts in writing and a place for provincial government staff to record what they were hearing. Anonymous quotes from the Jam boards are included throughout this report so participants voices can be directly included.

After the breakout rooms, the large room gathered once again to share what was discussed. Provincial government staff provided the report back to the larger group from each breakout room. The graphic recording presented what was heard in each room through their artwork. Following the report back, space was held for open question and answer prior to closing the session.

KEY THEMES:

- Upholding and affirming Aboriginal Rights and Title and the *Declaration Act*;
- Providing better information, data, training and educational opportunities, and financial support to ensure all Indigenous communities, leaders and organizations can meaningfully engage with the Province, develop their local economies, and make informed decisions that work for their communities;
- Interest in sustainable solutions and technologies that also address affordability and barriers to existing rebates and funding;
- Exploring and working in partnership on nature-based solutions and the circular economy, as these principles have been practiced by Indigenous peoples for millennia;
- Ensuring industry and businesses do their fair share to address climate change, are held accountable for climate impacts and are more transparent regarding the impacts on Indigenous communities and the environment.



OVERARCHING THEMES

Declaration Act and Indigenous Rights

Upholding and affirming Indigenous rights through the implementation of the United Nations Declaration on the Rights of Indigenous peoples (UNDRIP) was highlighted through all the engagements as an important part of supporting Indigenous climate action.

Applying the principles, norms, and standards outlined in B.C.'s *Declaration Act* to provincial policy in a meaningful and equitable way is seen as a clear way to support Indigenous climate action. During engagement, the recent Supreme Court of British Columbia ruling regarding *Yahey vs. British Columbia*¹ was shared as an example of the importance of the Province upholding rights of First Nations. Participants shared their hopes that this decision would lead to changes in provincial legislation, environmental assessment processes, policies, and regulations.

An example of the impact of upholding Aboriginal Rights and Title with respect to guardianship programs was shared by a participant. A participant shared that while guardianship programs are a successful way to support Indigenous stewardship, guardianship is limited unless it goes hand-in-hand with Indigenous authority. It is difficult to properly guard the air, land, and waters without authority.

Participants felt that it is critical for effective climate action that all levels of government (municipal, provincial, federal, and international) consider input collected through meaningful consultation with Indigenous communities. In addition to implementing UNDRIP, participants felt transparent and accessible communication early in policy, program, regulation, or legislation development is fundamental to meaningful consultation and engagement. Communities need to be informed in a manner that is clear and ensures comprehensive understanding.

¹ *Yahey v. British Columbia* 2021 BCSC 1287 <https://www.bccourts.ca/jdb-txt/sc/21/12/2021BCSC1287.htm>
“The cumulative effects of industrial development authorized by the Province have significantly diminished the ability of Blueberry members to exercise their rights to hunt, fish and trap in their territory as part of their way of life and therefore constitute an infringement of their treaty rights.”

Free, prior, and informed consent and the different interpretations of what this means to communities, the Province and Canada was noted as a challenge when it comes to consultation. Building meaningful relationships, educating public servants on UNDRIP and colonial history, and encouraging the private sector to involve Indigenous communities in early planning and decision-making were identified by participants to address this challenge and support reconciliation efforts. Participants shared hope that implementing the *Declaration Act* in a meaningful and equitable manner would support the Province and Indigenous communities working together more closely.

Diversity

One size won't fit all

Participants were clear that climate policies must reflect the diversity of Indigenous people given significant difference in geography, culture, and socio-economic realities. The variety of options to reduce greenhouse gas emissions and adapt to climate change may not work everywhere. Providing clear information and data about the variety of options available and how they work in different geographic settings would support more effective community decision-making.

The needs and realities of small, remote, and rural communities must be considered in policy development. Participants felt that the needs of small, remote, and rural communities should be given greater weight than the demands of industry.

While each community is distinct and has a unique perspective, many participants expressed an interest in working collaboratively with communities in similar geographic regions to address climate impacts and implement climate mitigation options. Indigenous cultures are rooted in sustainable economic practices and much can be learned from this diversity of sustainable practices.



Education and Training

“Education is very important, whether in learning how low-carbon energy can help the community, or how interest holders can truly understand each other’s priorities”

–Anonymous engagement participant

Climate education is fundamental

Listening, learning, and educating were seen as pivotal to addressing climate change. The importance of education and training was repeatedly raised with one break out group suggesting education should become a tenth proposed pathway. Education was identified as an opportunity to support community decision-making, understand priorities, and underscore the importance of climate action. One participant pointed out that training isn’t useful if there is little interest in the work, so accessible and well-communicated education needs to come first. Lack of education, coupled with lack of funding, were seen as hindering climate action progress in communities.

Training for a sustainable future

When considering educating youth, the values being taught to children were emphasized. Participants shared the benefits and successes of youth stewardship programs in educating youth on the land base in a culturally appropriate manner. At a post-secondary level, funding for trades and skills that will be necessary to combat climate change was identified as key. Participants were concerned that CleanBC policies didn’t encourage interest in the training needed for the jobs of the future, and as a result B.C. would lack skilled workers in these fields. Ensuring that Indigenous peoples have equitable access to green jobs, training, and upskilling was seen as integral to upholding the *Declaration Act*. Access to these jobs can support long-term sustainable economic development in Indigenous communities that directly benefit Indigenous peoples.

The participants also indicated that beyond formal education, better public and consumer information on climate impacts and sustainable and viable mitigation and adaptation options were needed. Offering educational opportunities to communities was identified as a clear way to support community climate leadership and autonomy.



Information and Data Sharing

More sharing, more collaborating

Participants impressed that now is the time to listen and share climate action stories and successes. Interest in learning what other communities are doing to address climate change and climate impacts was repeatedly raised. Success stories were identified as helpful to building community and council understanding and acceptance of new ideas. Participants were also interested in hearing community success stories beyond B.C. and Canada.

