



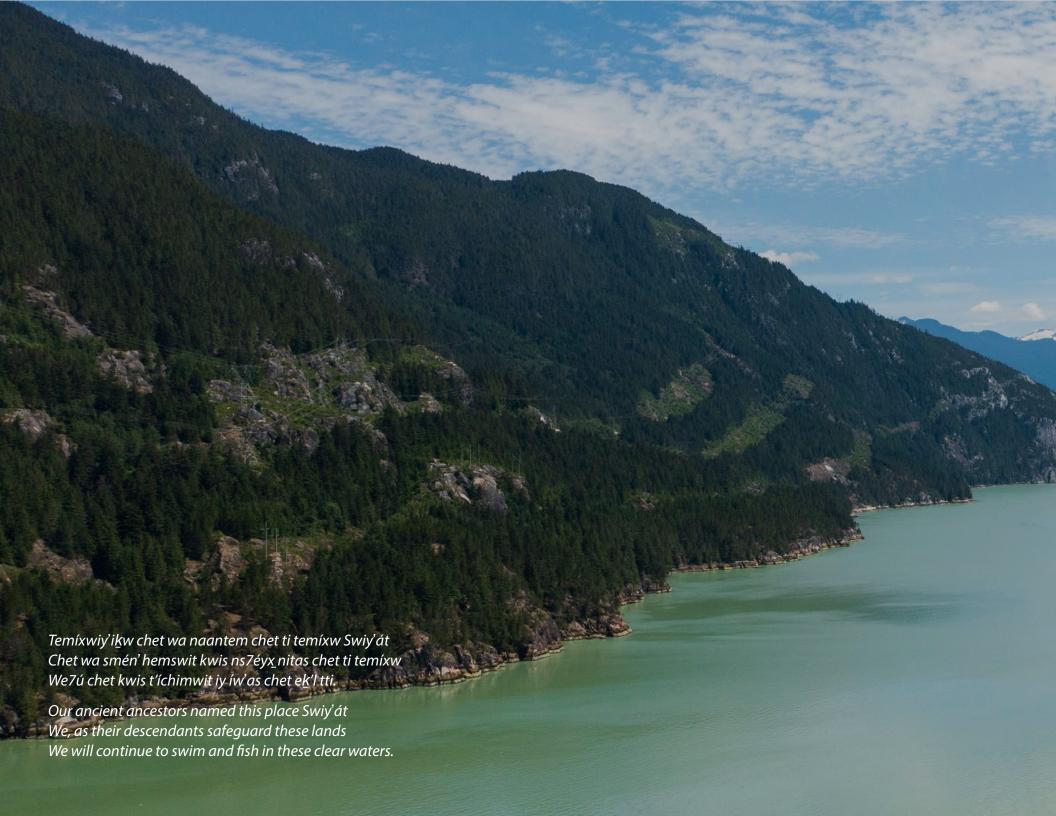
Health and Safety Reconciliation Regulatory Biodiversity Emission Community



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Woodfibre LNG is a liquefied natural gas (LNG) export facility being constructed on the former Woodfibre pulp mill site in Nexwnéwu7ts Átlk'a7tsem (Howe Sound), approximately seven kilometres south of Skwxwú7mesh (Squamish). The Project is on the historical location of a Skwxwú7mesh Úxwumixw (Squamish Nation) village known as Swiy' át. Swiy' át and Nexwnéwu7ts Átlk'a7tsem (Howe Sound) are tied to the cultural well-being of Skwxwú7mesh Úxwumixw (Squamish Nation) members, their ancestors, and their descendants, and to other Indigenous groups as defined in the Project's Provincial Environmental Assessment Certificate and Federal Decision Statement. Woodfibre LNG proudly acknowledges that Squamish Nation is a full environmental regulator on the project, with the Squamish Nation Environmental Assessment Agreement as the first ground-breaking Indigenous-led approval process in Canada. Woodfibre LNG also recognizes the importance of these areas to the Skwxwú7mesh stélmexw (Squamish People), and other Indigenous groups. Woodfibre LNG seeks to construct and operate the Project in a manner that is respectful of Indigenous values.

### **Foreword**



"Business development and sustainability must exist on the same side of the equation – one cannot be meaningfully achieved without the other. The company's 5Cs business philosophy - Good for Community, Country, Climate, Customer, Company – quides decision-making to ensure sustainability remains at the forefront of business strategy."

As a member of the RGE group of companies, Pacific Energy is an independent energy company focused on meeting the growing energy needs of North American and Asian economies. Pacific Energy seeks to invest, build, own and operate innovative energy assets that help provide affordable, reliable and lower-carbon energy<sup>1</sup>. Through strategic investments in Canada and overseas, Pacific Energy is a competitive and sustainable gas-based

1. In comparison to higher-carbon energy sources, like coal, currently used in many Asian economies

value chain business that seeks to set high environmental standards for the production and sale of energy to the world.

Reconciliation

As the parent company of Woodfibre LNG, Pacific Energy approaches sustainability from a full value chain perspective. In the upstream, Pacific Canbriam Energy is one of two natural gas producers in Canada to achieve Equitable Origin's EO100 certification, demonstrating its commitment to the industry's best practices for site-level ESG performance. Downstream, Pacific Energy's combined cycle natural gas power facilities provide reliable and affordable power to customers with lower greenhouse gas (GHG) emissions than coal generation facilities, helping to address air quality issues in emerging Asian economies.

In the midstream, Woodfibre LNG plays a critical role to bridge the gap between the abundant natural gas resources of Canada and the growing global demand for lower-carbon, affordable energy.

### **Redefining Sustainability in LNG**

Pacific Energy believes that natural gas still has an important role to play in the global energy picture. As many countries continue to industrialize and urbanize. energy demand continues to expand and the need for reliable and affordable

energy persists alongside the need to lower emissions and air pollutants associated with legacy energies like coal. Canadian LNG provides an attainable, affordable and near-term option to the high carbon energies used in many regions, including Asia. It also creates extensive new capital investment in British Columbia along with hundreds of new jobs and significant tax revenue.

**Emission** 

Thanks to British Columbia's renewable hydroelectric grid, the Woodfibre LNG project will be among the world's lowest emission LNG facilities. Woodfibre LNG has designed a project plan that prioritizes minimizing impacts wherever possible – through clear and regulated steps to protect the environment during construction and through provisions such as onsite accommodation for workforce to reduce impacts on nearby communities.

### **Exceptional Potential for the Future**

For all Woodfibre LNG has accomplished, it is just getting started.

Woodfibre LNG's net zero strategy commits to exploring new technologies to further reduce carbon emissions. Woodfibre LNG works closely with the community of Squamish and Squamish Nation, and invests in Squamish and the region through support for community non-profit organizations,

local procurement and hiring, and in educational programs to develop future operators for the facility.

Woodfibre LNG holds exceptional promise. British Columbia and Canada will benefit from extensive capital investment, and local communities will benefit from procurement, career opportunities and community investment. Once completed, Woodfibre LNG will transport Canadian natural gas – a reliable, affordable energy produced under some the of world's strictest regulatory and environmental standards – around the world, aiming to displace heavier carbon energies and provide an ideal complimentary energy to renewables like wind or solar.

Pacific Energy and Woodfibre LNG are committed to bringing energy to the world in a sustainable fashion. I look forward to Woodfibre LNG sharing its progress through this first sustainability report and in the years ahead.



Ratnesh Bedi, Pacific Energy President

## President's Letter



I am pleased to issue Woodfibre LNG's inaugural Sustainability Report, highlighting the company's key sustainability accomplishments during 2023. While the project remains at the early stages of construction, initiating annual sustainability reporting reflects the transparency Woodfibre LNG intends throughout building and operating the world's first net zero LNG export facility. 2023 was a key year the company completed environmental remediation and pre-construction steps necessary to prepare the site for facility construction in 2024.

