

Environmental Social Governance Report



About HomeBiogas

HomeBiogas Driving Innovation in Clean Energy and Carbon Reduction.

HomeBiogas is a global innovator in the development, production, and marketing of biogas systems that convert organic waste into clean energy and bio-fertilizer. The company empowers households, farmers, and communities worldwide to reduce their environmental footprint.

As part of its commitment to climate action, HomeBiogas develops and manages certified carbon projects, enabling companies and organizations to offset their emissions through the purchase of carbon credits.

The company's projects focus on equipping farmers with biogas systems that capture and remove methane emissions from animal manure, by converting it into clean cooking gas. This process not only eliminates the need for firewood and charcoal—thereby reducing CO₂ emissions—but also improves air quality and supports sustainable agriculture.

Through these initiatives, HomeBiogas continues to leverage its technological expertise and global partnerships to accelerate the transition to a low-carbon economy and deliver measurable environmental and social benefits.

2024

In numbers

HomeBiogas making an impact for a better world in 2024



261,196
Trees saved



154,753 tons
Tons co2-eq mitigated



34,107,334
Hours of clean cooking



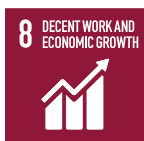
285,225,600M
Liters of water conserved



740,014,195
M3 Bio-fertilizer produced

UN SDGs

We are contributing to **13 of the UN Sustainable Development Goals**



SUSTAINABLE DEVELOPMENT
GOALS

HomeBiogas Project in Kenya is **Gold Standard**® certified.

Global Presence



With a growing global footprint, the company now operates through 15 active distributors across Africa, East Asia, and Latin America, supported by a wholly owned subsidiary in Kenya. Its innovative biogas solutions have reached over 100,000 users worldwide, reflecting both impact and scalability.

The company holds multiple international patents and played a leading role in drafting the global standard for household biogas systems, setting benchmarks for quality and safety in the sector. All systems are certified under CE and ISO standards, ensuring strict compliance with international safety, reliability, and performance requirements.

The values that guide us



Personal responsibility

Be the change you want to see in the world.
Take the lead.



Passion

Put your heart into everything you do.
Act with true intention.



Never give up

Problems are opportunities in disguise.
Overcome challenges.



Embrace change

Navigate with confidence through uncertainty.
Manage ambiguity.



Constant improvement

There is always a better way of doing things.
Eager to advance.



Driven by hospitality

Client satisfaction & service are paramount.
Serve customer's needs.

2 main product lines

Prefabricated biogas systems

Provide sustainable solutions for households, farms, and communities by converting food scraps & animal manure into renewable biogas for cooking and bio-fertilizer.

- ✓ Eliminate the use of wood and charcoal for cooking
- ✓ Generate savings on energy



UP TO

5 hours of clean
cooking gas daily.



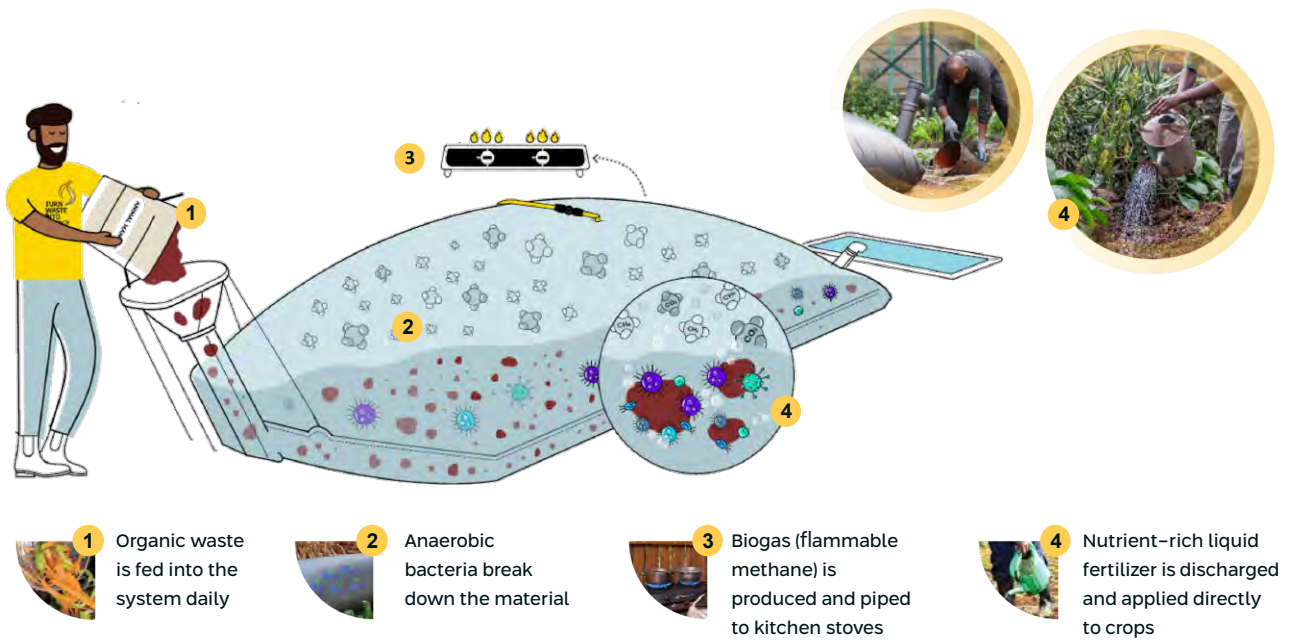
100 LITERS

of rich nutrient
bio-fertilizer.



