



# Fueling the future



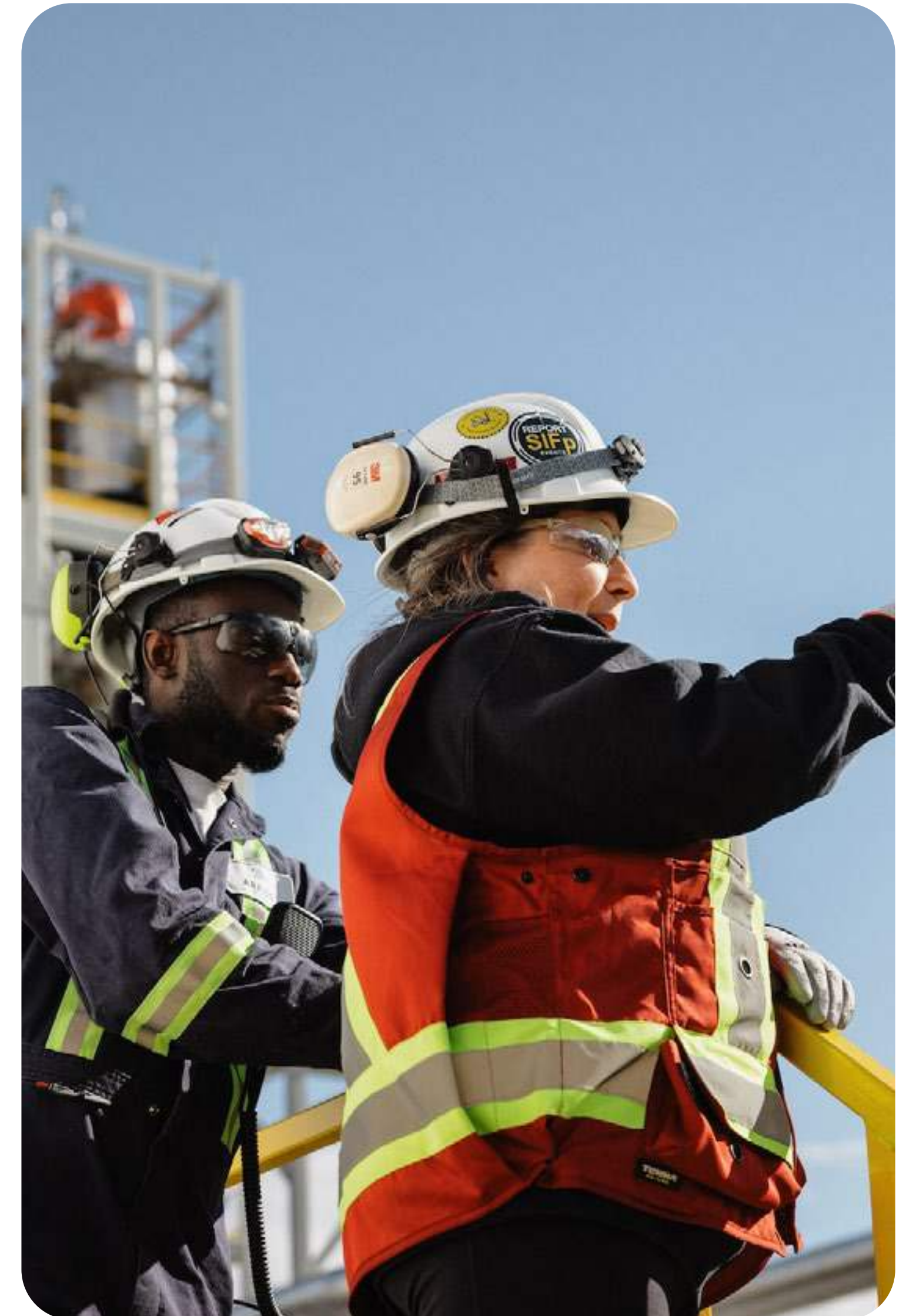
# Advancing the production of sustainable biofuels at scale

**A preeminent leader in the commercialization of the production of sustainable bio-oil that can be refined to create a range of biofuels and biochemicals.**

**Arbios is at the forefront of transforming renewable resources into sustainable energy and chemical products, driving the future of clean technology.**

Arbios envisions a future where waste and under-utilized biomass is not a burden, but a valuable resource, inspiring more carbon neutral industry and transportation sectors globally. By transforming locally sourced biomass, such as forestry residues such as slash, tops and thinnings, into high-value, renewable biofuels, Arbios offers a sustainable alternative to fossil-based oils.