Many communities are coming together to share resources to address climate change and would like to see the Province support this collaboration. In addition to inter-community collaboration, Nations are seeking greater cooperation and communication between all levels of government. A coordinated approach between the federal and provincial governments to share information about available programs, services, and opportunities for improvement would benefit communities, especially those with fewer resources.

Data for decision-making

Lack of information, data and education on climate-related topics was identified as a barrier to Nations' ability to make decisions on climate actions to build resilience in their communities. A key theme was the need for more comprehensive information and education on specific technologies, renewable energy options, and the programs, funding, and options available. Participants noted that the level of information required was community-dependent: some communities have dedicated staff with climate and technological expertise with an interest in detailed data and information, while other communities that are unable to allocate significant capacity to focus on climate action are interested in more accessible information. Participants were interested in the Province meeting Nations where they are at by supporting those with less climate-related capacity with accessible data and information and providing detailed data for those communities wanting it.

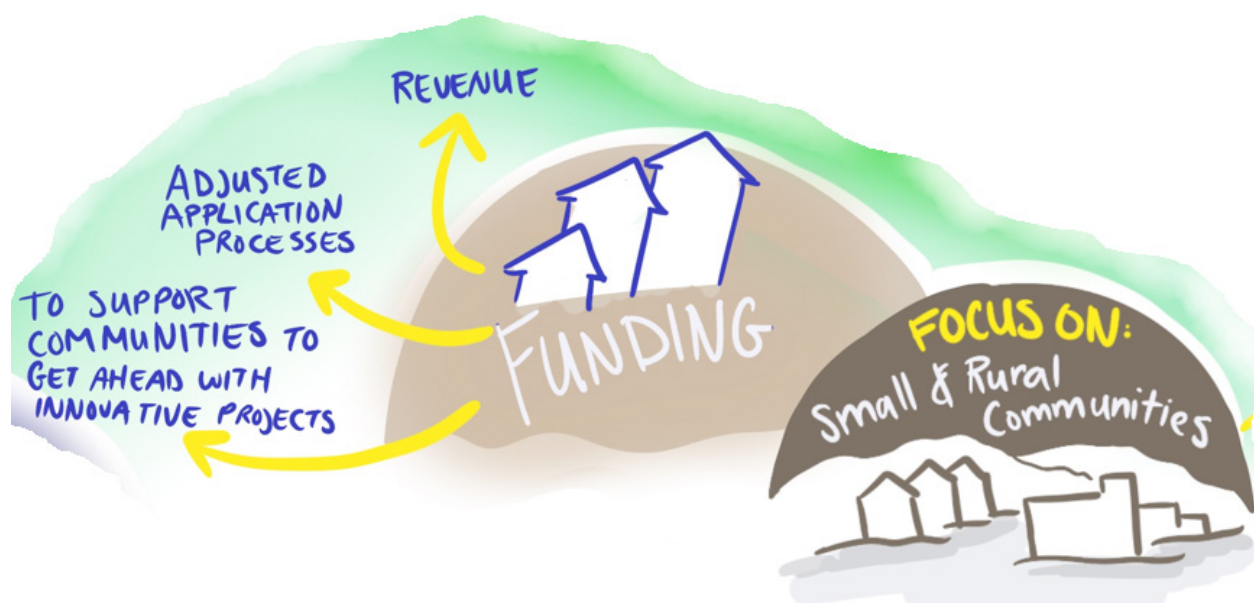
Sharing success stories, transparent, accessible data, and offering educational opportunities was also identified as an important step that can support communities in deciding for themselves what works best for them.

Funding

Change funding to address climate change

Participants note that the way funding is dispersed continues to be a barrier for Indigenous communities. Many Nations do not have the capacity or staff to apply for the funding that would support them in addressing climate change. Participants highlighted that there are over 200 First Nations competing for funding in British Columbia and this competitive model does not work for them. Similarly, short-term or patchwork funding makes it difficult for Nations to offer job security needed to retain knowledgeable staff, and provide training and mentoring needed for long term capacity building. Exploring alternative funding allocation methods that reduce the burden on Nations and provide secure, long-term (minimum 5 years) funding opportunities would support local climate expertise and capacity.

Participants felt that the eligibility criteria for project funding is often too rigid and narrow in scope. Some participants suggested eligibility criteria should broaden to allow exploration of innovative technologies and alternatives that are not yet considered “proven technology”.





PATHWAY SPECIFIC COMMENTS

“We need to look at climate change in conjunction with other things and take a holistic approach.”

Buildings

“Housing should be built as green and sustainable as possible, using locally sourced materials to reduce the carbon footprint and stimulate the local economy.”

–Anonymous engagement participant

Among participants there was strong support to see buildings become as sustainable as possible through energy efficient retrofits, such as insulation, heat pumps, and lighting as well as other resilience-focused retrofits, such as rainwater collection systems. Heat pumps were of particular interest among participants due to their efficiency, and both heating and cooling abilities as average temperatures continue to rise. High costs remain a barrier to heat pump adoption. Participants said they would like to see funding expanded to help replace electric baseboard heating with heat pumps so more people can benefit from the health benefits and long-term cost savings.

To stimulate local economies and reduce GHGs emitted by buildings and construction, participants suggested using locally sourced building materials and explore micro/tiny homes. The Xaadee Tl’a Hlanguulee Ayaagaa Trades Training program in Haida Gwaii was highlighted as an example that uses locally sourced wood to build tiny homes with lower carbon footprints.