The Woodfibre LNG project is being built on the historical site of a Skwxwú7mesh Úxwumixw (Squamish Nation) village named Swiyát, which served as a stopover point for fishing, hunting and gathering medicinal herbs and plants. In more recent times, the Woodfibre pulp mill occupied the site, operating for close to 100 years. Today, Woodfibre LNG is building an LNG export facility with

deep respect and awareness of the area's Indigenous history, with the Squamish Nation playing a central role as a regulator, alongside provincial and federal regulatory bodies.

Most core elements of sustainability during major projects construction are mandated through an intensive regulatory process that requires the development of permit and amendment applications and management plans for approval by regulators. These approvals result in thousands of conditions that dictate how work must be performed to limit or avoid impacts on land, water, air, wildlife and marine life, and on neighbouring communities. During 2023, Woodfibre LNG staff and regulatory consultants developed dozens of regulatory applications and management plans for the project. Their work, as well as those that offered comment during Indigenous consultation and stakeholder engagement processes, is appreciated.

### Roadmap to Net Zero

The Roadmap to Net Zero was introduced – a comprehensive, third-party verified blueprint to make Woodfibre LNG the world's first net zero LNG export facility. The project has been designed to produce LNG with a minimal carbon footprint at just 0.04 tonnes of CO2e per tonne of LNG produced, largely

thanks to using hydroelectricity for liquefaction. Incremental carbon-reducing technologies and the use of nature-base carbon offsets enable the facility to be net zero.

### **Gender and Cultural Safety**

Woodfibre LNG established a Gender Safety Advisory Committee made up of Indigenous and non-Indigenous women to guide the implementation of programming to address the Calls for Justice for Extractive and Development Industries from the National Inquiry into Missing and Murdered Indigenous Women and Girls. All workers on the project receive mandatory cultural awareness and gender safety training delivered by Squamish Nation trainers as part of onboarding to the project. Importantly, the Gender Safety Advisory Committee and mandatory training requirement later became regulatory conditions included in amendments of the Environmental Assessment Certificate and Squamish Nation Environmental Assessment Agreement.

### Innovative Worker Accommodation

The use of a floating work camp accommodation – or a floatel – was approved by the BC Environmental Assessment Office to house the construction workforce. The floatel hosts

up to 652 workers at the project site seven kilometres from the community of Squamish, ensuring that local rental housing and demand for community services will not be affected by Woodfibre I NG construction.

### **Marine Mammal Monitoring**

The program is regulated by, and carried out in collaboration with, the Squamish Nation will continue for the duration of construction. Squamish Nation and Woodfibre LNG place high priority on ensuring that underwater construction noise does not harm fish or marine mammals. The marine mammal monitoring programming provides clear parameters to protect wildlife and ensures direct participation of Squamish Nation and the opportunity to share lessons learned and support adapative management for the future.

The Woodfibre LNG team is proud of the work accomplished in 2023 and looks forward to progressing facility construction and implementing new sustainability programming into 2024 and beyond.

Christine Kennedy, Woodfibre LNG President

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## **Acronyms**

2SLGBTQ+	Two-Spirit, Lesbian, Gay, Bisexual, Transgender, Queer or Questioning, and additional sexual orientations and gender identities
B.C.	British Columbia
BCER	British Columbia Energy Regulator
CCF	Cheakamus Community Forest
CNWA	Canadian Navigable Waters Act
CO2	Carbon Dioxide
CSIMP	Community Services and Infrastructure Management Plan
DFO	Department of Fisheries and Oceans
EAC	Environmental Assessment Certificate
EAO	Environmental Assessment Office
EBM	Ecosystem-Based Management
EGP	Eagle Mountain – Woodfibre Gas Pipeline
GHG	Greenhouse Gas
GRI	Global Reporting Initiative
IAAC	Impact Assessment Agency of Canada

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## **Acronyms**

ISO	International Organization for Standardization
LNG	Liquefied Natural Gas
LTIF	Lost Time Incident Frequency
tCO2e	Tonnes of Carbon Dioxide Equivalent
TRIF	Total Recordable Incident Frequency
WCI	Western Climate Initiative
WSA	Water Sustainability Act

## About the Woodfibre LNG Project



### **Building the World's First Net Zero LNG Export Facility**

The Woodfibre LNG Project is a liquefied natural gas (LNG) export facility being constructed on the former Woodfibre pulp mill site in Nexwnéwu7ts Átlk'a7tsem (Howe Sound), approximately seven kilometers south of Squamish, B.C.

It will include one liquefaction train, a 250,000 m3 floating LNG storage and offloading unit and marine docking facilities for LNG carriers during operation. Once operational, the Project will produce an estimated 2.1 million tonnes of LNG per year. The Project has been designed to be among the lowest emission LNG export facilities in the world and has

committed to being facility net zero from the day it commences operations in 2027.

Woodfibre LNG is a Canadian partnership, owned indirectly 70 per cent by its Canadian parent company, Pacific Energy Corporation (Canada) Ltd, and 30 per cent Enbridge Inc.

### A Canadian first

In 2018 the Squamish Nation **Environmental Assessment was** completed, representing the first time a non-treaty Indigenous government has acted as an environmental regulator.

In addition to the federal and provincial governments, the Squamish Nation serves as an environmental regulator

for the Project. This collective regulatory framework, ensuring that both the construction and operation phases adhere to rigorous environmental standards while respecting Indigenous values and cultural well-being.

The combined efforts of Woodfibre LNG and the Squamish Nation have led to significant design adaptations that further mitigate environmental impacts, minimize disturbance to the surrounding ecosystem and enhance ecological health on site. This collaborative approach reflects shared dedication to sustainable development and responsible environmental management, supported by regulatory oversight from multiple levels of government.

### **Responsibly Sourced Natural Gas**

Woodfibre LNG will source its natural gas from Pacific Canbriam Energy, a Canadian subsidiary of Pacific Energy Corporation Limited. Pacific Canbriam Energy adheres to some of the world's most stringent regulatory standards in energy production.

In 2021, Pacific Canbriam Energy was the second natural gas producer in North America to achieve EO100<sup>™</sup> Standard Certification from Equitable Origin. Pacific Canbriam Energy is committed to continuous improvement to ensure measurable progress and accountability for emissions reduction.





## Woodfibre LNG's Vision, Purpose and Values

Woodfibre LNG strives to be at the forefront of the global energy transition by providing responsibly produced liquefied natural gas to the Asian Pacific.

At Woodfibre LNG, a common purpose of improving lives by developing resources sustainably unites the team, aligning with the company's vision to set a higher standard within the industry to create value for the Community, Country, Climate, Customer, and Company.

Success hinges on full commitment to the company core values, summarized as TOPICC, which emphasizes collaborative teamwork, people development, and continuous improvement, as described in the image adjacent.

Woodfibre LNG's corporate philosophy and 5Cs are at the center of the company's dedication to sustainability and govern Woodfibre LNG's actions.



### **Our Core Values: TOPICC**

We are aligned by our common purpose and work together as a complementary **Team**.

We take **Ownership** to achieve outstanding results and seek value at all times.

We develop **People** to grow with us.

We act with **Integrity** at all times.

We understand our **Customers** and deliver best value to them.

We act with zero complacency and always strive for **Continuous improvement**.



### **Our 5Cs Business Philosophy**

"Do what's good for the **Community**, what's good for the **Country**, what's good for the **Climate**, and what's good for the **Customer**. Only then will it be good for the **Company**."

## Sustainability Approach

Woodfibre LNG is committed to a proactive approach that surpasses compliance with regulatory requirements for environmental protection and social responsibility wherever possible, by continually striving to innovate and pioneer new solutions.

From its commitment to being a net zero facility to developing first-of-their-kind gender and cultural safety programs, Woodfibre LNG is at the forefront of establishing how major industrial projects will operate in Canada.

