



# WASTE TO METHANOL - Ngāti Hine


## With the use of MAXI SCFG technology


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# Foreword

If Ngāti Hine plans to install **15 MAXI SCFG units**, then Ngāti Hine is not only aiming to solve an environmental problem, but to dominate the **green methanol market**, which is crucial for the decarbonization of maritime transport (e.g. Maersk and other major shipping companies).

Here is a calculation that explains why it needs so much capacity (15 MAXI SCFG units) and where Ngāti Hine will find the raw material.

## Energy and production output (15 units)

When the system is running at full capacity, the figures are impressive:

- **Total waste processing:** 2,160 tons per day.
- **Green methanol production:** approx. **1,650 tons per day**.
- **Annual production:** over **600,000 tons of methanol**. *(This is the amount that can supply a large port or an international fleet of ships).*

## Why did Ngāti Hine express interest in 15 units (Real Sources of Waste)?

The official statistics of 80 tons per day are "ridiculous" for this capacity (2,160 tons per day). However, if the people of Ngāti Hina know the "waste business", then they know about resources that are invisible in the statistics:

1. **Slash & Wood Waste:** Northland is the heart of NZ's timber industry. Millions of tons of wood waste rot on the hills and cause flooding. The SCFG system ideally converts this wet wood waste (biomass) into EnerGas. It is **an unlimited source** of raw material in the region.
2. **Landfill Mining:** There are old landfills in Northland that need to be cleaned up due to the danger to the sea. By digging up these landfills, thousands of tons of waste per day are obtained, which "do not enter the statistics of liquid waste", but are the perfect raw material for SCFG machines.

3. **Waste Import (Auckland Hub):** Auckland produces over **1.6 million tonnes of** waste per year. The cost of disposal (Waste Levy) in NZ is steadily increasing. Ngāti Hine is probably planning contracts to pick up waste from Auckland by rail or ships, turning someone else's "cost" into his own "profit" (green methanol), at least that's what I would do/suggest, if Ngāti Hine doesn't already think so.

## **The Geopolitical and Economic Context of Ngāti Hina**

Ngāti Hine strives for **Mana Motuhake** (economic and political independence).

- By owning 15 MAXI SCFG units, they become **energy independent**.
- The production of **220 tons of methanol from just two units** means that with 15 units it will become one of the largest exporters of green fuel in Oceania.
- **Green methanol** currently has a premium price on the world market (often 2-3 times more expensive than fossil methanol).

## **My conclusion on the data disparity**

Ngāti Hine does not have exact data on "municipal waste", nor **does it plan to build a utility company**, but **an industrial energy complex**, as it has data on MAXI SCFG TO MTAHANOL. Ngāti Hine, i.e. the people who run it, do not look at the garbage cans of citizens, but:

- Trucks with wood waste (biomass).
- Wagons with waste from Auckland.
- Muddy lagoons that have been accumulating for 50 years.

Do you want me to help you put together **a technical query** that targets these "hidden" sources of waste to validate their plans?

# **SUBJECT: Request for submission of data on total raw material flows (Feedstock) for the project "NGĀTI HINE – WASTE TO METHANOL"**

Dear Sirs,

In order to produce a precise technical-economic study for the installation **of 15 MAXI SCFG units** and to ensure a strong argument before the Government of New Zealand, it is necessary to identify all sources of raw materials that go beyond standard municipal waste (MSW). Given the projected processing capacity of **2,160 tons per day** (15 MAXI SCFG units) and the targeted production **of green methanol**, please collect data from the following "hidden" sources:

## **1. Industrial and Agricultural Biomass (Primary Feedstock)**

SCFG technology uses moisture from biomass as a working medium, making it ideal for:

- **Forestry Slash:** An estimate of the annual quantities of logging residues in the Ngāti Hine Rohe area and the wider Northland region.
- **Wood industry:** Quantities of sawdust, bark and technological wood waste from local sawmills.
- **Agricultural waste:** Quantities of silage plastics, organic waste from farms, and crop residues that are currently being burned or left on the ground.

## **2. Remediation of historical landfills (Landfill Mining)**

Since the project has the capacity for the complete molecular destruction of old waste:

- **Site identification:** A list of closed and active landfills within the area of influence.

- **Volume estimation:** An estimate of the total mass of deposited waste available for excavation and energy conversion (legacy waste).

### 3. Liquid Municipal and Industrial Sludge (Liquid Feedstock)

For maximum efficiency of SCFG systems, sludge is a key component of:

- **Silt lagoons:** An assessment of the accumulated sludge in all wastewater treatment plants (WWTP) in the Northland region.
- **Industrial sludges:** Wastewater and sludge from the food industry (slaughterhouses, dairies) that require expensive disposal.

### 4. External waste streams (Auckland & Regional Hub)

With a capacity of 15 units, the project serves as a regional hub:

- **Commercial contracts:** The planned quantities of waste that would be transported from Auckland or neighboring counties (via rail or shipping).
- **Private service providers:** Data on waste collected by private companies (e.g. Waste Management NZ, EnviroNZ) that is not covered by Council statistics (FNDC).

### 5. Specification for the calculation of Ener-Gas and Methanol

For the above sources, please provide (where possible):

- **Moisture percentage:** Crucial for the working medium of the system.
- **Presence of PVC and mixed plastics:** Certificate of polymer content for the calculation of hydrogen and methane yields.

**The aim of this inquiry:** This data will allow us to present the study "Ngāti Hine – Waste to Methanol" not only as a waste disposal project, but as **a strategic investment in energy sovereignty (Mana Motuhake)** and the largest plant for the production of green methanol in this part of the world.