



FRTH
TECHNOLOGIES

IMPACT REPORT 2022



INDUSTRY IMPACT:

Until Froth Technologies was founded, NZ breweries had no option but to use yeast imported from overseas. World class brewing ingredients such as Canterbury barley and Tasman hops have been produced locally for some time, and for the first time, brewers can source their yeast locally too - allowing them to make Kiwi beers with 100% NZ ingredients. With beer ingredients making up 31% of the footprint of a pint of beer; using locally sourced ingredients is a great way to reduce that. Yeast also usually comes in two forms: dry or liquid. Dry yeast is usually industrially produced, and then dried and extruded in an energy intense process resulting in a carbon footprint 40% larger than liquid yeast. Froth Technologies is batch producing quality liquid brewing yeasts in Lower Hutt, NZ. Our products are shipped by road via the local overnight courier network.

“We imagine a future where NZ craft beer is recognised as not only the highest quality in the world, but also the most sustainable.”

EARTHLINGS | ENVIRONMENT | ENTERPRISE

Froth Technologies is motivated by three core business values. We want our sense of achievement to not just include profit or revenue growth, but also the natural environment, and the living beings that inhabit it. We refer to these three pillars as Earthlings, Environment, Enterprise. We want Froth Technologies to be a business that not only serves our customers, but also creates a positive impact at the same time.

PAST ACHIEVEMENTS:

- Invested in a fully electric brewing system (rather than gas)
- Sponsored 70 native seedlings, and helped plant 700 trees on a planting day
- Signed on with Ekos to offset our footprint to 120% Climate Positive
- Distributing used malt barrels to local community for repurposing
- Upgraded autoclave from gas fired to electric
- Switched from single-use plastic, to glass petri dishes for QC
- Implemented yeast jug take-back scheme for local recycling
- Energy consumption reduced and weekend trips to site eliminated after implementing smart & remote automation devices
- Switched from bubble wrap to 100% paper-based carton insulation
- Switched from sellotape to brown paper tape
- Introduced bucket liner packaging for our yeast nutrient product, meaning the first bucket can be reused indefinitely
- Re-certified with Ekos Climate Positive accreditation (120% offset)
- Implemented Tetra Pak and Soft Plastic recycling



GOALS FOR 2022:

- Switch to 100% renewable power
- Install a supplementary solar panel system on the lab roof
- Switch yeast jugs to sugarcane bio plastic material
- Continue to implement smart automation control to further increase efficiency and reduce energy consumption
- Plant more trees

GOALS FOR 2023:

- Explore reurposing of our waste brew from production
- Explore composting of spent yeast slurry
- Switch yeast jugs to lower impact material
- Switch to paper courier bags
- Plant more trees
- Re-certify Climate Positive accreditation
- Continue to reduce our emissions intensity per unit of yeast



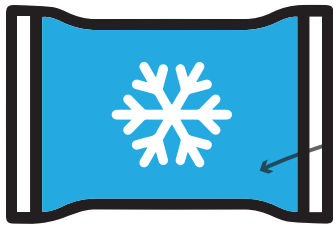
PRODUCT FOOTPRINT



All NZ ingredients (reusable 5-10 times in the brewery, then compostable or drained to local treatment plant)

Removable vinyl label (Soft plastic recycling)

(No.2) HDPE bottle | Recyclable via the brewery, or returnable to Froth Tech for recycling.



Reusable Ice Pack (returnable to Froth Tech, or can be drained for soft plastic recycling)



100% paper-based insulation (paper recycling or compost)

Corrugated cardboard carton (paper recycling or compost)

Reusable ink stamp for carton branding

Brown kraft paper tape (paper recycling or compost)



Net Climate Positive Business Operations

This is to certify that

Froth Technologies Limited

Has measured and offset the business operations scope 1, 2 and 3 CO₂ emissions for the year measurement period 1 March 2022 to 28 February 2023 with the following details:

Total emissions = 12.88 tCO₂e

Total offsets = 16 tCO₂e (120%)

Offsets retired on the New Zealand Emissions Trading Register.

Certificate #: 50000122

Date Issued: 12th April 2023

Carbon Credits:

16 Flax Hills Kaikōura Permanent Restorative Forest Project, Aotearoa New Zealand (NZUs)

Registry: New Zealand Emissions Trading Register, NZUs.

Signed



McHugh & Shaw Ltd
Certifier