Woodfibre LNG seeks input and feedback from Indigenous groups and stakeholders, including governments, community members, qualified environmental professionals, and industry peers. This inclusive approach ensures sustainability efforts are informed by a broad spectrum of perspectives and needs, leading to more robust and effective outcomes.

Woodfibre LNG also acknowledges that transparency plays an important role in remaining accountable to stakeholders with respect to sustainability efforts. Open communication and accountability is the key to fostering trust and understanding with stakeholders. As such, Woodfibre

LNG is committed to providing transparent reporting on sustainability initiatives, including successes and challenges that may be faced.

### **Going Forward**

Reconciliation

In 2024, Woodfibre LNG will undertake a thorough examination of available sustainability frameworks to align its sustainability strategies and initiatives with internationally recognized standards and benchmarks. This alignment will enhance future sustainability reporting expectations.



### **About the Sustainability Report**

**Emission** 

This report highlights recent and past achievements, challenges, and upcoming plans related to the sustainable development of the Woodfibre LNG Project.

### **Reporting Period**

This inaugural report summarizes Woodfibre LNG's sustainability programming in 2023 but also references initiatives and activities as far back as the company's inception in 2013. While programming was largely driven by strict and environmentally focused regulatory frameworks, Woodfibre LNG's overarching sustainability strategy is to, wherever possible, exceed regulatory standards to maximize benefits to the environment and community in the operational area.

### Verification

This report was prepared by Woodfibre LNG's sustainability team and reviewed by Woodfibre LNG management. The Greenhouse Gas

(GHG) emission projections have been independently verified by Brightspot Climate Inc.

### **Forward-Looking Statements**

This report contains forward-looking statements as to Woodfibre LNG's expectations of future performance. Such statements may relate to Woodfibre LNG's goals and targets, vision and sustainability objectives. Use of any of the words "plans", "strategy", "targets", "seeks", "believes", "continues", "strives", "will", or similar expressions are intended to identify forward-looking statements/ information.

### Contact

For any questions related to this report, please email info@wlng.ca.



## **Key Highlights**

### 13 Conditions

The Squamish Nation Environmental Assessment Agreement represents the first time a non-treaty Indigenous nation has acted as an environmental regulator on an industrial project in Canada, imposing legally binding, culturally-relevant conditions that Woodfibre LNG must adhere throughout construction and operations phases of the project.



Nearly **500** workers, including **100%** of Woodfibre LNG staff, participated in in-person training sessions covering cultural awareness, archaeological/chance find protocols, and gender safety in 2023.

### Net Zero by 2027

Woodfibre LNG's Roadmap to Net Zero was launched in March 2023, demonstrating a pathway to becoming the world's first net zero LNG facility by 2027.

### **Canadian First**

Woodfibre LNG is the first industrial project in Canada to develop and implement a Gender and Cultural Safety Plan with the goal of preventing, deterring, and responding to any incidents of gender and cultural-based violence on the Project and in the community.

## Community-Driven Worker Accommodation

A premium floating work camp was procured through a local business on the Squamish Nation business registry in conjunction with Nch'kay Development Corporation to house non-local construction workers at the Project site, minimizing impacts on community housing traffic and services.



## People and Occupational Health

### At Woodfibre LNG, ensuring the health and safety of the workforce is paramount.

As construction activities commenced in 2023, Woodfibre LNG implemented changes to its Health, Safety, Security and Environmental Management System to better manage the increased risks while upholding industry standards and International Organization for Standardization (ISO) guidelines. ISO guidelines, specifically standards 14001 and 45001, provide the industry benchmark for the proper structure and implementation of an HSSE Management System. These standards have been used throughout many industries around the world for over 20 years, including oil and gas.

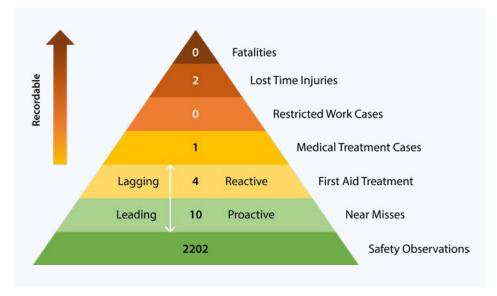
To prepare the Project for construction, Woodfibre LNG enhanced review and oversight of its contractor's (McDermott International), Health, Safety, Security and Environment program in collaboration with regulators, Indigenous nations, subcontractors, and other stakeholders. This involved comprehensive planning and development of mitigations to address critical community concerns such

as gender safety, use of medical services, emergency response, and site security.

The Health and Safety Management System is a cornerstone to safeguard the well-being of the workers and the surrounding Project environment.

### **Taking Ownership Over Project Safety**

In December of 2023, Woodfibre LNG received direction from WorkSafeBC, through an Order and subsequent correspondence, that due to the proximity and access limitations of both the Woodfibre LNG Project site and adjacent FortisBC Eagle Mountain Gas Pipeline project, the Regulator considered both project footprints as a single worksite. Therefore, prime contractor status and accountability for health and safety across the entire worksite defaulted to Woodfibre LNG. Woodfibre LNG will be working with WorkSafeBC as well as FortisBC in the Spring of 2024 to ensure actions required to change the approach to managing health and safety on-site will be implemented, ensuring compliance while maintaining the safety of the workforce as a priority.



The Safety Pyramid is a visual representation of the importance of addressing underlying safety concerns at every level, beginning with safety observations.

### 2023 Highlights

**0.3**Lost Time Incident
Frequency



**Emission** 

## **Emergency Preparedness and Response**

Reconciliation



## In 2023, Woodfibre LNG finalized its Emergency Response Plan for construction.

This plan outlines the steps to be taken before, during, and after an emergency to minimize damage, ensure human safety and well-being, and facilitate a coordinated response effort. A wide range of potential incidents (i.e., medical, spills, fires, transportation, infrastructure) were identified through a risk assessment conducted by Woodfibre LNG and third-party consultants.

As part of Woodfibre LNG's heightened focus on emergency response, all relevant personnel completed the Incident Command System training on emergency preparedness offered by the Justice Institute of BC. This training equips team members with the necessary skills to effectively respond to emergencies, should they occur.

In 2023, Woodfibre LNG conducted a tabletop exercise with regulatory officials, stakeholders, staff and contractor representatives to simulate application of the Emergency Response Plan, practice the Incident Command Structure and refine procedures. Moving forward, Woodfibre LNG will continue to regularly schedule similar exercises to maintain readiness for potential emergencies.



## Reconciliation in Action

Woodfibre LNG recognizes the importance of Indigenous knowledge and stewardship in environmental management and sustainability.

Woodfibre LNG is committed to ongoing consultation and to strengthening mutually beneficial relationships with Indigenous nations, particularly the Skwxwú7mesh Úxwumixw (Squamish Nation), through the Squamish Nation Environmental Assessment Agreement (SNEAA) and Impact Benefit Agreements (IBAs).

### **SNEAA**

On October 14, 2015, Squamish Nation Council approved the SNEAA and issued an Environmental Certificate for the Woodfibre LNG project. The Squamish Nation Environmental Assessment Agreement involved an independent environmental assessment of the Project, which began in 2014 and includes 13 legally binding conditions that Woodfibre LNG is required to meet for the Project to move forward. The agreement includes legal remedies to ensure Woodfibre LNG's compliance with its commitments.

### **IBAs**

Woodfibre LNG has an IBA with Squamish Nation, signed in 2019, and an IBA with Səl (Iwəta?/Selilwitulh (Tsleil-Waututh Nation) that was signed in June of 2023, further solidifying Woodfibre LNG's commitment to Indigenous inclusion and partnership.

The IBAs include provisions related to business procurement, employment, training, culture and community.