Desire for alternative power sources for homes

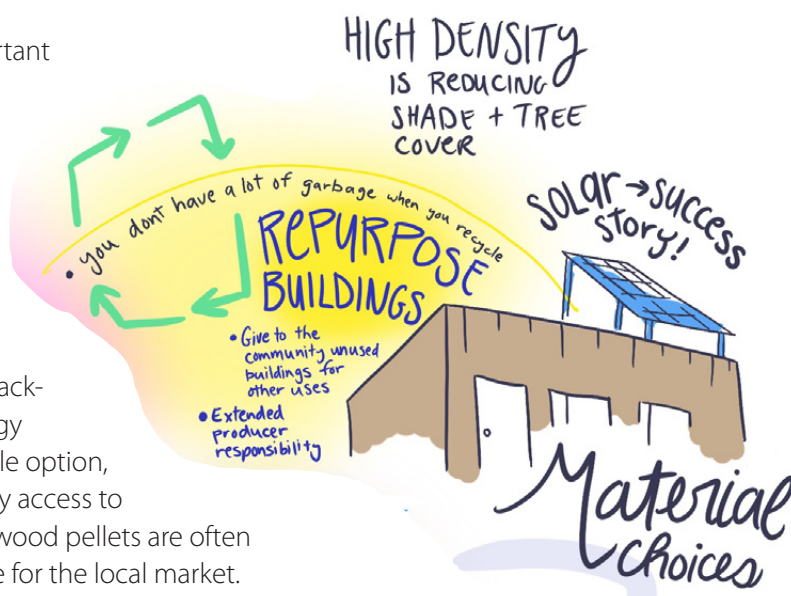
"The costs of renewable energy are an issue in Northern communities. For example, some areas had snow until the end of May this year, so fossil fuels or wood-burning stoves provide a cost-effective solution to heating, because electricity is not feasible."

—Anonymous engagement participant

Many participants expressed interest in incorporating solar power into the building sector. While installing solar panels on buildings already powered by BC Hydro will not reduce GHG emissions, participants identified benefits relating to affordability and energy security. Solar power can provide backup power generation in the event of power outages and, through the net metering program, offset high electricity costs burdening many rural and remote Indigenous communities. Participants suggested the BC Building Code could mandate "solar power readiness" for appropriate buildings.

There is a strong interest in powering community buildings using alternative power sources such as solar, wind, and geothermal. Some communities already have solar panels installed on community centers and participate in BC Hydro's net metering program. One participant highlighted the opportunity for independently powered community centers to act as "Resiliency Centres" to support surrounding communities during power outages, extreme weather events, and other emergencies. Additionally, a sense of pride, self-sufficiency, and reassurance was reported when community spaces are powered on site by renewable energy.

Wood stoves continue to play an important role in many homes. One participant shared that some communities promote the use of wood stoves for heating because this offsets high energy costs and provides a dependable alternative heat source that can be deployed in remote communities during a power outage. Many participants felt the options for back-up heat sources are limited. While energy efficient pellet stoves are seen as a viable option, especially for communities without easy access to winter firewood, it was noted that B.C. wood pellets are often produced for export, leaving a shortage for the local market.



Skilled contractors needed

Many participants shared the struggle of finding skilled contractors trained in installation and maintenance of sustainable building components. This is particularly problematic in rural and remote communities and can result in system failure due to the lack of support for maintenance or repairs. A participant shared how their community had installed a district heating system but struggled with maintenance as the nearest qualified technician was in a city over eight hours away. Without qualified professionals there is the risk of poor installation or maintenance, which can result in greater damage to homes such as mold.



Rebates and cost remain a barrier

"Net Zero buildings are a positive change in the right direction but require grants."

—Anonymous engagement participant

While there is strong interest in long-term support for sustainable building practices and building retrofits, especially those that can reduce electricity costs for residents, high costs and rebate programs that require up front capital remain a barrier. Participants consistently highlighted the need for policies to ensure low-income families can access all CleanBC initiatives, particularly those that can reduce energy costs. Access to information on payback periods for new technologies and retrofits would help communities and homeowners in their decision-making.

A suggestion to address cost barriers was the facilitation of bulk purchasing through a central agency. This could assist First Nations in accessing sustainable materials and technologies at a lower cost. While the Indigenous Energy Coach Program does support bulk purchasing of heat pumps, the program could be expanded to include other products.

Clarity around building codes needed

"Trying to incorporate ways of including BC step code into the building and construction laws is confusing and challenging, especially in a way that still allows for cost effective home building."

—Anonymous engagement participant

Participants expressed a desire to see more ambitious building codes that meet future climate needs and incorporate features such as green roofs, solar readiness, and rainwater collection systems. However, participants also cautioned that building standards must be affordable for communities to meet, while still being of high-quality and durable materials. Policies must strike this balance. Additionally, some building codes can be difficult to navigate and should be clearer. One participant shared their experience trying to adopt an innovative European housing construction technology in their community, but they are having difficulty navigating the building codes.

NATIONS LEADING THE WAY: ROUNDHOUSE KIT

Roundhouses built by Skeetchestn Natural Resources Corp. use traditional Indigenous design to construct modern, energy-efficient homes.

Learn more [here](#).

Transportation

“Charging stations are being built but it is difficult in remote areas.”

–Anonymous engagement participant

Increasing interest in electric vehicles

Three years ago, Indigenous engagement registered low interest in electric vehicles (EV) and EV charging stations. This has shifted today, with wide support for more EV charging stations across the province, particularly in Northern B.C. and rural areas. In addition to increasing the availability of charging stations, barriers include price and, in many rural Indigenous communities, having a driver’s license. One Nation with its own fleet of EVs is concerned there is a shortage of charging infrastructure to support their fleet.

Participants suggested placing EV charging infrastructure next to existing highway rest stops facilities and local businesses, and to increase the amount of fast charging stations. As the number of EVs on B.C.’s roads increase, participants were concerned about how utilities will meet this increased demand of electricity and whether this would result in the construction of new large-scale hydroelectric dams.