How it works

HomeBiogas Farmers

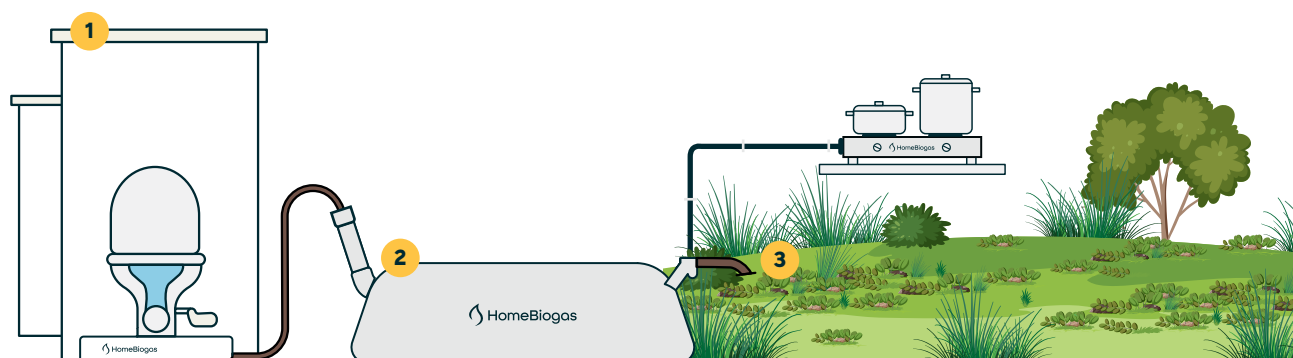


Unique Features:

- ✓ **2 hours** Quick set up
- ✓ Produces up to **~5 hours of gas** per day
- ✓ Generates up to **~120 liters of liquid** fertilizer per day
- ✓ Durable for **15+ years** with UV protection and featured cover

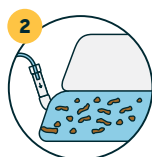
Bio-Toilets

HomeBiogas Bio-Toilets



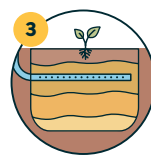
Toilets

Two ceramic low
Flash Toilets.



Anaerobic Treatment

HBG system treats the human
waste through an anaerobic
process, reducing the organic
load and creates energy.



Final Discharge Area

Drain field or Mulch basin
where the liquid is Treated
and can be used subsurface
to nurture trees and bushes.

A revolutionary
off-grid sanitary
solution

- ✔ Manages human waste **without relying on sewage** infrastructure
- ✔ Reduce environmental pollution
- ✔ Thousands of installations **worldwide**
- ✔ Achieving **up to 90%** of water savings

Environmental Data

Total energy consumed in the organization in 2024: 1,231,759 MJ

(The organization's total energy use for the reporting year included 119,631 kWh of electricity and 23,424 liters of gasoline).

Scope 1 (tons CO ₂ e)	Scope 2 (tons CO ₂ e)	Scope 3 (tons CO ₂ e)	Total
54	52	167	272

Using HomeBiogas systems at the company's offices, approximately **78,000 kg** of biogas were generated, replacing either grid electricity or cooking gas. This resulted in an estimated reduction of **~208 tCO₂e** when replacing electricity, or **~103 tCO₂e** when replacing cooking gas.

Methodology Overview

This GHG inventory was prepared in accordance with the GHG Protocol Corporate Standard and reflects updated calculations based on nationally and internationally recognized emission factors.

Scope 1 and Scope 2 emissions were calculated using the official emission factors published by the Israel Ministry of Environmental Protection. Scope 3 emissions were assessed using DEFRA's 2024 GHG Conversion Factors, the U.S. EPA WARM v16 model, ecoinvent datasets, and the GLEC Framework for freight transportation.

The **Scope 3** categories included in this inventory were:

- **Upstream and downstream transportation and distribution** (maritime and road freight)
- **Purchased goods and raw materials** (transport-related emissions),
- **Waste generated in operations** (recycling of dry materials and anaerobic digestion of food waste)
- **Business travel** (short- and long-haul flights)
- **Employee commuting** (private vehicles and public transport).

*All calculations follow a conservative, activity-based approach using tonne-kilometer, passenger-kilometer, fuel-based, or mass-based methods as appropriate.

**Changes in total emissions compared to previous years are primarily due to updates in official emission factors as well as changes in the company's activity levels, which together influence both direct and indirect emissions.





📍 HomeBiogas LTD, Beit Yanai, Israel 4029300, IL
🌐 www.homebiogas.com