Through IBA funding, Woodfibre LNG has been able to support the Squamish Nation Trades and Training Centre's Heavy Equipment Operator Program in 2022 and 2023. Woodfibre LNG has also partnered with Squamish Nation and the British Columbia Institute of Technology (BCIT) to launch an Operator Training Program for Squamish Nation members. This two-year program, which begins in 2024, will prepare participants for long-term careers during the operational phase of the Project.

## Governance and Accountability

Squamish Nation and Woodfibre LNG jointly operate an Environmental Working Group, facilitating transparent communication and sharing of Project details, updates, and progress on

implementing SNEAA and IBA conditions. Similarly, TsleilWaututh Nation and Woodfibre LNG have formed a Technical Working Group to discuss project elements and the IBA.

Quarterly Implementation Committee meetings provide a platform for the Nations and the company to discuss and manage implementation of the IBAs with updates from different working groups, covering areas such as employment, education, training and procurement.

Specialized sub-working groups allow subject matter experts to delve into specific topics, fostering in-depth engagement.

Approximately \$70.5 Million awarded in contracts to Indigenous-affiliated businesses in 2023.

In 2023, over 50 meetings were held with the Squamish Nation and 17 with the Tsleil-Waututh Nation.



## **Gender and Cultural Safety Training**

### Gender Safety Advisory Committee and Gender Safety Programming

In 2023, Woodfibre LNG made significant efforts to action the recommendations from the National Inquiry into Missing and Murdered Indigenous Women and Girls and established programming to strengthen gender and cultural safety related to the Project.

Woodfibre LNG established a Gender Safety Advisory Committee with a mandate to make recommendations on how to address gender and cultural safety concerns and manage safety and security impacts of the Project, particularly for Indigenous women, girls and 2SLGBTQIA+people.

The Committee includes Skwxwú7mesh Úxwumixw (Squamish Nation) staff and members, Səl ílwəta?/Selilwitulh (Tsleil-Waututh Nation) staff and members, and a representative from a local women's organization, PearlSpace. Representatives from the Impact Assessment Agency of Canada, BC Environmental Assessment Office, BC Energy Regulator, District of Squamish and FortisBC participate on the Committee as observers.

The Committee meets regularly to discuss and advise on ways in which the Project,



Members of the Gender Safety Advisory Committee and Woodfibre LNG staff

including the floatel and the surrounding community can be safe spaces for Indigenous women and 2SLGBTQIA+ people.

Gender safety programming is developed to strengthen corporate commitments to inclusivity, respect for diversity and community safety:

 Mandatory, in-person cultural awareness and gender safety training for all workers, delivered by Indigenous trainers, with the goal of creating a culture of respect and understanding,

- as a preventative measure to gender or cultural-based violence.
- Personal safety and risk identification training for women in Squamish to reduce vulnerability to assault and increase personal confidence and security.
- Sponsoring consent training for youth and high school students in Squamish.
- A four-year statistical research project to collect data that can serve as indicators related to gender-based violence for the Project's construction phase. The findings will assist in creating future

- bodies of work on best practices related to the policies at work camps.
- Dedicated training programs, in collaboration with the Ending Violence Association of BC, to promote a culture of speaking up and being more than a bystander.
- Providing additional capacity funding to PearlSpace to support programming and a third-party confidential reporting line for victims of violence, harassment, and assault.



## Gender and Cultural Safety Training



### **Gender and Cultural Safety Plan**

The Gender and Cultural Safety Management Plan is a condition of approval for use of the floatel, required by the BC Environmental Assessment Office through their November 2023 amendment of the Environmental Assessment Certificate, and additionally approved by the Squamish Nation through amendment of the Squamish Nation Environmental Assessment Agreement, also in November 2023.

The Plan is a first of its kind for any industrial project in Canada, and includes mitigations to deter, prevent and respond to any incidents of gender or culturally-based violence on the Project or in the community. It is informed by input from the Gender Safety Advisory Committee, Indigenous groups and stakeholders and will remain a living document over the course of the Project. Reporting on the Plan will be included as part of the 2024 Sustainability Report.

# In 2023, nearly 500 workers, including 100% of Woodfibre LNG staff, participated in comprehensive in-person training sessions.

Participants engage with important topics related to Squamish Nation cultural values, history, and the enduring legacy of colonization and residential schools. These sessions emphasize the importance of recognizing and addressing the ongoing challenges faced by Indigenous communities, shedding light on crucial statistics and underlining the urgent need to prioritize the safety and well-being of women and girls.

Gender safety training is a mandatory component of Woodfibre LNG's onboarding process that is delivered by Indigenous female trainers. This training ensures that workers understand the nuances of gender and cultural-based violence by exploring the disproportionate impacts of violence experienced by Indigenous women, girls, 2SLGBTQIA+ individuals, and the generational impacts of residential schools. The training offers an opportunity for reflection and discussion in a safe, nonjudgmental atmosphere.



Woodfibre LNG staff attend a training session



Introduction Health and Safety

## Regulatory Focus

### **Regulatory Environment**

Woodfibre LNG is pleased to work in an environment with a strong government regulatory framework. Woodfibre LNG is regulated by Indigenous, federal, and provincial governments, with regulation covering all aspects of the business, including managing and mitigating effects on the environment, community, health and safety, and Indigenous interests.

Subsequent to receiving environmental assessment approvals in 2015 and 2016, Woodfibre LNG met specific conditions of these authorizations prior to starting construction, as well as obtaining further permits and approvals for specific activities.

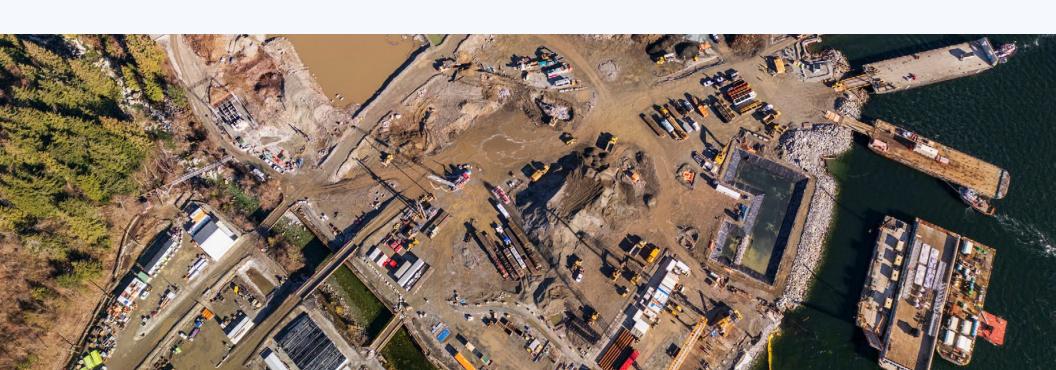
# Meeting regulatory requirements to allow construction to begin was a major focus in 2023.

This included obtaining major permits and authorizations to allow specific activities from federal, provincial and local governments and developing management plans to monitor for, avoid, respond or mitigate potential adverse effects from construction should these occur.

Applications for these authorizations were developed with a team of highly

qualified professionals, in collaboration with Indigenous nations. Development also entailed consultation with government technical experts, and for some applications, the broader local community. Woodfibre LNG received approval of amendments to its major environmental assessment authorizations.

As of the end of 2023, the company had more than 2,000 specific regulatory conditions that the company is required to comply with, as well as all provisions of Federal and Provincial legislation and regulation.



## Permits, Management Plans and Regulatory Amendments

In 2023, Woodfibre LNG submitted to regulators and received approvals, where required, on more than 30 regulatory documents, including management plans, protocols, and applications for permits and other authorizations.



### **April 7**

Reconciliation

District of Squamish issued 9 demolition permits for historical buildings and structures at the Project site, including the Powerhouse and Warehouse, Biobasin, Valve house and MCC Room, S.E.T. Control Room, Clarifier, Warehouse, Chemical Unloading shed, Potable Water Treatment Building, and Tool Shop and Garage.