Openness to alternatives for commercial transportation

Regarding commercial transportation there was support for further electrification of medium- and heavy-duty vehicles, farm equipment, buses, and trains. One suggestion was converting right of way train tracks to electric trains that could move people to and from urban centers across the province. Questions were raised about the viability of biofuel in supporting the decarbonization of commercial vehicles. Participants were interested in electric or low-carbon fuel alternatives to power farm equipment, ATVs, and boats. Although hydrogen fuel is a promising alternative to fossil fuel, it should be noted that hydrogen was not front of mind when participants discussed alternative fuel sources.

Participants expressed the desire for increased communication around impacts of individual consumer habits. For example, expedited delivery, such as same-day shipping, has resulted in increased freight traffic. One participant suggested imposing a carbon tax on expedited shipments. Similarly, promoting the production and consumption of local goods and investing in local food systems would reduce GHG emissions associated with importing and exporting to and from other jurisdictions.

Increased access to public transportation increases quality of life

Participants shared the improvements to quality of life and sense of independence that can result from increased access to public transportation options. There is a desire to see increased investment in public transportation serving Indigenous communities, including increasing transportation hubs. One participant shared details of their community’s solution to providing rural public transportation. The community has a fleet of vans servicing the community and has developed a Class 1 driving program that trains local drivers. Others highlighted that the COVID-19 pandemic has reduced their travel needs by allowing them to work from home.

Communities

Indirect benefits of greenspace

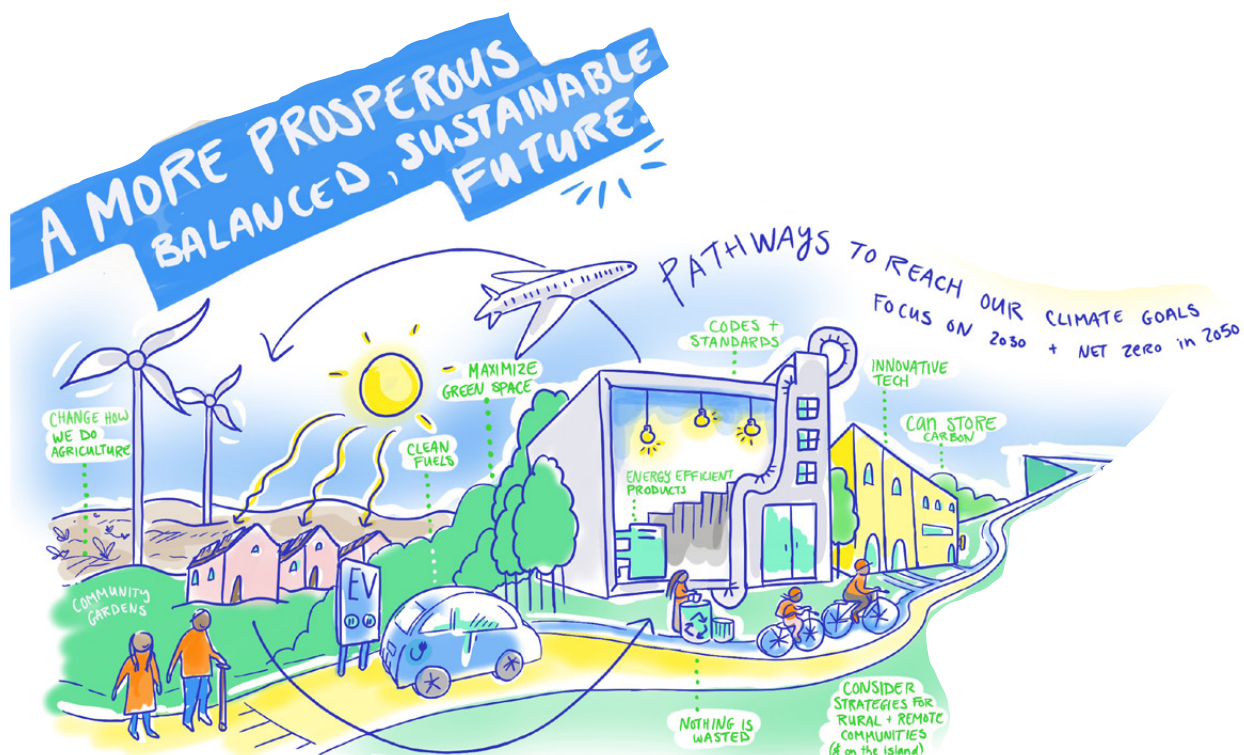
"Trees are a vital part of urban and rural communities, not only because they create shade, but they also have emotional and spiritual benefits."

–Anonymous engagement participant

The important role of trees and greenspaces in community planning was consistently highlighted by participants. Trees in both urban and rural communities provide shade cover during heat events, sequester carbon from the atmosphere, and offer significant emotional and spiritual benefits. Participants were interested in seeing nature-based solutions such as tree-planting and provision of green spaces prioritized in community planning and building and infrastructure projects so the cost of creating more community green spaces is not left to residents. An emphasis was also placed on developing without displacing nature, with participants stating they would like municipal, provincial, and federal governments to reject projects that impact or reduce community green spaces.

Along with trees, community gardens were highlighted as an area where Indigenous communities would like to see greater support from the Province. Increasing local food security by shifting to local food production can reduce transportation emissions while supporting community resilience and self-sufficiency.

Participants stressed the importance of ensuring the realities of rural, remote, and smaller communities are well represented in this pathway, as participants felt the Province often focuses more on policy options suitable to urban settings.



Circular Economy

"There is actually no waste, because every material can be used or repurposed."