Arbios has built a facility in Prince George, British Columbia, to verify the continuous production of renewable bio-oil, which can be further refined into sustainable biofuels for sectors like aviation, road transport, and shipping. As a joint venture between industry leaders Licella and Canfor, Arbios is advancing the implementation and operationalization of hydrothermal liquefaction technology.





Arbios Facilities and Projects

# Leading the global commercialization of HTL technology

# Arbios Chuntoh Ghuna facility (CS-2)

<b>Location</b>	Prince George, British Columbia, Canada, central to British Columbia's forest industry and close to underutilized forest residues. <a href="https://maps.app.goo.gl/8Q61CUrSaF4a7QRr5">https://maps.app.goo.gl/8Q61CUrSaF4a7QRr5</a>
<b>Completion</b>	Completed in 2024, Arbios has constructed the world's largest Hydrothermal Liquefaction (HTL) facility converting biomass to bio-oil.
<b>Capacity</b>	Initially converting 25,000 dry tonnes of wood biomass into 50,000 barrels of renewable bio-oil annually, Chuntoh Ghuna currently holds permitting to double this capacity. The facility's footprint allows for a potential quadrupled output of 200,000 barrels yearly.
<b>Core Technology</b>	Arbios uses Licella's Cat-HTR™ hydrothermal liquefaction technology, which has been developed for over 16 years. With the Chuntoh Ghuna facility we aim to verify the commercial viability of the technology / facility configuration.



# Arbios Chuntoh Ghuna facility (CS-2)

## Design Basis

The Arbios Chuntoh Ghuna facility in Prince George is designed to operate 24/7 to prove steady state process conditions and long-term reliability for HTL production of renewable bio-oil.

## Project Partners

Situated in the heart of the unceded territory of the Lheidli T'enneh First Nation, the facility has been developed working in close partnership with the Lheidli T'enneh who named the facility Chuntoh Ghuna ("Chan-toh Hannah"), meaning The Forest Lives.

## Other Project Funding

The Arbios Biotech Chuntoh Ghuna facility received support from the British Columbia Low Carbon Fuel Standard (LCFS); Sustainable Development Technology Canada; the BC Innovative Clean Energy Fund; and Natural Resources Canada's Clean Growth Program.



# Arbios CS-1

<b>Location</b>	Somersby, New South Wales, Australia.
<b>Completion</b>	The world's first small-scale HTL plant, CS-1 was commissioned in 2021, after 3 previous rounds of scale-up since 2007.
<b>Capacity</b>	This facility is designed to process biomass at a rate of 1,100 tonnes per annum and can produce renewable bio-oil at a rate of 3,000 barrels per annum using Cat-HTR™ reactors.
<b>Core Technology</b>	Cat-HTR™ hydrothermal liquefaction.
<b>Design Basis</b>	The facility can process a range of post-consumer biomass feedstocks including agricultural waste biomass, forest residues and woody biomass, and biogenic forms of municipal solid waste.



# Combining deep operational expertise with proven success in commercializing sustainable technologies

## Board

Arbios' Board comprises a seasoned and diverse team including senior executives from Licella, Canfor, and the wider finance and clean biotech industry.



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Board Chair

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# Boots on the ground, eyes on the future

## Leadership team

Our leadership team takes strength from its highly collaborative approach, drawing upon the team's experience in similar biofuel projects, finance, M&A, industrial operations and infrastructure projects.