### **May 11**

BCER approved an amendment to the Project's Facility permit regarding Fortis's V2 compressor location and butane-to-propane storage conditions.



### August 4

IAAC approved amendment to the Federal Decision Statement regarding marine mammal exclusion zones and marine water and sediment quality.



### October 6

DFO issued a Fisheries Act Authorization for in-water works, with conditions for fish protection, habitat, and offsetting.



### October 12

District of Squamish confirmed the marine components of the Project were exempt from requiring a development permit due to a Fisheries Act Authorization by DFO.



### October 24

District issued a development permit for the terrestrial components of the Project.



### November 1

BC EAO approved the third amendment to the Project's EAC, adding temporary floating worker accommodation and associated infrastructure, including removal of riparian vegetation and instream impacts.



### **November 2**

BCER issued a WSA Section 11 Authorization for changes in and about a stream during construction. It covered multiple streams and included removal of riparian vegetation and instream impacts like infilling, realigning, and diverting.



### **November 7**

Transport Canada approved potential navigational hazards under the CNWA for in-water infrastructure, including the Marine Offloading Facility, Floatel Mooring structures, and Floating Storage Tanks.



### **December 4**

Squamish Nation approved an amendment to add a floatel during construction to the Project Description under SNEAA.

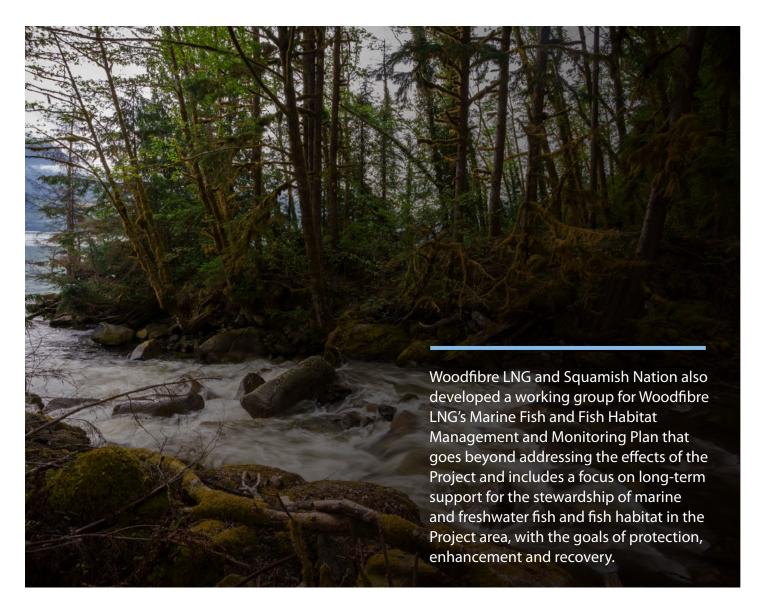
## **SNEAA** and Indigenous Monitoring

Reconciliation

As part of their jurisdiction under SNEAA, Skwxwú7mesh Úxwumixw (Squamish Nation) approved or conditionally approved several of Woodfibre LNG's management plans in 2023, including those fundamental to protecting water and the terrestrial and marine environments, as well as managing effects on the local community.

In addition to their approval role, the Squamish Nation plays a major role in actively monitoring Woodfibre LNG's construction activities, with a particular emphasis on the marine environment.

Starting in 2023, Woodfibre LNG provided capacity funding for the Squamish Nation to establish Indigenous monitor positions to ensure no marine mammals are nearby when certain marine construction activities are underway, and to stop work if marine mammals are too close, among other responsibilities.





## Compliance Mechanisms



Woodfibre LNG's authorizations are subject to compliance and enforcement frameworks of the Skwxwú7mesh Úxwumixw (Squamish Nation), federal, provincial and local governments, which includes onsite inspections.

Under these authorizations, Woodfibre LNG regularly reports on compliance, including annual reports for the federal environmental assessment Decision Statement, monthly reports for the provincial Environmental Assessment Certificate and federal Fisheries Act Authorization, and weekly reports on construction waste discharge.

In accordance with its compliance requirements, Woodfibre LNG reported any incidents and events pertaining to regulatory requirements.

In 2023, these included four reportable spills, with the largest spill volume of 250mL of biodegradable hydraulic oil, four turbidity events, and an elevated pH event. In all cases, Woodfibre LNG acted immediately to rectify the nonconformance and used these events as lessons learned to reduce the occurrence of similar events in the future. Details of these events can be found in Woodfibre LNG's Federal Decision Statement Annual Report 2023.

During 2023, there was a reported non-compliance event by the BC

Environmental Assessment Office (BC EAO). Woodfibre LNG had notified BC EAO that it intended to replace its passenger dock in December 2022 and January 2023, as the existing passenger dock was old, badly damaged and no longer safe. BC EAO elected to begin an administrative inspection after Woodfibre LNG began work on the passenger dock. To support this administrative inspection, Woodfibre LNG provided the schedule, and design for the replacement passenger dock, indicating that Woodfibre LNG believed its replacement did not constitute Construction under the Environmental Assessment Certificate, which allowed for "Ongoing maintenance or upgrades to the existing work or infrastructure to address safety, environment or regulatory

compliance." (Amendment 2 of the EAC)

In February 2023, BC EAO concluded that passenger dock work conducted by Woodfibre LNG constituted "Construction", and determined that Woodfibre LNG was in non-compliance. Woodfibre LNG accepted the decision and safely halted the work, to put Woodfibre LNG back in compliance. The passenger dock work did not resume until after Woodfibre LNG met the conditions required to begin construction, according to the EAO, later in 2023.



and Permits

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Freshwater Use

Protection

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# Biodiversity and Ecosystem Protection

Canada's robust regulatory environment, supported by the provincial government of British Columbia, sets high standards for environmental protection, ensuring that projects like Woodfibre LNG are held to the highest levels of accountability.

Woodfibre LNG acknowledges and respects the stringent regulations put in place by both the federal and provincial governments as well as the Skwxwú7mesh Úxwumixw (Squamish

Nation), recognizing their regulatory requirements as fundamental pillars of environmental preservation.

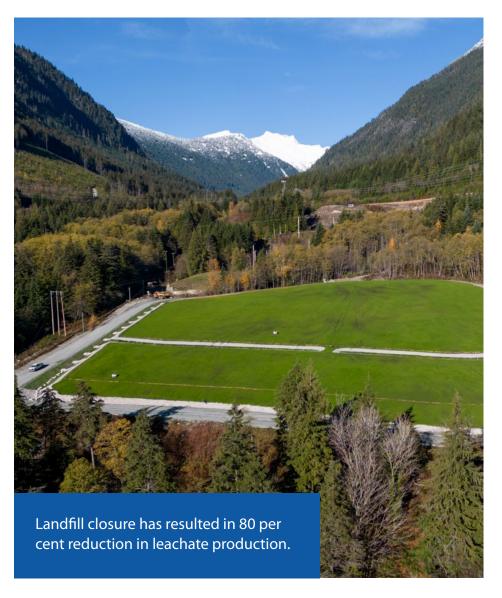
Operating within Howe Sound, Woodfibre LNG acknowledges the heightened responsibility to protect and conserve this unique habitat as a cherished cultural and recreational area for Squamish Nation and local communities. Woodfibre LNG is committed to implementing effective environmental programs to mitigate any potential adverse impacts from its operations.





### **Environmental Remediation**

Reconciliation



Since acquiring the site in 2013, Woodfibre LNG has embarked on significant initiatives to remediate historical environmental impacts and safeguard local ecosystems from the site's 100-year operating history as a pulp mill.

**Emission** 

Key among these efforts are contaminated soil remediation, creosote pile removal, and the closure of a historical landfill.