–Anonymous engagement participant

Principles of circular economy aligned with Indigenous values

Participants noted that many Indigenous communities already practice the principles of circular economy, and so were supportive of circular economy principles and waste reduction efforts. Participants were interested in seeing greater support for community composting with one community member sharing how composting was providing local soil to communities that previously had to bring in soil by barge. Transportation remains a barrier for some remote communities as it is not cost effective to have waste shipped out of the community, so support is needed for small-scale, on-site waste processing. While transportation is a barrier for some communities, another participant suggested creating a centralized waste collection program for used oil to allow it to be processed efficiently with minimal environmental impact.

Bringing business and industry along

Participants suggested greater incentives for businesses and industry to participate in the circular economy. Other participants suggested creating disincentives to waste production to shift attitudes, such as having businesses bear the cost of recycling or waste they create. Battery and electronic waste (e-waste) recycling was of particular interest, given the growing number of EVs in B.C. Given the volume of waste that industry creates, participants were keen to see the Province facilitate and support better cross-industry collaboration to make use of waste. A desire for incentives for businesses and industry to move away from petroleum-based plastics was also shared as an opportunity to reduce waste and dependency on fossil fuels.



Negative Emissions Technologies

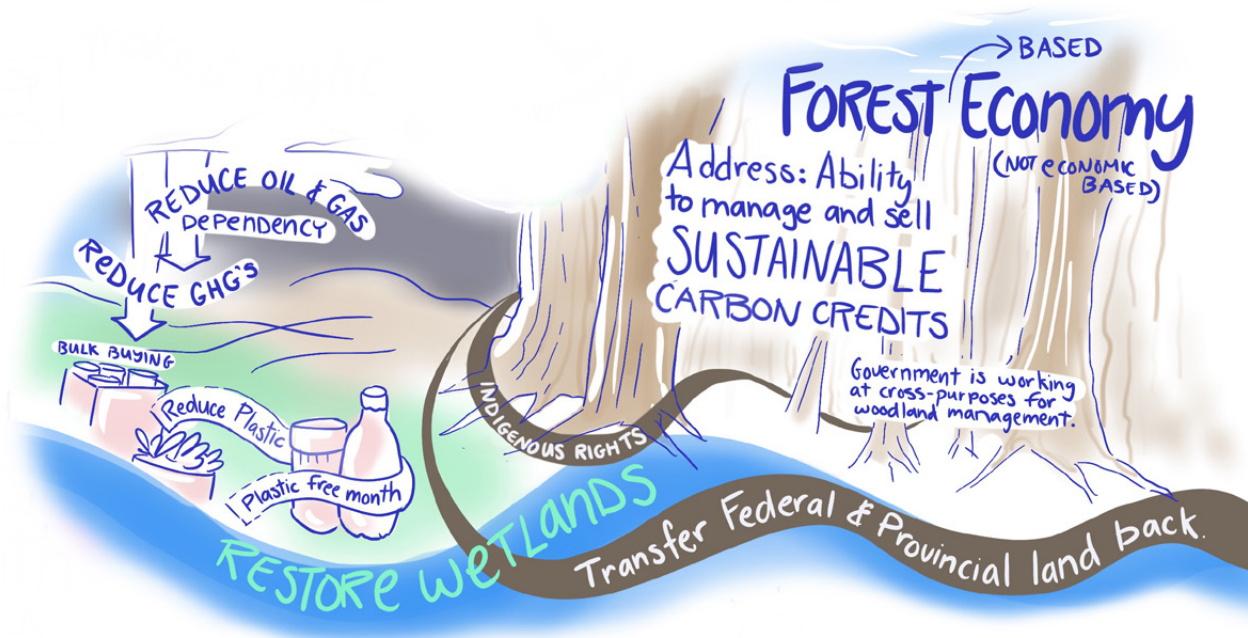
Preference for nature-based negative emissions technologies

When discussing negative emission technologies (NETs) there was a mix of support and concern by participants. Some participants were interested in opportunities to be involved with the research and development of NETs and were curious about available provincial and federal funding opportunities and incentives. A desire to see a large variety of NET strategies implemented across the province was shared. Other participants were concerned about carbon sequestration and storage and the ethics of “filling mother nature with toxins”. Concerns were also raised about whether emissions reductions through carbon capture and storage and offsetting with carbon credits would encourage more industrial activity.

Participants expressed greater support for nature-based NETS such as reforestation, afforestation, wetland restoration, and ocean based blue carbon sequestration options. Given the diversity of environments and communities across the province, participants encouraged exploring a multitude of NET options to meet unique regional needs. The benefits of wetland restoration were repeatedly highlighted, acting as natural carbon sinks, protecting communities during extreme weather events, and providing community greenspaces.

Potential role for forestry in NETs

Connections were made throughout the engagements between the forestry sector and potential NET opportunities. Some participants felt carbon credit and offset programs supported the idea that trees hold greater value standing than logged. Others thought reforestation and afforestation could provide opportunities to reclaim previously disturbed lands and provide potential work for forestry workers. There was a concern that carbon sequestration work was taking on the mindset of the forestry sector, focusing on one resource type rather than taking a holistic view that accounts for the ecological, cultural, and archeological values that can be connected to carbon sequestration projects.



Oil and Gas

“Want to see Oil & Gas transition and make a change through investing in innovative ways.”