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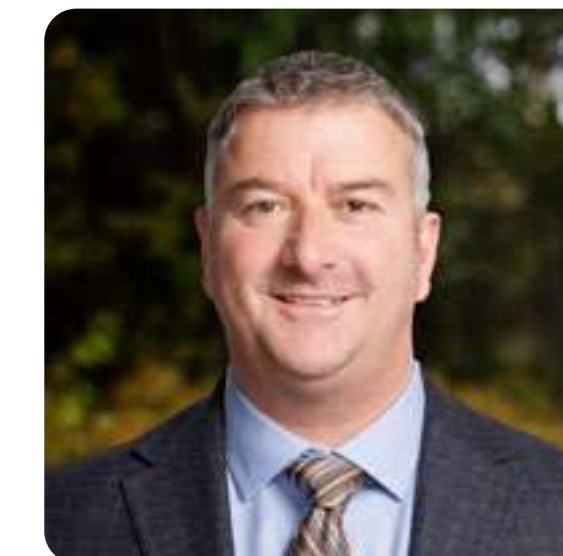
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# About Arbios

## HQ location

Arbios Biotech is headquartered in Vancouver, a hub of Canada's natural resource and biotech development companies. Arbios Biotech has strong government and community support.

## Territory

Arbios is growing its business in North America, South America and Europe.

## Team

Arbios has a diverse and experienced team of approximately 30 people.

## Ownership

Arbios is a privately owned joint venture of two industry leaders: Licella ([www.licella.com](http://www.licella.com)) and Canfor ([www.canfor.com](http://www.canfor.com)).

## Partners / Alliances

Arbios has a strategic alliance with Shell Catalysts and Technology to explore upgrading and biorefining technology with a low carbon intensity.

Following the principles of UNDRIP and FPIC, Arbios has been working in Partnership with the Lheidli T'enneh Nation since the inception of its Chuntoh Ghuna facility in Prince George, British Columbia.

Arbios works in jurisdictions where governments support the development of biofuel technology and commercialization.



# About Arbios

## Technology Development

Arbios uses Licella's Cat-HTR™ hydrothermal liquefaction technology which has been developed for over 16 years and 3 scale-ups to bring us to this point where we are proving the commercial viability of the technology / facility configuration. Arbios' facilities are based on modular design that is easily scalable and can be positioned close to feedstock supplies.

## Advantages of HTL Bio-oils

Studies have shown that HTL technology can yield an energy-dense, stable bio-oil which is compatible with existing refinery processes and improves overall fuel quality, paving the way for widespread adoption.

## Feedstocks

The Cat-HTR™ core technology utilized by Arbios is versatile and feedstock agnostic. The technology can handle high moisture content biomass including sawmill residuals like bark, forest industry and agricultural residues, and biogenic forms of municipal solid waste.

## Products and Applications

Arbios' bio-oil is a ready-for-refining intermediate, with further processing required for end-use products.

End use applications with the highest value potential include Sustainable Aviation Fuel (SAF), marine fuels, renewable transportation fuels, and renewable chemicals.

## Future Projects

Arbios is currently permitted for expansion at its Chuntoh Ghuna facility in Prince George and the company is exploring projects in North America and Europe. Our modularized approach provides flexibility in both scalability and ability to be positioned close to feedstocks.

## Net-Zero

Bio-oils like ours have the potential to be up to 80% less carbon intensive than fossil-based fuels. By using feedstocks that would otherwise be burnt or left to decompose, Arbios' products have the potential to be truly Net-Zero – an advantage for the environment, and our partners and customers.

## From opportunity to action-join us on our journey to net-zero

Arbios is open to working with like-minded partners. We have the versatility to consider a range of structures. From global feedstock suppliers to forward-thinking off-take partners, we're building a collaborative ecosystem that drives the bioeconomy forward.

Our approach is built on open communication, shared goals, and a commitment to driving positive change in the industry.



# Contact us

Arbios is open to exploring how to create mutual value through expanded partnerships. Please contact us at [investors@arbiosbiotech.com](mailto:investors@arbiosbiotech.com)