### **Contaminated Soil** Remediation

Upon acquiring the site, Woodfibre LNG initiated a comprehensive program to address historic pollution, identify contaminated soil hotspots and carry out remediation, including disposal of contaminated soils at licensed, off-site facilities. Compliance with regulatory standards guided the selection of remediation methods, ensuring effective pollution mitigation while minimizing environmental impact.

### **Creosote Pile Removal**

Recognizing the ecological hazards posed by deteriorating creosote piles in the marine environment, the company removed more than 4,000 creosote piles from the marine environment. Additional creosote structures are planned to be removed throughout the construction phase of the Project.

### **Landfill Closure**

In 2023, Woodfibre LNG completed closure of the site's historical landfill. In compliance with regulatory requirements, multiple layers of environmental protection were implemented to prevent leachate migration and soil contamination. Surface water management features, such as diversion ditches around the landfill perimeter, were installed to redirect water away. Regulatory authorities provided oversight throughout the closure process, ensuring compliance with environmental regulations and standards. Since the closure, there has been an 80 per cent reduction of landfill leachate production.

## **Ecological Protection**

As Woodfibre LNG advances through the construction phase of the Project, the primary focus remains on environmental stewardship and proactive conservation efforts.

Upcoming ecosystem enhancement projects, mandated by regulatory requirements, provide opportunities for Woodfibre LNG's commitment to exceed regulatory standards. These projects will be underpinned by baseline data measurements and ongoing monitoring. By tracking progress and outcomes, including the changes to biodiversity of aquatic species in both marine and freshwater ecosystems adjacent to Woodfibre LNG's site, tangible benefits for the environment will be measurable.

### Marine Mammals and Underwater Noise

In 2023, Woodfibre LNG worked closely with Skwxwú7mesh Úxwumixw (Squamish Nation) to develop the Marine Mammal Observation Program and Hydroacoustic Plan to achieve environmental protection and regulatory compliance. Underwater noise and above water visual monitoring was conducted, as required, during in-water construction

activities by environmental monitors under the direction of a Qualified Professional. Exclusion zones for fish and marine mammals were maintained to ensure peak sound pressure levels were not exceeded.

### **Riparian Habitat**

As part of the environmental permitting process with the District of Squamish, Woodfibre LNG has committed to compensating for the clearing of terrestrial habitats on the project site with a minimum ratio of 2:1. Woodfibre LNG is working with the Squamish Nation to identify areas within Squamish for riparian and aquatic restoration projects. In total, Woodfibre LNG has committed to restoring or enhancing 5.4 hectares of riparian and aquatic habitats.

### Mill Creek

Woodfibre LNG is committed to conducting restoration activities in Mill Creek to restore it to a more natural state. The creek bed will have added in-stream habitat features, select concrete walls will be altered to provide more natural slopes, and a "Green Zone" surrounding the creek will be planted with riparian vegetation, providing new habitat to a variety of wildlife species.



### **Fish Habitat**

As part of commitments under 2023 approvals from the Fisheries Act Authorization, Development Permit, and Water Sustainability Act permit, Woodfibre LNG is committed to fish habitat offsetting initiatives. These efforts entail multifaceted habitat improvements,

including the removal of wood waste debris, installation of habitat structures, and integration of ecologically functional substrates panning approximately 20,000m<sup>2</sup>.

**Emission** 



## **Environmental Management Plans and Permits**

Reconciliation



To enable start of construction, numerous permit applications and management plans were developed and executed to ensure adherence to thousands of regulatory conditions imposed by federal, provincial, municipal, and Indigenous authorities.

In 2023, notable environmental approvals included federal permits for fish and fish habitat protection, navigational safety, and endangered species conservation, and provincial approvals for water management and contaminated soil remediation. Municipal permits included development, noise control, and tree management. Indigenous groups granted archaeological investigation permits and amendments important for the project to move forward, in addition to the direct approvals within Squamish Nation's jurisdiction.

Management plans were developed in consultation with Indigenous groups and other stakeholders and outline strategies for environmental, heritage, safety, and social impact mitigation and are required to be reviewed and approved by regulators prior to the start of construction.

Woodfibre LNG's Construction Wildlife Management Plan has species specific management plans, including for Bald Eagles.

Reconciliation

**Emission** 

### Freshwater Use



### Woodfibre LNG aims to minimize freshwater usage during construction.

In 2023, freshwater usage included water for human consumption, for the administrative building and sanitary water, fire suppression, and general construction activities such as dust suppression and equipment cleaning. Water sourced from Mill Creek amounted

to approximately 89,000 m<sup>3</sup>. To ensure sufficient water is available for aquatic species, Woodfibre LNG is required to maintain minimum flow levels in any stream that water is drawn from. This means during periods of low stream flow, Woodfibre LNG will not extract water from the streams.

Terrestrial works, including rail track removal, building demolition, Mill Creek water intake upgrades, electrical upgrades, and landfill closure, were executed with attention towards environmental protection and waste management efforts. Similarly, marine operations such as dock replacement, shoreline works, and geotechnical drilling incorporated stringent mitigation measures to minimize ecological impact.

Environmental monitoring programs encompassing water quality assessments, instream flow monitoring, and wildlife

surveys, provided crucial baseline data and facilitated ongoing impact evaluation. Stringent protocols for invasive species management and endangered species protection were implemented to safeguard local biodiversity and ecosystem integrity.



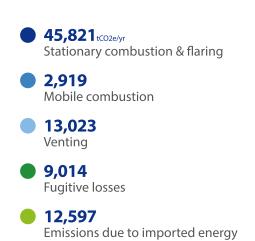


## Net Zero Roadmap

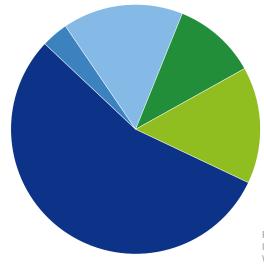
Woodfibre LNG is dedicated to Canada's net zero targets, including the Canadian Net-Zero Emissions Accountability Act and the 2030 Emissions Reduction Plan. Envisioned as a low-carbon facility from inception, Woodfibre LNG aims to be the world's first net zero LNG export facility upon completion in 2027.

In 2023, Woodfibre LNG collaborated with Brightspot Climate Inc. to develop a Roadmap to Net Zero, estimating emissions during construction and operation. The methodology aligns with BC Ministry of Environment and Climate Change Strategy's regulations and best practices from the International Group of Liquefied Natural Gas Importers.

The facility aims for a new global standard of carbon intensity, targeting 0.04 tCO2e/tLNG, significantly below the global LNG production facility average. Woodfibre LNG prioritizes emission avoidance through design choices and plans to offset residual emissions with local, nature-based carbon credits. The Roadmap also commits to net zero emissions during construction, a rarity in Canadian industrial projects.



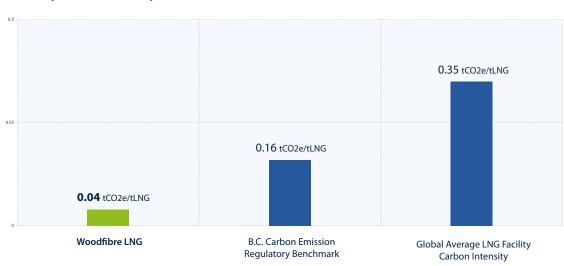
**83,374** tCO2e/yr Total Emissions



Community

Figure 1: Brightspot Climate Inc.'s Estimated Emissions for the Woodfibre LNG facility

### Facility Carbon Intensity in tCO2e/tLNG



Reconciliation

**Emission** 

1,028

## Low Emission by Design

Woodfibre LNG can achieve net zero in part because of earlystage design decisions, including those stipulated by SNEAA, to avoid emissions at the outset.