–Anonymous engagement participant

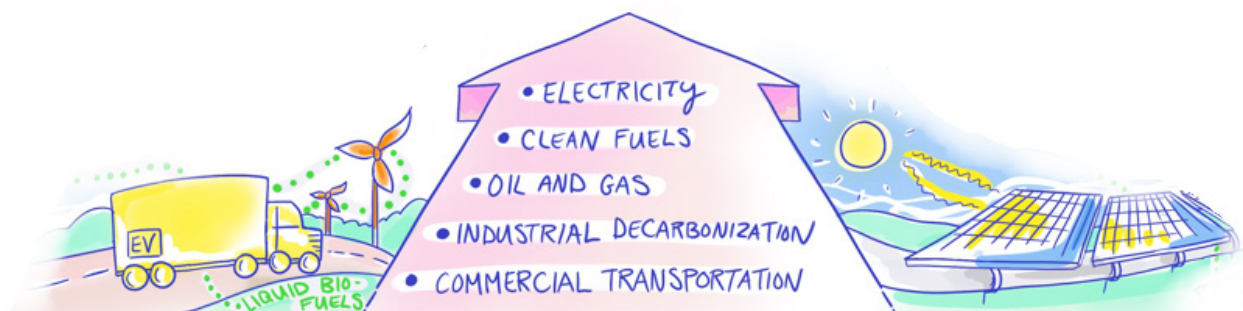
Accountability

Discussions around the oil and gas sector centered on wanting to see the Province hold the oil and gas sector more accountable for their emissions. The sentiment among many participants was that government has a history of subsidizing the oil and gas sector when they should be holding the sector responsible for climate impacts. Participants suggested creating an industry fund that would dispense funds collected through licensing, user fees, or carbon tax credits back to Indigenous communities, on whose territories oil and gas companies operate, to address the impacts of climate change in their communities.

Stories were shared about the significant environmental and cultural impacts of oil spills. The trauma of losing culturally sensitive areas, that provided food and medicine has lasting effects on communities. Indigenous communities are often some of the first responders to an oil spill and would like to see improved relationships on spill management with the Province and the federal government. Participants also raised the recent Yahey vs. British Columbia court ruling, which found that the cumulative impacts of oil and gas development approved by the Province had infringed upon Treaty 8 rights. The participants expressed a desire to improve the oil and gas sector’s understanding of the impacts of oil and gas activities on Indigenous communities.

Transparent transition plans

Along with holding the oil and gas sector accountable, participants urged the Province to be more transparent about oil and gas decarbonization and transition plans. While some participants raised concerns that decarbonizing oil and gas may prolong the industry, others wanted to see the oil and gas sector phased out through investment in innovative solutions. One participant felt that improving the oil and gas sector by “standing on the shoulders of the oil and gas industry” would be better than breaking away from the sector completely. Ensuring that any future large projects fit within the climate plan was highlighted as a priority. Ultimately, while recognizing our current dependance on fossil fuels, participants expressed a strong desire to see a reduction in oil and gas use.



Industry Decarbonization

Opportunity for improved relationships

Tensions have long existed between Indigenous communities and industry, and participants felt the Roadmap to 2030 provides opportunities to address some of these tensions. When considering initiatives for this pathway, participants highlighted the need to consider the displacement of animals and impacts on habitats caused by industrial activity and climate change. Participants shared that they often feel concerns regarding the welfare of wildlife are dismissed when brought to the Province or industry. Small, remote communities would like to see their voices given greater consideration by the Province, particularly in relation to industrial impacts. Some participants would like the Province to recognize the value of information shared by Indigenous communities and use this wisdom to help industry reduce their footprint. For example, ideas were shared around improving right of ways by revegetating these areas with local species that benefit humans and animals, such as berries and willows, instead of grasses. As one participant put it “First Nations would stand up for development if it was done right and done right the first time. Everything depends on everything else – it’s all interconnected.”

Accountability matters

Participants wanted the Province to ask industry to clearly articulate how their activities are going to impact Indigenous peoples. Seeing both the Province and industry applying the principles, norms, and standards of UNDRIP to policy and activities involving Rights and Title issues was highlighted as a priority. One way to do this would be for the provincial and federal governments to create stronger incentives to encourage partnerships between Indigenous communities and big industry. As with the oil and gas pathway, a suggestion was made to create a fund supported by licensing, user fees, and tax credits that would support communities as they work to adapt to and address climate change and other industrial impacts.

Waste to Fuel

Participants consistently connected the industry pathway with the circular economy and clean fuels pathways, highlighting opportunities to address industry waste through creation of biofuels. To make use of industry waste, participants were interested in seeing greater provincial support for cross-industry collaboration. Similarly, there was interest in innovative technologies, such as better filtration systems to reduce GHG emissions and pollutants.

The decarbonization of industry was of interest to participants; however, concerns were raised that unless decarbonization and electrification was cost effective, this would not be widely adopted. Sharing success stories of industries that have decarbonized was an idea to help support this work.

Clean Fuels

“Just stop burning things.”

Participants recognized the potential economic opportunities tied to biofuels and new fuel types and are keen to see the Province support communities with early adoption. Participants agreed they would like to see diesel energy be labeled as a “dirty” fuel and phased out for cleaner alternatives. This would require greater funding to support the transition away from diesel generators. Exploring and developing a variety of biofuels was more favorable than relying on one source and participants were interested in seeing more follow up from the Province regarding biofuels.

Participants explored the option to use unused wood from logging practices, also known as slash piles, to support alternative fuels production, acknowledging that work is needed to develop a system to facilitate such activity. Concerns were raised that developing biofuel out of wood waste could promote increased logging activity. The point was made that logging removes mature, growing, dying, and dead trees that provide natural carbon storage and slow carbon release, while logging releases this stored carbon by hauling it out, processing it, and burning waste products.

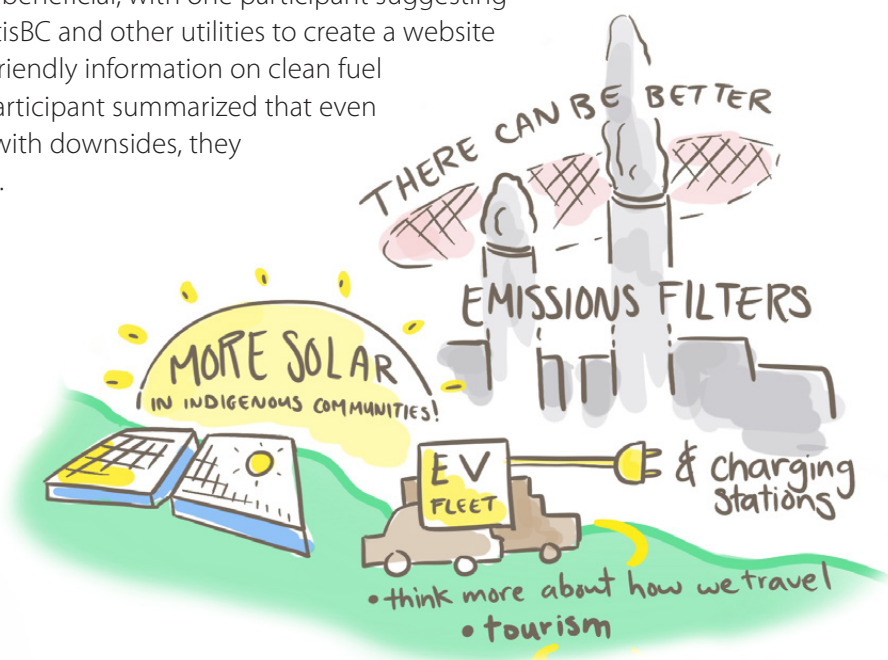
Pellet plants were discussed with participants pointing out that for community members without access to firewood, pellet stoves could be a beneficial alternative while making use of residual forestry waste.

More information needed on the BC Hydrogen Strategy

The BC Hydrogen Strategy was released on July 6, 2021, the same day that clean fuels were discussed during the engagement sessions, allowing for focused discussion on the potential role of hydrogen in B.C.’s clean fuels landscape. Some participants noted the strategy was progress in the right direction. They saw investment in hydrogen technology as an opportunity to replace the oil and gas sector while simultaneously creating jobs and revenue within B.C.’s economy. Opportunities for hydrogen fuel to reduce emissions and become a viable option alongside electric vehicles for the transportation sector were positively received. Questions emerged and a discussion was had regarding the different ways to produce hydrogen and the varying levels of GHG emissions associated with production methods. One participant felt that even if hydrogen was not 100% carbon-free, hydrogen and other renewable fuels would be necessary to support the transition of heavy-duty vehicles and commercial vehicles away from fossil fuels. Concerns were raised around unknown cumulative impacts of hydrogen fuel, as well as concerns over water consumption. One participant was unsure if hydrogen production and use would be viable in northern B.C. where gas and petroleum use is prevalent. That participant also pointed to the importance of infrastructure in supporting a hydrogen fuel economy. Participants suggested the Province host a series of workshops to share information about hydrogen energy and the BC Hydrogen Strategy to ensure communities are engaged and fully informed.

Greater transparency on clean fuel options

When discussing alternative fuel options, some participants expressed concern around Liquefied Natural Gas (LNG) development and the potential associated emissions. Others were concerned about natural gas blending, and the potential that it may increase LNG development and use. Participants wanted to see amendments made to limit investment decisions being made by utilities to avoid the blending of natural gas. Greater transparency and more comprehensive information on clean fuel options were considered beneficial, with one participant suggesting CleanBC collaborate with FortisBC and other utilities to create a website with clear, concise, and user-friendly information on clean fuel development options. One participant summarized that even though clean fuels do come with downsides, they are still better than fossil fuels.



Bioeconomy

Incentivize sustainable agriculture

In discussions regarding agriculture's role in the bioeconomy, participants wanted to see greater ambition from the Province in incentivizing sustainable and ecologically friendly agriculture practices. Encouraging cover crops, greater diversity of crops, and a more sustainable agricultural ecosystem were a few examples. Electrification or use of alternative fuels for farm equipment was supported, although more time was spent discussing opportunities for the agricultural sector to create multiple benefits in addition to emissions reductions. Participants would like agricultural practices to support resilience, food security and soil health, while simultaneously reducing emissions related to the industry. Increasing crop diversity and shifting towards local food production was proposed as an opportunity to offset transportation emissions resulting from food imports and exports. Supporting Indigenous food security and agriculture provides an opportunity to uphold Indigenous rights, Indigenous governance and protect biodiversity.

Information needed to match biogas interest

Some participants were interested in learning more about anaerobic digestion, biogas capture, and improving waste programs but felt more information and support was needed to do this work, particularly given the regulatory hurdles related to landfill and organic methane capture. One participant shared an interest in seeing partnership conversations with Indigenous agriculturalists and ranchers regarding the potential use of agricultural waste and animal manure.

Support for Indigenous aquaculture

"The province of B.C. can stimulate an interest in aquaculture by acknowledging and implementing the articles of UNDRIP in a meaningful and equitable way."

—Anonymous engagement participant

Participants shared their interest and examples of potential opportunities in the bioeconomy pathway related to fisheries and aquaculture. As climate change continues to impact culturally significant fish species, such as salmon and trout, many Indigenous communities are interested in or already exploring land aquaculture and aquaponics. Greater support for Indigenous aquaculture, aquaponics, and community-based fisheries was indicated as an opportunity to support local food security and culturally significant economic development, while simultaneously reducing emissions and meaningfully upholding UNDRIP.

Concerns were raised regarding impacts to wild fish populations and habitats as well as the impact of water permits on crucial fish habitats. One coastal Nation shared that in the face of declining fish stocks they are looking to explore alternative aquaculture opportunities such as developing clam beds and farming kelp.