Introduction

The foundation of Woodfibre LNG's approach to low emission design is the early decision to incorporate turbines powered by renewable hydroelectricity, rather than natural gas, to cool and liquify the feed gas. The decision to use an electric drive compressor will result in stationary combustion emission avoidance of approximately 230,470 tCO2e per year.

Woodfibre LNG continues to stay current with emission reduction innovations, including those incentivized by the federal and provincial governments and encouraged by emerging frameworks, such as Canada's Methane Strategy.

Table 1 lists the key GHG reducing technologies and their contribution to emission reductions. For more detailed information on these technologies, please refer to WLNG's Roadmap to Net Zero.

Woodfibre LNG Emission Reduction Opportunity	Annual tCO2e Avoided
Design Phase Opportunities	
Electric Drive Compressors	230,470
Boil-off gas re-liquefaction	11,714
Use of high-performance (low passing) dry gas seals on compressors	6,391
Recycle Lines	3,579
Air cooling	3,280
Operations Phase Opportunities	
Орегация т насе оррогиниесь	
Monthly LDAR inspections and repairs	7,842
Compressor improvements	3.579

Table 1: A summary of key technologies Woodfibre LNG will use to abate emissions.

On-site Nitrogen Plant

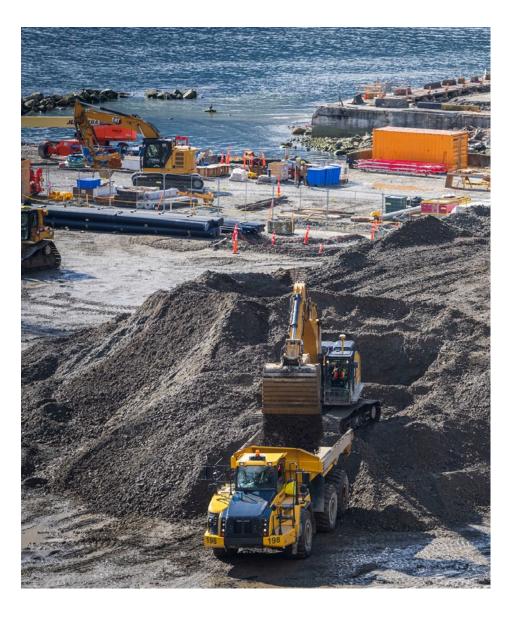


**Emission** 



## **Construction Emissions Quantification**

Reconciliation



Woodfibre LNG is committed to being net zero on site during construction, which is unique for industrial construction projects in Canada.

The Project's construction emissions for 2023 were quantified using the methodology and emission factors published by the Western Climate Initiative (WCI) in 2011. The WCI is the standard quantification methodology used by industrial GHG emitters under the British Columbia Greenhouse Gas Reporting and Control Act.

The WCI outlines the methodology for calculating the emissions from the combustion of gasoline and diesel in mobile equipment at facilities (WCI.280). In general, emissions are calculated by

multiplying the volume of combusted fuel by a standard emission factor for the type of fuel. In BC, WCI's off-road transportation emission factor for motor gasoline is used for gasoline combustion (WCI Table 20-2). WCI has one standard emission factor for diesel combustion (WCI Table 20-2).

Brightspot's quantification of Woodfibre LNG's 2023 construction emissions are estimated to be 534.7 tCO2e, summarized in Table 2. The quantified emissions represent 2.7 per cent of the total estimated emissions for the entire construction period to 2027. Woodfibre LNG is expected to experience an increase in emissions through the construction phase as activities ramp. Nature-based carbon credits have been purchased in advance to offset the GHG emissions from on-site activities related to the construction phase of the Project.

Emissions Category	Fuel	Volume (L)	Emissions (tonnes)			
			CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e
Site Preparation & Logistics	Diesel	185,524	494.1	0.02	0.07	514.4
	Gasoline	8,525	19.5	0.02	0	20.3

Table 2: Woodfibre LNG's 2023 On Site Construction Emissions

Regulatory

Reconciliation

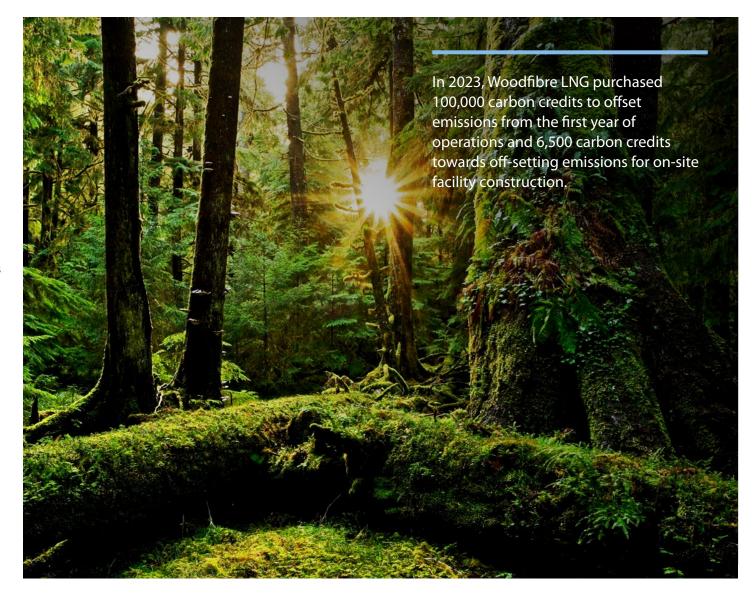
**Emission** 

## **Offset Strategy**

Recognizing there are limitations to current emission reduction technologies, Woodfibre LNG has taken proactive steps to address hard-to-abate emissions by purchasing nature-based carbon offsets.

Through strategic partnerships with Mosaic Forest Management and Cheakamus Community Forest, both of which involve partnerships with local Indigenous groups, Woodfibre LNG has opted to purchase nature-based carbon credits to offset greenhouse gas emissions generated during Project construction and the first year of operations. Additional carbon credits will be purchased throughout operational years to offset future facility emissions.

Nature-based offsets involve investing in certified initiatives or projects that sequester (remove) CO<sup>2</sup> from the atmosphere through natural processes such as afforestation, reforestation, or improved forest management. These projects not only mitigate carbon emissions but also provide additional environmental and social co-benefits, including biodiversity conservation, watershed protection, cultural heritage protection and enhanced recreation and tourism to name a few.





Community

## Community Services and Infrastructure Management



Woodfibre LNG's Floatel

In summer 2023, as a condition of start of construction approvals, Woodfibre LNG developed a Community Services and Infrastructure Management Plan (CSIMP) through extensive consultation with Indigenous groups, government agencies and community stakeholders, and in the fall, it was approved by the BC Environmental Assessment Office and the Skwxwú7mesh Úxwumixw (Squamish Nation).

The CSIMP outlines key mitigations that Woodfibre LNG is undertaking, or will undertake during construction, to minimize any potential negative impacts of the Project. These include the following:

- Housing all non-local construction workers on the floatel, which will be located on the Project site, 7 km outside Squamish and under regulatory conditions that prohibit recreational access to the community.
- Providing separate utilities and on-site services (e.g. gym and recreational services) on the floatel, to minimize potential impact to community infrastructure and services.

- Providing medical care to workers living on the floatel, including access to mental health, addictions and sexual health services.
- Ensuring that non-local workers do not have access to the community.
- Minimizing impacts to local traffic by using a ferry service to shuttle non-local workers, materials, and equipment to site.
- Implementing gender and cultural safety programming to ensure the safety of the workforce and community members, particularly Indigenous women and 2SLGBTQIA+ people.

- Providing hiring and training opportunities for local and Indigenous workers, and monitoring impacts on local businesses.
- Funding existing local services and programs in the community.
- Providing a Community Feedback and Inquiry mechanism to answer questions and share concerns or complaints.



## Community Feedback and Stakeholder Engagement

Since 2013, Woodfibre LNG has had thousands of interactions with community members through community events, information sessions, open houses, town halls, municipal government presentations and stakeholder roundtables and meetings.

Introduction

Woodfibre LNG is committed to maintaining this engagement throughout construction of the Project and into operations. In February 2023 the company established a Community Feedback and Inquiry Process as a mechanism for members of the public to seek information, raise concerns (anonymously if desired) and have their inquiries addressed by subject matter experts within the company in a timely manner

In 2023, there were a total of 3,536 inquiries through the Community Feedback and Inquiry mechanism, and all were responded to or resolved.

In 2023, Woodfibre LNG organized 20 public events aimed at engaging with local stakeholders and soliciting their feedback on key initiatives and projects. These events included a public meeting to discuss Woodfibre LNG's construction

phase Waste Discharge Authorization
Permit, an open house event to provide
insights into the Project's progress, and
public engagement sessions featuring
virtual reality technology to allow
community members to visualize and
explore the future facility. These initiatives
served as platforms for dialogue, allowing
Woodfibre LNG to share information,
address concerns, and gather valuable
feedback from community members.



Type of Event	Number of Events
Gender Safety Committee Meetings	4
Community working group/roundtable	20
Community event sponsorship	10
Community event participation	9
Woodfibre LNG hosted events / open houses	5

Woodfibre LNG responded to **3,536** inquiries and organized **20** public engagement opportunities.

Reconciliation

**Emission** 



## Sponsorship and Events

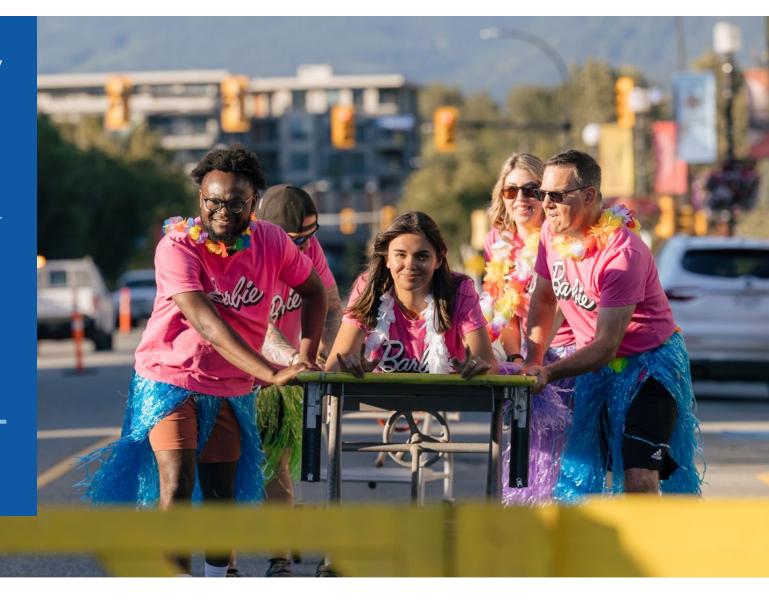
Woodfibre LNG made it a priority in 2023 to actively participate in various community events throughout the year.

From the Squamish Days Loggers Sports Festival, to culturally oriented events such as the Sikh Festival, Woodfibre LNG enjoyed connecting with and celebrating the diversity of the Squamish community.

In addition, Woodfibre LNG sponsored events hosted by the Squamish Chamber of Commerce, Squamish Hospital Foundation, Squamish Windsports Society, and Learn Develop Succeed Society. These gatherings provide opportunities for Woodfibre LNG to engage with the community while supporting important local causes and initiatives.

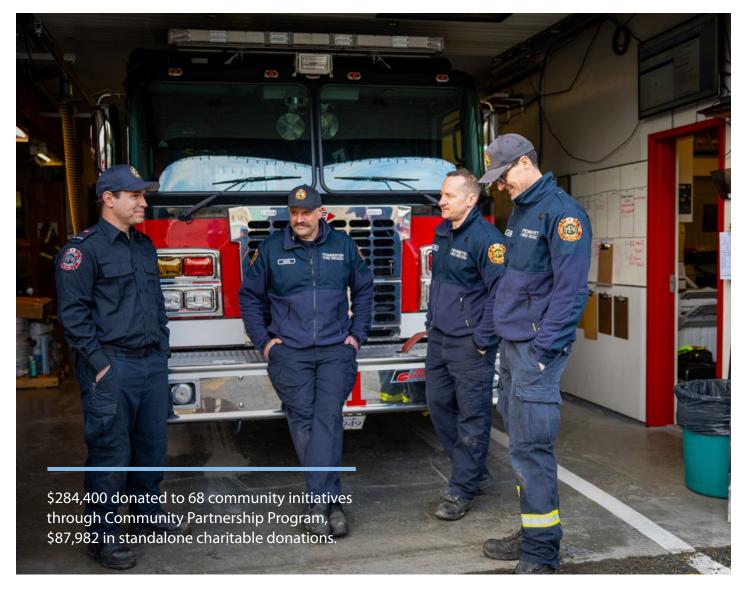
\$93,950 in Community Sponsorships







## **Community Support**



Woodfibre LNG believes that nurturing strong and resilient communities helps to develop a supportive ecosystem that benefits all stakeholders, including customers and employees.

Twice per year, Woodfibre LNG invites non-profit organizations from the community to apply to its Community Partnership Program, the company's cornerstone community investment program. The program is open to organizations that provide services and programming related to sports and recreation, health and wellness, arts and culture, employment and training and search and rescue.

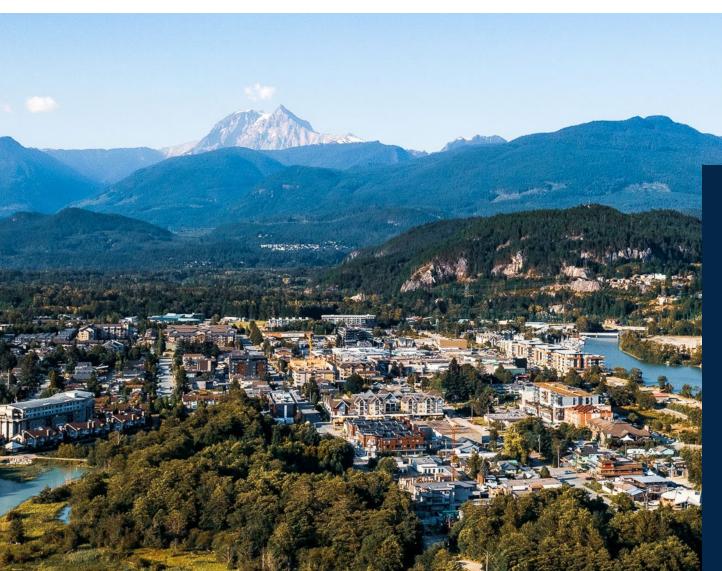
In 2023, Woodfibre LNG invested \$284,400 through the Community Partnership Program in 68 different community support initiatives aimed at addressing important social and educational challenges and improving the quality of life in the Squamish region.

Through its annual scholarship program, Woodfire LNG provides four \$5,000 scholarships to deserving students of Howe Sound Secondary School to support their pursuit of post-secondary education.

Introduction Health and Safety Reconciliation Regulatory

Biodiversity

## **Community Investment**



In 2023, Woodfibre LNG spent nearly \$18 million on local procurement, municipal permits and capacity funding, exclusive of charitable donations.

Woodfibre LNG acknowledges that reviewing, considering and approving permits and management plans requires time, attention and capacity of the local government. Since 2022, Woodfibre LNG has provided additional capacity funding to the District of Squamish for incremental staff positions dedicated to the Project.

Woodfibre LNG also provides annual capacity funding to PearlSpace for delivery of programs that aim to prevent gender-based violence and support survivors impacted by violence or abuse, not directly related to the Project.