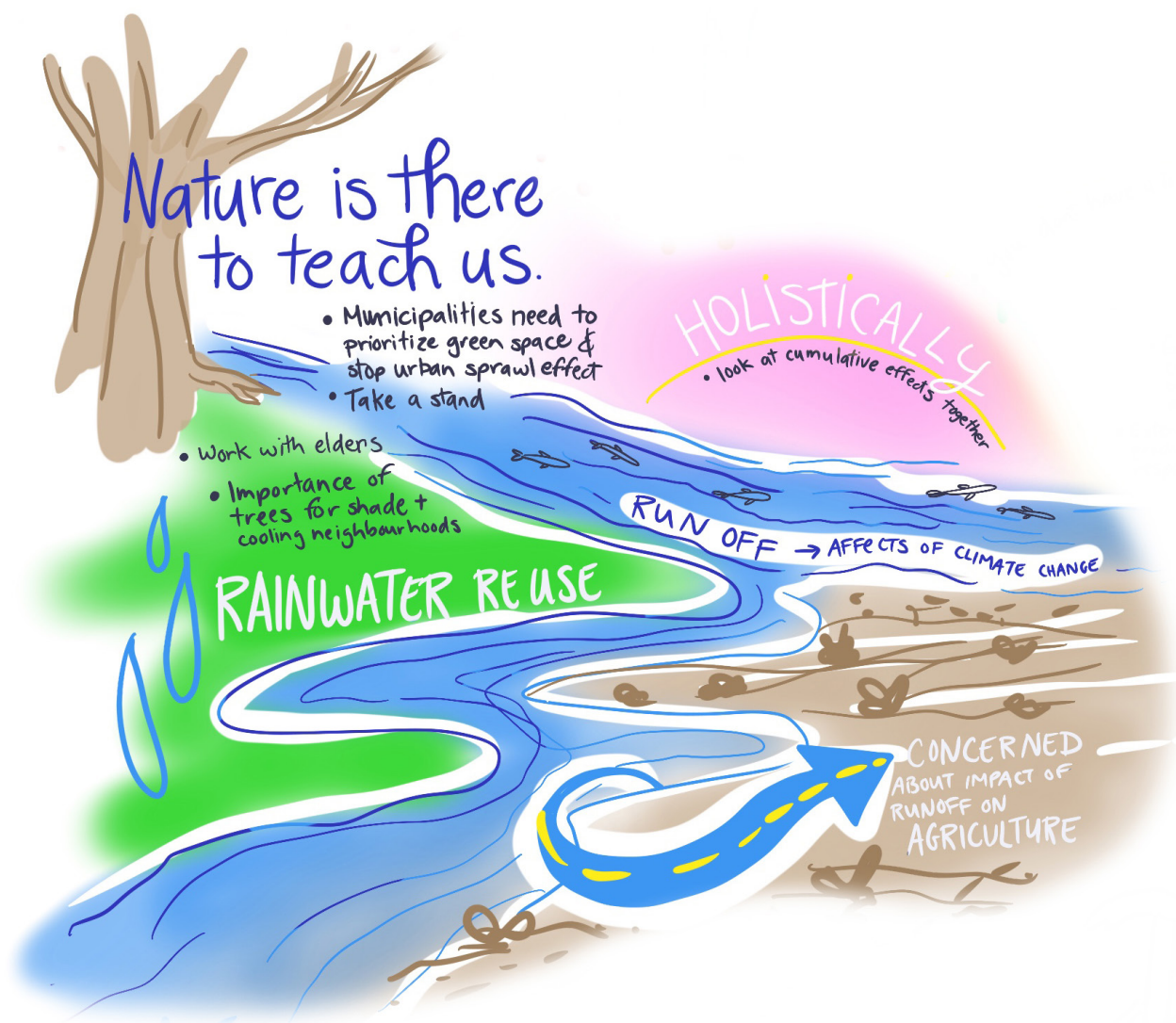
Potential benefits of Kelp

Sequestration of carbon in kelp was raised numerous times over the four engagement sessions. Opportunities identified by participants related to kelp farming extended beyond carbon sequestration to include bio-plastic production and feed additive for cattle to reduce enteric fermentation, which is a source of methane. Participants urge the Province support kelp farming but recognized further research and information may be needed to explore potential opportunities.

More value under the canopy

When discussing bioeconomy opportunities related to B.C.'s forests, the comment was made that there is "more value under the canopy". This view was reflected in participants' interests in exploring economic development opportunities that make use of the forest without logging. This could include non-timber products like big leaf maple syrup, essential oils, and birch water, as well as the important cultural value derived from harvesting plants, medicines, and berries. Placing value on living trees through a variety of methods is seen as a positive way to support a low-carbon future that would have additional benefits to habitats, riparian areas, and biodiversity. Industrial hemp farms were raised as a forestry sector alternative to explore since hemp products can replace a variety of wood products with fewer emissions.

Participants saw the Province's interest in the forest bioeconomy as an opportunity to re-evaluate and alter forestry practices. The impacts of forestry operations on riparian areas, as well as concerns regarding the logging of old-growth forests were shared. Some saw an opportunity to focus on replanting native plant species and addressing bio-diversity loss through reforestation.



CONCLUSION

The CleanBC Roadmap to 2030 builds on the progress B.C. has made since 2018 supporting the shift from fossil fuels and making clean alternatives more affordable. The Roadmap is a more ambitious climate plan to meet B.C.'s emissions reduction targets for 2030 and build a cleaner, stronger economy for people throughout the province.

Indigenous perspectives and full participation are essential to successfully mitigating and adapting to climate change. The impacts of last year's unprecedented heat dome, severe wildfires, flooding, and landslides have made it clearer than ever that immediate ambitious and collective action is needed to build B.C.'s climate resilience. Ongoing engagement and collaboration with Indigenous communities, leaders and organizations is required to implement the Roadmap and develop policy, regulations, and strategies to move toward our 2030 and 2050 targets.

